

CATALOG

# SACE® Tmax® XT UL/CSA

Low voltage molded case circuit-breakers  
UL489 and CSA C22.2 Standards



**Break new ground**

- Data and connectivity
- Ease of use and installation
- Performance and protection
- Safety and reliability

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**Break new ground.**

**A cutting-edge molded case circuit-breaker range delivering a brand new experience, with extreme performance and protection features up to 1200A, maximizing ease of use, integration and connectivity. Built to deliver safety, reliability and quality.**



# SACE Tmax XT

The complete offering

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# Main characteristics

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# SACE Tmax XT overview

## Break new ground

Break new ground simply means delivering value through the entire customer journey by leaving behind the traditional concept of circuit-breaker. The SACE Tmax XT range offers a unique experience that, sharing the same features and logics with the Emax 2 range, for the first time ever overcomes the differences between molded case and air circuit-breakers. The most advanced products designed to maximize data and connectivity, ease of use and installation, performance as well as protection, safety and reliability.

The SACE Tmax XT range offers higher performance, better protection and more precise metering than equivalent units, and can handle from 160 up to 1200A.

Combined with the world's most precise electronic trip units in the smallest frames, the new range delivers significant time savings and enhances installation quality.

Reliability is further increased, and speed of installation reduced, thanks to Bluetooth and Ekip connectivity for mobile devices.



The SACE Tmax XT family's built-in connectivity links smartphones, tablets and PCs to data analysis tools on the ABB Ability™ cloud platform in real time. The extreme precision of the data measured means users have access to accurate information anywhere and anytime, making it easier to monitor resources and identify savings opportunities. Using the embedded smart power controller can help reduce energy consumption by up to 20 per cent.

Upgrading the breakers is straightforward. Now available for the first time, customers can download new functions from [ABB Ability Marketplace™](#), choosing among more than 50 different protection, metering and automation functionalities. This capability creates an exceptional level of adaptability as needs change over time.



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# Distinctive features

## Data and connectivity



Plant management of the future – SACE Tmax XT sets standards in modern plant and energy management. Access, monitor and control information remotely, anywhere, at any time. Improving performance efficiency and saving energy.



The SACE Tmax XT is the first molded case circuit-breaker to become an active element inside the electrical plant without using external accessories.

**Local connection**

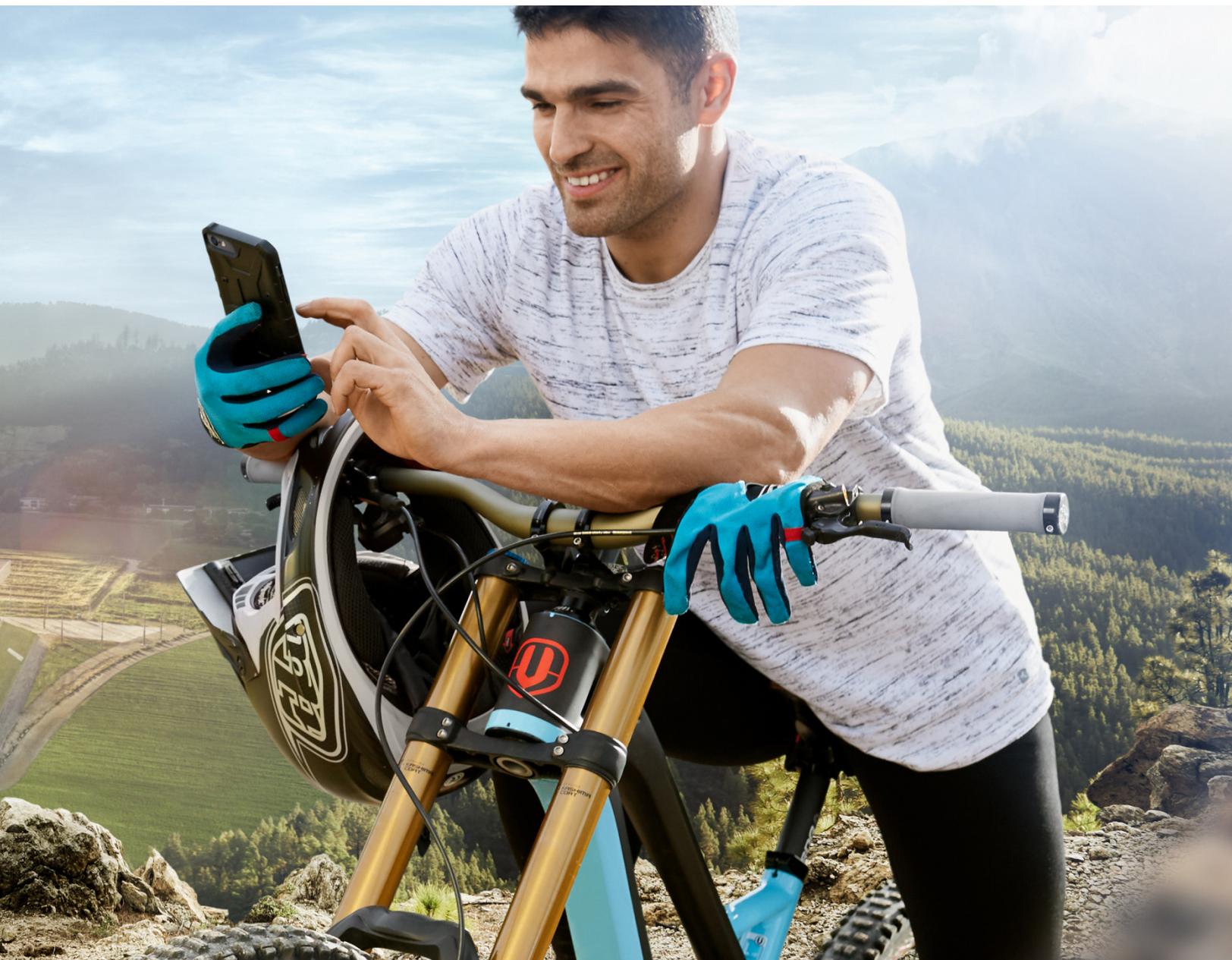
Commissioning and device setting have never been so easy thanks to the Bluetooth connectivity and the Ekip Connect software.

**Remote communication**

All the data of the electrical plant are accessible and the interaction with the breakers from remote is straightforward and secure thanks to the several communication protocols available.

**Cloud connectivity**

Cloud connection is now possible to exploit the full service of ABB Ability™ Energy and Asset Manager thanks to the Ekip Com HUB.



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# Distinctive features

## Ease of use and installation



Maximum flexibility for every application – SACE Tmax XT sets standards for electrical installations. Easy selection, one-fits-all accessories and intuitive design pave the way for fast upgrades and create values through the entire life-cycle. Even for the most critical projects.



**Ease of selection**

The clever organization of the SACE Tmax XT range and the user-friendly software e-Configure allows the customer to easily select and customize the right products for their needs.

**One-fits-all accessories**

Improving the circuit-breaker from its basic functions to a more versatile and sophisticated device is

made possible thanks to the SACE Tmax XT modular structure and the variety of available accessories.

**Upgradability**

The Ekip Touch and Hi-Touch trip units can always be upgraded via ABB Ability Marketplace™ and new functionalities will always be available via the marketplace.



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# Distinctive features

## Performance and protection



Continuity of service and equipment protection – SACE Tmax XT sets standards when extreme circuit breaking capacity is needed. Sharing the same logics, interfaces and features regardless of operating voltage environmental conditions. Embedding the most advanced protections into the smallest of frames.



**Electrical performances**

SACE Tmax XT is designed and tested to meet any installation requirement, even the most critical ones.

**Metering**

SACE Tmax XT provides all the tools needed to set up a competent and effective energy management strategy thanks to the trip units able to measure electrical parameters with 1% accuracy certification.

**Protections and logics**

SACE Tmax XT integrates extra functionalities into the size of a standard molded case circuit-breaker. The most advanced protection functions and logics are available thanks to its cutting-edge trip units.



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# Distinctive features

## Safety and reliability



Absolute attention to detail, with style from design to manufacturing SACE Tmax XT sets standards for cutting edge technologies. Half a century of research and experience means top-level products performance ready to face challenges now and into the future.



Discover more about SACE Tmax XT



Web page: [go.abb/XT](https://go.abb/XT)



# Products conformity

SACE Tmax XT circuit-breakers and their accessories comply with UL489 and CSA C22.2 Standards

## Compliance with Standards

The Tmax XT circuit-breakers and their accessories are constructed in compliance with:

- Standards:
  - UL489 and CSA C22.2 (E116596; E116595; E93565);
- Directives:
  - EC “Low Voltage Directive” (LVD) N° 2014/35/EC;
  - EC “Electromagnetic Compatibility Directive” (EMC) 2014/30/EC;

## Shipping Registers:

- Lloyd’s Register of Shipping, Germanischer Lloyd, Bureau Veritas, Rina, Det Norske Veritas, Russian Maritime Register of Shipping, ABS.

Certification of conformity with product Standards is carried out at the ABB SACE test laboratory (accredited by ACCREDIA - certificate no. 0062L-02/2020) in compliance with UNI CEI EN ISO/IEC 17025 European Standard, by the Italian certification body ACAE, member of the European LOVAG organization and by the Swedish certification body SEMKO recognized by the international IECEE organization.



CCC



JIS



KC



Registro Italiano Navale (RINA):  
Italy



Lloyd’s Register of Shipping (LR):  
United Kingdom



American Bureau Shipping (ABS):  
United States of America



Germanischer Lloyd (GL):  
Germany



Bureau Veritas (BV):  
France



Det Norske Veritas (DNV):  
Norway



Russian Maritime Register of Shipping (RMRS):  
Russia



Nippon Kaiji Kyokai (NKK):  
Japan

For more information about circuit-breakers, certified ratings and their corresponding validity, please contact ABB SACE.



### Company Quality System

The ABB SACE Quality System complies with the following Standards:

- ISO 9001 International Standard;
- EN ISO 9001 (equivalent) European Standard;
- UNI EN ISO 9001 (equivalent) Italian Standard;
- IRIS International Railway Industry Standards.

The ABB SACE Quality System attained its first certification by the RINA certification body in 1990.

### Environmental health & safety management system, social responsibility and ethics

Special care for the environment is a priority commitment for ABB SACE. This is confirmed through the company's Environmental Management System which is certified by the RINA (ABB SACE was the first industry in the electromechanical sector in Italy to obtain this recognition) in conformity with the International ISO14001 Standard. In 1999 the Environmental Management System was integrated with the Occupational Health and Safety Management System according to the OHSAS 18001 Standard and later, in 2005, with the SA 8000 (Social Accountability 8000) Standard. All this amounts to solid evidence of ABB's commitment to respecting business ethics and promoting a safe and healthy working environment.

ISO 14001, OHSAS 18001 and SA8000 recognitions together with ISO 9001 made it possible to obtain RINA BEST 4 (Business Excellence Sustainable Task) certification.

### Product Material Compliance

The XT family complies with the following international regulations:

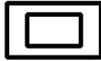
- RoHS II, Directive 2011/65/EU and Amendment 2015/863 - Restriction of Hazardous Substances;
- REACH, 2006/1907/EC, Registration, Evaluation, Authorisation and Restriction of Chemicals;
- WEEE 2012/19/EU -Waste Electrical & Electronic Equipment;
- Conflict Minerals - Dodd-Frank Consumer Protection Act. Section 1502.



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# Construction characteristics

All the SACE Tmax XT molded case circuit-breakers are built in accordance with the following constructional characteristics.



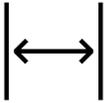
## Double insulation

The Tmax XT circuit-breaker has double insulation between the live power parts (excluding the terminals) and the front parts of the apparatus where the operator works during normal operation. The mounting location of each electrical accessory is completely segregated from the power circuit, preventing any risk of contact with live parts. The operating mechanism especially is completely insulated from the energized circuits. Furthermore, the circuit-breaker has oversized insulation, both between the live internal parts and near the connection terminals. These clearances exceed those required by the IEC Standards and fully comply with the prescriptions of the UL 489 Standard.



## Positive operation

The operating lever always indicates the precise position of the moving contacts of the circuit-breaker, thereby guaranteeing safe and reliable signals, in compliance with IEC 60073 and IEC 60417 Standards (I = Closed; O = Open; yellow-green line = open due to protection trip). The circuit-breaker operating mechanism has a free release regardless of the pressure on the lever and the speed of operation. Protection tripping automatically opens the moving contacts: to re-close them, the operating mechanism must first be reset by pushing the operating lever from the intermediate position to the lowest open position.

**Insulation behaviour**

In the open position, the circuit-breaker guarantees insulation distances in compliance with the UL489 Standard, thus preventing leakage currents to flow between the input and output terminals.

**Tropicalization**

Circuit-breakers and accessories in the Tmax XT series are tested in compliance with the IEC 60068-2-30 Standard, carrying out 2 cycles at 55 °C with the “variant 1” method (clause 7.3.3). The suitability of the Tmax XT series under the most severe environmental conditions is further ensured with hot-humid climate according to climatograph 8 in the IEC 60721-2-1 Standards thanks to:

- molded insulating cases made of synthetic resins reinforced with glass fibers;
- anti-corrosion treatment of the main metallic parts;
- Fe/Zn 12 zinc-plating (ISO 2081) protected by a conversion layer, free from hexavalent chromium (ROHS-compliant), with the same corrosion resistance guaranteed by ISO 4520 class 2C;
- application of anti-condensation protection for electronic overcurrent trip units and relative accessories.

# ABB EcoSolutions™

## Leading the way to the circular economy

To help preserve the Earth’s resources for future generations, ABB takes a company-wide approach to circularity. We aim to innovate towards new circular business models by cutting waste, increasing recyclability and reusability, and making our products more durable. We work closely with customers and suppliers to embed circularity across the value chain.

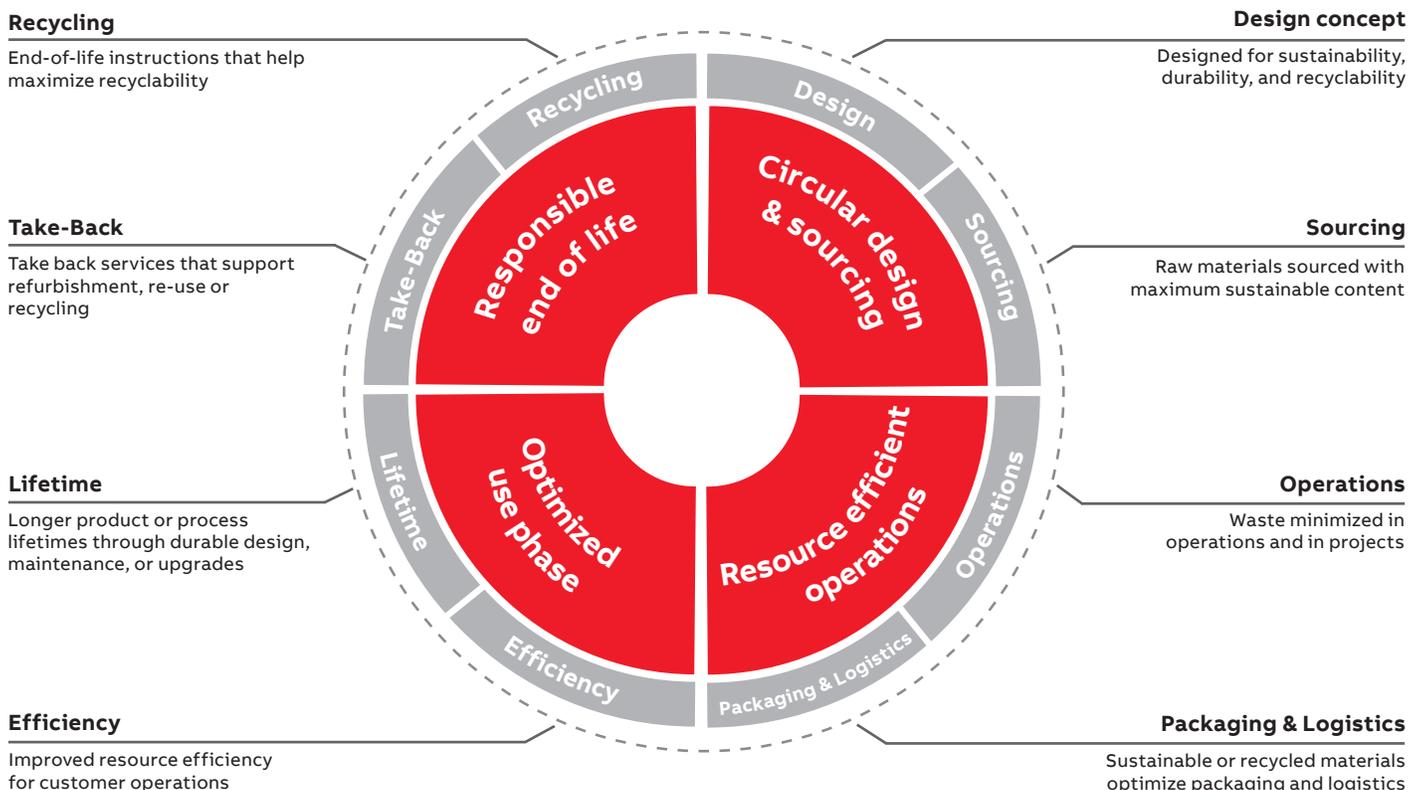
ABB’s EcoSolutions™ label provides full transparency on a product’s circularity value and environmental impact. ABB products with the EcoSolutions label carry an independently verified environmental product declaration (EPD) (ISO 14025) – and comply with a set of key performance indicators defined in ABB’s circularity framework.

### ABB EcoSolutions: transparency for customers

The ABB EcoSolutions™ label is an assurance that the product is:

- designed to last and manufactured with the maximum amount of sustainably sourced raw materials;
- made with processes that are designed to avoid waste and maximize the use of sustainable packaging materials;
- designed to increase resource and process efficiency while in use, be upgradable and optimize the lifetime of equipment and facilities;
- supported by take-back services leading to refurbishment, re-use or recycling of products and components, and is accompanied by instructions for responsible end-of-life treatment.

EcoSolutions products are evaluated against a clear set of 8 key performance indicators (KPIs) based on these four stages of the product life cycle.





ABB

**Eco**  
Solutions™



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Look for the ABB EcoSolutions™ logo and QR code on packaging to access transparent sustainability information about the product. To receive information for a specific product, please contact ABB.



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# The ranges

- 2/2** **SACE Tmax XT automatic circuit-breakers for alternating current (AC) distribution**
- 2/6** **SACE Tmax XT automatic circuit-breakers for direct current (DC) distribution**
- 2/10** **SACE Tmax XT molded case switches (MCS)**
- 2/14** **Current Limiting**
- 2/14** **Circuit-breakers for single phase applications**
- 2/15** **100% rated circuit-breakers**
- 2/16** **Circuit-breakers for motor protection**  
Main characteristics

# SACE Tmax XT automatic circuit-breakers for alternating current (AC) distribution



Molded case circuit-breakers (MCCB)			XT1		
Frame Size	[A]		125		
Poles	[No.]		3, 4		
Rated voltage	(AC) 50-60Hz	[V]	600Y/347		
Versions			Fixed, Plug-in		
Max supply voltage reverse feed (F, P, W)			690		
Interrupting ratings			N	S	H
	240 V (AC)	[kA]	50	65	100
	480 V (AC)	[kA]	25	35	65
	600Y/347 V (AC)	[kA]	18	22	25
	600 V (AC)	[kA]	-	-	-
Mechanical life		[No. Operations]	25000		
		[No. Hourly operations]	240		
Dimensions - Fixed (Width x Depth x Height)	3 poles	[mm]/[in]	[76.2 x 70 x 130] / [3 x 2.75 x 5.12]		
	4 poles	[mm]/[in]	[101.6 x 70 x 130] / [4 x 2.75 x 5.12]		
Weight	Fixed 3/4 poles	[kg]/[lbs]	[1.1 - 2.43] / [1.4 - 3.07]		
	Plug-in (EF) 3/4 poles	[kg]/[lbs]	[2.21 - 4.87] / [2.82 - 6.22]		
	Withdrawable (EF) 3/4 poles	[kg]/[lbs]	-		

## Trip units for power distribution

TMF



TMA

Ekip Dip

Ekip Touch

(1) Available with TM trip units only;

(2) 2-poles version available only as complete circuit-breaker with TMF;

4-poles version available only as complete circuit-breaker from In=80 to In=250 with TMF.



XT2						XT3			XT4					
125						225			250					
3, 4						3, 4			2 (for N fixed version only) 3, 4 <sup>(2)</sup>					
600						600Y/347			600					
Fixed, Plug-in, Withdrawable						Fixed, Plug-in			Fixed, Plug-in, Withdrawable					
≤ 480						690			≤ 600					
N	S	H	L	V	X <sup>(1)</sup>	N	S	N	S	H	L	V	X	
65	100	150	200	200	200	50	65	65	100	150	200	200	200	
25	35	65	100	150	200	25	35	25	35	65	100	150	200	
-	-	-	-	-	-	10	10	-	-	-	-	-	-	
18	22	25	35	42	42	-	-	18	22	25	50	65	100	
25000						25000			25000					
240						240			240					
[90 x 82.5 x 130] / [3.54 x 3.25 x 5.12]						[105 x 70 x 150] / [4.13 x 2.75 x 5.90]			[105 x 82.5 x 160] - [4.13 x 3.25 x 6.3]					
[120 x 82.5 x 130] / [4.72 x 3.25 x 5.12]						[140 x 70 x 150] / [5.51 x 2.75 x 5.90]			[140 x 82.5 x 160] - [5.51 x 3.25 x 6.3]					
[1.2 - 2.65] / [1.6 - 3.53]						[1.7 - 3.37] / [2.1 - 4.63]			[2.5 - 5.51] / [3.5 - 7.72]					
[2.54 - 5.60] / [3.27 - 7.21]						[3.24 - 7.14] / [4.1 - 9.04]			[4.19 - 9.24] / [5.52 - 12.17]					
[3.32 - 7.32] / [4.04 - 8.91]									[5 - 11.02] / [6.76 - 14.90]					
■						■			■					
■									■					
■									■					
■									■					

# SACE Tmax XT automatic circuit-breakers for alternating current (AC) distribution



Molded case circuit-breakers (MCCB)		XT5					
Frame Size	[A]	400-600					
Poles	[No.]	3, 4					
Rated voltage	(AC) 50-60Hz [V]	600					
Versions		Fixed ,Plug-in, Withdrawable					
Max supply voltage on bottom side (F, P, W)		690					
Interrupting ratings		N	S	H	L	V	X
240 V (AC)	[kA]	65	100	150	200	200	200
480 V (AC)	[kA]	35	50	65	100	150	200
600Y/347 V (AC)	[kA]	-	-	-	-	-	-
600 V (AC)	[kA]	18	25	35	65	100	100
Mechanical life	[No. Operations]	20,000					
	[No. Hourly operations]	120					
Dimensions - Fixed	3 poles [mm]/[in]	[140 x 103 x 205] - [5.51 x 4.05 x 8.07]					
(Width x Depth x Height)	4 poles [mm]/[in]	[186 x 103 x 205] - [7.32 x 4.05 x 8.07]					
Weight	Fixed 3/4 poles [kg]/[lbs]	[3.25-7.17] / [4.15-9.15]					
	Plug-in (EF) 3/4 poles [kg]/[lbs]	[5.15-11.35] / [6.65-14.66]					
	Withdrawable (EF) 3/4 poles [kg]/[lbs]	[5.4-11.9] / [6.9-15.21]					
<b>Trip units for power distribution</b>							
TMF							
TMA							
Ekip Dip							
Ekip Touch							



XT6			XT7			XT7 M		
800			800-1000-1200			800-1000-1200		
3, 4			3, 4			3, 4		
600			600			600		
Fixed , Withdrawable			Fixed , Withdrawable			Fixed , Withdrawable		
690			690			690		
N	S	H	S	H	L	S	H	L
65	100	200	65	100	200	65	100	200
35	50	65	50	65	100	50	65	100
20	25	35	25	50	65	25	50	65
20.000			10.000			20.000		
120			60			60		
[210 x 103.5 x 268] - [8.27 x 4.07 x 10.55]			[210 x 167 x 268] - [8.27 x 6.57 x 10.55]			[210 x 178 x 268] - [8.27 x 7.01 x 10.55]		
[280 x 103.5 x 268] - [11.02 x 4.07 x 10.55]			[280 x 166 x 268] - [11.02 x 6.57 x 10.55]			[280 x 178 x 268] - [11.02 x 7.01 x 10.55]		
[9.5-20.94] / [12-26.46]			[9.7-21.38] / [12.5-27.56]			[11-24.25] / [14-30.86]		
[12.1-26.68] / [15.1-33.29]			[29.7-65.48] / [39.6-87.3]			[32-70.55] / [42.6-93.92]		
■			■			■		
■			■			■		
■			■			■		

# SACE Tmax XT automatic circuit-breakers for direct current (DC) distribution



Molded case circuit-breakers (MCCB)			XT1		
Frame Size		[A]	125		
Poles		[No.]	3, 4		
Rated voltage (DC)		[V]	500		
Versions			Fixed, Plug-in		
Interrupting ratings			N	S	H
	250 V (DC) 2 poles in series	[kA]	35	42	50
	500 V (DC) 2 poles in series		-	-	-
	500 V (DC) 3 poles in series	[kA]	-	-	-
	500 V (DC) 4 poles in series	[kA]	35	50	50
	600 V (DC) 3 poles in series	[kA]	-	-	-
Mechanical life		[No. Operations]	25000		
		[No. Hourly operations]	240		
Dimensions	Fixed 3 poles	[mm]/[in]	[76.2 x 70 x 130] / [3 x 2.75 x 5.12]		
(Width x Depth x Height)	4 poles	[mm]/[in]	[101.6 x 70 x 130] / [4 x 2.75 x 5.12]		
Weight	Fixed 3/4 poles	[kg]/[lbs]	[1.1 - 2.43] / [1.4 - 3.07]		
	Plug-in (EF) 3/4 poles	[kg]/[lbs]	[2.21 - 4.87] / [2.82 - 6.22]		
	Withdrawable (EF) 3/4 poles	[kg]/[lbs]	-		
<b>Trip units for power distribution</b>					
	TMF		■		
	TMA				
	TMG		-		



XT2						XT3	
125						225	
3, 4						3, 4	
500						500	
Fixed, Plug-in, Withdrawable						Fixed, Plug-in	
N	S	H	L	V	X	N	S
35	50	65	75	85	85	25	35
-	-	-	-	-	-	-	-
35	50	65	75	85	85	25	35
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
25000						25000	
240						240	
[90 x 82.5 x 130] / [3.54 x 3.25 x 5.12]						[105 x 70 x 150] / [4.13 x 2.75 x 5.90]	
[120 x 82.5 x 130] / [4.72 x 3.25 x 5.12]						[140 x 70 x 150] / [5.51 x 2.75 x 5.90]	
[1.2 - 2.65] / [1.6 - 3.53]						[1.7 - 3.37] / [2.1 - 4.63]	
[2.54 - 5.60] / [3.27 - 7.21]						[3.24 - 7.14] / [4.1 - 9.04]	
[3.32 - 7.32] / [4.04 - 8.91]							
■						■	
■							
-						-	

# SACE Tmax XT automatic circuit-breakers for direct current (DC) distribution



Molded case circuit-breakers (MCCB)		XT4						
Frame Size	[A]	250						
Poles	[No.]	3, 4						
Rated voltage (DC)	[V]	600						
Versions		Fixed, Plug-in, Withdrawable						
Interrupting ratings		N	S	H	L	V	X	
	250 V (DC) 2 poles in series	[kA]	35	42	50	85	100	100
	500 V (DC) 2 poles in series							
	500 V (DC) 3 poles in series	[kA]	-	-	-	-	-	-
	500 V (DC) 4 poles in series	[kA]	-	-	-	-	-	-
	600 V (DC) 3 poles in series	[kA]	35	50	65	75	85	85
Mechanical life		[No. Operations]	25000					
		[No. Hourly operations]	240					
Dimensions	Fixed 3 poles	[mm]/[in]	[105 x 82.5 x 160] - [4.13 x 3.25 x 6.3]					
(Width x Depth x Height)	4 poles	[mm]/[in]	[140 x 82.5 x 160] - [5.51 x 3.25 x 6.3]					
Weight	Fixed 3/4 poles	[kg]/[lbs]	[2.5 - 5.51] / [3.5 - 7.72]					
	Plug-in (EF) 3/4 poles	[kg]/[lbs]	[4.19 - 9.24] / [5.52 - 12.17]					
	Withdrawable (EF) 3/4 poles	[kg]/[lbs]	[5 - 11.02] / [6.76 - 14.90]					
<b>Trip units for power distribution</b>								
	TMF		■					
	TMA		■					
	TMG		-					



<b>XT5</b>						<b>XT6</b>		
<b>400-600</b>						<b>800</b>		
3, 4						3, 4		
600						600		
Fixed, Plug-in, Withdrawable						Fixed, Withdrawable		
N	S	H	L	V	X	N	S	H
35	50	70	100	100	100	35	50	70
25	35	50	70	100	100	35	35	50
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
16	25	35	50	70	70	20	20	35
20.000						20.000		
60						60		
[140 x 103 x 205] - [5.51 x 4.05 x 8.07]						[210 x 103.5 x 268] - [8.27 x 4.07 x 10.55]		
[186 x 103 x 205] - [7.32 x 4.05 x 8.07]						[280 x 103.5 x 268] - [11.02 x 4.07 x 10.55]		
■						■		
■						-		

# SACE Tmax XT molded case switches (MCS)

Molded case switches are devices created from the corresponding circuit-breakers and feature the same overall dimensions, versions, and can be fitted with the same accessories.

## Applications

The MCS can be used as a general circuit breakers in sub-switch-boards, switching and isolation parts for lines, busbars or groups of apparatus, or as bus-ties. They can be part of a general isolation device of groups of machines or of complexes for motor operation and protection.

In the open position, the switch guarantees a sufficient insulation distance (between the contacts) to ensure safety and to prevent an electrical arc from striking.

## Characteristics of molded case switches according to UL489 and CSA C22.2 No.5

		XT1D			XT2D					XT3D	
Frame Size	[A]	125			125					225	
Poles	[No.]	3, 4			3, 4					3, 4	
Rated service voltage	(AC) 50-60Hz [V]	600Y/347			600					600Y/347	
	(DC) [V]	500 4p series / 3p CB up to 250V DC 3p series			500 3p series					500 3p series	
Versions		Fixed, Plug-in			Fixed, Plug-in, Withdrawable					Fixed, Plug-in	
Interrupting Rating		N	S	H	N	S	H	L	V	N	S
Magnetic Override	[A]	1500			1500					2700	

## Characteristics of molded case switches according to IEC60947-3

Size		XT1D			XT3D			XT4D		
<b>Rated operating current. Ie</b>	<b>(AC) 50-60Hz</b>	125			125			225		
AC-22A	415-440Vac	125			225			150/250		
AC-23A		125			200			150/200		
AC-22A	690V AC	125			225			150/250		
AC-23A					200			150/200		
<b>Rated operating current. Ie</b>	<b>DC</b>									
DC-22A	250V DC	125 - 2p in series			225 - 2p in series			150/250 - 2p in series		
DC-23A		125 - 2p in series			200 - 2p in series			150/200 - 2p in series		
DC-22A	500V DC	125 - 4P in series			225 - 3p in series			150/250 - 2p in series		
DC-23A		125 - 4P in series			200 - 3p in series			150/200 - 2p in series		
DC-22A	750V DC	-			-			-		
DC-23A		-			-			-		
Electrical life AC22 / AC23 (AC) 440 V In										
Mechanical life										

**Protection**

Each molded case switch must be protected on the supply side by a coordinated device which safeguards it against short-circuits.

The section "Coordination" in the table below shows the correspondence between each molded case switch and the relevant circuit-breaker.

XT4D					XT5D					XT6D			XT7D/XT7D M		
150/250					400 - 600					800			1000 - 1200		
3, 4					3, 4					3, 4			3, 4		
600					600					600			600		
600 3p series					600 3p series					600 3p series			-		
Fixed, Plug-in, Withdrawable					Fixed, Plug-in, Withdrawable					Fixed, Withdrawable			Fixed, Withdrawable		
N	S	H	L	V	N	S	H	L	V	N	S	H	S	H	L
3000					8000					10000			20000		

XT5D		XT6D		XT7D		XT7D M	
400	600	800		1000 - 1200		1000 - 1200	
400	600	800		1000 - 1200		1000 - 1200	
400	600	800		1000 - 1200		1000 - 1200	
400	600	800		1000 - 1200		1000 - 1200	
400 2p in series	600 2p in series	800 - 2p in series		1000 - 1200 - 2p in series		1000 - 1200 - 2p in series	
400 2p in series	600 2p in series	800 - 2p in series		1000 - 1200 - 2p in series		1000 - 1200 - 2p in series	
400 2p in series	600 2p in series	800 - 2p in series		1000 - 1200 - 3p in series		1000 - 1200 - 3p in series	
400 2p in series	600 2p in series	800 - 2p in series		1000 - 1200 - 3p in series		1000 - 1200 - 3p in series	
400 3p in series	600 3p in series	800 - 3p in series		1000 - 1200 - 4p in series		1000 - 1200 - 4p in series	
400 3p in series	600 3p in series	800 - 3p in series		1000 - 1200 - 4p in series		1000 - 1200 - 4p in series	
5.000	3.000	3.500		2.500		2.500	
20.000	20.000	20.000		10.000		20.000	

# SACE Tmax XT molded case switches (MCS)

## Coordination

Supply side		XT1			XT3			XT2			
Version		N	S	H	N	S	N	S	H	L	V
SCCR 480 VAC [kA]		25	35	65	25	35	25	35	65	100	150
	<b>In</b>										
XT1N-D		25	25	25			25	25	25	25	25
XT1S-D	125		35	35				35	35	35	35
XT1H-D				65					65	65	65
XT2N-D		25	25	25			25	25	25	25	25
XT2H-D				65					65	65	65
XT2L-D	125									100	100
XT2V-D								25			150
XT3N-D	225	25	25	25	25	25	25	25	25	25	25
XT3S-D			35	35		35		35	35	35	35
XT4N-D		25	25	25	25 <sup>(1)</sup>	25 <sup>(1)</sup>	25	35	25	25	25
XT4S-D			35	35		35 <sup>(1)</sup>		35	35	35	35
XT4H-D	150 - 250			65					65	65	65
XT4L-D										100	100
XT4V-D											150
XT5N-D											
XT5S-D											
XT5H-D	400 - 600										
XT5L-D											
XT5V-D											
XT6N-D											
XT6S-D	600 - 800										
XT6H-D											
XT7S-D											
XT7H-D	800-1000-1200										
XT7L-D											

(1) the configuration is valid only with I1<225A setting on Tmax XT4 circuit-breaker

(2) the configuration for Tmax XT4D 150 is valid only with I1<150A setting on Tmax XT4 circuit breaker



## Current Limiting

Existing UL circuit-breakers Tmax XT2, XT4 and XT5 have undergone specific tests as per the UL 489 Standard in order to be classified as UL current limiting circuit-breakers. They have specific characteristics in terms of limiting peak current and specific let-through energy.

According to the UL 489 Standard, current limiting circuit-breakers will be marked “Current Limiting” on the front and will have a label on the right side specifying the peak current and specific let-through energy values. Accessories and trip units are the same as available for standard UL Tmax MCCBs.

Circuit-breaker	XT2			XT4			XT5		
Trip Units	TMF, TMA, Ekip			TMF, TMA, Ekip			TMF, TMA, Ekip		
In	Up to 125A <sup>(1)</sup>			Up to 250A <sup>(2)</sup>			Up to 600A		
Breaking Capacity	H	L	V	H	L	V	H	L	V

(1) Includes TMF, TMA with In = 15-125A and Ekip with In= 10, 25, 60, 100, 125A

(2) Includes TMF, TMA with In = 25-250A and Ekip with In= 40, 60, 100, 150, 225, 250A

## Circuit-breakers for single phase applications

Tmax XT three poles circuit-breakers can be used in single phase applications.

For this purpose, they are marked as follows according to UL standard:

- Suitable for single phase application up to 347 Vac
- Suitable for single phase application up to 600 Vac

	XT1	XT2	XT3	XT4	XT5	XT6	XT7
TM	347VAC	347VAC	347VAC	600VAC	600VAC	600VAC	-
Ekip Dip	-	-	-	600VAC		600VAC	600VAC
Ekip Touch	-	-	-	600VAC	600VAC	-	600VAC

# 100% rated circuit-breakers

All Tmax XT circuit-breakers are available both as standard version and as 100% rated version. Because of the additional heat generated bringing

100% of continuous current rating, the use of specific 90°C rated wires sized per 75°C ampacity may be required.

## Fixed circuit-breakers

<b>XT1</b>	Suitable for continuous operation at 100-percent of rating up to 100A with 90°C wire. The wire size shall be based on the ampacity of 75°C rated wire.
<b>XT2</b>	Suitable for continuous operation at 100-percent of rating up to 100A with thermal magnetic trip unit and up to 125A with electronic trip unit.
<b>XT3</b>	Suitable for continuous operation at 100-percent of rating up to 225A with 90°C wire. The wire size shall be based on the ampacity of 75°C rated wire.
<b>XT4</b>	Suitable for continuous operation at 100-percent of rating up to 250A, with 90°C wire. The wire size shall be based on the ampacity of 75°C rated wire. With 75°C wire suitable for continuous operation at 100-percent of rating up to 200A with lugs FC CuAl only.
<b>XT5 400</b>	Suitable for continuous operation at 100-percent of rating up to 400A. For XT5 V-X 90°C wire needed, the wire size shall be based on the ampacity of 75°C rated wire.
<b>XT5 600</b>	N-S-H-L versions suitable for continuous operation at 100-percent of rating up to 600A with 90°C wire. The wire size shall be based on the ampacity of 75°C rated wire.
<b>XT6</b>	Suitable for continuous operation at 100-percent of rating up to 800A with electronic trip units and 90°C wire. The wire size shall be based on the ampacity of 75°C rated wire.
<b>XT7</b>	Suitable for continuous operation at 100-percent of rating up to 1200A with 90°C wire. The wire size shall be based on the ampacity of 75°C rated wire.

For 80% - 100% rated enclosure dimensions and further installation details, please refer to the document "Technical characteristics SACE Tmax XT UL/CSA" (1SDC 210199D0202)

# Circuit-breakers for motor protection

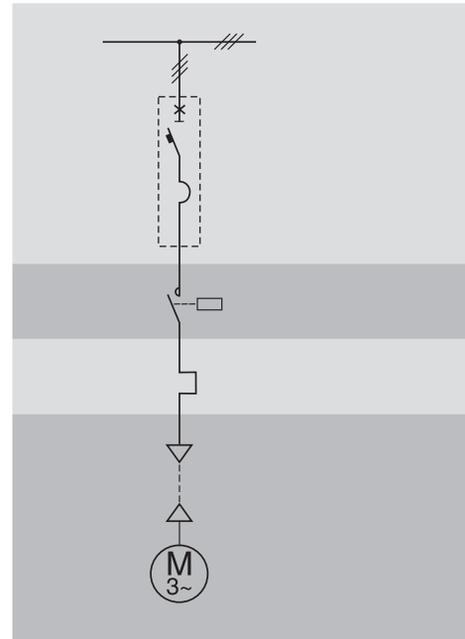
## Main characteristics

When choosing and manufacturing a system for starting and monitoring motors, safety and reliability are important considerations. Motor starting is a particularly critical phase for the motor itself and for the installation powering it.

Even rated service needs to be adequately monitored and protected in order to deal with any faults that might occur.

When it comes to direct starting, ABB SACE offers two different solutions:

- a conventional system equipped with a circuit-breaker with a magnetic only trip unit for protection against shortcircuits, a thermal trip unit for protection against overloads and phase failure or unbalance, and a contactor to operate the motor;

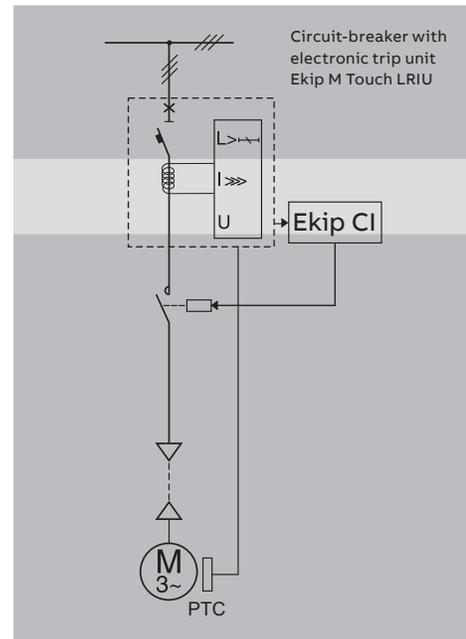


**Conventional system**

- an advanced protection system which integrates all the protection and monitoring functions in the circuit-breaker itself and a contactor for operating the motor.

Several different factors must be considered when choosing and coordinating the protection and operating devices, e.g.:

- the electrical specifications of the motor (type, power rating, efficiency,  $\cos\Phi$ );
- the starting type and diagram;
- the fault current and voltage in the part of the network where the motor is installed.



**Advanced protection system**

# Circuit-breakers for motor protection

## Main characteristics

Motor protection		XT1	XT2			XT3
Frame Size	[A]	125	125			225
Poles	[No.]	3	3			3
Rated service voltage	(AC) 50-60Hz [V]	600Y/347	600			600Y/347
Versions		Fixed, Plug-in	Fixed, Plug-in, Withdrawable			Fixed, Plug-in
Rating level		H	H	L	V	S
Trip units for motor protection						
MA (MCP)		■	■	■		■
Ekip M Dip I (MCP)			■	■	■	
Ekip M Dip LIU (MPCB)			■	■	■	
Ekip M Touch LRIU (MPCB)			■	■	■	

XT4					XT5					XT6			XT7		
250					400 - 600					800			800 - 1000- 1200		
3					3					3			3		
600					600					600			600		
Fixed, Plug-in, Withdrawable					Fixed, Plug-in, Withdrawable					Fixed, Withdrawable			Fixed, Withdrawable		
H	L	V	X	N	S	H	L	V	X	N	S	H	S	H	L
■	■			■	■	■	■	■	■						
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■	■	■	■	■			
■	■	■	■	■	■	■	■	■	■				■	■	■



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# Protection trip units

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# Introduction

SACE Tmax XT trip units break new ground: they represent a new benchmark for the molded case circuit-breakers with a depth of features and functionality setting a new standard in their class.

The Tmax XT trip units are designed to be used in a wide range of applications. This complete, flexible protection trip unit can be adapted to the actual level of protection required, independently of the complexity of the system.

The range is available for three levels of performances, to meet any requirement, from simple to advanced applications.

- **TM, thermal-magnetic trip unit**
- **Ekip Dip, electronic trip unit**
- **Ekip Touch/Hi-Touch, electronic trip units**






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### Thermal-magnetic trip units

Used in both AC and DC networks, these are a solution for protection against overloads and short-circuits. Overload protection is ensured thanks to ABB thermal device based on a temperature dependent bimetal heated by the current. Protection against short-circuiting is realized with a magnetic device.

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### The Ekip Dip trip units

The first level of electronic trip units, used for the protection of an AC network: these are based on microprocessor technologies and guarantee high reliability and tripping precision. They provide protection against overloads, selective short-circuits, short-circuits and earth faults. The power required for their operation is provided directly from the current sensors. In addition, for XT2 and XT4 the communication is available over Modbus RTU.

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### The Ekip Touch/Hi-Touch trip units

These represent the state of the art in terms of technology for AC network protection with advanced protection and system management functions. Diverse communication protocols enable the reading of measurement parameters and circuit-breaker control remotely.

Class 1 active energy measurement in compliance with the IEC 61557-12 Standard permits highly demanding requirements of energy efficiency to be satisfied. The integrated display makes interaction with the Ekip Touch/Hi-Touch an easy and intuitive experience for the user and the embedded Bluetooth functionality allows fast interaction via EPiC (Electrification Products intuitive Configurator), the new application to configure and check the status of the ABB low voltage circuit breakers.

The Ekip Touch trip unit guarantees maximum flexibility. In fact, by selecting among the numerous software solutions available, it is possible to customize the functionality of the device at will. On the other side, the Ekip Hi-Touch trip unit includes all functions by default, representing the top-of-the-line in the SACE Tmax XT offer.

#### **New digital experience**

With the new Ekip Touch and Hi-Touch trip units, it is always possible to select and install the desired functions on the device. The functions can be selected when ordering the circuit-breaker or downloaded directly from the ABB Ability Marketplace™, even from a smart phone or tablet, thus reducing installation time to zero.

# New digital experience

Ekip Touch/Hi-Touch trip units can be now customized with the functions required.

—  
Ekip Touch/Hi-Touch provides a unique new experience to tailor the trip unit by selecting the set of protections, measurements and logics unique to your needs, as well as change them at anytime as needs change.

Circuit-breakers' customization has never been so easy.

With the new Ekip Touch and Hi-Touch trip units, the most advanced functionalities can be enabled following two different purchasing processes:

- **1 ABB Ability Marketplace™**

Users can download digital upgrades via web and enable them directly on the trip unit, without removing the circuit-breaker from the installation point, with zero shipping time and no installation costs. This process allows additional functions to be selected after the trip unit has been already received on site and installed. Moreover, stock can be optimized by keeping in the warehouse few types of trip units and customizing them according to the customer's specific needs. Once purchased, each function can be easily activated by using a smartphone or tablet via EPiC and embedded Bluetooth connectivity, or a laptop with Ekip Connect 3 and an Ekip T&P.

- **2 Traditional ordering**

This option represents the standard way to order ABB devices. The traditional process allows the users to select and directly install the desired functions when ordering the circuit-breaker. Once received and installed, SACE Tmax XT always offers the possibility to add new functionalities via ABB Ability Marketplace™.

The new Ekip digital offering includes:

- **Packages**

The software packages offer the possibility to customize the circuit-breaker by selecting additional protection functions and measurements. The device can be personalized to create tailor-made solutions according to the specific application. Maximum flexibility is guaranteed by offering specific technical features that can be combined in the Ekip Touch/Hi-Touch during the product life cycle.

- **Bundles**

Simplify the selection of advanced functions and logics with group of packages able to satisfy requirements by market segments and applications.

Bundles shall require additional plug and play hardware modules.

- **Solutions**

The SACE Tmax XT circuit-breaker is no more intended as a simply stand-alone protection device, but it has become an active player in the electrical system, able to exchange data and trigger actions managing the behavior of other connected devices. Thanks to the new electronic trip units, it is possible to implement transfer logics, load shedding and peak shaving strategies. Such solutions require additional plug and play hardware modules and other smart devices.

SACE Tmax XT allows for easy upgrade and customization of the Ekip Touch and Hi-Touch trip units, guaranteeing maximum flexibility for any application, and delivering value throughout the entire customer journey.

### 1. Design



Build the circuit-breaker according to specific project requirements.

#### Key drivers

- Ease of doing business
- Technical specifications
- Application and function

#### Benefits

- Flexibility of choice
- Customization by application

### 2. Commissioning



Customize the device thanks to the digital solutions. Manage last minute changes through digital upgrades.

#### Key drivers

- Ease of doing business
- Management of components
- Time to market

#### Benefits

- Stock optimization
- Zero lead time and installation effort

### 3. Service



Unlock the full potential of the circuit-breaker at any time, minimizing downtime and installation changes.

#### Key drivers

- Manage installed base
- Simplify diagnostics
- Simplify the hardware re-design

#### Benefits

- Zero lead time and installation effort
- Avoid downtime

# New digital experience

## Packages

Each package includes a set of protection functions or measurements that can be enabled in the trip unit.

Six packages relate to protection functions: Voltage Protections, Frequency Protections, Power Protections, Advanced Voltage Protections, ROCOF Protections and Adaptive Protections.



### Voltage Protections

Set of protections included: UV - Undervoltage, OV - Overvoltage, UV2 - 2nd Undervoltage, OV2 - 2nd Overvoltage, PS - Phase Sequence, VU - Voltage unbalance.

How to order: via ABB Ability Marketplace™ or traditional ordering channels.



### Frequency Protections

Set of protections included: UF - Underfrequency, OF - Overfrequency, UF2 - 2nd Underfrequency, OF2 - 2nd Overfrequency.

How to order: via ABB Ability Marketplace™ or traditional ordering channels.



### Power Protections

Set of protections included: RP - Reverse active power, Cos $\Phi$  - Power factor, D - Directional overcurrent, RQ - Loss of field or reverse reactive power, OQ - Reactive overpower, OP - Active over power, UP - Active underpower, RQ - 2nd Loss of field or Reverse reactive power.

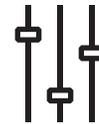
How to order: via ABB Ability Marketplace™ or traditional ordering channels.



### Advanced Voltage Protections

Set of protections included: S(V) - Voltage controlled overcurrent, S(V)2 - 2nd Voltage controlled overcurrent, R - Residual voltage.

How to order: via ABB Ability Marketplace™ or traditional ordering channels.



### ROCOF Protections

Set of protections included: ROCOF - Rate of change of frequency.

How to order: via ABB Ability Marketplace™ or traditional ordering channels.



### Adaptive Protections

Set of protections included: Dual Setting - Set A-B.

How to order: via ABB Ability Marketplace™ or traditional ordering channels.

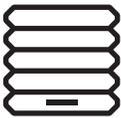
Three packages relate to measurements and diagnostics: Measuring Package, Data Logger and Network Analyzer.



#### Measuring Package

To monitor the plant through several measurements: Phase-to-phase voltage, Phase-to-neutral voltage, Phase sequence, Frequency, Active power, Reactive power, Apparent power, Power factor, Peak factor.

How to order: via ABB Ability Marketplace™ or traditional ordering channels.



#### Data Logger

To record data about events in the plant: Currents, Voltages, Sampling rate, Maximum recording duration, Recording stop delay, Number of registers.

How to order: via ABB Ability Marketplace™ or traditional ordering channels.



#### Network Analyzer

To monitor the power quality of the network through: Harmonic analysis, Hourly average voltage value, Short voltage interruption, Short voltage spikes, Slow-voltage sags and swells, Voltage unbalance.

How to order: via ABB Ability Marketplace™ or traditional ordering channels.

When a package is purchased via ABB Ability Marketplace™, it must be activated through:

- Ekip Connect 3 installed on a PC using Ekip T&P to scan the trip unit
- EPiC installed on a mobile device, by directly using the embedded Bluetooth connection available in the new Ekip trip units.

# New digital experience

## Packages

Thanks to the maximum flexibility guaranteed by these packages, the new Ekip trip units are now completely customizable. Depending on the specific trip unit version, different packages are available by default, and all can be added to the trip unit.

Default functionalities and upgradability of the trip units:

												
	Standard Protection	Standard Measures	Measuring Package	Voltage Protections	Frequency Protections	Power Protections	Adaptive Protections	Data Logger	Network Analyzer	Advanced Voltage Protections	ROCOF Protections	Power Controller
<b>Ekip Touch</b>	●	●	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
<b>Ekip Touch Measuring</b>	●	●	●	↑	↑	↑	↑	↑	↑	↑	↑	↑
<b>Ekip G Touch</b>	●	●	●	↑	↑	↑	↑	●	↑	↑	↑	↑
<b>Ekip M Touch</b>	●	●	●	●	●	↑	●	↑	↑	↑	↑	↑
<b>Ekip Hi-Touch</b>	●	●	●	●	●	↑	●	●	●	↑	↑	↑
<b>Ekip G Hi-Touch</b>	●	●	●	●	●	●	●	●	●	●	●	↑

- Available by default
- ↑ Updraggable
- ↑ Some functions available. Updraggable with the full package.

The flexibility offered by the packages allows also the selection of the proper functions that can be required by different segments and applications, purchasing only the needed functionalities.

Suggested packages by segment:

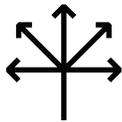
Packages									
	Wind	Solar	Data Center	Building Infrastructure	GenSet	Mining	Marine	Industries	Utilities
<b>Voltage Protections</b>	●	●		●	●		●		
<b>Advanced Voltage Protections</b>	●	●			●				
<b>Frequency Protections</b>	●	●			●	●		●	●
<b>Power Protections</b>			●	●		●		●	●
<b>ROCOF Protections</b>	●	●			●				
<b>Adaptive Protections</b>	●	●		●		●			
<b>Measuring Package</b>	●	●	●	●	●	●	●	●	●
<b>Data Logger</b>	●	●	●	●	●		●	●	
<b>Network Analyzer</b>	●	●	●	●	●	●	●		●
<b>Power Controller</b>			●	●		●			●

# New digital experience

## Bundles

Each bundle includes a set of packages that can be enabled on the trip unit.

Five bundles are available to satisfy different needs: Intelligent Grid Edge, Power Management, Grid Connection, Diagnostics and Measure Advanced.



### Intelligent Grid Edge

Make the grid smart.

Thanks to this bundle, the circuit-breaker becomes the main player of the smart interconnection of power distribution and loads for demand-supply coordination. Packages included: Measuring Package, Adaptive Protections, Power Protections, Voltage Protections and Ekip Power Controller.

How to order: via ABB Ability Marketplace™ or traditional ordering channels.



### Power Management

Embedded demand management.

Thanks to this bundle, the circuit-breaker is ready for demand management to ensure service continuity and reduce energy costs. Packages included: Measuring Package, Adaptive Protections, Power Protections and Voltage Protections.

How to order: via ABB Ability Marketplace™ or traditional ordering channels.



### Grid Connection

Optimize renewable power generation.

No more external and additional relays are needed with this bundle. It enhances tracking and improved energy harvesting. Packages included: Measuring Package, Adaptive Protections, Power Protections and Ekip Power Controller.

How to order: via ABB Ability Marketplace™ or traditional ordering channels.



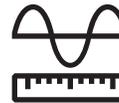
### Diagnostics

Comprehensive data for root-cause analysis and preventive maintenance.

This bundle gives full diagnostics of the system to guarantee a full control of the plant status.

Packages included: Measuring Package, Network Analyzer and Data Logger.

How to order: via ABB Ability Marketplace™ or traditional ordering channels.



### Measure Advanced

Embedded advanced metering and power quality information.

This bundle gives the possibility to preserve the loads, by avoiding equipment malfunctioning and optimizing energy consumption thanks to additional measurements and full power quality analysis. Packages included: Measuring Package, Network Analyzer.

How to order: via ABB Ability Marketplace™ or traditional ordering channels.

When a bundle is purchased via ABB Ability Marketplace™, it must be activated through:

- Ekip Connect 3 installed on a PC using Ekip T&P to scan the trip unit
- EPiC installed on a mobile device, by directly using the embedded Bluetooth connection available in the new Ekip trip units.

# New digital experience

## Bundles

The flexibility offered by the bundles allows also the selection of the proper functions that can be required by different segments and applications, purchasing only the needed functionalities.

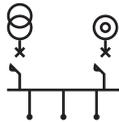
Suggested bundles by segment:

Bundle									
	Wind	Solar	Data Center	Building Infrastructure	GenSet	Mining	Marine	Industries	Utilities
<b>Intelligent Grid Edge</b>			●	●	●				●
<b>Power Management</b>			●	●				●	●
<b>Grid Connection</b>	●	●						●	
<b>Diagnostics</b>	●	●	●	●	●	●	●		
<b>Measure Advanced</b>	●	●	●	●	●	●			

# New digital experience

## Solutions

Five solutions are available to fully exploit the potential of the Ekip architecture: Embedded ATS, Adaptive Load Shedding and Ekip Power Controller.



### Embedded ATS (Automatic Transfer Switch)

This function enables the activation of auxiliary generation sources (e.g. generators) and transfers the feed of the loads from the distribution network to such auxiliary sources, thus ensuring a secure transfer to maintain service continuity and reliability of the system.

How to order: via ABB Ability Marketplace™ or traditional ordering channels.

The hardware accessories must be ordered via traditional ordering channels.



### Adaptive Load Shedding

Thanks to this solution, the circuit-breaker enables islanding transition to avoid blackouts.

It actively controls the power consumption based on the priorities set by the user.

How to order: via ABB Ability Marketplace™ or traditional ordering channels.

The hardware accessories must be ordered via traditional ordering channels.



### Ekip Power Controller

This function is the ideal solution for load management and represents an optimum compromise between reliability, simplicity and cost-effectiveness. Based on a patented calculation algorithm, Ekip Power Controller allows a list of loads to be controlled from remote according to the priorities defined by the user.

How to order: via ABB Ability Marketplace™ or traditional ordering channels. The hardware accessories must be ordered via traditional ordering channels.

When a solution is purchased via ABB Ability Marketplace™, it must be activated through Ekip Connect 3 installed on a PC using Ekip T&P to scan the trip unit.

These solutions require the installation of hardware components that must be ordered through the traditional ordering channels. For further information, please refer to the specific documentation available on ABB Library ([www.abb.com/abblibrary/DownloadCenter/](http://www.abb.com/abblibrary/DownloadCenter/)).

# New digital experience

## Solutions

	Functions included	Hardware accessories
<b>PACKAGES</b>		
Voltage Protections	UV - Undervoltage	-
	OV - Overvoltage	
	UV2 – 2nd Undervoltage	
	OV2 – 2nd Overvoltage	
	PS – Phase sequence	
	VU – Voltage unbalance	
Frequency Protections	UF - Underfrequency	-
	OF - Overfrequency	
	UF2 – 2nd Underfrequency	
	OF2 - 2nd Overfrequency	
Power Protections	RP – Reverse active power	-
	Cos $\Phi$ - Power factor	
	D – Directional current	
	RQ – Loss of field or Reverse reactive power	
	OQ – Reactive overpower	
	OP – Active overpower	
	UP – Active underpower	
	2RQ – 2nd Loss of field or Reverse reactive power	
Advanced Voltage Protections	S(V) – Voltage controlled overcurrent	-
	S(V)2 – 2nd Voltage controlled overcurrent	
	R – Residual voltage	
ROCOF Protections	ROCOF	-
Adaptive Protections	Dual setting	Ekip Signalling
Measuring Package	Phase-to-phase voltage	-
	Phase-to-neutral voltage	
	Phase sequence	
	Frequency	
	Active power	
	Reactive power	
	Apparent power	
	Power factor	
	Peak factor	
Data Logger	Currents	-
	Voltages	
	Sampling rate	
	Maximum recording duration	
	Recording stop delay	
	Number of registers	
Network Analyzer	Hourly average voltage value	-
	Short voltage interruptions	
	Short voltage spikes	
	Slow voltage sags and swells	
	Voltage unbalance	
	Harmonic analysis	

	Functions included	Hardware accessories
<b>BUNDLES</b>		
Intelligent Grid Edge	Measuring Package Adaptive Protections Power Protections Voltage Protections Ekip Power Controller	Ekip Link, Ekip Signalling, motor operators and coils
Power Management	Measuring Package Adaptive Protections Power Protections Voltage Protections	Ekip Signalling
Grid Connection	Measuring Package Adaptive Protections Power Protections Ekip Power Controller	Ekip Link, Ekip Signalling, motor operators and coils
Diagnostics	Measuring Package Network Analyzer Data Logger	-
Measure Advanced	Measuring Package Network Analyzer	-
<b>SOLUTIONS</b>		
Embedded ATS	-	Ekip Link, Ekip Signalling, motor operators and coils
Adaptive Load Shedding	-	Ekip Link, Ekip Signalling, motor operators and coils
Ekip Power Controller	-	Ekip Link, Ekip Signalling, motor operators and coils

# Offer

SACE Tmax XT trip units have been developed to be used in a broad range of installations environments. From commercial construction to highly automated industries, anticipating the growing needs of data centers and modern buildings - engineered from an exceptionally broad depth of application experience.

The complete, flexible protection trip unit is classified in three different fields of applications as follows:

### Power distribution protection

Tmax XT is the ideal solution for all distribution levels, from main low voltage switchboards to sub-switchboards, and also for transformers and drives. The field of application is very broad and ranges from residential and commercial buildings to infrastructure, microgrids, but also industrial environments, oil and gas installations, mining facilities, data centers, marine applications, wind and solar farms. Depending on the complexity of the system, it is possible to select between different performance levels. Thus, when higher protection accuracy is required, or advanced control systems are needed, it is always possible to choose the appropriate version.

### Motor protection

Motors are used in several industrial sectors, like food and beverage, chemicals, metallurgic, paper, water and extractive industries. When a motor system needs to be protected, the safety and reliability of the solution are important aspects that must be considered when choosing and manufacturing the system for motor starting and monitoring.

Start-up is a particularly critical phase for the motor itself and for the system powering it. When it comes to direct starting, the SACE Tmax XT range proposes different solutions, from magnetic only protection to a very advanced protection system.

### Generator protection

Tmax XT has been designed to provide a solution for the protection of small generators and networks where distribution is realized through very long cables. In addition, it also provides protection for generators without using external devices that require dedicated relays and wiring. This solution minimizes the time needed for implementation and commissioning of the system, and ensures the high levels of accuracy and reliability required for running generators in applications such as naval, GenSet or cogeneration.

	Field of application	Current protection	Voltage protection	Measuring	Communication	Remote Control	Embedded software functions
TMD/TMA	Power distribution	●				●	
Ekip Dip		●			● <sup>(1)</sup>	●	
Ekip Touch		●	●	●	●	●	●
MA	Motor	●				●	
Ekip M Dip		●				●	
Ekip M Touch		●	●	●	●	●	●
TMG	Generator	●				●	
Ekip G Dip		●				●	
Ekip G Touch		●	●	●	●	●	●

(1) Available only for XT2 and XT4





# Offer

The Tmax XT trip units represent the ideal solution for applications up to 1200A.

The Tmax XT molded case circuit-breaker family complies with numerous installation requirements. Circuit-breakers are available with trip units dedicated to three different application groups. The table below shows the trip units for each circuit-breaker frame and the related rated interrupted current ranges.

The power distribution and generator protection application trip units are available in both 3 and 4-pole versions. With the XT2, XT4, XT5, XT6, XT7 and XT7 M versions the trip units are interchangeable, in order to make a performance upgrade of the system easier.



Rated uninterrupted current ranges [A]	XT1	XT2	XT3
<b>Power Distribution Protection</b>			
<b>Thermal-magnetic</b>			
TMF	15...125	15...70	80...125
TMA		80...125	
<b>Ekip Dip</b>			
Ekip Dip LS/I		10...125	
Ekip Dip LIG		10...125	
Ekip Dip LSI		10...125	
Ekip Dip LSIG		10...125	
Ekip C Dip LSI		10...125	
Ekip C Dip LSIG		10...125	
<b>Ekip Touch</b>			
Ekip Touch LSI		40...125	
Ekip Touch LSIG		40...125	
Ekip Touch Measuring LSI		40...125	
Ekip Touch Measuring LSIG		40...125	
Ekip Hi-Touch LSI		40...125	
Ekip Hi-Touch LSIG		40...125	
<b>Motor Protection</b>			
<b>Magnetic</b>			
MA	3...125	3...125	100...200
<b>Ekip Dip</b>			
Ekip M Dip I		10...125	
Ekip M Dip LIU		25...100	
<b>Ekip Touch</b>			
Ekip M Touch LRIU		40...100	
<b>Generator Protection</b>			
<b>Thermal-magnetic</b>			
TMG			
<b>Ekip Dip</b>			
Ekip G Dip LS/I			
<b>Ekip Touch</b>			
Ekip G Touch LSIG			
Ekip G Hi-Touch LSIG			

Maximum flexibility is guaranteed for customers: on the XT5, XT7 and XT7 M, with Ekip Touch trip units, the interchangeable rating plug enables the rated current to be changed according to system requirements.



XT4	XT5	XT6	XT7	XT7 M
25...250				
80...250	300...600	600...800		
40...250	250...600	600...800	600...1200	600...1200
40...250	250...600	600...800	600...1200	600...1200
40...250	250...600	600...800	600...1200	600...1200
40...250	250...600	600...800	600...1200	600...1200
40...250				
40...250				
100...250	250...600		600...1200	600...1200
100...250	250...600		600...1200	600...1200
100...250	250...600		600...1200	600...1200
100...250	250...600		600...1200	600...1200
100...250	250...600		600...1200	600...1200
100...250	250...600		600...1200	600...1200
25...200	300...500			
40...250	250...600	600...800	600...1200	600...1200
40...150	250...500	600...800		
100...200	250...500		600...1200	600...1200
	300...600			
	300...600	600...800	600...1200	600...1200
	250...600		600...1200	600...1200
	250...600		600...1200	600...1200

# Thermal-magnetic trip unit

## Overview

The thermal-magnetic trip units are used for the protection of AC and DC networks. They are a solution for systems where only protection against overloads and short-circuits are needed.

### Power Distribution Protection

- TMF
- TMA

### Motor Protection

- MA

- Key:
1. Current threshold for short-circuit protection;
  2. Rotary switch for short-circuit protection;
  3. Current threshold for overload protection;
  4. Rotary switch for overload threshold setting.



### Rotary switch

Depending on the version, it is possible to set the desired thresholds for protection by turning the front rotary switch.

Field of application	Trip Unit	L - Overload Protection		I - Short-circuit Protection	
		Current Threshold	Trip Time	Current Threshold	Trip Time
Power Distribution Protection	TMF	Fixed	Fixed	Fixed	Fixed instantaneous
	TMA	Adjustable	Fixed	Adjustable	Fixed instantaneous
Motor Protection	MA	-	-	Adjustable	Fixed instantaneous

**Power Distribution Protection**

TMF

In [A]	15	20	25	30	35	40	45	50	60	70	80	90	100	110	125	150	175	200	225	250	
XT1	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●						
XT2	●	●	●	●	●	●		●	●	●											
XT3									●	●	●	●	●	●	●	●	●	●	●	●	●
XT4			●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●

Note: For XT4 and for In ≥ 80A, TMF available in 3 poles version only

TMA

In [A]	80	90	100	110	125	150	175	200	225	250	300	400	500	600	800
XT2	●	●	●	●	●										
XT4	●	●	●	●	●	●	●	●	●	●					
XT5											●	●	●	●	
XT6														●	●

**Motor Protection**

MA (MCP)

In [A]	3	7	15	25	30	50	70	80	100	110	125	150	175	200	225	250	300	400	500
XT1	●	●	●		●	●	●	●	●		●								
XT2	●	●	●		●	●	●	●	●		●								
XT3									●	●	●	●		●					
XT4				●		●		●	●	●	●	●	●	●	●	●			
XT5																	●	●	●

**Generator Protection**

TMG

In [A]	300	400	500	600
XT5	●	●	●	●

# Thermal-magnetic trip unit

## Settings

Available settings for TMF and TMA trip units:

Circuit Breaker	Trip Unit	In [A]	L - Overload / Long Time Protection			I - Short Circuit / Instantaneous Protection				
			I1 [A]			I3 [A]				
			MIN.	MED.	MAX.	MIN.	MED.	MAX.		
XT1	TMF	15			15			500		
		20			20			500		
		25			25			500		
		30			30			500		
		35			35			500		
		40			40			500		
		45			45			500		
		50			50			500		
		60			60			600		
		70			70			700		
		80			80			800		
		90			90			900		
		100			100			1000		
		110			110			1100		
125			125			1250				
XT2	TMF	15			15			400		
		20			20			400		
		25			25			400		
		30			30			400		
		35			35			400		
		40			40			400		
		50			50			500		
	TMA	60			60			600		
		70			70			700		
		80	56	68	80	400	600	800		
		90	63	77	90	450	675	900		
		100	70	85	100	500	750	1000		
		110	77	94	110	550	825	1100		
		125	88	107	125	625	937	1250		
XT3	TMF	60			60			600		
		70			70			700		
		80			80			800		
		90			90			900		
		100			100			1000		
		110			110			1100		
		125			125			1250		
		150			150			1500		
		175			175			1750		
		200			200			2000		
		225			225			2250		
		XT4	TMF	25			25			400
				30			30			400
				35			35			400
40					40			400		
50					50			500		
60					60			600		
70					70			700		
80					80			800		
90					90			900		
100					100			1000		
110					110			1100		
125					125			1250		
150					150			1500		
175					175			1750		
200				200			2000			
225				225			2250			
250				250			2500			
TMA	80		56	68	80	400	600	800		
	90		63	77	90	450	675	900		
	100		70	85	100	500	750	1000		
	110	77	94	110	550	825	1100			
	125	88	106	125	625	938	1250			
	150	105	128	150	750	1125	1500			
	175	123	149	175	875	1313	1750			
	200	140	170	200	1000	1500	2000			
	225	158	192	225	1125	1688	2250			
	250	175	213	250	1250	1875	2500			
XT5	TMA	300	210	255	300	1500	2250	3000		
		400	280	340	400	2000	3000	4000		
		500	350	425	500	2500	3750	5000		
		600	420	510	600	3000	4500	6000		
		800	560	680	800	4000	6000	8000		
XT6	TMA	600	420	510	600	3000	4500	6000		
		800	560	680	800	4000	6000	8000		

Available settings for MA and TMG trip units:

Circuit Breaker	Trip Unit	In [A]	L - Overload / Long Time Protection			I - Short Circuit / Instantaneous Protection		
			I1 [A]			I3 [A]		
			MIN.	MED.	MAX.	MIN.	MED.	MAX.
XT1	MA	3				12	23	33
		7				28	53	77
		15				45	105	165
		30				90	210	330
		50				150	350	550
		70				210	490	770
		80				240	560	880
		100				300	700	1100
XT2	MA	125				375	875	1375
		3				12	23	33
		7				28	53	77
		15				45	105	165
		30				90	210	330
		50				150	350	550
		70				210	490	770
		80				240	560	880
XT3	MA	100				600	900	1200
		110				660	990	1320
		125				750	1125	1500
		150				900	1350	1800
		200				1200	1800	2400
XT4	MA	25				75	175	275
		50				150	350	550
		80				400	600	800
		100				500	750	1000
		110				550	825	1100
		125				625	938	1250
		150				750	1125	1500
		175				875	1313	1750
		200				1000	1500	2000
		225				1125	1688	2250
		250				1250	1875	2500
XT5	MA	300				2100	3000	3900
		400				2800	4000	5200
		500				3500	5000	6500
	TMG	300	210	255	300	750	1125	1500
		400	280	340	400	1000	1500	2000
		500	350	425	500	1250	1875	2500
		600	420	510	600	1500	2250	3000

# Ekip Dip

## Overview

The Ekip Dip is a first level of electronic trip unit, used for the protection of AC networks.

### Power Distribution Protection

- Ekip Dip LS/I
- Ekip Dip LIG
- Ekip Dip LSI
- Ekip Dip LSI G
- Ekip C Dip LSI
- Ekip C Dip LSI G

### Motor Protection

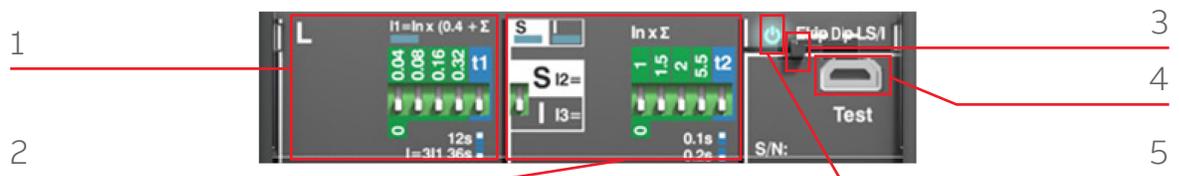
- Ekip M Dip I
- Ekip M Dip LIU

### Generator Protection

- Ekip G Dip LS/I

Key:

1. Dip switches for an overload protection setting.
2. Dip switches for short-circuit and time delayed short-circuit protection settings.
3. Slot for lead seal.
4. Test connector.
5. Power-on LED.



### Dip switches

The dip switches on the front of the trip unit allow manual settings also when the trip unit is off.

### LEDs

The LEDs on the front indicate the status of the release (on/off) and provide information about the protection tripped when the Ekip TT accessory is connected.

### Front connector

The connector on the front of the unit allows the connection of:

- Ekip TT for trip testing; LED-test and signaling of the most recent trip.
- Ekip T&P for connection to a laptop with the Ekip Connect program (thus measurement reading, as well as trip and protection function tests are made available for the user).

### Characteristics of electronic Ekip Dip trip units

Operating temperature	-25°C...+70°C
Relative humidity	98%
Self-supplied	0.2xIn (single phase)*
Auxiliary supply (where applicable)	24V DC ± 20%
Operating Frequency	45...66Hz
Electromagnetic compatibility	IEC 60947-2 Annex F

\*For 10A:0.4in

### Thermal memory

All the Ekip Dip trip units include a thermal memory function. The trip unit records the trips which have occurred in the last few minutes. Since the trip causes overheating, in order to protect the cables and let them cool down, the trip unit imposes a shorter delay tripping time in case of a fault. Thus, the system is protected against damage due to cumulative overheating. This can be disabled, if needed, by using the Ekip T&P.

### External neutral

Ekip Dip trip units are available in both 3 and 4 poles. The 3-pole version with earth fault protection (G) can be equipped with an external sensor for the neutral phase. In this way, the external neutral phase is protected and uninterrupted.

### Communication

- Using the dedicated Ekip Com Modbus RTU Dip module, XT2 and XT4 can communicate when they are equipped with the following trip units:
  - Ekip C Dip LSI
  - Ekip C Dip LSI G

Field of application	Trip Unit	L - Overload Protection		S - Selective Short-circuit Protection		I - Short-circuit Protection		
		Current Threshold	Trip Time	Current Threshold	Trip Time	Current Threshold	Trip Time	
Power Distribution Protection	Ekip Dip	LS/I	Adjustable	Adjustable	Adjustable	Adjustable	Fixed	
		LIG	Adjustable	Adjustable	-	-	Adjustable	Fixed
		LSI	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Fixed
		LSIG	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Fixed
	Ekip C Dip	LSI	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Fixed
LSIG		Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Fixed	
Motor Protection	Ekip M Dip I	I	-	-	-	-	Adjustable	Fixed
		LIU	Adjustable	Adjustable	-	-	Adjustable	Fixed
Generator Protection	Ekip G Dip	LS/I	Adjustable	Adjustable	Adjustable	Adjustable	Adjustable	Fixed

**Power Distribution Protection**

Ekip Dip LS/I; Ekip Dip LIG; Ekip Dip LSI; Ekip Dip LSIG

In [A]	10	25	40	60	100	125	150	225	250	300	400	600	800	1000	1200
XT2	●	●		●	●	●									
XT4			●	●	●		●	●	●						
XT5									●	●	●	●			
XT6												●	●		
XT7												●	●	●	●

Ekip C Dip LSI; Ekip C Dip LSIG

XT2	●	●		●	●	●									
XT4			●	●	●		●	●	●						

**Motor Protection**

Ekip M Dip I

In [A]	10	25	40	60	100	125	150	225	250	300	400	600	800	1000	1200
XT2	●	●		●	●	●									
XT4			●	●	●		●	●	●						
XT5									●	●	●	●			
XT6												●	●		
XT7												●	●	●	●

Ekip M Dip LIU

In [A]	25	40	60	100	150	250	300	400	500	600	800	
XT2	●		●	●								
XT4		●	●	●	●							
XT5						●	●	●	●			
XT6											●	●

**Generator Protection**

Ekip G Dip LS/I

In [A]	250	300	400	600	800	1000	1200
XT5	●	●	●	●			
XT6				●	●		
XT7				●	●	●	●

# Ekip Dip

## Protection settings

Available settings for Ekip Dip trip units:

### Ekip Dip LS/I & Ekip Dip LIG

ABB code	ANSI code	Protection Function	Threshold	Trip Time	Trip Curve
L	49	Overload / Long Time Protection	I1 = 0.4...1 x In with steps of 0.04	t1 at 3 x I1 = 12 - 36s 12 - 48s for XT7	t=k/I <sup>2</sup>
S	50 TD/51	Selective short-circuit / Short Time Protection	I2 = Off - 1 - 1.5 - 2 - 2.5 - 3 - 3.5 - 4.5 - 5.5 - 6.5 - 7 - 7.5 - 8 - 8.5 - 9 - 10 x In	t2 = 0.1 - 0.2s at 10 x In when t = k/I2	t=k t = k or t = k/I <sup>2</sup> for XT7
I	50	Short-circuit / Instantaneous Protection	I3 = Off - 1 - 1.5 - 2 - 2.5 - 3 - 3.5 - 4.5 - 5.5 - 6.5 - 7 - 7.5 - 8 - 8.5 - 9 - 10 x In	t3 ≤ 20ms t3 ≤ 30ms for XT7	t=k
G	50N/50N TD	Earth fault / Ground Fault Protection	I4 = Off - 0.20 - 0.25 - 0.45 - 0.55 - 0.75 - 0.80 - 1 x In I4 = Off - 0.2 - 0.3 - 0.4 - 0.6 - 0.8 - 0.9 - 1.0 x In for XT7	t4 = 0.1 - 0.2 - 0.4 - 0.8s at 3 x In when t = k/I2	t=k t = k or t = k/I <sup>2</sup> for XT7

### Ekip Dip LSI, Ekip Dip LSIG, Ekip C Dip LSI & Ekip C Dip LSIG

ABB code	ANSI code	Protection Function	Threshold	Trip Time	Trip Curve
L	49	Overload / Long Time Protection	I1 = 0.4...1 x In with steps of 0.02 I1 = 0.4 - 0.42 - 0.45 - 0.47 - 0.5 - 0.52 - 0.55 - 0.57 - 0.6 - 0.62 - 0.65 - 0.67 - 0.7 - 0.72 - 0.75 - 0.77 - 0.8 - 0.82 - 0.85 - 0.87 - 0.9 - 0.92 - 0.95 - 0.97 - 1 x In for XT7	t1 at 3xI1 = 3 - 12 - 36 - 60s at 3xI1 for XT2-XT4 3 - 12 - 36 - 48s for XT5 3 - 12 - 36 - 72 for XT6 3 - 12 - 24 - 36 - 48 - 72 - 108 - 144s for XT7	t=k/I <sup>2</sup>
S	50 TD/51	Selective short-circuit / Short Time Protection	I2 = Off - 1 - 1.5 - 2 - 2.5 - 3 - 3.5 - 4.5 - 5.5 - 6.5 - 7 - 7.5 - 8 - 8.5 - 9 - 10 x In I2 = Off - 0.6 - 0.8 - 1 - 1.5 - 2 - 2.5 - 3 - 3.5 - 4 - 5 - 6 - 7 - 8 - 9 - 10 for XT7	t2 = 0.05 - 0.1 - 0.2 - 0.4 for XT2-XT4-XT5-XT6 t2 = 0.1 - 0.2 - 0.3 - 0.4 - 0.5 - 0.6 - 0.7 - 0.8 for XT7 at 10xIn when t = k/I <sup>2</sup>	t = k or t = k/I <sup>2</sup>
I	50	Short-circuit / Instantaneous Protection	I3 = Off - 1 - 1.5 - 2 - 2.5 - 3 - 3.5 - 4.5 - 5.5 - 6.5 - 7 - 7.5 - 8 - 8.5 - 9 - 10 x In I3 = Off - 1.5 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 for XT7	t3 ≤ 40ms t3 ≤ 30ms for XT7	t=k
G	50N/50N TD	Earth fault / Ground Fault Protection	I4 = Off - 0.20 - 0.25 - 0.45 - 0.55 - 0.75 - 0.80 - 1 x In I4 = Off - 0.1 - 0.2 - 0.3 - 0.4 - 0.6 - 0.8 - 0.9 - 1.0 x In for XT7	t4 = 0.1 - 0.2 - 0.4 - 0.8s at 3 x In when t = k/I2	t=k t = k or t = k/I <sup>2</sup> for XT7

### Ekip M Dip I

ABB code	ANSI code	Protection Function	Threshold	Trip Time	Trip Curve
I	50	Short-circuit / Instantaneous Protection	I3 = Off - 1 - 1.5 - 2 - 2.5 - 3 - 3.5 - 4.5 - 5.5 - 6.5 - 7 - 7.5 - 8 - 8.5 - 9 - 10 x In	t3 ≤ 15ms for XT2-XT4 t3 ≤ 20ms for XT5-XT6 t3 ≤ 30ms for XT7	t=k

### Ekip M Dip LIU

ABB code	ANSI code	Protection Function	Threshold	Trip Time	Trip Curve
L	-	Overload / Long Time Protection	I1 = 0.4...1 x In with steps of 0.04	Operating Class for XT2-XT4: t=k/I <sup>2</sup> 3E - 5E - 10E - 20E Operating Class for XT5-XT6: 5E - 10E - 20E - 30E	
I	50	Short-circuit / Instantaneous Protection	I3 = 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 x In	t3 ≤ 15ms for XT2-XT4 t3 ≤ 20ms for XT5-XT6 t3 ≤ 30ms for XT7	t=k
U	46	Phase loss (IEC 60947-4-1)	ON/OFF	When ON t6 = 2s	t=k

**Ekip G Dip LS/I**

ABB code	ANSI code	Protection Function	Threshold	Trip Time	Trip Curve
L	49	Overload / Long Time Protection	$I1 = 0.4...1 \times I_n$ with steps of 0.04	$t1$ at $3 \times I1 = 3 - 6s$	$t = k/I^2$
S	50 TD/ 51	Selective short-circuit / Short Time Protection	$I2 = \text{Off} - 1 - 1.5 - 2 - 2.5 - 3 - 3.5 - 4.5 - 5.5 - 6.5 - 7 - 7.5 - 8 - 8.5 - 9 - 10 \times I_n$	$t2 = 0.05 - 0.075 - 0.1 - 0.2$ at $10 \times I_n$ when $t = k/I2$	$t = k / I^2$
I	50	Short-circuit / Instantaneous Protection	$I3 = \text{Off} - 1 - 1.5 - 2 - 2.5 - 3 - 3.5 - 4.5 - 5.5 - 6.5 - 7 - 7.5 - 8 - 8.5 - 9 - 10 \times I_n$	$t3 \leq 20ms$ $t3 \leq 30ms$ for XT7	$t = k$

**Neutral protection**

Trip Unit	XT2 - XT4 <sup>(1)</sup>		XT5 - XT6		XT7 - XT7 M	
	3 poles + external neutral	4 poles	3 poles + external neutral	4 poles	3 poles + external neutral	4 poles
Ekip Dip LS/I	-	OFF / ON (50%-100%)	-	OFF / ON (50%-100%)	OFF / ON (50%-100%)	OFF / ON (50%-100%)
Ekip Dip LIG	OFF / ON (50%-100%)	OFF / ON (50%-100%)	OFF / ON (50%-100%)	OFF / ON (50%-100%)	OFF / ON (50%-100%)	OFF / ON (50%-100%)
Ekip Dip LSI	OFF / ON (50%-100%)	OFF / ON (50%-100%)	OFF / ON (50%-100%)	OFF / ON (50%-100%)	OFF / ON (50%-100%)	OFF / ON (50%-100%-200%)
Ekip Dip LSIG	OFF / ON (50%-100%)	OFF / ON (50%-100%)	OFF / ON (50%-100%)	OFF / ON (50%-100%)	OFF / ON (50%-100%)	OFF / ON (50%-100%-200%)
Ekip C Dip LSI	OFF / ON (50%-100%) <sup>(2)</sup>	OFF / ON (50%-100%)	-	-	-	-
Ekip C Dip LSIG	OFF / ON (50%-100%) <sup>(2)</sup>	OFF / ON (50%-100%)	-	-	-	-
Ekip M Dip I	-	-	-	-	-	-
Ekip M Dip LIU	-	-	-	-	-	-
Ekip G Dip LS/I	-	-	-	OFF / ON (50%-100%)	OFF / ON (50%-100%)	OFF / ON (50%-100%)

When external neutral sensors are installed on Ekip C Dip, the protection must be enabled first via Ekip Connect

(1) For  $I_n < 100A$  neutral protection is fixed to 100% when enabled; (2) Settings must be done via Ekip Connect 3

# Ekip Dip

## Protection settings

### Tolerances in case of:

- Self-powered trip unit at full power
- 2 or 3 phase supply

Trip Unit	Protection	Trip Threshold	Trip Time
Ekip Dip LS/I Ekip Dip LIG Ekip G Dip LS/I	L	trip between 1.05...1.3 x I1	±10% up to 4xIn; ±20% from 4xIn
	S	±10%	XT2-XT4-XT5-XT6: 15% <sup>(2)</sup> XT7: t=k: ±10% t=k/I2: ±15% up to 4xIn; ±20% from 4xIn
	I	±10%	-
	G <sup>(1)</sup>	±10%	XT2-XT4-XT5-XT6: ±20%; XT7: ±15%
Ekip Dip LSI Ekip Dip LSIG	L	trip between 1.05...1.3 x I1	XT2-XT4-XT5-XT6: ±10% up to 4xIn; ±20% from 4xIn XT7: ±10% up to 6xIn; ±20% from 6xIn
	S	±10%	XT2-XT4-XT5-XT6: t=k: ±10% up to 4xIn; ±20% from 4xIn t=k/I2: ±15% t2 >100ms; ±20ms t2 ≤100ms XT7: t=k the better of the two data: ±10% or ± 40ms; t=k/I2: ±15% up to 6xIn; ±20% from 6xIn
	I	±10%	-
	G <sup>(1)</sup>	XT2-XT4-XT5-XT6: ±10% XT7: ±7%	XT2-XT4-XT5-XT6: ±15% XT7: t=k the better of the two data: ±10% or ± 40ms; t=k/I2: ±15% up to 6xIn; ±20% from 6xIn
Ekip C Dip LSI Ekip C Dip LSIG	L	trip between 1.05...1.3 x I1	±10% up to 4xIn; ±20% from 4xIn
	S	±10%	t=k: ±10% up to 4xIn; ±20% from 4xIn t=k/I2: ±15% t2 >100ms; ±20ms t2 ≤100ms
	I	±10%	-
	G <sup>(3)</sup>	±10%	±15%
Ekip M Dip I and Ekip M Dip LIU	L	trip between 1.05...1.2xI1	±10% up to 4xIn; ±20% up to 4xIn
	I	±10%	-
	U	±10%	±10%

(1) G protection is inhibited for currents higher than 4xIn with XT2, XT4, XT5 and XT6; (2) for G Dip LS/I: ±10% t2 > 100ms; ±20% t2 ≤ 100ms;

(3) G protection is inhibited for currents higher than 2xIn with XT2-XT4 C Dip

### Tolerances in other conditions:

Trip Unit	Protection	Trip Threshold	Trip Time
Ekip Dip LS/I Ekip Dip LIG Ekip G Dip LS/I	L	trip between 1.05...1.3 x I1 according IEC 60947-2	±20%
	S	±10%	±20%
	I	±15%	≤60ms
	G	± 30% For In=10A Ifault min=4A For In=25A Ifault min=9A	± 20% For In=10A,25A: ±30%
Ekip Dip LSI Ekip Dip LSIG	L	trip between 1.05...1.3 x I1 according IEC 60947-2	±20%
	S	±10%	±20%
	I	±15%	≤60ms
	G	XT2-XT4-XT5-XT6 ± 30% For In=10A Ifault min=4A For In=25A Ifault min=9A XT7 ±7%	XT2-XT4-XT5-XT6 ± 20% For In=10A,25A: ±30% XT7 t=k the better of the two data: ±10% or ±40ms t=k/I2: ±15%
Ekip C Dip LSI Ekip C Dip LSIG	L	trip between 1.05...1.3 x I1 according IEC 60947-2	±20%
	S	±10%	±20%
	I	±15%	<=60ms
	G <sup>(1)</sup>	±30% For In=10A Ifault min 4A For In=25A Ifault min 9A	±20% For In=10A,25A : ±30%
Ekip M Dip I Ekip M Dip LIU	L	trip between 1.05...1.2xI1	±20%
	I	±15%	≤60ms
	U	±20%	±20%

(1) G protection is inhibited for currents higher than 2xIn with XT2-XT4 C Dip

# Ekip Touch/Hi-Touch

## Overview

The Ekip Touch/Hi-Touch provide a complete series of protections and high accuracy measurements of all electrical parameters and can be integrated perfectly with the most common automation and supervision systems.

### Power Distribution Protection

- Ekip Touch LSI
- Ekip Touch LSIG
- Ekip Touch Measuring LSI
- Ekip Touch Measuring LSIG
- Ekip Hi-Touch LSI
- Ekip Hi-Touch LSIG

### Motor Protection

- Ekip M Touch LRIU

### Generator Protection

- Ekip G Touch LSIG
- Ekip G Hi-Touch LSIG

#### Key:

1. Power-on LED; pre-alarm LED; alarm LED
2. Test and programming connector
3. Display
4. Home push-button to return to homepage;
5. Push-button for testing and tripping information



### Communication and Connectivity

The Ekip Touch/Hi-Touch trip units can be integrated perfectly into all automation and energy management systems to improve productivity and energy consumption and for remote control. The circuit-breakers can be equipped with communication modules for Modbus, Profibus, and DeviceNet™ protocols as well as Modbus TCP, Profinet and EtherNet/IP™. The modules can be easily installed even at a later date.

A solution with integrated modules is useful when the space in the switchboard is limited, but also a solution with external Ekip Cartridge modules is highly suitable when an advanced control and communication system is required.

Furthermore, the IEC61850 communication module enables connection to automation systems widely used in medium voltage power distribution to create intelligent networks (Smart Grids). All circuit-breaker functions are also accessible via the Internet, in complete safety and through the Ekip Link switchgear supervision system. Furthermore, with an easy connection thanks to the Ekip Com Hub module, the circuit-breakers allow the system to be monitored via ABB Ability™ Energy and Asset Manager.

# Ekip Touch/Hi-Touch

## Overview

### Efficiency and measurements

Achieving maximum efficiency for an electrical installation requires intelligent management of power supplies and energy use. For this reason, the new technologies used in the Ekip Touch/Hi-Touch trip units allow the productivity and reliability of installations to be optimized while reducing consumption and fully respecting the environment. These advanced functionalities, together with the protection and communication functions contribute to make Tmax XT with Ekip Touch/Hi-Touch the circuit-breaker that maximizes efficiency in all low-voltage electrical installations. With 1% accuracy on power and energy measurements, the trip units are certified according the IEC 61557-12 Standard. Ekip Touch/Hi-Touch trip units are no longer simply protection devices, but integrate multimeter and network analyzer functionality, thus guaranteeing a top level energy management system.

### Digital Upgrade

Ekip Touch/Hi-Touch trip units are available in different versions, to enable a wide range of functions: from the Ekip Touch to the Ekip Hi-Touch, it is always possible to customize any device thanks to the additional digital modules.

All functions are available on the ABB Ability Marketplace™ and can be added both when ordering the trip unit as well as after the installation of the circuit-breaker. Ekip Connect provides the desired functions, and EPiC makes the operation even faster, directly from a Smartphone. Several packages are available to download, and all of them are designed to save time, costs, and space, since no external devices are needed.

### Interface

It is possible to interact with the trip unit in several ways via:

- **The front display**

An LCD display with a push button ensures easy navigation on the XT2 and XT4, while a color touch screen is available for intuitive and quick navigation on the XT5 and XT7, together with the possibility of viewing the waveform for different parameters.

- **Smartphone via Bluetooth**

Thanks to the integrated Bluetooth functionality, it is possible to set and check all the measurements and information directly from a smartphone thanks to the EPiC app. Even when the cabinet door is closed, it is always possible to carry out maintenance in a safer way. Bluetooth connectivity helps the customer during the commissioning of the system; all system parameters and protection thresholds can be set rapidly in the Ekip Touch trip units thanks to the easy and intuitive navigation pages of the app.

- **PC with Ekip Connect**

It is also easy to interact with the trip unit with a PC. Thanks to the Ekip T&P cable the trip unit can be easily connected to a USB PC port and using the Ekip Connect program it is possible to fully interact with the trip unit.

**Supply**

The Ekip Touch/Hi-Touch protection trip unit is self-supplied through the current sensors and does not require an external supply for the basic protection functions or for the alarm indication functions. The trip units for all the circuit-breakers start to power on from a minimum of  $0.2 \times I_n^*$  and activate the indication functions, the ammeter and the display. All protection settings are stored in a non-volatile memory that maintains the information, even without a power supply. An auxiliary supply can also be easily connected. In fact, the trip unit can be supplied by means of a galvanically isolated 24V DC auxiliary voltage with the following characteristics:

Parameter	Operation limits
<b>Voltage</b>	24 V DC galvanically isolated*
<b>Tolerance</b>	±10%
<b>Maximum wave</b>	±5%
<b>Maximum surge current @ 24 V</b>	10 A for 5 ms
<b>Maximum rated power @ 24 V</b>	4 W
<b>Connecting cable</b>	Insulated with ground cable (characteristics equal to or greater than Belden 3105A/B)

The the insulation characteristics must refers to the IEC 60950 (UL 1950) or their equivalent

The Ekip Supply module can be connected to both DC and AC current power supplies to activate additional functions such as:

- using the unit with the circuit-breaker open;
- using additional modules such as Ekip Signalling and Ekip Com;
- connection to external devices such as Ekip Multi-meter;
- recording the number of operations;
- G protection with values below 100A or below  $0.2 \times I_n^*$ ;
- zone selectivity;
- Gext and MCR protection functions.

Supply	Ekip Supply	
<b>Nominal voltage</b>	24-48 V DC	110-240 V AC/DC
<b>Voltage range</b>	21.5-53 V DC	105-265 V AC/DC
<b>Rated power (including modules)</b>	10W max.	10W max.
<b>Inrush current</b>	~10A for 5 ms	~10A for 5 ms

The Ekip Touch/Hi-Touch are also supplied with a battery that enables the cause of the fault to be indicated after a trip. In addition, the battery enables the date and time to be updated, thus ensuring the chronology of events. When the Ekip Touch/Hi-Touch are active, they use an internal control circuit to automatically indicate when the battery is flat. Furthermore, when the unit is switched off a battery test can be run by simply pressing the iTest key.

\* for XT2 and XT4 with  $I_n \leq 100A$ :  $0.3 \times I_n$

# Ekip Touch/Hi-Touch

## Overview

### Rating Plug

The XT5 and XT7 trip units allow the rated current to be modified by simply changing the front rating plug. Thus, an upgrade of the circuit-breaker, whenever needed, can be carried out without replacing the circuit-breaker.

### Commissioning

The setting, testing and downloading of reports can be carried out directly from a smartphone, tablet or PC. In addition, the commissioning stage can be further accelerated, minimizing the possibility of errors, by directly configuring the protection trip unit with the DOC design software settings.

### Test function

The test port and the iTest key on the front of the protection unit can be used to carry out circuit-breaker tests by connecting one of the following devices:

- The Ekip TT, which allows trip tests, LED tests and checks for the absence of alarms detected by the watchdog function;
- The Ekip T&P, which permits not only trip tests and LED tests but also testing of the individual protection functions and the saving of the relative report;
- The iTest key, to run a battery test when the circuit-breaker is disconnected.

The following table shows the main features for each version of the trip unit. The additional features can be added to the trip unit at the time of purchase or after, via the ABB Ability Marketplace™.

Trip Unit	Current measurement & protection	Voltage, power, energy measurements	Voltage, power, energy protections	Embedded functions*
Ekip Touch LSI	●	○	○	○
Ekip Touch LSIG	●	○	○	○
Ekip Touch Measuring LSI	●	●	○	○
Ekip Touch Measuring LSIG	●	●	○	○
Ekip Hi-Touch LSI	●	●	●	●
Ekip Hi-Touch LSIG	●	●	●	●
Ekip M Touch LRIU	●	●	●	●
Ekip G Touch LSIG	●	●	●	●
Ekip G Hi-Touch LSIG	●	●	●	●

● Default available

○ Additionable features

\* See the following pages for more details

### Watchdog

All the Ekip Touch/Hi-Touch trip units for the Tmax XT ensure high reliability thanks to an electronic circuit that periodically checks the continuity of the internal connections, such as the trip coil, rating plug and each current sensor (ANSI 74). In the event of an alarm, a message is shown on the display, and if it is set during the installation phase, the trip unit can command the opening of the circuit-breaker. If a protection function intervenes, Ekip Touch/Hi-Touch always checks that the circuit-breaker has been opened by auxiliary contacts that indicate the position of the main contacts. Otherwise, Ekip Touch/Hi-Touch indicate an alarm (ANSI BF code Breaker Failure) to command the opening of the circuit-breaker upstream. Ekip Touch/Hi-Touch also feature self-protection, which ensures the correct operation of the unit in overtemperatures (OT) inside the protection trip unit.

The following indications or controls are available:

- “Warning” LED for temperature below -20 °C or above +70 °C, at which point the trip unit operates correctly with the display switched off.
- “Alarm” LED for temperature outside the operating range, at which point the trip unit commands the opening of the circuit-breaker (if set during the configuration phase).

**Power Distribution Protection**

Ekip Touch LSI

Ekip Touch LSIG

Ekip Touch Measuring LSI

Ekip Touch Measuring LSIG

Ekip Hi-Touch LSI

Ekip Hi-Touch LSIG

In [A]	40	60	100	125	150	225	250	300	400	600	800	1000	1200
XT2	●	●	●	●									
XT4			●		●	●	●						
XT5							●	●	●	●			
XT7										●	●	●	●

**Motor Protection**

Ekip M Touch LRIU

In [A]	40	60	100	150	200	250	300	400	500	600	800	1000	1200
XT2	●	●	●										
XT4			●	●	●								
XT5						●	●	●	●				
XT7										●	●	●	●

**Generator Protection**

Ekip G Touch LSIG

Ekip G Hi-Touch LSIG

In [A]	250	300	400	600	800	1000	1200
XT5	●	●	●	●			
XT7				●	●	●	●

# Ekip Touch/Hi-Touch

## Protection functions

The Ekip Touch/Hi-Touch trip units enable all the protection functions to be set with a few simple steps.

Thanks to the ABB Ability Marketplace™, it is always possible to customize the Ekip Touch/Hi-Touch trip units when ordering and also when the circuit-breaker is already installed by using the Ekip Connect 3.

Each trip unit has a default protection set, as shown in the table below. Adding other functional packages to this set is always possible, either directly when ordering the circuit-breaker, or via ABB Ability Marketplace™ at a later time.

The following protection software packages are available to be added to any version of Ekip Touch/Hi-Touch trip units:

- Voltage Protection
- Voltage Protection Advanced
- Frequency Protection
- Power Protection
- ROCOF Protection
- Adaptive Protection

ABB Code	ANSI Code	Function	Ekip Touch LSI	Ekip Touch LSI G	Ekip Touch Measuring LSI
<b>Default Protection</b>					
L	49	Overload / Long Time Protection	●	●	●
S	50 TD / 68 / 51	Selective short circuit / Short Time Protection	●	●	●
I	50	Instantaneous circuit / Instantaneous Protection	●	●	●
G	50N/50N TD/68/51N	Earth fault / Ground Fault Protection		●	
N		Neutral	●	●	●
2I	50	2nd instantaneous short-circuit	●	●	●
MCR		Closing on short-circuit	●	●	●
linst		Instantaneous high intensity short-circuit protection	●	●	●
IU	46	Current unbalance	●	●	●
<b>Harmonic Distortion</b>			●	●	●
T		Temperature	●	●	●
<b>Hardware trip</b>			●	●	●
<b>Current Thresholds</b>			●	●	●
S2	50 TD/68	2nd Time delayed overcurrent	●	●	●
<b>Voltage Protection package</b>					
Phase Sequence	47	Cyclical direction of the phases	○	○	○
UV	27	Undervoltage	○	○	○
OV	59	Overvoltage	○	○	○
UV2	27	2nd Undervoltage	○	○	○
OV2	59	2nd Overvoltage	○	○	○
VU	47	Voltage unbalance	○	○	○
<b>Voltage Protection Advanced package</b>					
S(V)	51V	Voltage controlled overcurrent	○	○	○
S(V) 2nd	51V	2nd Voltage controlled overcurrent	○	○	○
RV	59N	Residual overvoltage	○	○	○

● Available as standard

○ Available as software package to be ordered via ABB Ability Marketplace™ or during the circuit-breaker ordering phase. To add this function, the Measuring package must be installed first.

Ekip Touch Measuring LSIG	Ekip Hi-Touch LSI	Ekip Hi-Touch LSIG	Ekip M Touch LRIU	Ekip G Touch LSIG	Ekip G Hi-Touch LSIG
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●		●	●	●	●
●	●	●		●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
●	●	●	●	●	●
○	●	●	●	●	●
○	●	●	●	●	●
○	●	●	●	●	●
○	●	●	●	○	●
○	●	●	●	○	●
○	●	●	●	●	●
○	○	○	○	●	●
○	○	○	○	○	●
○	○	○	○	●	●

# Ekip Touch/Hi-Touch

## Protection functions

ABB Code	ANSI Code	Function	Ekip Touch LSI	Ekip Touch LSIG	Ekip Touch Measuring LSI
<b>Frequency Protection package</b>					
UF	81L	Underfrequency	○	○	○
OF	81H	Overfrequency	○	○	○
UF2	81L	2nd Underfrequency	○	○	○
OF2	81H	2nd Overfrequency	○	○	○
<b>Power Protection package</b>					
RP	32R	Reverse active power	○	○	○
Cos $\varphi$	78	Power Factor	○	○	○
D	67	Directional overcurrent	○	○	○
RQ	40/32R	Loss of field or reverse reactive power	○	○	○
OQ	320F	Reactive overpower	○	○	○
OP	320F	Active overpower	○	○	○
UP	32LF	Active underpower	○	○	○
<b>ROCOF Protection package</b>					
ROCOF	81R	Rate of change of frequency	○	○	○
<b>Adaptive Protection package</b>					
Set A-B		Dual Setting	○	○	○
<b>Motor Protection</b>					
L		Motor protection overload			
R	51LR	Rotor blockage			
U	46	Phase lack and/or unbalance			
Uc	37	Undercurrent			
<b>Protection with additional modules</b>					
SC	25	Synchrocheck	●	●	●
Ekip CI		Motor contactor interface protection			
PTC		PTC for temperature			
G ext	50G TD/86/51G	Earth fault		● <sup>(1)</sup>	
Rc	64 50N TD 87N	Residual current / Differential ground fault		● <sup>(1)</sup>	

● Available ○ Available with the corresponding software package

(1) Available for XT and XT7 M only: Gext requires installation of the homopolar toroid and Ekip Supply module; RC requires installation of RC toroid, RC Rating Plug and Ekip Supply (or direct 24Vdc)

When an Ekip Touch LSI or LSIG trip unit is upgraded with one of the following packages:

- Voltage Protection
- Voltage Protection Advanced
- Frequency Protection
- Power Protection
- ROCOF Protection

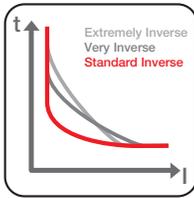
it is mandatory to add first the Measuring package described on the following pages.

Ekip Touch Measuring LSIG	Ekip Hi-Touch LSI	Ekip Hi-Touch LSIG	Ekip M Touch LRIU	Ekip G Touch LSIG	Ekip G Hi-Touch LSIG
○	●	●	●	●	●
○	●	●	●	●	●
○	●	●	○●	○	●
○	●	●	○●	○	●
○	●	●	○●	●	●
○	●	●	●	●	●
○	●	●	○●	○	●
○	○	○	○	●	●
○	○	○	○	●	●
○	○	○	○	●	●
○	○	○	○	○	●
○	●	●	○●	○	●
			●		
			●		
			●		
			●		
●	●	●	●	●	●
			●		
● <sup>(1)</sup>		● <sup>(1)</sup>	●	● <sup>(1)</sup>	● <sup>(1)</sup>
● <sup>(1)</sup>		● <sup>(1)</sup>	● <sup>(1)</sup>	● <sup>(1)</sup>	● <sup>(1)</sup>

# Ekip Touch/Hi-Touch

## Protection functions

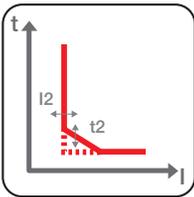
The Ekip Touch/Hi-Touch can be customized with the protection functions required.



### L – Overload (L - ANSI 49)

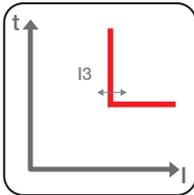
This function is used for protection against overloads. It allows the setting of the trip threshold, trip time and pre-alarm threshold. Three different types of trip curves are available:

1.  $t = k/I^2$  with an inverse long time;
2. IDMT in accordance with IEC 60255-151 for coordination with medium voltage protection, available according to Standard Inverse (SI), Very Inverse (VI) and Extremely Inverse (EI) curves;
3. With a  $t = k/I4$  curve for better coordination with upstream circuit-breakers or fuses.



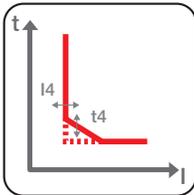
### S – Time-delayed overcurrent (S - ANSI 51 & 50TD)

This function is used to protect against selective short-circuits. If necessary, it can be disabled, or if needed, only the trip can be excluded keeping the alarm indication, to be used in installations where continuity of service is required. With a constant trip time ( $t = k$ ), or constant specific let through energy ( $t = k/I^2$ ).



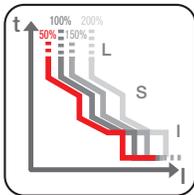
### I – Short-circuit

This function is used for instantaneous protection against short-circuits. The trip threshold is adjustable and, if needed, the protection can be disabled.



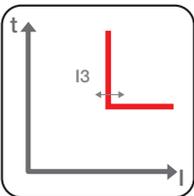
### G - Ground fault

This function protects against earth faults. The trip threshold and trip time are adjustable. When needed, the protection can be disabled.



### Neutral protection

This function is used to adjust the setting provided from protections L, S and I on the Neutral pole with a control factor which is different from the other phases. It is available with values at 50%, 100%, 150% or 200% of the phase currents. It can be disabled if necessary.

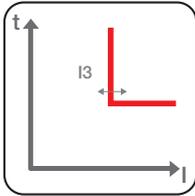


### 2I - Second protection against instantaneous overcurrent

This function protects against the instantaneous short-circuit (e.g. I protection) and it is enabled with an activation event (or command), that can be programmed by the user. It can be activated for different uses in different ways:

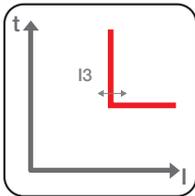
- locally, directly on the Ekip display unit
- locally, with a smartphone with the EPiC app via Bluetooth
- locally, with a PC with the Ekip Connect program
- remotely, via any Ekip Com module connected to the circuit-breaker
- remotely, via a switch wired through an Ekip Signalling module.

When active, the Ekip display unit will show a confirmation of the activation and a red LED alarm will flash on the diagnosis bar. Moreover, the second instantaneous tripping curve (also referred to as RELT - Reduced Energy Let-Through) is designed to mitigate arc flashes. This protection can be adjusted from 1.5 to 15 x  $I_n$  with a maximum setting of 18kA. Easy activation and I/O assignment, including positive feedback, can be established using the RELT Ekip Signaling 2k-3 module.



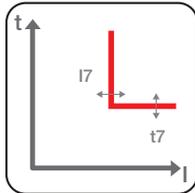
### MCR – Closing on Short-circuit

This protection uses the same algorithm as the I protection, limiting the operation to a settable time window starting from the closing of the circuit-breaker. The protection can be disabled, when needed. The function is active with an auxiliary supply.



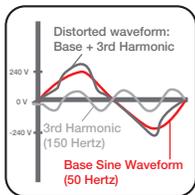
### linst

This guarantees the integrity of the circuit-breaker and installation in the case of particularly high current values requiring shorter reaction times than those provided by the instantaneous short-circuit protection. The protection cannot be disabled, and the tripping threshold and time are defined by ABB.



### IU - Current unbalance (ANSI 46)

This function protects against an unbalance between the currents of the single phases protected by the circuit-breaker.



### Harmonic distortion

This allows a control alarm to be activated for a distorted waveform. If enabled, an alarm is activated for waveform factors higher than 2.1.

### T - Temperature

This protects the circuit-breaker against abnormal temperatures recorded by the unit. It is always active, and has two states, according to the temperature:

- Warning:  $-25 < t < -20$  or  $70 < t < 85$  Display off; Warning LED on @ 0.5Hz.
- Alarm:  $t < -25$  or  $t > 85$  Display off; Alarm and Warning LEDs on @2Hz; Circuit-breaker opening command.

### Hardware Trip

This protects against internal disconnections of the circuit-breaker. If enabled, a fault is signaled and an opening command is sent if one or more of the following events are detected:

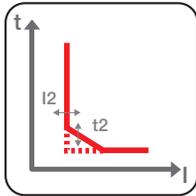
- Current sensors disconnected (phase or external if enabled)
- Rating plug disconnected (only for XT5 and XT7)
- Trip coil disconnected (only signaling)
- Incompatibility between protection release and mainboard (only for XT7)
- Internal problems with the release.

### Current thresholds

This function enables the realization of four independent thresholds to be indicated to enable corrective actions before the overload L protection trips the circuit-breaker. For example, by disconnecting the loads controlled by an Ekip Signalling device positioned downstream of the circuit-breaker.

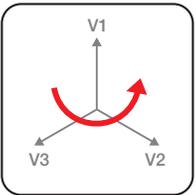
# Ekip Touch/Hi-Touch

## Protection functions



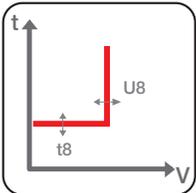
### S2 - Second time-delayed overcurrent protection

In addition to the Standard S protection, a second (excludible) time-constant protection is available that enables two independent thresholds to be set to ensure precise selectivity, especially under highly critical conditions.



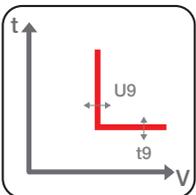
### Phase sequence

This function gives an alarm in case of phase sequence inversion.



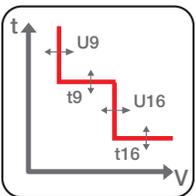
### UV - Undervoltage (UV - ANSI 27)

With a constant trip time ( $t = k$ ), this trips when the phase voltage falls below the set threshold.



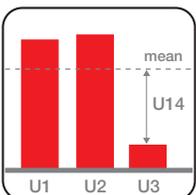
### OV - Overvoltage (OV - ANSI 59)

With a constant trip time ( $t = k$ ), this trips when the phase voltage exceeds the set threshold.



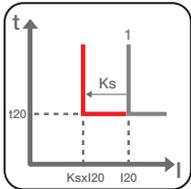
### UV2 & OV2 - Second protection against undervoltage and overvoltage (ANSI 27 and 59)

This enables two minimum and maximum voltage thresholds to be set with different delays to discriminate, for example, between voltage dip transients due to the start-up of a motor and an actual fault.



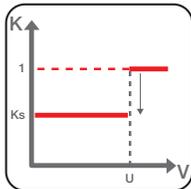
### VU - Voltage unbalance (VU - ANSI 47)

With a constant trip time ( $t = k$ ), this protects against an unbalance between the voltages of the single phases that are protected by the circuit-breaker.

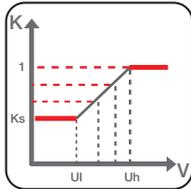


**S(V) - Voltage controlled overcurrent protection (ANSI 51V)**

This provide protection from a maximum current with a constant trip time ( $t = k$ ) that is sensitive to the voltage value. Following a voltage drop, the current set threshold decreases in steps or linearly. It is possible to set the operating mode to: active, alarm only, or deactivated. The protection operates also with the circuit-breaker open, thus allowing fault identification before circuit-breaker closing.



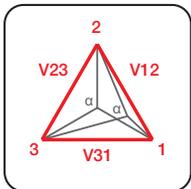
In step mode (controlled mode) the protection is tripped at a set threshold ( $I_{20}$ ) if the voltage is above  $U$ , whereas it is tripped at the lower threshold of the factor  $K_s$  ( $I_{20} * K_s$ ) if the voltage is below  $U$ .



In linear mode (restrained mode) two voltage limits are selected within which the protection is tripped at the set threshold ( $I_{20}$ ) reduced by a factor of  $K$  corresponding to the measured voltage. The variation of the factor  $K$  is proportional to the voltage, and for voltages greater than the upper threshold ( $U_h$ ) the threshold  $I_{20}$  works, whereas for voltages below the lower threshold ( $U_l$ ) the minimum threshold ( $I_{20} * K_s$ ) applies.

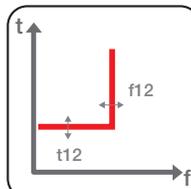
**S2(V) – 2nd protection against voltage-controlled overcurrent protection (ANSI 51V)**

Available in addition to the protection  $S(V)$ , this enables total selectivity to be achieved in all installations. It is possible to set the operating mode to: active, alarm only, or deactivated. The protection also operates with the circuit-breaker open, thus allowing fault identification before circuit-breaker closing.



**Residual overvoltage (ANSI 59N)**

With a constant trip time ( $t = k$ ), this protects against insulation loss in systems with insulated neutral or with neutral earthed with impedance. It is possible to set the operating mode to: active, alarm only, or deactivated. The protection also operates with the circuit-breaker open, thus allowing fault identification before circuit-breaker closing.

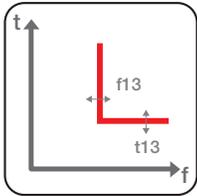


**UF Underfrequency (ANSI 81L)**

With a constant trip time ( $t = k$ ), this trips when the network frequency falls below a set threshold.

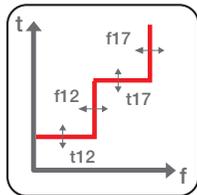
# Ekip Touch/Hi-Touch

## Protection functions



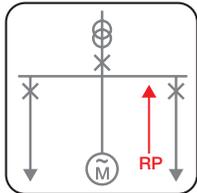
### OF Overfrequency (ANSI 81H)

With a constant trip time ( $t = k$ ), this trips when network frequency exceeds a set threshold.



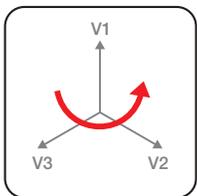
### UF2 & OF2 Second protection against underfrequency and overfrequency (ANSI 81L and 87H)

This enables two minimum and maximum frequency thresholds to be set simultaneously. For example, just an alarm can be set for tripping when the first threshold is reached, and the circuit-breaker can be set to be opened when the second threshold is reached.



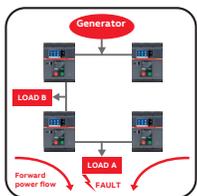
### RP Reverse active power

With a constant trip time ( $t = k$ ), this trips when the total active power – in the opposite direction of the current – exceeds the set threshold.



### Cosφ Power factor

Available with a three-phase threshold, this provides a warning when the system operates with a power factor that is lower than the set power factor.



### D Directional overcurrent

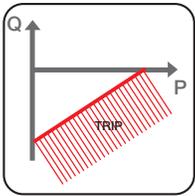
This form of protection is able to recognize the direction of the current during the fault period and thus detect if the fault is upstream or downstream of the circuit-breaker. The protection, with a fixed time trip curve ( $t=k$ ), intervenes with two different time delays ( $t_{7bw}$  and  $t_{7fw}$ ), according to the current direction. In ring distribution networks, it enables the identification and disconnection of the area in which a fault has occurred, while maintaining operation in the rest of the installation.

### Zone selectivity for protection D

This enables the possibility to interconnect more circuit-breakers, so that, in case of a fault, the affected area can be disconnected nearest to the fault and operation in the rest of the installation is maintained. It is possible to enable directional zone selectivity alternatively to zone selectivity of S and G protections. This also works in the presence of an auxiliary supply.

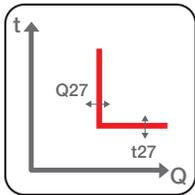
### Start-up function for protection D

This enables higher trip thresholds to be set at the outgoing point, as available for protections S, I and G.



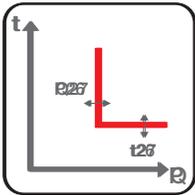
**RQ Loss of field or reverse reactive power (ANSI 40 or 32RQ)**

With a constant trip time ( $t = k$ ) this circuit-breaker trips when the total reactive power absorbed by the generator exceeds the set threshold. It is possible to select a constant threshold ( $k=0$ ) or a function of the delivered active power of the generator ( $k \neq 0$ ).



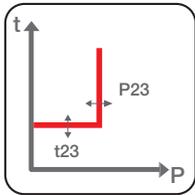
**OQ Reactive overpower (ANSI 32OF):**

With a constant trip time ( $t = k$ ), this trips when the reactive power exceeds the set threshold in the direction from the generator to the network.



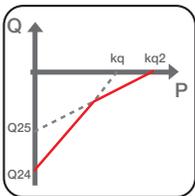
**OP Active overpower (ANSI 32OF):**

With a constant trip time ( $t = k$ ), this trips when the active power exceeds the threshold set in the delivering direction from the generator.



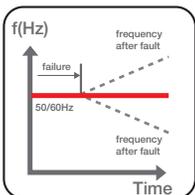
**UP Active underpower (ANSI 32LF):**

With a constant trip time ( $t = k$ ), this trips when the active power delivered by the generator is lower than the set threshold. It is possible to disable the protection temporarily to manage the start-up phase by setting a time window from the closing of the circuit-breaker, by using an electric signal or via incoming communication to a relay.



**RQ Second protection against loss of field or reverse reactive power (ANSI 40 or 32R):**

This functions as the above mentioned RQ protection. These two functions can be active and used at the same time, thus allowing the under-excitation curve of the generator to be accurately followed and avoiding unwanted disconnections.

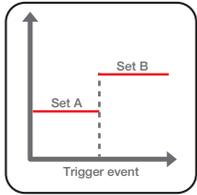


**ROCOF Rate of change of frequency (ANSI 81R)**

This enables both positive and negative frequency variations to be detected rapidly. The threshold is constant and the function trips when the frequency variation in Hz/s is greater than the set threshold. It is possible to set the operating mode to: active, alarm only, or deactivated. The protection enables the identification and disconnection of the area where the fault has occurred while maintaining operation in the rest of the installation.

# Ekip Touch/Hi-Touch

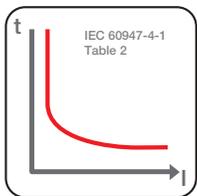
## Protection functions



### Adaptive protection: dual setting of protections (Set A-B)

The Ekip Hi-Touch can store a set of alternative parameters (set B) for all protections. This second set can replace the default series (set A) with an external control. A typical application for dual settings may be when an emergency source is activated in the system, causing a change of load capacity and short-circuit levels, and in cases of switchgear maintenance to protect the operator against electric arcs (the minimum trip delays of set B guarantee safety for the operator). It is possible to activate series B by:

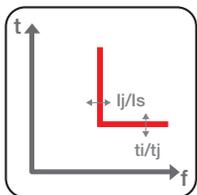
- Digital input, available with an Ekip Signalling module;
- Communication network, by means of one of the Ekip Com communication modules;
- Directly from the Ekip Hi-Touch display;
- Using a settable internal time, after the circuit-breaker has closed.



### L Motor protection overload in compliance with Standard IEC 60947-4-1 Table 2

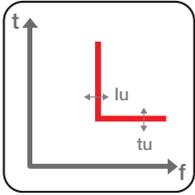
The L function protects the motor against overloads in accordance with the indications and classes defined by Standard IEC 60947-4-1 and the Table 2. The trip time is established by choosing the appropriate trip class, which depends on the motor that must be protected. In addition to this protection, the thermal memory function (implemented in accordance with Standard IEC60255-8 and the above-mentioned Standard) is permanently activated. After tripping the Ekip M Touch LRIU, the thermal memory is active for a time that depends on the trip class selected (see table). The protection unit will trip faster than the time established for a cold fault condition if a new overload occurs before the thermal memory automatically resets (hot trip condition). The protection has a “start-up” stage from the moment the current exceeds  $0.25 \times I_n$  to the moment the minimum time of the selected trip class is reached.

TRIP CLASS	CLASS MIN	CLASS MAX	TMEM RESETTING TIME
5E	3s	5s	5 min
10E	5s	10s	10 min
20E	10s	20s	20 min
30E	20s	30s	33 min



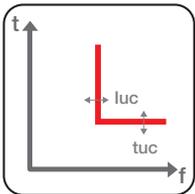
### R Protection against rotor blockage

This protects the motor in two different ways, depending on whether the fault occurs on startup or during normal operation. The behavior in the two operating conditions is defined by the Standard IEC 947-4-1 in Annex 2. In the first case (Jam), the operation of the R function protects the motor against rotor jamming during normal operation. The R (Jam) protection function works in conjunction with the L protection to ensure that the motor start-up phase is completed. The R (Jam) protection is inhibited during the start-up phase for the same time as the minimum time in the selected overload protection trip class. Once this time has elapsed, the R protection is activated and causes the circuit-breaker to trip if the current remains above the current threshold setting ( $I_5$ ) for longer than the time ( $t_5$ ) setting of the protection. In the second case (Stall), the protection is designed to operate to protect the motor against rotor jamming upon start-up. If activated, the R (Stall) protection is not inhibited during start-up and causes the circuit-breaker to open if the current remains above the current threshold setting ( $I_8$ ) for longer than the time setting ( $t_8$ ) of that protection. The protection has a “start-up” stage from the moment the current exceeds  $0.25 \times I_n$  to the moment the minimum time of the selected trip class is reached.



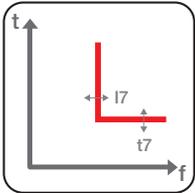
### U Protection against phase loss and/or unbalance

This can be implemented when the motor must be promptly protected owing to the absence of a phase. The protection trips if the r.m.s. value of at least one of the phase currents drops below the level equal to 0.1 times the rated current of the trip unit and a second phase exceeds 0.25 times the rated current. The circuit-breaker is opened if the current value fails to rise above this level within 2 sec. During start-up, the tripping time of the protection is the lowest value between 2 sec or half the minimum time of the start-up class. The protection has a “start-up” stage starting from the moment the current exceeds  $0.25 \times I_n$  to the moment the minimum time of the selected trip class is reached.



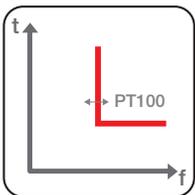
### UC Undercurrent protection

This function protects the motor from operating in conditions where the load is reduced or null. The circuit-breaker is opened if all the phases remain below the threshold setting  $I_9$  for delay-time  $t_9$ . The protection has a “start-up” stage from the moment the current exceeds  $0.25 \times I_n$  to the moment the minimum time of the selected trip class is reached.



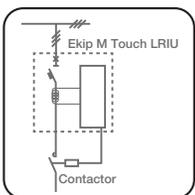
### IU Protection against phase unbalance

This unit is used when a motor needs to be protected against differences in the currents circulating in the phases. Threshold setting  $I_7$  defines the maximum level of difference between each phase and the mean value of the three phases. If a phase differs more than its set level from the mean value, the protection opens the circuit-breaker once its time-delay setting ( $t_7$ ) has elapsed. The protection is activated only if all three phase currents exceed  $0.25 \times I_n$ . During the start-up phase, the tripping time is the lowest value between  $t_7$  or half the minimum time of the start-up class. The protection has a “start-up” stage from the moment the current exceeds  $0.25 \times I_n$  to when the minimum time of the selected trip class is reached.



### PTC Temperature protection

In its initial configuration, this trip unit is set up to receive an incoming signal from a PTC sensor installed on the motor. The operating thresholds of the protection are defined in accordance with the Standard IEC 60947-8. If the threshold is exceeded, the trip unit opens the circuit-breaker after a 1 sec time-delay.



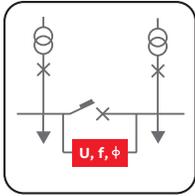
### Ekip CI Contactor Interface for motor protection

The breaking capacity of a contactor is definitely lower than a circuit-breaker, but with a number of possible operations consistently higher than those of the breaker (approx. 1,000,000): motor protection and operation are thus optimized when these two devices are used in conjunction with each other. In its initial configuration, the trip unit is set for operation in Normal mode, activating the contactor by means of the Ekip CI module if one of the protections trip (with the exception of protections I and G).

If the configuration is changed from Normal to Heavy, the trip unit opens the circuit-breaker directly without transmitting the command to the contactor. An auto-reset function allows the actuation status of the Ekip CI to reset automatically after the contactor has tripped owing to the L function, once an adjustable time from 1 to 1000s has elapsed. Auto-reset can occur only in Normal mode. A BACK UP function is also available and deals with situations where an opening command transmitted to the contactor via module Ekip CI has not been successful. In this case, the EKIP M Touch LRIU trip unit sends an opening command to the circuit-breaker after waiting for the set time  $T_x$ . The actuation time of the contactor given by the manufacturer must be considered when the time-delay setting  $T_x$  is entered. The function is active with an auxiliary supply.

# Ekip Touch/Hi-Touch

## Protection functions



### SC Synchrocheck

By comparing voltage, frequency and phase values of the two circuits involved, the synchronism control function indicates that the synchronism conditions necessary to allow the circuit-breaker to be closed have been reached. The function is available in two operating modes:

- In systems with both busbars supplied, where synchronism is determined by:
  1. voltage of the two half-busbars above the  $U_{live}$  threshold for the set time
  2. difference of the two voltages below the threshold  $\Delta U$
  3. difference of the frequency of the two voltages below the threshold  $\Delta f$
  4. difference of the phase of the two voltages below the threshold  $\Delta$
  5. desirable time for synchronism condition  $t_{syn}$
  6. circuit-breaker open.

In systems with an out-of-service line (dead busbar), where the synchronism condition is determined by the concurrence of the following conditions for the set  $t_{Ref}$  time:

1. the voltage of the active half-busbar is above threshold  $U_{live}$
2. the voltage of the dead half-busbar is below threshold  $U_{dead}$
3. the circuit-breaker is open.

In both cases, the synchronism signal is activated when the required conditions are reached and it remains active for at least 200ms. After this lapse of time, the consent signal is deactivated, if the synchronism conditions fail.

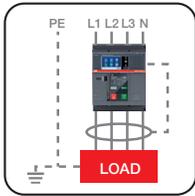
The indication of the synchronism reached is available directly as an electrical indication via a contact that is always provided with the module. This function can be activated simply by connecting the Ekip Synchrocheck module to any Ekip Touch device provided with an Ekip Measuring module.

### G ext – Ground fault on toroid

This is available only for the XT7, with a trip time which is independent of the current ( $t = k$ ) or with a constant specific let-through energy ( $t = k/I^2$ ). If the pre-alarm reaches a 90% threshold this permits the fault to be reported to supervision systems without any interruption of continuity. The protection needs an external toroid installed, for example, on the star center of the transformer, and is an alternative to the G and Rc functions. This device works with an auxiliary supply.

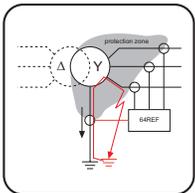
### Modified differential ground fault (MDGF)

With trip time independent of the current ( $t = k$ ) or with constant specific let-through energy ( $t = k/I^2$ ). The protection allows use of the MDGF scheme into the XT7 circuit-breaker. Third party phase current transformers and summing current transformers are needed to realize the complete scheme. XT7 needs a dedicated terminal in order to properly measure the ground fault (see the paragraph "Modified differential ground fault terminals" in the "Ordering codes" chapter).



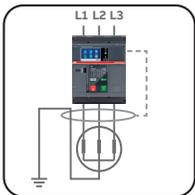
### RC Residual current

This available only for the XT7, with a constant time ( $t=k$ ) and protects against indirect contacts and is integrated into the Ekip Touch LSIG with an Ekip Measuring with a dedicated residual current rating plug and external toroid. The protection is an alternative to Gext functions. This function needs to have auxiliary power supply, via Ekip Supply or via direct 24Vdc connection.



### Second protection against ground fault

This is available only for the XT7. Whereas with the Ekip Touch, the user has to choose between implementation of the G type protection using internal current sensors (calculating the vector sum of the currents) or Gext external toroids (direct measurement of the ground fault current), the Ekip Hi-Touch offers the exclusive feature of simultaneous management of both configurations by two independent ground fault protection curves. Owing to this characteristic, the trip unit is able to distinguish a non-restricted from a restricted ground fault, and then activate the opening of the circuit-breaker and command the opening of the medium voltage circuit-breaker. Another possible configuration is with the residual current protection replacing the Gext protection, while the G protection remains active. The residual current protection is activated in the presence of the residual current rating-plug and of the toroid.



### RC Differential ground fault protection against ground faults

Available on the XT7 only, this unit protects against internal ground faults on the generator windings. It is required that the toroid (additional accessory) embraces the active conductors and the ground conductor. RC protection is integrated via a dedicated residual current rating plug and an external toroid.

# Ekip Touch/Hi-Touch

## Additional protection functions

### Additional protection functions:

Protection	Thermal memory	Trip Enable	Zone Selectivity	StartUp enable	Blocks	Directional Zone Selectivity
L	●					
S	●	●	●	●	●	
I			●	●	●	
G		●	●	●	●	
MCR					●	
IU		●				
T		●				
S2		●	●	●	●	
D				●		●
UV		●		●		
OV		●		●		
VU		●		●		
UF		●		●		
OF		●		●		
RP		●		●		
S(V)		●		●		
S2(V)		●		●		
RV		●		●		
RQ		●		●		
RQ2		●		●		
OQ		●		●		
OP		●		●		
UP		●		●		
ROCOF				●		
UV2		●			●	
OV2		●			●	
UF2		●			●	
OF2		●			●	
UP		●				
Gext		●	●			

#### Thermal memory

This function is used to protect components such as transformers and cables against overheating due to overloads. It adjusts the trip time of the protection according to the time elapsed after the first overload, taking account of the overheating caused. It can be activated when a  $t = k/I^2$  (with an inverse long time) curve is used.

#### Trip Enable

The function enables the trip to be excluded so that only the alarm is indicated. This is used in installations where continuity of service is an essential requirement.

### Zone Selectivity

The function allows multiple circuit-breakers belonging to the same installation to be connected together, in order to coordinate the trip units and to reduce the tripping times in the case of protections S, G, S2 and I. Thus, in the event of a failure:

- the circuit-breaker closest to the fault trips
- the other circuit-breakers are locked for a programmable time.

Each circuit-breaker that detects a fault reports it to the circuit-breaker upstream; the circuit-breaker that detects the fault but does not receive any communication from those downstream opens without waiting for the set delay to elapse.

It is possible to enable zone selectivity if a fixed-time curve has been selected and the auxiliary supply is present.

### StartUp Enable

The function modifies the threshold of the protection for a period that can be set by the user, avoiding unwanted trips due to high inrush currents of certain loads (motors, transformers, lamps). The starting phase lasts 100ms to 30s and is recognized automatically by the trip unit:

- at the closing of the circuit-breaker with a self-supplied trip unit;
- when the peak value of the maximum current exceeds the set threshold ( $0.1...10 \times I_n$ ) with an externally supplied trip unit.

A new start-up is possible after the current falls below the threshold. This function can be activated with a fixed time protection function ( $t = k$ ). Moreover, the I3 startup threshold must be higher than the I2 startup threshold.

### Protection blocks

With the Ekip Connect software, six blocks are available for some protections, which is useful for deactivating the protection based on programmable events. In particular:

- four blocks are associated with the programmable states A, B, C and D
- one block is associated with the start-up (present for protections that have a StartUp function);
- one block, not present for frequency protections, is associated with the checking of the measured frequency.

Each block is independent and has its own activation command. The protection is deactivated for a time equal to the duration of the event itself:

- if the programmed event occurs (true), in the case of state-based blocks
- if the StartUp function is active and the start-up threshold is exceeded (the active block for the set start-up time), whenever the StartUp block function is enabled.
- if at least one frequency measured is outside the range 30...80 Hz, in the case of a frequency based block.

### Directional Zone Selectivity

The Zone Selectivity function allows multiple circuit-breakers belonging to the same installation to be connected together in order to coordinate the trip units and reduce tripping times, but with some important differences:

- it is to be used in installations with a ring circuit
- it allows tripping to be managed and coordinated according to the power flows (determined by the direction of the current), in order to minimize dispersion of energy.

It works as an alternative to S and G Zone Selectivity.

# Ekip Touch/Hi-Touch

## Protection settings

Available settings for each protection function:

ABB Code	ANSI Code	Function	Threshold Range	Threshold Step
<b>Protections</b>				
<b>L</b>	49	Overload / Long Time Protection	$I1 = 0.4...1 \times I_n$	$0.001 \times I_n$
<b>S</b>	50 TD	Selective short-circuit / Short Time Protection	$I2 = 0.6...10 \times I_n$	$0.1 \times I_n$
	68	Zone selectivity		
		Start up	Activation: $0.6...10 \times I_n$	$0.1 \times I_n$
	51	Time-delayed overcurrent	$I2 = 0.6...10 \times I_n$	$0.1 \times I_n$
<b>I</b>	50	Instantaneous short-circuit / Instantaneous Protection	XT2-XT4-XT5: $I3 = 1.5...10 \times I_n$ XT7: $I3 = 1.5...15 \times I_n$	$0.1 \times I_n$
		Start up	Activation: XT2-XT4-XT5: $I3 = 1.5...10 \times I_n$ XT7: $I3 = 1.5...15 \times I_n$	$0.1 \times I_n$
	68	Zone selectivity		
<b>G<sup>(4)</sup></b>	50N TD	Earth fault / Ground Fault Protection	$I4 = 0.1...1 \times I_n$	$0.001 \times I_n$
	68	Zone selectivity		
		Start up	Activation: $0.2...10 \times I_n$	$0.02 \times I_n$
	51N	Earth fault	$I4 = 0.1...1 \times I_n$	$0.001 \times I_n$
<b>N</b>		Neutral	On/Off	50%-100%-200% of the phases
<b>2I</b>	50	Programmable 2nd Instantaneous short-circuit	XT2-XT4-XT5: $I3 = 1.5...10 \times I_n$ XT7: $I3 = 1.5...15 \times I_n$	$0.1 \times I_n$
<b>MCR</b>		Closing on short-circuit	XT2-XT4-XT5: $I3 = 1.5...10 \times I_n$ XT7: $I3 = 1.5...15 \times I_n$	$0.1 \times I_n$
<b>IU</b>	46	Current unbalance	$I6 = 2...90\% I_n$ unbalance	$1\% I_n$
<b>LC1/2</b> <b>Iw1/2</b>	-	Current threshold	$LC1 = 50...100\% \times I1$	1%
		Activation up/down	$LC2 = 50...100\% \times I1$ $Iw1 = 0.1...10 \times I_n$ $Iw1 = 0.1...10 \times I_n$	1% $0.01 \times I_n$
<b>S2</b>	50 TD	2nd Time-delayed overcurrent	$I2 = 0.6...10 \times I_n$	$0.1 \times I_n$
	68	Zone selectivity		
		Start up	Activation: $0.6...10 \times I_n$	$0.1 \times I_n$
<b>Phase Sequence</b>	47	Cyclical direction of the phases	1-2-3 or 3-2-1	
<b>UV</b>	27	Undervoltage	$U8 = 0.5...0.98 \times U_n$	$0.001 \times U_n$
<b>OV</b>	59	Overvoltage	$U9 = 1.02...1.5 \times U_n$	$0.001 \times U_n$
<b>UV2</b>	27	2nd Undervoltage	$U15 = 0.5...0.98 \times U_n$	$0.001 \times U_n$
<b>OV2</b>	59	2nd Overvoltage	$U16 = 1.02...1.5 \times U_n$	$0.001 \times U_n$

Trip Time	Time Step	Excludability	Excludability trip	Pre-Allarm	Curve
XT2-XT4 : t1 = 3...60 s @ 3 x I1 XT5: t1 = 3...48 s @ 3 x I1 XT7: t1 = 3...144 s @ 3 x I1	1 s	no	no	50%...90% I1 step 1%	t = k/I <sup>2</sup>
XT2 - XT4 : t2 = 0.05...0.4 s XT5: t2 = 0.05...0.5 s XT7: t2 = 0.05...0.8 s	0.01 s	yes	yes	no	t = k
t2sel = 0.04...0.2 s @ 10 x In	0.01 s	yes			
Range: 0.1 ... 30s	0.01 s	yes			
XT2 - XT4 : t2 = 0.05...0.4 s @ 10 x In XT5: t2 = 0.05...0.5 s @ 10 x In XT7: t2 = 0.05...0.8 s @ 10 x In	0.01 s	yes	yes	no	t = k/I <sup>2</sup>
Instantaneous		yes	no	no	t = k
Range: 0.1 ... 30s	0.01 s	yes			
t3sel = Instantaneous		yes			
t4 = Inst.0.1 ...1 s with I > I4	0.05 s	yes	yes	50%...90% I4 step 1%	t = k
t4sel = 0.04...0.2 s	0.01 s	yes			
Range: 0.1 ... 30s	0.01 s	yes			
t4 = 0.1...1 s	0.05 s	yes	yes	50%...90% I4 step 1%	t = k/I <sup>2</sup>
		yes			
Instantaneous		yes	no	no	t = k
Instantaneous Monitor time range 40...500 ms	0.01 s	yes	no	no	t = k
t6 = 0.5...60 s	0.5 s	yes	yes	no	t = k
		yes	only signaling	no	
XT2 - XT4 : t2 = 0.05...0.4 s XT5: t2 = 0.05...0.5 s XT7: t2 = 0.05...0.8 s	0.01 s	yes	yes	no	t = k
t5sel = 0.04...0.2s	0.01 s	yes	yes		
Range: 0.1 ... 30s	0.01 s	yes			
		yes	only signaling	no	
t8 = 0.05...120 s	0.01 s	yes	yes	no	t = k
t9 = 0.05...120 s	0.01 s	yes	yes	no	t = k
t15 = 0.05...120 s	0.01 s	yes	yes	no	t = k
t16 = 0.05...120 s	0.01 s	yes	yes	no	t = k

# Ekip Touch/Hi-Touch

## Protection settings

ABB Code	ANSI Code	Function	Threshold Range	Threshold Step
<b>Protections</b>				
<b>VU</b>	47	Voltage unbalance	$U_{14} = 2...90 \% U_n$ unbalance	1% $U_n$
<b>S(V)</b>	51V	Voltage controlled overcurrent	$I_{20} = 0.6...10 \times I_n$	0.1 x $I_n$
		Step mode (controlled mode)	$U_{I1} = 0.2...1 \times U_n$ $K_{s1} = 0.1...1$	0.01 x $U_n$ 0.01
		Linear mode (restrained mode)	$U_{I1} = 0.2...1 \times U_n$ $U_{h1} = 0.2...1 \times U_n$ $K_{s1} = 0.1...1$	0.01 x $U_n$ 0.01 x $U_n$ 0.01
<b>S2(V)</b>	51V	2nd Voltage controlled overcurrent	$I_{21} = 0.6...10 \times I_n$	0.1 x $I_n$
		Step mode (controlled mode)	$U_{I2} = 0.2...1 \times U_n$ $K_{s2} = 0.1...1$	0.01 x $U_n$ 0.01
		Linear mode (restrained mode)	$U_{I2} = 0.2...1 \times U_n$ $U_{h2} = 0.2...1 \times U_n$ $K_{s2} = 0.1...1$	0.01 x $U_n$ 0.01 x $U_n$ 0.01
<b>RV</b>	59N	Residual overvoltage	$U_{22} = 0.05...0.5 \times U_n$	0.001 x $U_n$
<b>UF</b>	81L	Underfrequency	$f_{12} = 0.9...0.999 f_n$	0.001 x $f_n$
<b>OF</b>	81H	Overfrequency	$f_{13} = 1.001...1.1 f_n$	0.001 x $f_n$
<b>UF2</b>	81L	2nd Underfrequency	$f_{17} = 0.9...0.999 f_n$	0.001 x $f_n$
<b>OF2</b>	81H	2nd Overfrequency	$f_{18} = 1.001...1.1 f_n$	0.001 x $f_n$
<b>RP</b>	32R	Reverse active power	$P_{11} = -1...-0.05 S_n$	0.001 $S_n$
<b>Cos <math>\phi</math></b>	78	Power factor	$\text{Cos } \phi = 0.5...0.95$	0.01
	<b>D</b>	67	Directional overcurrent	$I_{7 Fw/Bw} = 0.6...10 \times I_n$
	68	Zone selectivity		
		Start up	Activation: $0.6...10 \times I_n$	0.1 x $I_n$
		Minimum angle of direction (°)	3.6, 7.2, 10.8, 14.5, 18.2, 22, 25.9, 30, 34.2, 38.7, 43.4, 48.6, 54.3, 61, 69.6	
<b>RQ</b>	40/32R	Loss of field or reverse reactive power	$Q_{24} = -1...-0.1 \times S_n$ $K_q = -2...2$	0.001 x $S_n$ 0.01
		Loss of field or reverse reactive power	$Q_{25} = -1...-0.1 \times S_n$ $K_q = -2...2$	0.001 x $S_n$ 0.01
		Minimum voltage threshold	$V_{min.} = 0.5...1.2$	0.01
<b>OQ</b>	320F	Reactive overpower	$Q_{27} = 0.4...2 \times S_n$	0.001 x $S_n$
<b>OP</b>	320F	Active overpower	$P_{26} = 0.4...2 \times S_n$	0.001 x $S_n$
<b>UP</b>	32LF	Active underpower	$P_{23} = 0.1...1 \times S_n$	0.001 x $S_n$
		StartUp		
<b>ROCOF</b>	81R	Rate of change of frequency	$f_{28} = 0.4...10 \text{ Hz / s}$ (up &/or down)	0.2 Hz/s
<b>L (Motor Protection)</b>	49	Motor protection overload	$I_1 = 0.4...1 \times I_n$	0.001 x $I_n$
		According 60947-4-1		
<b>R</b>	51R	Rotor blockage - Jam	$I_j = 2...10 \times I_1$	0.1
	51R	Rotor blockage - Stall	$I_s = 1...10 \times I_1$	0.1
<b>U</b>		Phase lackand/or unbalance	On/Off	-
<b>Uc</b>	37	Undercurrent	$50...90\% \times I_1$	10%

Trip Time	Time Step	Excludability	Excludability trip	Pre-Alarm	Curve
t14 = 0.5...60 s	0.5 s	yes	yes	no	t = k
t20 = 0.05...30 s	0.01 s	yes	yes	no	t = k
t21 = 0.05...30 s	0.01 s	yes	yes	no	t = k
t22 = 0.5...120 s	0.01 s	yes	yes	no	t = k
t12 = 0.15...300 s	0.01 s	yes	yes	no	t = k
t13 = 0.15...300 s	0.01 s	yes	yes	no	t = k
t17 = 0.15...300 s	0.01 s	yes	yes	no	t = k
t18 = 0.15...300 s	0.01 s	yes	yes	no	t = k
t11 = 0.5...100 s	0.1 s	yes	yes	no	t = k
t7 Fw/Bw = 0.2...0.8 s	0.01 s	yes	only signaling	no	t = k
t7sel = 0.13...0.5s	0.01 s	yes			
Range 0.1...0.8s	0.01 s	yes			
t24 = 0.5...100 s	0.1 s	yes	yes	no	t = k
t24 = 0.5...100 s	0.1 s	yes	yes	no	t = k
t27 = 0.5...100 s	0.5 s	yes	yes	no	t = k
t26 = 0.5...100 s	0.5 s	yes	yes	no	t = k
t23 = 0.5...100 s	0.5 s	yes	yes	no	t = k
Range from closing: 0.1...30S or with digital input	0.01 s	yes			-
t28 = 0.5...10 s for f>f28	0.01 s	yes	yes	no	t = k
XT2-XT4: 5E - 10E - 20E					$t = (13.5 t1)/((if/I1)-1)$
XT5-XT7: 5E - 10E - 20E - 30E					
tj = 1...10 s	0.5 s				t = k
ts = 2...10 s	0.5 s				t = k
tu = 1...10 s	0.5 s				t = k
tuc = 1...20 s	0.5 s				t = k

# Ekip Touch/Hi-Touch

## Protection settings

ABB Code	ANSI Code	Function	Threshold Range	Threshold Step
<b>Protection with additional modules</b>				
<b>SC</b> Synchrocheck	25	Synchrocheck (Live busbars)	U <sub>live</sub> = 0.5...1.1 x Un ΔU = 0.02...0.12 x Un Δf = 0.1...1 x Hz ΔΦ 5...50° elt	0.001 x Un 0.001 x Un 0.1 x Hz 5° elt
		Synchrocheck (Live/Dead busbars)	U <sub>live</sub> = 0.5...1.1 x Un U <sub>dead</sub> = 0.02...0.2 x Un	0.001 x Un 0.001 x Un
		Frequency check off		
		Phase check off		
		Dead bar configuration	Reverse/Standard	
		Primary voltage	100...1150	100, 115, 120, 190, 208, 220, 230, 240, 277, 347, 380, 400, 415, 440, 480, 500, 550, 600, 660, 690, 910, 950, 1000, 1150
		Secondary voltage	100...120	100, 110, 115, 120
<b>Gext</b>	50G TD	Earth fault	I <sub>41</sub> <sup>(1)</sup> = 0.1...1 x I <sub>n</sub> toroid	0.001 x I <sub>n</sub> toroid
	68	Zone selectivity		
		Start up	Activation: 0.1...1 x I <sub>n</sub>	0.02 x I <sub>n</sub>
51G	Earth fault	I <sub>41</sub> <sup>(1)</sup> = 0.1...1 x I <sub>n</sub>	0.001 x I <sub>n</sub>	
<b>MDGF</b> <sup>(2)</sup>		Earth fault	I <sub>41</sub> = 0.1...1 x I <sub>n</sub> toroid Max setting 1200A	0.001 x I <sub>n</sub> toroid
		Earth fault	I <sub>41</sub> = 0.1...1 x I <sub>n</sub>	0.001 x I <sub>n</sub>
<b>Rc</b>	64 50N TD 87N	Residual current / Differential ground fault	IΔn = 3 - 5 - 7 - 10 - 20 - 30A	

The RC for the XT7 is active only when the rating plug is present. All of the Synchrocheck functions are for signaling.

An adjustable pre-alarm threshold (50...90%) is available for L protection, as well as a fixed pre-alarm threshold is available for G and Gext protection.

(1) With Vaux all thresholds are available. Without Vaux there are minimum threshold limitations. Details available on the "User manual for use and maintenance of Ekip Touch Trip units"

(2) Available for XT7 only.

Trip Time	Time Step	Excludability	Excludability trip	Pre-Allarm	Curve
Stability voltage time for live state = 100...30000ms Minimum matching time = 100...3000ms tref = 0.1...30 s	0.001 s 0.01 s 0.1 s	yes yes yes	only signaling only signaling	no no	
t41 = 0.1...1 s	0.05 s	yes	yes	50...90% I41 step 1%	t = k
t41sel = 0.04...0.2 s	0.01 s	yes			
Range: 0.1...30s	0.01 s	yes			
t41 = 0.1...1 s with I = 4 x In	0.05 s	yes	yes	50...90% I41 step 1%	t = k/I <sup>2</sup>
t41 = 0.05-0.4 s	0.05 s	yes	yes	50...90% I41 step 1%	t = k
t41 = 0.1-0.4 s	0.05 s	yes	yes	50...90% I41 step 1%	t = k/I <sup>2</sup>
tΔn = 0.06 – 0.1 – 0.2 – 0.3 – 0.4 – 0.5 – 0.8 s			no	no	t = k

# Ekip Touch/Hi-Touch

## Tolerances

ABB Code	ANSI Code	Function	Threshold Range	Trip Time
<b>Protections</b>				
L	49	Overload according to 60947-2	trip between 1.05 and 1.2 x I <sub>n</sub>	± 10% I < 6 x I <sub>n</sub> ± 20% I ≥ 6 x I <sub>n</sub>
	49	Overload according to 60255-151	trip between 1.05 and 1.2 x I <sub>n</sub>	± 10% I < 6 x I <sub>n</sub> ± 20% I ≥ 6 x I <sub>n</sub>
S	50 TD	Selective short-circuit	± 7% I < 6 x I <sub>n</sub> ± 10% I ≥ 6 x I <sub>n</sub>	The better of the two data: ± 10% or ± 40ms
	51	Selective short-circuit	± 7% I < 6 x I <sub>n</sub> ± 10% I ≥ 6 x I <sub>n</sub>	± 15% I < 6 x I <sub>n</sub> ± 20% I ≥ 6 x I <sub>n</sub>
I	50	Instantaneous short-circuit	± 10%	≤ 30ms
G	50N TD	Earth Fault	± 7%	50ms with t <sub>4</sub> =instantaneous
	51N	Earth Fault	± 7%	± 15%
2I	50	2nd Instantaneous short-circuit	± 10%	15ms <sup>(1)</sup>
MCR		Closing on short-circuit	± 10%	≤ 30ms
IU	46	Current unbalance	10%	The better of the two data: ± 10% or ± 40ms (for t <sub>5</sub> <5s) / ± 100ms (for t <sub>5</sub> ≥ 5s)
LC1/2 - Iw1/2		Current threshold	± 10%	
S2	68	2nd Selective short-circuit	± 7% I < 6 x I <sub>n</sub> ± 10% I ≥ 6 x I <sub>n</sub>	The better of the two data: ± 10% or ± 40ms
UV	27	Undervoltage	± 2%	The better of the two data: ± 10% or ± 40ms (for t <sub>8</sub> <5s) / ± 100ms (for t <sub>8</sub> ≥ 5s)
OV	59	Overvoltage	± 2%	The better of the two data: ± 10% or ± 40ms (for t <sub>9</sub> <5s) / ± 100ms (for t <sub>9</sub> ≥ 5s)
UV2	27	2nd Undervoltage	± 2%	The better of the two data: ± 10% or ± 40ms (for t <sub>15</sub> <5s) / ± 100ms (for t <sub>15</sub> ≥ 5s)
OV2	59	2nd Overvoltage	± 2%	The better of the two data: ± 10% or ± 40ms (for t <sub>16</sub> <5s) / ± 100ms (for t <sub>16</sub> ≥ 5s)
VU	47	Voltage unbalance	± 5%	The better of the two data: ± 10% or ± 40ms (for t <sub>14</sub> <5s) / ± 100ms (for t <sub>14</sub> ≥ 5s)
S(V)	51V	Voltage controlled overcurrent	± 10%	The better of the two data: ± 10% or ± 40ms (for t <sub>20</sub> <5s) / ± 100ms (for t <sub>20</sub> ≥ 5s)
S2(V)	51V	2nd Voltage controlled overcurrent	± 10%	The better of the two data: ± 10% or ± 40ms (for t <sub>21</sub> <5s) / ± 100ms (for t <sub>21</sub> ≥ 5s)
RV	59N	Residual overvoltage	± 10%	The better of the two data: ± 10% or ± 40ms (for t <sub>22</sub> <5s) / ± 100ms (for t <sub>22</sub> ≥ 5s)
UF	81L	Underfrequency	± 1% (with f <sub>n</sub> ± 2%)	The better of the two data: ± 10% or ± 40ms (for t <sub>12</sub> <5s) / ± 100ms (for t <sub>12</sub> ≥ 5s)
OF	81H	Overfrequency	± 1% (with f <sub>n</sub> ± 2%)	The better of the two data: ± 10% or ± 40ms (for t <sub>13</sub> <5s) / ± 100ms (for t <sub>13</sub> ≥ 5s)
UF2	81L	2nd Underfrequency	± 1% (with f <sub>n</sub> ± 2%)	The better of the two data: ± 10% or ± 40ms (for t <sub>17</sub> <5s) / ± 100ms (for t <sub>17</sub> ≥ 5s)
OF2	81H	2nd Overfrequency	± 1% (with f <sub>n</sub> ± 2%)	The better of the two data: ± 10% or ± 40ms (for t <sub>18</sub> <5s) / ± 100ms (for t <sub>18</sub> ≥ 5s)

ABB Code	ANSI Code	Function	Threshold Range	Trip Time
RP	32R	Reverse active power	± 10%	The better of the two data: ± 10% or ± 40ms (for t11<5s) / ± 100ms (for t11 ≥ 5s)
D	68	Directional overcurrent	± 7% I ≤ 6 x I <sub>n</sub> ± 10% I ≥ 6 x I <sub>n</sub>	If t7 ≤ 200 ms : +/-20 ms If 200ms < t7 ≤ 400 ms : 10% If con t7 > 400 ms : 40 ms
RQ	40/32R	Loss of field or reverse reactive power	± 10%	The better of the two data: ± 10% or ± 40ms (for t24<5s) / ± 100ms (for t24 ≥ 5s)
OQ	320F	Reactive overpower	± 10%	The better of the two data: ± 10% or ± 40ms (for t27<5s) / ± 100ms (for t27 ≥ 5s)
OP	320F	Active overpower	± 10%	The better of the two data: ± 10% or ± 40ms (for t26<5s) / ± 100ms (for t26 ≥ 5s)
UP	32LF	Active underpower	± 10%	The better of the two data: ± 10% or ± 40ms (for t23<5s) / ± 100ms (for t23 ≥ 5s)
ROCOF	81R	Rate of change of frequency	± 10% (20% when "0,4Hz/s" is set)	The better of the two data: ± 20% or ± 200ms
L (Motor Protection)		Motor protection overload According 60947-4-1		
R	51LR	Rotor blockage - Jam	I <sub>j</sub> = 2...10 x I <sub>1</sub>	t <sub>j</sub> = 1...10 s
	51LR	Rotor blockage - Stall	I <sub>s</sub> = 1...10 x I <sub>1</sub>	t <sub>s</sub> = 2...10 s
U		Phase lack and/or unbalance	± 10%	The better of the two data: ± 10% or ± 40ms (for t <sub>u</sub> <5s) / ± 40ms (for t <sub>u</sub> ≥5s)
Uc	37	Undercurrent	± 10%	The better of the two data: ± 10% or ± 40ms (for t <sub>uc</sub> <5s) / ± 40ms (for t <sub>uc</sub> ≥5s)
Protection with additional modules				
SC Synchrocheck	25	Synchrocheck (Live busbars)	10%	
		Synchrocheck (Live. Dead busbars)	10%	
Gext	50GTD	Earth fault	± 7%	The better of the two data: ± 10% or ± 40ms
	51G	Earth fault	± 7%	± 15%
	51G	Earth fault		
MDGF <sup>(2)</sup>		Earth fault	± 7%	The highest between 15% or 15ms
Rc	64 50N TD 87N	Residual current / Differential ground fault	- 20% ÷ 0%	140ms @ max trip time 950ms @ max trip time

(1) 2I Trip time with Vaux only:  
 - ≤ 3ms when the fault current is above 18kA  
 - ≤ 7ms (three-phase) or ≤ 9ms (single-phase) when the fault is greater than three times the 2I setting (I31)  
 - ≤ 15ms when the fault is lower than three times the 2I setting (I31)  
 (2) Available for XT7 only

The tolerances above apply to trip units already powered by the main circuit with current flowing in at least two phases or an auxiliary power supply. In all other cases the following tolerance values apply:

ABB Code	Trip threshold	Trip time
L	Trip between 1.05 and 1.2 x I <sub>1</sub>	± 20%
S	± 10%	± 20%
I	± 15%	≤ 60ms
G	± 10%	± 20% (60ms when t4=inst)
Other protection	± 15%	± 20%

# Ekip Touch/Hi-Touch

## Measurement functions and data

### Currents

All the Ekip Touch/Hi-Touch trip units measure the RMS value of the instantaneous currents of the three phases and the neutral. There are two different levels of accuracy depending on the version (0.5% and 1%). In addition, also the minimum and maximum values recorded within an adjustable time interval are available.

### Voltage

Instantaneous phase-to-phase and phase-to-neutral voltages can be measured. They are available at a 0.5% level of accuracy. In addition, the minimum and maximum values recorded within an adjustable time interval are available.

### Power

Real time measurements of the total and phase power. Available at 2 different level of accuracy depending on the version, 1 % and 2%. In addition, the minimum and maximum values recorded within an adjustable time interval are available.

### Energy meters

Measurements of the active, reactive and apparent energy totals, updated every minute. The measurements can be reset when needed.

### Frequency

Measurement of line real time frequency, expressed in hertz.

### Peak Factor

Real time measurements of the peak factors of the phase currents. The measurements are expressed as a ratio between the peak values and RMS values, for each single phase.

### Power Factor

Power factor and real time measurements of the ratio between the total active power and total apparent power, expressed as  $\cos\phi$ . In addition, the trip unit signals an alarm if the  $\cos\phi$  value drops below an adjustable threshold, settable via Ekip Connect software (from 0.5 to 0.95).

### Datalogger

This function allows the data related to a trigger event to be recorded. These data are:

- Analog measurements: phase currents and phase-to-phase voltages
- Digital events: protection alarms, circuit-breaker status signals, tripping of protections.

When the datalogger is activated, the trip unit continuously acquires data by filling and emptying an internal register. If a trigger event occurs, the trip unit inhibits acquisition (either immediately or with an adjustable time-lag) and stores the data, which is available for downloading.

### Network Analyzer

This function fully evaluates the quality of the network. It is possible to set the controls to long cycle voltage and current in order to analyze the system functionality. Voltages and currents are monitored to find:

- The sequence of voltages
- Short term voltage drops or interruptions
- Short duration voltage increases
- Slow voltage drops
- Slow voltage increases
- Unbalances between the voltages
- Harmonic distortion of voltages and currents.

### Waveforms

A selected quantity can be represented as a waveform and acquired at the moment of selection. The phase current and phase-to-phase voltage can be displayed.

### Harmonics

A representation in the form of a histogram of the measurements of the harmonics that make up the waveform, and related to the frequency set.

### Operation counter

In the presence of a power supply, the trip unit records information about the openings of the circuit-breaker including:

- the number of manual openings
- the total number of operations (manual + trips).

By activating communication with the trip unit, the following parameters are also available:

- the number of openings due to protection tripping
- the number of openings for which tripping has not been completed in due time (back-up commands have been necessary)
- the number of opening tests performed.

### Contact wear

This gives an estimation of the conditions of the main circuit-breaker contacts. The value is expressed as a percentage, and is 0% in case of no wear, and 100% in case of total wear. This is calculated automatically by the trip unit at every opening for protection or, in the presence of a power supply, also at every manual opening of the circuit-breaker.

### Openings

Information about the last 30 openings are available. In particular:

- tripped protection
- the progressive number of the opening
- the date and time of the opening (referred to the internal clock)
- measurements associated with the trip protection.

The most recent opening is viewable also by pressing the iTest key.

### Events

The last 200 events are recorded. The following information is available:

- trip unit: configuration status of the bus, operating mode, active set, auxiliary power supply
- protections: delay in action or alarms
- connection states or alarms: circuit-breaker, current sensors, trip coil, rating plug
- tripping: state of the opening command, or signal of tripping for protection.

The icons help to quickly understand the type of event:

-  event reported for information purposes
-  delay of a protection in progress, trip expected
-  alarm referring to a non-hazardous condition
-  alarm for operation, failure, or connection fault.

### Synchrocheck

Synchrocheck measurements relating to the function of synchronism between two independent power sources.

# Ekip Touch/Hi-Touch

## Measurement functions and data

The parameters measurable for each trip unit are shown in the following tables. Three different software packages are available to upgrade the trip units:

- Measuring package for measurement of voltage, power and energy
- Datalogger for data record
- Network Analyzer for the evaluation of the power quality.

Instantaneous measurements		Ekip Touch	Ekip Touch Measuring	Ekip Hi-Touch	Ekip M Touch	Ekip G Touch	Ekip G Hi-Touch
<b>Currents (RMS)</b>	L1, L2, L3, Ne	[A] ●	●	●	●	●	●
<b>Ground fault current (RMS)</b>	Ig	[A] ●	●	●	●	●	●
<b>Measuring package</b>							
<b>Phase-to-phase voltage (RMS)</b>	U12, U23, U31	[V] ○	●	●	●	●	●
<b>Phase-to-neutral voltage (RMS)</b>	U1, U2, U3	[V] ○	●	●	●	●	●
<b>Phase sequence</b>		○	●	●	●	●	●
<b>Frequency</b>	f	[Hz] ○	●	●	●	●	●
<b>Active power</b>	P1, P2, P3, Ptot	[kW] ○	●	●	●	●	●
<b>Reactive power</b>	Q1, Q2, Q3, Qtot	[kVAR] ○	●	●	●	●	●
<b>Apparent power</b>	S1, S2, S3, Stot	[KVA] ○	●	●	●	●	●
<b>Power factor</b>	PF1, PF2, PF3, PF total	○	●	●	●	●	●
<b>Peak factor</b>	total	○	●	●	●	●	●
<b>Active energy</b>	Ep total, Ep positive, Ep negative	[kWh] ○	●	●	●	●	●
<b>Reactive energy</b>	Eq total, Ep positive, Ep negative	[kVARh] ○	●	●	●	●	●
<b>Apparent energy</b>	Es total	[KVAh] ○	●	●	●	●	●

● Available as standard

○ Available as software package to be ordered via ABB Ability Marketplace™ or during the circuit-breaker ordering phase

Depending on the need, two different accuracy levels are available for the trip unit, the Standard Precision and High Precision certified according to IEC 61557-12:

Instantaneous measurements		Standard Precision	High Precision certified according to IEC 61557-12
<b>Currents (RMS)</b>	[A] L1, L2, L3, Ne	1%	0.50%
<b>Ground fault current (RMS)</b>	[A] I <sub>g</sub>	2%	0.50%
<b>Phase-to-phase voltage (RMS)</b>	[V] U12, U23, U31	0.50%	0.50%
<b>Phase-to-neutral voltage (RMS)</b>	[V] U1, U2, U3	0.50%	0.50%
<b>Frequency</b>	[Hz] f	0.10%	±0.02 Hz
<b>Active power</b>	[kW] P1, P2, P3, P <sub>tot</sub>	2%	1%
<b>Reactive power</b>	[kVAR] Q1, Q2, Q3, Q <sub>tot</sub>	2%	2%
<b>Apparent power</b>	[KVA] S1, S2, S3, S <sub>tot</sub>	2%	1%
<b>Power factor</b>	PF1, PF2, PF3, PF total	2%	1%
<b>Active energy</b>	[kWh] E <sub>p</sub> total, E <sub>p</sub> positive, E <sub>p</sub> negative	2%	1%
<b>Reactive energy</b>	[kVARh] E <sub>q</sub> total, E <sub>p</sub> positive, E <sub>p</sub> negative	2%	2%
<b>Apparent energy</b>	[kVAh] E <sub>s</sub> total	2%	1%

The lowest current value that the trip units Ekip Touch/Hi-Touch can measure is 0.004 x I<sub>n</sub>

#### High Precision certified according to IEC 61557-12

Available only for factory assembled circuit-breakers, this accuracy is available as default on the Ekip Hi-Touch and Ekip G Hi-Touch trip units; anyway, it is always possible to have this accuracy for the other Ekip Touch trip units by adding the dedicated commercial codes upon ordering.

For XT2 Ekip Touch trip units the High Precision is available in general for I<sub>n</sub> ≥ 100A.

# Ekip Touch/Hi-Touch

## Measurement functions and data

Network Analyzer		Interval
Hourly average voltage value	[V] [no] - Umin= 0.75...0.95 x Un - Umax= 1.05...1.25 x Un - Events counter <sup>(1)</sup>	t = 5...120min
Short voltage interruptions	[no] - Umin= 0.75...0.95 x Un - Events counter <sup>(1)</sup>	t <40ms
Short voltage spikes	[no] - Umax= 1.05...1.25 x Un - Events counter <sup>(1)</sup>	t <40ms
Slow voltage sags and swells	[no] - Umin1= 0.75...0.95 x Un - Umin2= 0.75...0.95 x Un - Umin3= 0.75...0.95 x Un - Umax1= 1.05...1.25 x Un - Umax2= 1.05...1.25 x Un - Events counter <sup>(1)</sup>	t = 0.02s...60s
Voltage unbalance	[V] [no] - U neg. seq.= 0.02...0.10 x Un - Events counter <sup>(1)</sup>	t = 5...120min
Harmonic analysis	Current and Voltage - up to 50 <sup>th</sup> - Alarm THD: 5...20% - Single harmonic alarm: 3...10% plus a count of minutes the harmonic has been exceeded	

● Available as standard

○ Available as software package to be ordered via ABB Ability Marketplace™ or during the circuit-breaker ordering phase. To add this function, the Measuring package must be installed first.

<b>Ekip Touch</b>	<b>Ekip Touch Measuring</b>	<b>Ekip Hi-Touch</b>	<b>Ekip M Touch</b>	<b>Ekip G Touch</b>	<b>Ekip G Hi-Touch</b>
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

1) No. of events day by day in the last year plus the total events in the breaker's lifetime

# Ekip Touch/Hi-Touch

## Measurement functions and data

Record of values: for each interval with time-stamping	Parameters	Window & interval
Current: minimum and maximum	[A] I Min, I Max	Fixed synchronizable by remote
Phase-to-phase voltage: minimum and maximum	[V] U Min, U max	Duration: 5...120min
Active power: average and maximum	[kW] P Mean, P Max	Number of intervals: 24
Reactive power: average and maximum	[kVAR] Q Mean, Q Max	
Apparent power: average and maximum	[KVA] S Mean, S Max	
Data logger: high rate sampling record of parameters	Parameters	
Currents	[A] L1, L2, L3, Ne, Ig	Fixed synchronizable by remote
Voltages	[V] U12, U23, U31	Duration: 5...120min
Sampling rate	[Hz] 1200-9600	Number of intervals: 24
Maximum recording duration	[s] 18	
Recording stop delay	[s] 0-10s	
Number of registers	[no] 2 independent	
Info on trip & opening data: after a fault without auxiliary supply	Parameters	
Type of protection tripped	eg. L, S, I, G, UV, OV	
Fault values per phase	[A/V/Hz w/VAR] eg. I1, I2, I3, neutral for S protection V12, V23, V32 for UV protection	
Time-stamping	Date, time and progressive number	
Maintenance indicators	Parameters	
Information on last 30 trips	Type of protection, fault values and time-stamping	
Information on last 200 events	Type of event, time-stamping	
Number of mechanical operations	[no] can be associated to alarm	
Total number of trips	[no]	
Total operating time	[h]	
Wear of contacts	[%] Pre-alarm >80% Alarm = 100%	
Date of maintenance operations performed	Last	
Indication of maintenance operation needed		
Circuit-breaker I.D.	Type of circuit-breaker, assigned device name, serial number	
Self-diagnosis	Parameters	
Check of continuity of internal connections	Alarm due to disconnection: rating plug, sensors, trip coil	Note: Opening of the circuit-breaker
Failure of circuit-breaker to open (ANSI 50BF)	Alarm following non-tripping of protection functions	can be set in the event of alarm
Temperature (OT)	Pre-alarm and alarm for abnormal temperature	

● Available as standard

○ Available as software package to be ordered via ABB Ability Marketplace™ or during the circuit-breaker ordering phase. To add this function, the Measuring package must be installed first.





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# Communication and connectivity

- 4/2**      **Introduction**
- 4/4**      **Switchgear compartment**
- 4/6**      **Electrical switchgear**  
Remote communication
- 4/8**      **Electrical system**  
Software applications
- 4/10**     Ekip Connect
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- 4/27**     **Accessories for electronic trip units**
- 4/28**     **Accessories for Ekip Dip trip units**

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# Introduction

The Tmax XT circuit-breakers are completely ready for Industry 4.0 requirements. The increasing number of connected objects and people is transforming electrical installation systems, bringing forward new potential in efficiency and productivity.

The Ekip Touch trip unit series can be connected in several ways to different networks and systems. According to their complexity, the supervision of low-voltage systems may involve different levels. Depending on where the supervision is needed, different communication configurations are available.

**Switchboard/Panelboard compartment:** control of the main electrical values of the circuit-breaker and set the protection functions, thanks to:

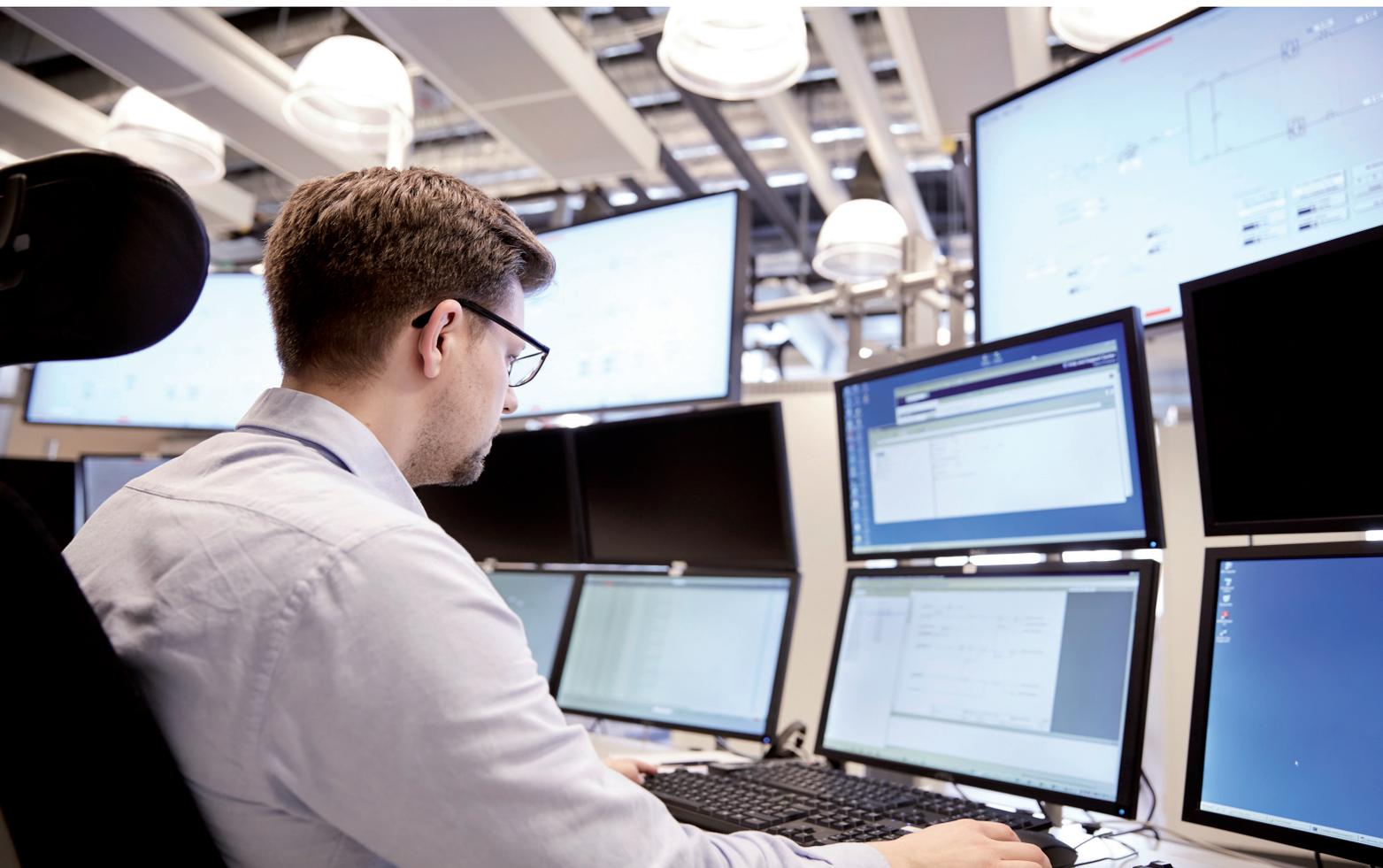
- embedded display of the trip units
- Ekip Multimeter display connected to the trip unit
- smartphone connection via embedded Bluetooth.

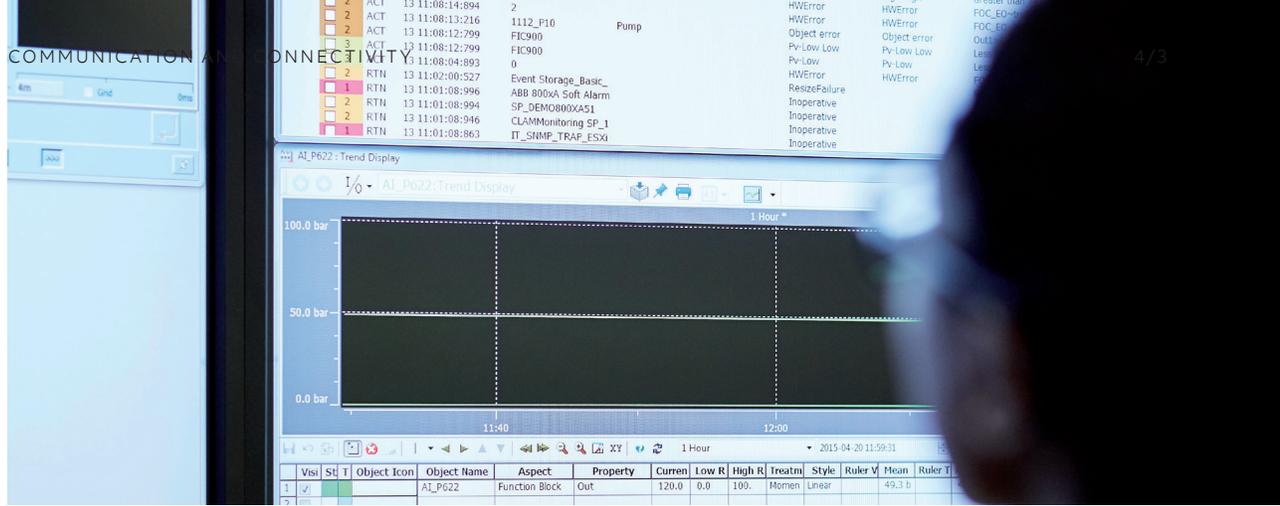
**Electrical Switchboard/Panelboard:** display of the data of all circuit-breakers installed in the switchgear from a single point, remotely and via several communication protocols. In this scenario, ABB Lite Panel, the front door display, allows monitoring and control of the circuit-breakers.

**Electrical system:** management of complex systems in which the devices must be integrated in automated industrial processes or in intelligent electrical networks, better known as smart grids.

The system can be supervised by:

- Ekip View software
- Internet with the ABB Ability™ Energy and Asset Manager webapp.





For all the possible supervision modes, connectivity modules are necessary. Two mounting solutions are possible, one excluding the other:

- **Internally**, it is possible to mount the Ekip Com modules in the circuit-breaker. This solution can be used on XT2, XT4 and XT5 circuit-breakers. The module is mounted directly inside the circuit-breaker with no additional space needed in the switchboard. For this configuration, dedicated internal module codes are available.
- **Externally**, through the Ekip Cartridge. The modules can be installed inside the cartridge, which is directly connected to the trip unit by a cable. Available with the XT2, XT4 and XT5 sizes. The Ekip cartridge is available in two versions depending on how many modules are needed.

The solution with the external cartridge permits a double or even triple communication channel, as well as redundant communication. Besides, the cartridge solution makes it possible the use of advanced functions, such as embedded ATS and more.

When an internal module is used, the Ekip Cartridge cannot be used and vice versa.

It has to be highlighted that, for the XT7 and XT7 M sizes, the modules must be installed directly on the terminal box available on the upper part of the circuit-breaker. The modules are the same of the Ekip Cartridge. On the upper part of the circuit-breaker it is possible to install one Ekip Supply plus maximum two additional modules.

In addition, the Ekip Dip Measuring for XT4 and Ekip C Dip for XT2-4 allow the Modbus communication thanks to the internal Com module. In other cases (for the Ekip Dip, thermal-magnetic trip unit, or switch-disconnector), the Modbus RTU and TCP, available in the STA version (Stand-Alone), can be still installed inside the circuit-breaker to provide information on the status of the circuit-breaker and remote control (adding the motor operator).

Circuit Breaker	Trip unit Type	Internal solution		External solution with Ekip Cartridge	
		Module	Protocol	Module	Protocol
XT2-XT4	Switch disconnector Thermomag Ekip Dip	Ekip Com STA	Modbus RTU Modbus TCP	-	-
		Ekip C Dip	Ekip Com Dip	Modbus RTU	-
		Ekip Touch / Hi-Touch	Ekip Com	A	Ekip Com
XT5	Switch disconnector Thermomag Ekip Dip	Ekip Com STA	Modbus RTU Modbus TCP	-	-
		Ekip Touch / Hi-Touch	Ekip Com	Modbus RTU, Modbus TCP, Profinet, Ethernet/IP, IEC61850	Modbus RTU, Modbus TCP Profinet, Ethernet/IP IEC61850, DeviceNet Profibus-DP
Circuit Breaker	Trip unit Type	Terminal box			
XT7-XT7M	Switch disconnector Ekip Dip	-			
		Ekip Touch / Hi-Touch	Ekip Com	Modbus RTU, Modbus TCP, Profinet, Ethernet/IP, IEC61850, DeviceNet, Profibus-DP	

# Switchgear compartment Display solutions

—  
For the list of information available for each trip unit, see Chapter 3.

—  
SACE Tmax XT circuit-breakers equipped with Ekip Touch/Hi-Touch electronic trip units enable electrical measurements and diagnostic data to be displayed on the front of the switchgear.

#### **Solution with Ekip Touch trip units display**

The Ekip Touch electronic trip units are the ideal solution for supervision and control of the compartments inside a switchgear. In detail:

- their use is simple and intuitive thanks to an embedded front display with push buttons on XT2 and XT4 sizes and a high resolution color touch screen display on XT5, XT7 and XT7 M sizes
- they do not require an auxiliary power supply for safety; the Ekip Touch trip units are directly supplied by the current sensors integrated in the circuit-breaker, thereby avoiding the use of external power supplies.

—  
The Ekip Multimeter is a display unit to be installed on the front of the switchgear for SACE Tmax XT molded case circuit-breakers equipped with Ekip Touch electronic trip units.

#### **Solution with Ekip Multimeter Display on the front of the switchgear**

This device displays information about the system available in the trip unit to which it is connected and enables the adjustment of the parameters and protection thresholds.

The main characteristics of the Ekip Multimeter unit are:

- **Graphical and functional uniformity with the Ekip Touch trip units:** the Ekip Multimeter uses the same display as the trip unit to which it is connected, ensuring perfect continuity between the graphic display and the menu items.
- **Reduced dimensions:** the Ekip Multimeter guarantees the precision of the trip unit to which it is connected and performs the function of a measuring instrument without requiring the installation of external current and voltage transformers.
- **Flexible installation:** the Ekip Multimeter can be installed at a distance from the trip unit, enabling access to information from the most convenient point.
- **Simultaneous reading of the various electrical values:** the advanced connection system used allows several Ekip Multimeter devices to be connected to the same protection trip unit.

—  
Embedded Bluetooth for a quick and wireless connection to your smartphone.

#### **Solution with a smartphone connected via Bluetooth to the trip unit thanks to EPiC**

Via the Ekip Connect App, it is possible to:

- check and modify the protection functions settings
- read the measurements available on the trip unit
- buy the functions to upgrade the trip unit from the ABB Ability Marketplace™ and enable them directly on the trip unit
- download and share test reports of the trip unit.



- 01 Ekip Touch
- 02 Ekip Multimeter
- 03 EPiC

Ekip Touch trip unit	Integrated display	Ekip Multimeter	Smartphone with EPiC
<b>Measurement functions</b>			
Currents	●	●	●
Voltages	○	○	○
Powers	○	○	○
Energies	○	○	○
Harmonics	○	○	○
Network analyzer	○	○	○
<b>Adjustment functions</b>			
Setting of thresholds	●	●	●
Setting second set thresholds	○	○	○
Resetting of alarms	●	●	●
<b>Upgrade of the trip unit functions</b>			
Purchase of functions			●
Installation of function			●
<b>Diagnostics</b>			
Protection function alarms	●	●	●
Device alarms	●	●	●
Protection unit tripping details	●	●	●
Events log	●	●	●
Protection unit tripping log	●	●	●
<b>Maintenance</b>			
Number of operations	●	●	●
Number of trips	●	●	●
Contact wear	●	●	●
<b>Other data</b>			
Status of circuit-breaker	●	●	●
Local/remote mode	●	●	●

● Default available  
 ○ Available depending on the trip unit

# Electrical switchgear

## Remote communication

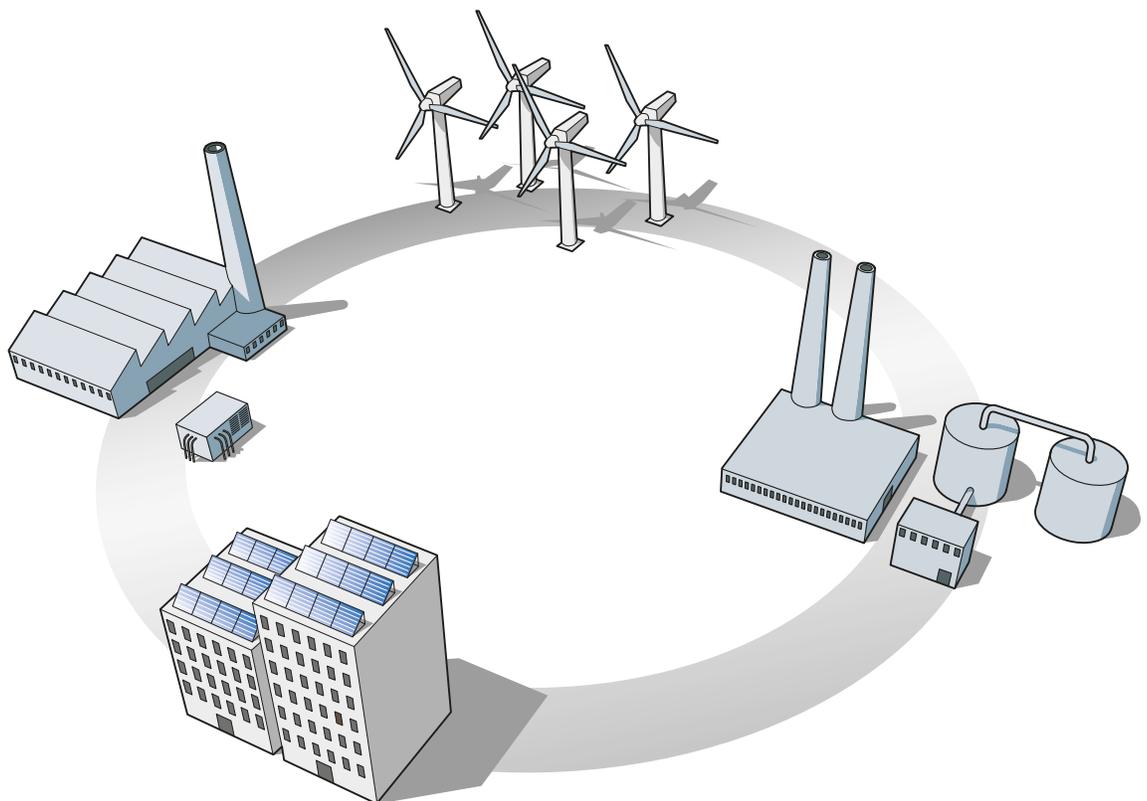
The integration of low-voltage devices in communication networks is required, in particular for: automated industrial processes, industrial and petrochemical sites, modern data centers and intelligent electricity networks, better known as smart grids.

### Ekip Com Modules

Thanks to the wide range of communication protocols supported, SACE Tmax XT circuit-breakers equipped with Ekip Touch/Hi-Touch electronic trip units can be integrated into communication networks without the need for external interface devices. The distinctive characteristics of the SACE Tmax XT circuit-breakers offering for industrial communication are:

- A wide range of protocols are supported; the Ekip Com communication modules enable integration with the most common communication protocols based on RS485 serial lines and the most modern communication systems based on EtherNet™ infrastructures, which guarantee an exchange of data in the order of 100 Mbit/s.

- Installation times reduced to a minimum due to the plug & play technology of the communication modules, which are connected directly to the circuit-breaker terminal box for XT7 and XT7 M and to the Ekip Cartridge with XT2, XT4 and XT5.
- Installation space reduced thanks to the ability to install the communication modules directly inside the circuit-breaker for XT2, XT4 and XT5.
- Redundancy of communication for greater reliability of the system; the circuit-breaker can be equipped with two communication modules at the same time, allowing the information on the buses to be exchanged simultaneously.
- Ready for the smart grid; the Ekip Com 61850 module is the solution for integrating SACE Tmax XT circuit-breakers into the automated systems of electrical substations based on the IEC 61850 Standard without the need for complex external devices.
- Complete supervision of Modbus RTU or Modbus TCP/IP networks via the software for PC Ekip View.



<b>Supervision of the electrical installation</b>	
<b>Electronic trip unit</b>	
<b>Solution</b>	
Protocols supported:	<b>Ekip Touch/Hi-Touch trip units</b>
Modbus RTU	Ekip Touch/Hi-Touch trip units + Ekip com modules
Profibus-DP	Ekip com Modbus RTU
DeviceNet™	Ekip com Profibus
Modbus TCP/IP	Ekip com DeviceNet™
Profinet	Ekip com Modbus TCP
EtherNet/IP™	Ekip com Profinet
IEC61850	Ekip com EtherNet™
Hub	Ekip com IEC61850
	ABB Ability™ Edge Industrial gateway
<b>Control functions</b>	
Circuit-breakers opening and closing <sup>1)</sup>	●
<b>Measurement functions</b>	
Current	●
Voltage	○
Power	○
Energy	○
Harmonics	○
Network analyzer	○
Data logger	○
<b>Adjustment functions</b>	
Setting thresholds	●
Resetting of alarms	●
<b>Diagnostics</b>	
Protection function alarms	●
Device alarms	●
Protection unit tripping details	●
Events log	●
Protection unit tripping log	●
<b>Maintenance</b>	
Number of operations	●
Number of trips	●
Contact wear	●
<b>Other data</b>	
Status of circuit-breaker	●
Local/remote mode	●

1) Circuit-breakers equipped with MOE-E for the XT2-XT4-XT5 or the Ekip Com Actuator module, or electrical accessories, opening and closing coils and spring charging motor in the case of the XT7-XT7 M. For details, ask ABB.

● Default available ○ Available depending on the trip unit

#### ABB Ability™ Edge Industrial gateway

This is a DIN-rail mounted communication module for cloud-connectivity. ABB Ability™ Edge Industrial gateway can collect data throughout the system from medium voltage to low voltage devices. Moreover, it is possible to connect sensors for environmental

parameters (temperature, water, gas) via both analog and digital inputs. Modules for Wi-Fi or cellular connection are provided as optional features. It now also has the possibility to run locally through a webserver dashboard without sending data to the cloud platform.

# Electrical system

## Software applications

ABB SACE offers software applications that allow the potential of the Ekip electronic trip units to be fully utilized in the management of power, acquisition and analysis of the electrical values, as well as testing of the protection, maintenance and diagnostic functions.

### Overview of the software

An overview of the software available and the main characteristics are given below:

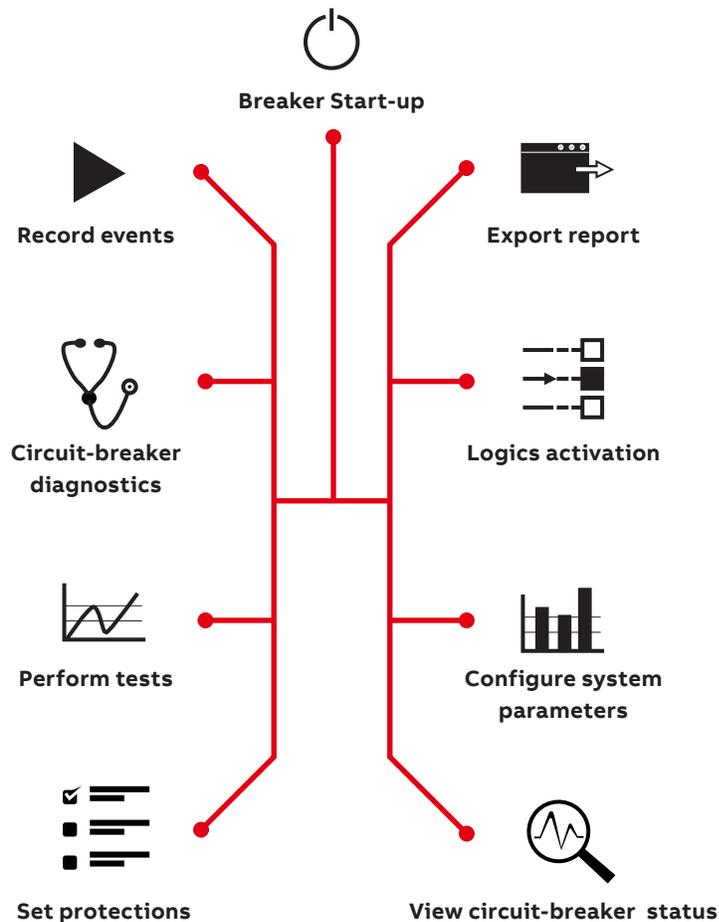
Software	Functions	Distinctive characteristics
Ekip Connect	<ul style="list-style-type: none"> <li>- commissioning of circuit-breakers</li> <li>- fault analysis</li> <li>- communication bus testing</li> </ul>	<ul style="list-style-type: none"> <li>- simple and intuitive use</li> <li>- integrated with DOC electrical design software</li> <li>- useable via EtherNet™</li> <li>- automatic updating from the Internet</li> <li>- off-line mode</li> <li>- multi-media (smart phone, tablet or PC)</li> </ul>
Ekip View	<ul style="list-style-type: none"> <li>- supervision and control of communication networks</li> <li>- analysis of electrical value trends</li> <li>- condition monitoring</li> </ul>	<ul style="list-style-type: none"> <li>- engineering free</li> <li>- analysis of past trends</li> <li>- customizable reports</li> <li>- access via Internet to the installation</li> <li>- possibility of integrating third party devices</li> </ul>
ABB Ability™ Energy and Asset Manager	<ul style="list-style-type: none"> <li>- monitoring of plants</li> <li>- optimization of the plant</li> <li>- control center</li> </ul>	<ul style="list-style-type: none"> <li>- alerts notification via mail</li> <li>- automatic report for energy efficiency</li> <li>- asset management</li> </ul>

### Ekip Connect

Ekip Connect is the ABB programming and commissioning software tool that allows the user to unlock the full potential of circuit-breakers, improving the efficiency of the electrical plant.

A circuit-breaker is an essential part of any electrical system guaranteeing that day-to-day processes can be performed safely and continuously. For this reason, it is vital that the installation and use of the circuit-breaker is made as error-free and simple as possible. From commissioning to implementation, through monitoring, testing and analysis, Ekip Connect is the perfect tool for guiding the user in the management of ABB circuit-breakers throughout the entire product life cycle.

Ekip Connect is the ABB commissioning and programming software that allows the potential of Ekip electronic trip units to be fully realized. Using Ekip Connect, the user can manage power, acquire and analyze electrical values and test protection, maintenance and diagnostic functions. Just as SACE EMAX 2 did before, SACE Tmax XT has evolved into a true power manager that has simplified the electrical plant, and the Ekip Connect software has become the user's key to accessing the full capabilities of the breakers.



# Electrical system

## Ekip Connect

—  
Panel builders  
- 50% commissioning  
time



### Ease of use

Imagine you are a panel builder and you have to commission a circuit-breaker and you need to save time. Using Ekip Connect it is possible to cut commissioning time up to 50%. Providing a stress-free interaction with the device complexity, Ekip Connect easy-to-use software has all the answers.

Ekip Connect's simple and intuitive interface means that, from the very start, it is possible to easily navigate the tool and access every circuit-breaker operation. At a glance, the user can see all the required information, providing the ability to quickly and effectively assess any situation.

—  
Facility managers  
100% full exploitation  
of the device



### Full exploitation

Imagine you are a facility manager and you need to perform fast and precise diagnosis in order to keep everything under control and avoid failures. Using Ekip Connect you can exploit the full capabilities of your device and thanks to the customizable dashboard you can organize the functions displayed, just the way you want it. It is possible to manage all the circuit-breaker settings and specifications directly with Ekip Connect, making it the perfect instrument for exploring and using the breaker. Diagnostics are easy too: it is possible to consult and download the log of events, alarms and unit trips, thereby facilitating the identification and understanding of any anomalies.

This software is able to manage all ABB low-voltage circuit-breakers equipped with an electronic trip unit, providing full integration of air and molded case circuit-breakers.

—  
Consultants/system  
integrators  
Complex logics at your  
fingertips



### Product enhancement

Imagine you are a consultant or a system integrator and you want to implement advanced features while avoiding the risk of errors. Using Ekip Connect it is possible to implement complex logics with a few clicks of your mouse.

Adding, setting and managing advanced functions has never been so easy.

Automatic transfer switch logics, load shedding, advanced protection and demand management can be managed and easily set via the Ekip Connect software.

Expand the software features by purchasing and downloading software packages for advanced functions directly using Ekip Connect.

Accessing the full potential of the circuit-breaker is finally possible. Thanks to Ekip Connect software, you can maximize the utilization of the breaker and more with just a few clicks of your mouse.



**Configuration**

- Set protections
- Configure system and communication parameters
- Breaker start-up



**Monitoring & analysis**

- View circuit-breaker status and measurements
- Read events list
- Circuit-breaker diagnostics



**Product implementation**

- Set advanced protections
- Logics activation
- Enable advanced functions

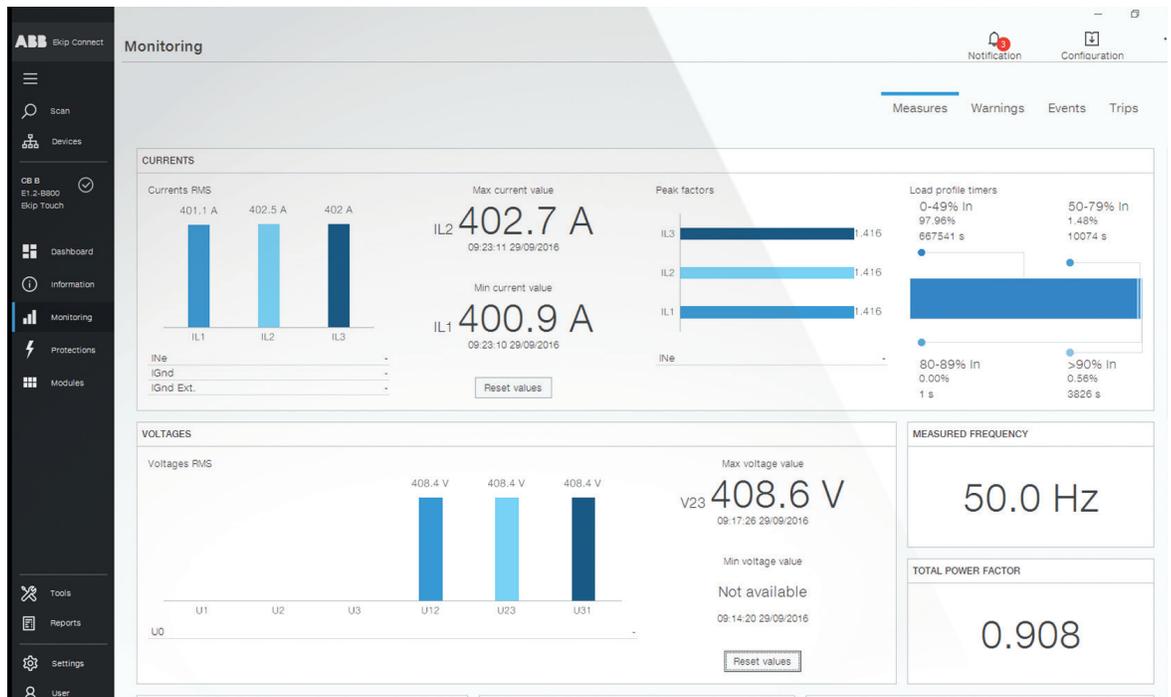
**Test**



**Testing & reporting**

- Check correct functionality
- Perform tests
- Export report

Ekip Connect is available for free download at <http://www.abb.com/abblibrary/DownloadCenter/>



**EPiC**

With Bluetooth embedded into the trip units it possible to connect rapidly to the EPiC app. Buy additional protection functions or measures, register the product and configure your device. EPiC helps the customer during the commissioning of the system; all system parameters and protection thresholds can be set rapidly in the Ekip Touch trip units thanks to the easy and intuitive navigation pages of the app.

# Electrical system

## Ekip View

Ekip View is the software for supervising all the devices connected to a communication network that uses the Modbus RTU or Modbus TCP protocol.

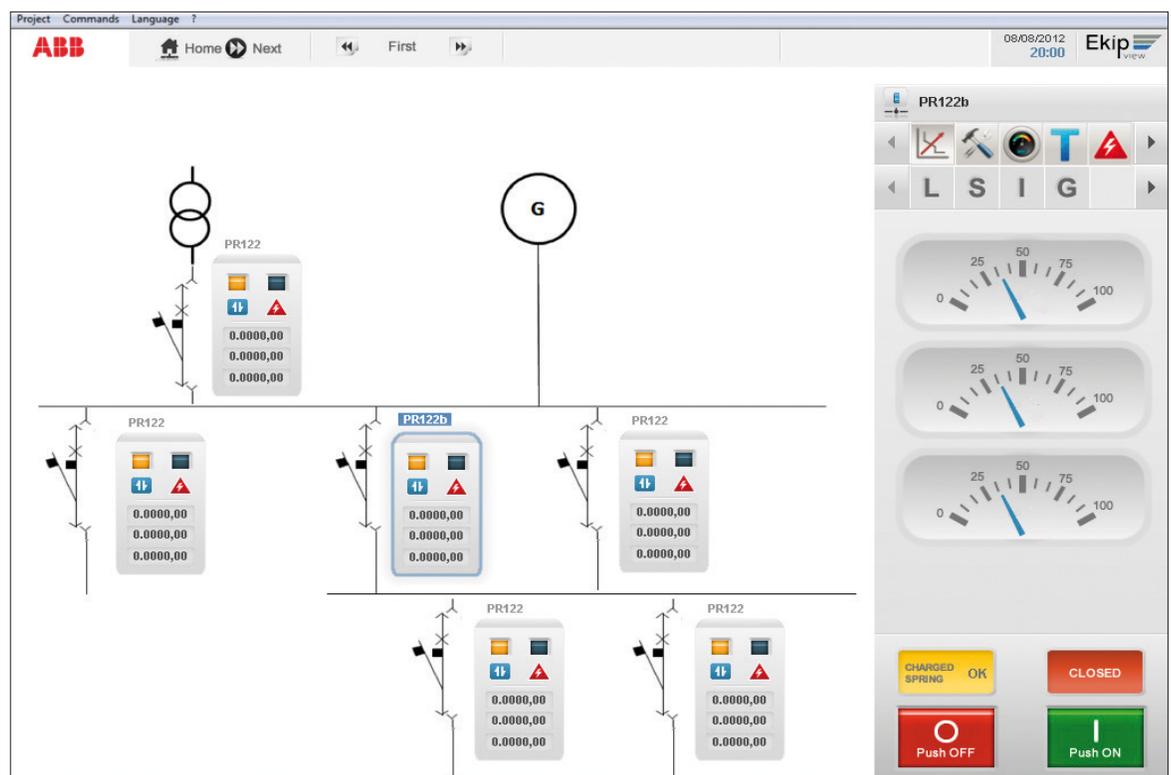
Ekip View is the ideal tool for all the applications that require:

- remote control of the system,
- monitoring of power consumption,
- fault detection of the system,
- allocation of energy consumption to the different processes and departments,
- preventative maintenance planning.

The main characteristics of Ekip View are:

- **Free and ready to use** engineering software to guide the user in the recognition and configuration of the protection units without the need for any system engineering supervision.

- **Dynamic mimic panel:** after automatic scanning of the network, for each of the devices found, Ekip View proposes a dynamic symbol that summarizes the most important information (status, electrical measurements, alarms). The extensive library of electrical symbols enables the entire electrical system to be represented in detail.
- **Analysis of trends:** the instantaneous and past trends of currents, powers and power factors are represented graphically and can be exported into Microsoft Excel for detailed analysis.
- **Reports:** advanced reports can be created regarding system and communication network diagnostics. Using the Alarm Dispatcher option, the user can receive the most important notifications via text message.
- **Web access:** to the installation, thanks to Ekip View's Web Server function.



<b>Ekip View Software</b>		
<b>Communication characteristics</b>		
Protocol Supported	Modbus RTU	Modbus TCP
Physical layer	RS 485	EtherNet™
Maximum data exchange rate	19200 bps	100 Mbps
Operating system	Windows XP, Windows 7, Windows Vista	
<b>Devices supported</b>		
Tmax XT and Emax 2 trip units	Ekip com Modbus RS485	Ekip com Modbus TCP
Third party devices	optional <sup>1)</sup>	optional <sup>1)</sup>
Licenses available	- up to 30 <sup>2)</sup> controllable devices	- up to 30 <sup>2)</sup> controllable devices
	- up to 60 <sup>2)</sup> controllable devices	- up to 60 <sup>2)</sup> controllable devices
	- unlimited number <sup>3)</sup> of controllable devices	- unlimited number <sup>3)</sup> of controllable devices
<b>Supervision and control functions</b>		
Opening and closing of circuit-breakers <sup>4)</sup>	●	●
Electrical value trends	●	●
Log of electrical value trends	●	●
Dynamic installation mimic panel	●	●
Automatic scanning	●	●
Centralized time synchronization	●	●
Web server function <sup>6)</sup>	● <sup>5)</sup>	● <sup>5)</sup>
<b>Measurement functions</b>		
Current	●	●
Voltage	●	●
Power	●	●
Energy	●	●
Harmonics	●	●
Network analyzer	●	●
Data logger	●	●
<b>Adjustment functions</b>		
Setting thresholds	●	●
Resetting of alarms	●	●
<b>Diagnostics</b>		
Protection function alarms	●	●
Device alarms	●	●
Communication system alarms	●	●
Protection unit tripping details	●	●
Events log	●	●
Protection unit tripping log	●	●
Generation of reports	●	●
<b>Maintenance</b>		
Number of operations	●	●
Number of trips	●	●
Contact wear	●	●
<b>Other data</b>		
Status of circuit-breaker	●	●
Local/remote mode	●	●

1) Contact ABB to integrate other devices in the Ekip View software

2) Can be increased

3) Within the physical limit of the protocol used

4) Circuit-breakers are equipped with MOE-E for the XT2-XT4-XT5 or Ekip Com Actuator module, electrical accessories, opening and closing coils and spring charging motor in the case of XT7-XT7 M

5) Two client web accesses included in the license

6) According to the values supported by the trip units

---

# Software and web application

ABB Ability™ Energy and Asset Manager is the state-of-the-art cloud-solution for monitoring, supervising and analyzing site equipment as well as the site's electrical distribution system, resulting in improved overall performance, efficiency and safety.

Through its scalable and flexible approach, ABB Ability™ Energy and Asset Manager ensures full-range integration of main electrical LV and MV equipment installed in the distribution and sub-distribution switchboards. It also enables upgrades at any time via the ABB Ability Marketplace™ in just a click. With a single easy-to-use interface, ABB Ability™ Energy and Asset Manager assists the user by means of a cloud computing or hybrid platform, enabling analysis of relevant data and optimization of installation anytime, anywhere.

- **Flexible and scalable platform**
  - Ease of use: the power of understanding at your fingertips
  - Remote visibility: discovery of facility performance anytime, anywhere
  - Faster payback
  - Scalable, from monitoring of a production line to the supervision of multiple sites.
- **Improved site efficiency**
  - Reduce cabling, connectivity components and commissioning time with embedded WiFi and 3G/4G
  - Save up to 20% on energy bills
  - Remove energy inefficiency by up to 10%
  - Identify unexpected consumptions and eliminate unwanted energy usage
  - 100% avoidance of penalties for low power factor.
- **Maximized performance**
  - 100% elimination of costly unplanned labor
  - Up to 40% maintenance-cost reduction: avoid unnecessary inspection and maintenance
  - Up to 15% extended asset lifetime
  - Up to 30% reduction in operational costs
  - Minimized risk of unplanned downtime
  - Monitoring up to 70% of potential asset-failure causes.
- **Enhanced personnel safety**
  - Improve safety: healthy assets mean healthy people mean healthy business
  - Keep operators safe with remote monitoring
  - Supervise and schedule maintenance remotely.



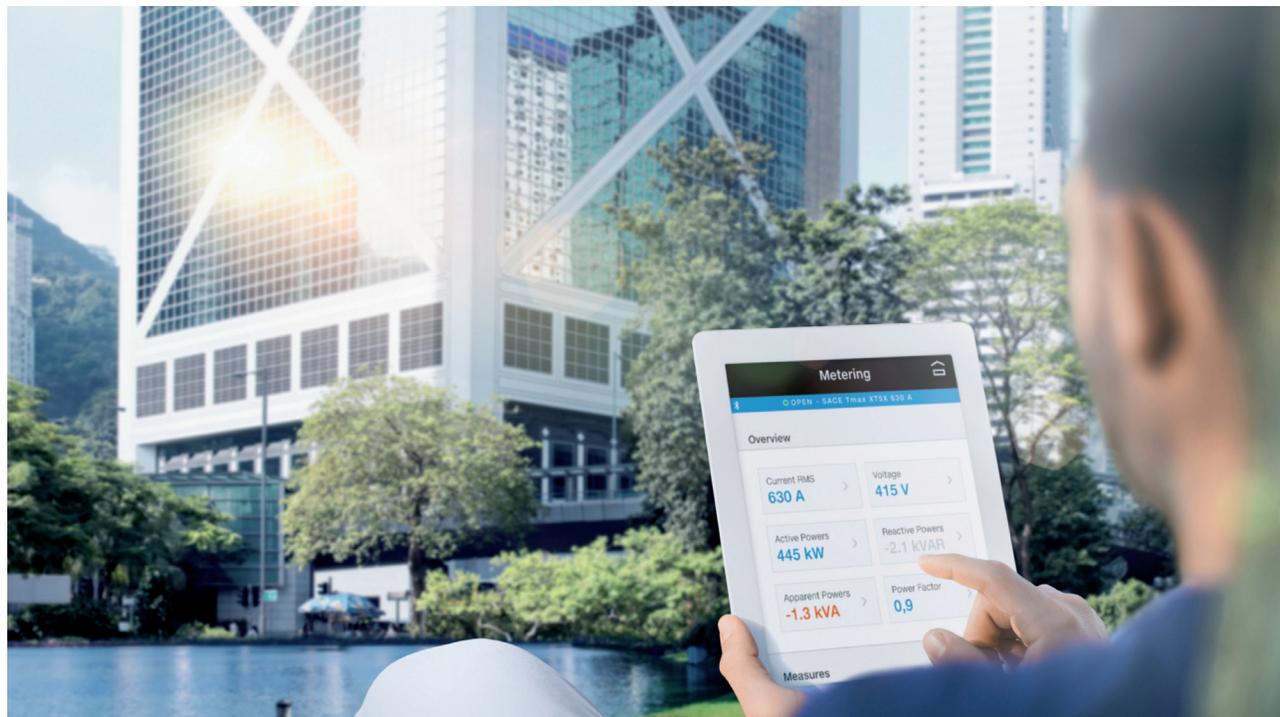


**An external solution with ABB Ability™ Edge Industrial gateway**

The Ekip ABB Ability™ Edge Industrial gateway module can be mounted on a DIN-rail to collect data throughout the system. Moreover, it is possible to connect sensors for environmental parameters (temperature, water, gas) via both analog and digital I/O.

Modules for Wi-Fi or GPRS connection are provided as optional features.

For any further information please visit our website : <https://new.abb.com/about/our-businesses/electrification/abb-ability/energy-and-as-set-manager>.



# Accessories for Ekip Touch/Hi-Touch trip units

## Connectivity

Tmax XT circuit-breakers can be integrated perfectly into all automation and energy management systems to improve productivity and energy consumption and to carry out remote service.

They can be equipped with communication units available for use with Modbus, Profibus, and DeviceNet™ protocols as well as with the modern Modbus TCP, Profinet and EtherNet/IP™ protocols. Furthermore, the integrated IEC 61850 communication module enables connection to automation systems widely used in medium voltage power distribution to create intelligent networks (Smart Grids). The modules are available in both solutions, internally and externally mounted. The internal modules are installed directly inside the circuit-breaker and the external modules can be easily installed directly on the terminal box or in the Ekip cartridge, even at a later date. Accurate measurements of current, voltage, power and energy are all available by means of the communication modules. The trip units themselves can be used as multimeters that display the measurements available, or the Ekip Multimeter can be connected on the front of the switch-gear without the need for external instruments. All the functions are also accessible via the Internet, in complete safety. In addition, a full set of information on the plant and circuit-breaker can be made available throughout the cloud via ABB Ability™ Energy and Asset Manager.

Circuit-breaker	Trip Unit Type	Internal modules	External modules with Ekip Cartridge
XT2-XT4	Ekip Touch/ Hi Touch	Internal Ekip COM	External Ekip COM
XT5	Ekip Touch/ Hi Touch	Internal Ekip COM	External Ekip COM
Circuit-breaker	Trip Unit Type	Terminal box	
XT7-XT7M	Ekip Touch/ Hi Touch	External Ekip COM	

## Internal modules

Available with several different communication protocols, the Ekip Com internal module is installed directly inside the circuit-breaker. It allows the circuit-breaker to be integrated in a communication network for supervision and control. Ekip Com internal modules can be used for the XT2-XT4 and XT5. They can be connected to the trip unit when Ekip Touch is used.



XT5 Ekip Com TCP internal module

Protocols	Ekip Com Module	Ekip Touch/Hi-Touch
Modbus RTU	Ekip Com Modbus RS-485	■
Modbus TCP/IP	Ekip Com Modbus TCP	■
Profinet	Ekip Com Profinet	■
EtherNet / IP	Ekip Com EtherNet	■
IEC61850	Ekip Com IEC61850	■



—  
XT2-XT4 Slim Ekip  
Com RS-485

#### **Slim Ekip Com RS-485 for XT2-XT4**

Thanks to the reshape of its size, the internal communication module with the RS-485 protocol (available for XT2-XT4 equipped with Touch/Hi-Touch trip units) allows to install the additional auxiliary contacts 1Q and 1SY.

The Slim Ekip Com RS-485 for fixed/plug-in versions is supplied by default with the internal bus cable (CAN) available through the module, and with the 24V/IntBus side connection to be connected with the trip unit. For the withdrawable part, it is mandatory to have the side plug for the supply of the trip unit.



—  
XT2-XT4 Slim Micro I/O

#### **Slim Micro I/O for XT2-XT4**

The internal module is supplied by default within the Ekip Touch/Hi-Touch trip unit, if no other internal communication module has been selected, and it is mandatory for the correct functioning of the trip unit.

The new slim version allows to install additional auxiliary contacts, 1Q and 1SY, and to provide the 24V supply for the trip unit and the internal bus cable (in addition to the connection with the trip unit).

The module is available in two versions, one for fixed/plug-in circuit-breakers and one for withdrawable circuit-breakers, and allows to connect Ekip Cartridge or Ekip Multimeter directly with no need of any other connection from the side part of the trip unit.

#### **Micro I/O for XT5**

The internal module is supplied by default within the Ekip Touch/Hi-Touch trip units, if no other internal communication module has been selected, and it is mandatory for the correct functioning of the trip unit.

It is available in one single version, fixed/plug-in and withdrawable, and it is always supplied with the connection with the trip unit.

# Accessories for Ekip Touch/Hi-Touch trip units



Communication module

## External modules

These Ekip Com modules, as well as the internal modules, allow integration in any communication network. They can be used on the XT2, XT4 and XT5 with an Ekip Touch/Hi-Touch trip unit by using the Ekip Cartridge. On the XT7 and XT7 M with an Ekip Touch/Hi-Touch trip unit, they can be mounted directly on the terminal box. Several modules can be used simultaneously enabling systems with different protocols, but also, in case of high reliability requirements, Ekip Com R modules can be installed to guarantee system redundancy. The Modbus RTU, Profibus-DP and DeviceNet™ modules contain a terminating resistor and two dip switches for optional activation to terminate the serial network or bus. The Profibus-DP module also contains a polarization resistor and two dip switches for its activation. When used on the XT7 and XT7 M, communication can be maintained with withdrawable circuit-breakers, even while they remain in the racked-out position, by using Ekip AUP auxiliary position contacts and Ekip RTC ready to close circuit-breaker contacts.

Protocols	Ekip Com Module	Ekip Touch/Hi-Touch
Modbus RTU	Ekip Com Modbus RS-485	■
Modbus TCP	Ekip Com Modbus TCP	■
Profibus-DP	Ekip Com Profibus	■
Profinet	Ekip Com Profinet	■
Ethernet / IP	Ekip Com Ethernet	■
DeviceNet	Ekip Com DeviceNet	■
IEC 61850	Ekip Com IEC 61850	■

## Ekip Cartridge

The external device connected directly to the Ekip Touch trip unit of XT2, XT4 and XT5 allows most of the connectivity modules to be used including: the Ekip Supply, Ekip Com, Ekip Link, Ekip 3T, Ekip Signaling 2K and Ekip Synchro check. It is always necessary to install the Ekip Supply module. The Ekip Cartridge is available in two different versions: with 2 slots (1 Ekip Supply + 1 module) or with 4 slots (1 Ekip Supply + 3 modules).

If needed, when circuit-breakers in the withdrawable version are used, it is possible to connect the position AUP contacts to the related pins of the cartridge to avoid failure messages on the communication channel. The cartridge can be installed on a DIN-rail everywhere in the panel. The cable that connects the trip unit with the Ekip Cartridge is 1m long.

The external device can be also directly connected through the cable available with the new Slim Micro I/O avoiding the usage of a side connector with the trip unit.



Ekip Cartridge



Ekip Power Supply

### Ekip Power Supply

The Ekip Supply module supplies all Ekip trip units and modules present on the Ekip Cartridge or terminal box of the circuit-breaker with several auxiliary power sources (in AC or DC) available in the switchgear. The module permits the installation of the other advanced modules. It can be field installed at any time. Two versions are available according to the control voltage:

- Ekip Supply 110-240V AC/DC
- Ekip Supply 24-48V DC



Ekip Link

### Ekip Link

The Ekip Link module enables the Tmax XT circuit-breaker to be connected to an ABB communication system for locally supervising switchgear. It is available in both inside-breaker and external cartridge versions. It is available as:

- an inside-breaker version for XT2, XT4, and XT5 sizes
- a cartridge and terminal box mounted version for XT2, XT4, XT5, XT7 and XT7 M sizes.



Ekip Com Hub

### Ekip Com Hub

The Ekip Com Hub is the new communication module for cloud-connectivity. A circuit-breaker equipped with Ekip Com Hub can establish a connection with an ABB Ability™ Energy and Asset Manager for the low-voltage power distribution panel.

This dedicated module is available in two versions: the inside-breaker (for XT2, XT4 and XT5 sizes) and the cartridge/ terminal box mounted versions (for XT2, XT4, XT5, XT7 and XT7 M sizes), even when other modules are present.

For further information related to the ABB Ability™ Energy and Asset Manager, please visit the dedicated website at <http://new.abb.com/low-voltage/launches/ekip-smartvision>.

In order to ensure cybersecurity of the device, the Ekip Com Hub has loaded a Certificate from a Trusted Authority. Ekip Com Hub has to be connected to the external network in order to refresh the Cybersecurity Certificate and have it always up to date. In case of long-term disconnections from the network, more than 6 months (e.g. module in stock or physically disconnected), the correct functioning of Ekip Com Hub can be inhibited from the cybersecurity measures in place. It is recommended to keep the module connected or periodically connect it (e.g. in stock or physically disconnected) to the external network.

### Ekip Com Actuator

The Ekip Com Actuator module enables the XT7 M circuit-breakers to be opened and closed remotely. The Ekip com Actuator is optional and can be ordered for all Ekip Touch/Hi-Touch trip units equipped with Ekip Com or Ekip Link modules. The Ekip Com Actuator is installed on the front of the circuit-breaker in the right-hand accessories area. It can be used also combined with XT7 toggle version for opening only.



Ekip Com Actuator

# Accessories for Ekip Touch/Hi-Touch trip units

## Signaling

### Ekip 1K Signalling

The Ekip 1K Signalling module, available for the XT5, supplies one input contact and one output contact for control and remote signaling. It can be programmed from the trip unit display or through the Ekip Connect software and app. Furthermore, when using Ekip Connect, combinations of events can be freely configured. The Ekip 1K Signalling device is installed inside the circuit-breaker in the housing provided on the left down side of the circuit-breaker and it can be used when an Ekip Touch/Hi-Touch trip unit is present.



Ekip Signalling 1K

### Ekip 2K Signalling modules

The Ekip 2K Signalling modules supply two input and two output contacts for control and remote signaling of alarms and circuit-breaker trips. They can be programmed from the trip unit display or via the Ekip Connect software and app. Furthermore, when using Ekip Connect, combinations of events can be freely configured. Three versions of the Ekip 2K Signalling modules are available: Ekip 2K-1, Ekip 2K-2, and RELT Ekip 2K-3. In this way, a maximum of three modules for XT2, XT4 and XT5 can be installed at the same time into an Ekip Cartridge, while a maximum of two modules can be installed at the same time into the terminal box for XT7 and XT7 M. Moreover, RELT Ekip Signalling 2K-3 module enables the wizard for easy configuration of the 2I protection.



Ekip 2K Signalling modules

### Ekip 3T Signalling modules

The Ekip 3T Signalling modules provide three analog inputs for PT100/PT1000 thermo-resistances and one analog input 4-20mA for external sensors. Through the Ekip Connect commissioning tool, it is possible to set different control thresholds and associate them to digital signals. The Ekip 3T Signalling modules are suitable for all the versions of Ekip Touch and Hi-Touch trip units. However, PT100 sensors are compatible with the Ekip black platform only. Up to two modules can be installed simultaneously on SACE Emax 2: one Ekip Signalling 3T-1 and one Ekip Signalling 3T-2. ABB external probes PT1000 are available for busbar applications.



Ekip 3T Signalling modules



Ekip 10K Signalling unit

### Ekip 10K Signalling unit

The Ekip 10K Signalling unit is an external device designed for DIN-rail installation. The unit provides ten contacts for electrical signaling of timing and tripping of protection devices. If connected via the Ekip Connect software, the contacts can be freely configured in association with any event and alarm or combination of both. Several Ekip 10K Signalling units (max 4) can be used at the same time on the same Ekip trip unit. The Ekip 10K Signalling module can be powered either by direct or alternating current and can be connected to all the trip units via internal bus or Ekip Link modules.



Ekip Signalling Modbus TCP

### Ekip Signalling Modbus TCP

It is an external signalling unit designed for DIN rail installations. The function of the signalling module is to share - via an Ethernet network with Modbus TCP communication protocol - information about the state of circuit-breakers that might not have the ability to provide such information via Ethernet, and also to allow these circuit-breakers to be operated via remote control.

Output contacts characteristics		Number of contacts	
Type	Monostable	Ekip 1K	Ekip 2K
Maximum switching voltage	150V DC / 250V AC		
Maximum switching current			
30V DC	2A	1 output + 1 input	2 output + 2 input
50V DC	0.8A		
150V DC	0.2A		
250V AC	4A		
Contact/coil insulation	1000 Vrms (1min @50Hz)		

### Ekip 10K/Ekip Signalling Modbus TCP power supply

Auxiliary supply	24-48V DC, 110-240V AC/DC
Voltage range	21.5-53V DC, 105-265V AC/DC
Rated power	10VA/W
Inrush current	1A for 10ms

# Accessories for Ekip Touch/Hi-Touch trip units

## Protection

### Ekip Synchrocheck

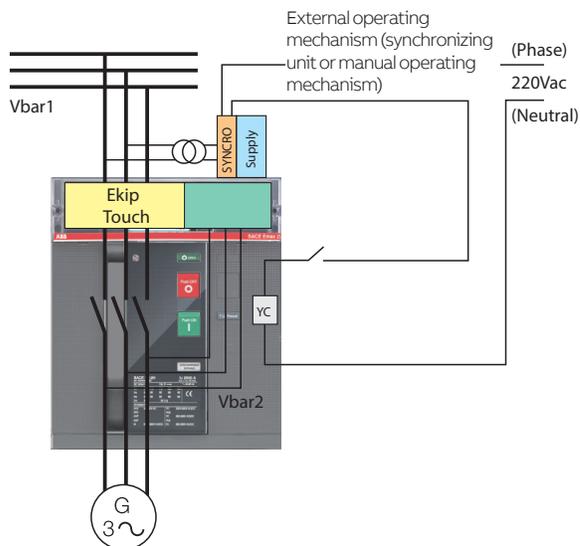
This module enables the control of the synchronism condition when placing two lines in parallel. The module can be used with the Ekip Touch/Hi-Touch trip units. Ekip Synchrocheck measures the voltages from two phases of one line through an external transformer and compares them to the voltage values measured at the circuit-breaker. An output contact is available, which is activated upon synchronism, and enables the circuit-breaker to be closed by means of wiring with the closing coil.

The Ekip Synchrocheck can be installed in the Ekip Cartridge (for XT2, XT4 and XT5) and in the terminal box (for XT7 and XT7 M).



Ekip Synchrocheck

Output contacts characteristics		Number of contacts
Type	Monostable	Ekip Synchrocheck
Maximum switching voltage	150V DC / 250V AC	
Maximum switching current		
	30V DC	2A
	50V DC	0.8A
	150V DC	0.2A
	250V AC	4A
Contact/coil insulation	1000 Vrms (1min @50Hz)	





Ekip CI

**Ekip CI**

This module is an accessory for the Ekip M Touch LRIU trip unit and is needed when the circuit-breaker and the contactor must work in conjunction with each other. In this way the higher number of operations of the contactor are used instead of the circuit-breaker. When the trip unit is set in Normal mode (default mode) by means of the Ekip CI module the contactor is activated in one of the protection trips (excluding I and G protections); if the Heavy mode is set, the trip unit directly opens the circuit-breaker. The auto-reset function allows the actuation status of the Ekip CI to reset automatically after the contactor has tripped owing to the L function, once an adjustable time from 1 to 1000s has elapsed. Auto-reset can occur only in Normal mode. The BACK UP function is available and deals with situations whereby an opening command transmitted to the contactor via module Ekip CI has not been successful. In this case, the Ekip M Touch LRIU trip unit sends an opening command to the circuit-breaker after waiting a set time Tx. The actuation time of the contactor given by the manufacturer must be considered when the Tx time delay setting is entered. The function is active with an auxiliary supply.



Rating Plug

**Rating Plug**

The rating plugs are field interchangeable from the front on all the trip units and the protection thresholds can be adjusted according to the actual rated current of the system. This function is particularly advantageous in installations that may require future expansion or when the power supplied needs to be limited temporarily (e.g. mobile Gen Set). For the XT7 and XT7 M special rating plugs are also available for residual current protection against ground faults combined with a suitable external toroid. For the XT5, the following rating plugs are available for the two versions of Ekip Touch (400A and 600A). On the Ekip Touch 400 it is not possible to install the 500A and 600A rating plugs.

Nominal Value of the Rating Plug	Ekip Touch/Hi-Touch 400A	Ekip Touch/Hi-Touch 600A
250A	■	■
300A	■	■
400A	■	■
500A	-	■
600A	-	■

■ compatible      - not compatible

For XT7 and XT7 M the following rating plugs are available

Ekip Touch all	
Nominal Value	Standard Rating Plug
600A	■
800A	■
1000A	■
1200A	■

■ compatible

# Accessories for Ekip Touch/Hi-Touch trip units

## Cables and connectors

### XT2-XT4 connectors for Ekip Touch/Hi-Touch trip units

The following items are available only for Ekip Touch/Hi-Touch trip units:

- Side connector 24V/IntBus for fixed/plug-in version
- Side connector 24V/IntBus, selectivity and external neutral for fixed/plug-in version
- Side plug to connect the trip unit to the 24V/internal bus, selectivity cable and external neutral cable for withdrawable version.

#### Side Connector

There are three possible side connections for Ekip Touch/Hi-Touch trip units: two versions for fixed/plug-in breakers and one version for withdrawable breakers.

**1. Side connector 24V/IntBus F/P:** 24V supply for the trip unit and internal bus cables, available with a unique connector to be mounted directly on the side of the trip unit and to be covered with a mandatory carter of 4 mm only. The connector is not supplied by default within the trip unit, because the same connections are already available through the slim Micro I/O.

In case of internal communication module, it is supplied by default within the module (only F/P version). The side connector is available as loose part.

**2. Side connector 24V/IntBus/Ne/ZSI F/P:** unique connector with 24V DC/internal bus cable, selectivity cable and external neutral cable, to be mounted directly on the side of the trip unit and to be covered with a mandatory carter of 4 mm only. The connector is not supplied by default within the trip unit.

In case of configured breakers factory mounted, if more than one of the functionality above has been selected, the side connector will be provided by default within the configuration, if there aren't any other possibilities to have the connection the trip unit. The side connector is available also as loose.

**3. Side plug 24V/IntBus/Ne/ZSI W:** side plug connector with 24V DC/internal bus cable, selectivity cable and external neutral cable, to be mounted directly on the side of the trip unit.

The side plug is not supplied by default within the trip unit.

In case of configured breakers factory mounted, if more than one of the function above has been selected, the side connector will be provided by default within the configuration.

The side plug is available also as loose part.

### XT5 connectors for Ekip Touch/Hi-Touch trip units

The following items are always provided with the Ekip Touch trip units for circuit-breakers in fixed/plug-in versions:

- a 24V DC supply/internal bus cable that supplies the trip unit, and connects the Ekip Cartridge and the Ekip Multimeter.

When a circuit-breaker with the withdrawable version of the trip unit is required, the 24V DC supply/internal bus cable is included in case of order to be configured in the factory. Otherwise, it needs to be ordered with the dedicated code.

## Zone Selectivity

To use the zone selectivity function for G and S protections, zone selectivity cables must be ordered.

For XT2-XT4 circuit-breakers, the zone selectivity cable is available into the fixed/plug-in version. For the withdrawable version, zone selectivity is only available through the side plug.

For XT5 circuit breakers, zone selectivity is available for two versions:

- fixed
- plug-in/withdrawable.

The length of all the cables above (Cables and connectors & Zone Selectivity) is about 1mt / 3.28ft.



Side connector  
24V/IntBus F/P



Side plug 24V/Int-  
Bus/Ne/ZSI W



Current sensor for neutral conductor outside the circuit-breaker

## External neutral sensors

### Ekip Touch/Hi-Touch

With this trip unit it is possible to use both current and voltage sensors (to measure or protect the neutral conductor). The current sensor is available only for 3-pole circuit-breakers. For the XT7 and XT7 M the current sensor is connected through the terminal box; moreover the voltage connection can also be added to the terminal box area by just connecting a cable to the right connection point. To use the external neutral with XT2-XT4, the cable supplied by default within the sensor must be connected to the side part of the trip unit and the connection must be covered with the 4mm carter.

The current sensor available for XT2, XT4 and XT5 circuit-breakers is the version current + voltage, for measuring of both values.

It is always possible to select as loose part only the cables to be connected to the trip unit.

The sensors are available with the following rated currents:

Circuit-breaker	In	Ekip Touch/Hi-Touch
XT2	10	-
	25	-
	40	■
	60	■
	100	■
	125	■
XT4	40	-
	60	-
	100	■
	150	■
	225	■
	250	■
XT5	250	■
	300	■
	400	■
	600	■
XT6	600	
	800	
XT7	600	■
	800	■
	1000	■
	1200	■

The length of all the cables above is about 2mt / 6.56ft

# Accessories for Ekip Touch/Hi-Touch trip units



Homopolar toroid for the earthing conductor of the main power supply

## Homopolar toroid for the earthing conductor of the main power supply

The Ekip Touch/Hi-Touch trip units can be used with an external toroid positioned, for example, on the conductor that connects the star center of the MV/LV transformer to earth (homopolar transformer): in this case, the earth protection is called Source Ground Return. Four sizes of the toroid are available: 100A, 250A, 400A, 800A. The homopolar toroid is an alternative to the toroid for differential protection. This is for the XT7 and XT7 M only.

## Toroid for differential protection

Connected to the Ekip Touch/Hi-Touch trip units equipped with a rating plug for differential protection, this toroid enables earth fault currents of 3...30A to be monitored. This is an alternative to the homopolar toroid and should be installed on the busbar system. This is for the XT7 and XT7 M only.



Toroid for differential protection

## Display and supervision

### Ekip Multimeter Display for the front of the switchgear

The Ekip Multimeter is a display unit which can be installed on the front of the switchgear for the Tmax XT circuit-breakers equipped with Ekip Touch/Hi-Touch trip units. The device is equipped with a large touch screen display and enables measurements to be displayed. If connected to trip units with a display, the Ekip Multimeter enables the adjustment of parameters and protection thresholds. Up to 4 Ekip Multimeter devices can be connected at the same time to the same Ekip protection trip unit to display currents, voltage, power and energy. The Ekip Multimeter can be connected to a single trip unit and can be powered either by direct current (24-48V DC or 110-240V DC) or alternating current (110-240V AC). It is equipped with a 24V DC output that supplies the trip unit to which it is connected (only if Ekip Supply is not used). IEC standard certified.



An Ekip Multimeter Display for the front of the switchgear.

Power supply	24-48V DC, 110-240V AC/DC
Tolerance	21.5-53V DC, 105-265V AC/DC
Rated Power	10VA/W
Inrush current	2A for 20ms

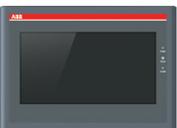
### Lite Panel

The Lite Panel is a 7 inches local control panel that can monitor and control max 20+8 devices connected via Modbus TCP/IP or Modbus RTU. Available with Ekip Touch/Hi-Touch trip units.

The most important functionalities of this device:

- User administration: 5 level of user inside the Lite Panel
- Automatic scan via Modbus RTU and via Modbus TCP connection of various devices already mapped inside the Lite Panel: Emax 2, Tmax XT, ITS2, M4M, CMS700 etc...(see detailed list in the user installation manual)
- Local monitoring directly on the front of the panel for all devices
- Local control of devices: open, closing, reset

Alarm list and event log directly displayed from one access point. IEC standard certified.



Lite panel

# Accessories for electronic trip units



Ekip TT testing and power supply unit

## Testing and programming

### Ekip TT testing and power supply unit

This unit is compatible with the Ekip Dip and Ekip Touch/Hi-Touch trip units and allows a trip unit to be supplied so that the last protection device tripped can be viewed directly on the display or identified as the corresponding LEDs light up. The Ekip TT is a device that verifies that the circuit-breaker trip mechanism is functioning correctly (trip test). This device can be connected to the front test connector of any Ekip trip unit.



Ekip T&P testing kit

### Ekip T&P testing kit

The Ekip T&P is a kit that includes different components for programming and testing the electronic protection trip units.

The kit includes:

- The Ekip T&P unit;
- The Ekip TT unit;
- Adaptors for the Emax and Tmax trip units;
- A USB cable to connect the T&P unit to the Ekip trip units;
- An installation CD for the Ekip Connect and Ekip T&P interface software.

The Ekip T&P unit is easily connected from your PC (via USB) to the trip unit (via mini USB) with the cable provided. The Ekip T&P unit can perform simple manual or automatic tests of the trip unit functions. Additionally, the Ekip T&P provides the possibility to perform more advanced function testing that allows simulations of very critical applications: real conditions of a system can be accurately represented by considering additional harmonics and shifting of phases. It also generates a test report as well as monitor maintenance schedules.



Ekip Programming module

### Ekip Programming module

The Ekip Programming module is used for programming Ekip Touch trip units via PC using the Ekip Connect software that can be downloaded online. The Ekip Programming module, which is connected to the PC via USB, can be useful for uploading/downloading entire sets of parameters for more circuit-breakers both for set-up and maintenance.

# Accessories for Ekip Dip trip units

## Connectivity

The Ekip Dip trip unit family offers the possibility to communicate using the Modbus RTU protocol with the following trip units:

- XT2-XT4: Ekip C Dip

In other cases, the Stand-Alone module (Modbus RTU and TCP) can be installed inside the circuit-breaker in order to provide information of the status and remote control.

Circuit-breaker	Trip Unit Type	Internal modules	Protocol
XT2-XT4	Ekip Dip	Internal Ekip Com STA	Modbus RTU/TCP
	Ekip C Dip	Ekip Com Modbus RTU Dip	Modbus RTU
XT5	Ekip Dip	Internal Ekip Com STA	Modbus RTU/TCP
Circuit-breaker	Trip Unit Type	Terminal box	
XT7-XT7M	Ekip Dip	-	-

## Ekip Com

The Ekip Com allows the MOE-E motor operator to be controlled, to determine the ON/OFF/TRIP state of the circuit-breaker and to connect an electronic trip unit to a Modbus communication line. The Ekip Com is available in two versions: one version for the circuit-breakers in the fixed/plug-in version and a version complete with a connector for the fixed moving parts for circuit-breakers in the withdrawable version.

Main characteristics:

- **Installation:** The Ekip Com module is inserted in the right-hand slot of the circuit-breaker and fixing is carried out without any need for screws or tools. Connection to the trip unit is done by using a special small cable which is fitted with a cable guide. The connection towards the Modbus line is made by means of the terminal box to which a 24V DC auxiliary power supply must also be connected, which activates both the module and the protection trip unit.
- **Functions:** The Ekip Com module can acquire the state of the circuit-breaker remotely and, in combination with the MOE-E motor operator, allows the circuit-breaker to be opened and closed. If combined with a trip unit fitted with a communication function (Ekip C Dip LSI or Ekip C Dip LSIG), the Ekip Com module allows the trip unit to be connected to a Modbus network, offering the possibility of programming the protections and acquiring the measurements and alarms when it is connected to a control and/or supervision system.

Protocols	Ekip Com Module	Ekip Dip
Modbus RTU	Ekip Com Modbus RS-485	■
Modbus TCP/IP	Ekip Com Modbus TCP	■
Profinet	Ekip Com Profinet	-
EthernNet / IP	Ekip Com EthernNet	-
IEC61850	Ekip Com IEC61850	-



—  
Signaling contacts  
for Ekip trip units

## Signaling

### Signaling contacts for the XT7 and XT7 M Ekip trip units

With XT7 and XT7 M circuit-breakers, the Ekip trip units can acquire the status of the circuit-breaker ready to close (RTC) and racked-in, test, or racked-out position through the optional Ekip RTC and Ekip AUP signaling contacts. These contacts, housed in the accessories area of the circuit-breakers, are available with the Ekip Dip and Ekip Touch.

## Protection

### Rating Plug

The rating plugs are field interchangeable from the front on all the trip units and the protection thresholds can be adjusted according to the actual rated current of the system. This function is particularly advantageous in installations that may require future expansion or when the power supplied needs to be limited temporarily (e.g. mobile Gen Set). For the XT7 and XT7 M special rating plugs are also available for residual current protection against ground faults combined with a suitable external toroid.

For XT7 and XT7 M the following rating plugs are available

#### Ekip Dip LS/I, Ekip Dip LIG, Ekip M Dip I, Ekip G Dip LS/I

Nominal Value	Standard Rating Plug
630A	■
800A	■
1000A	■
1250A	■
1600A	■

■ compatible

#### Ekip Dip LSI, Ekip Dip LSIG

Nominal Value	Standard Rating Plug	Rating Plug for RC protection <sup>(1)</sup>
630A	■	-
800A	■	■
1000A	■	-
1250A	■	■
1600A	■	-

■ compatible

- not compatible

(1) Available only for Ekip Dip LSIG



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# Energy Measurements

**5/2**      **Introduction**

**5/4**      **Class 1 accuracy**

**Network Analyzer**

**5/5**      Applications

**5/7**      The first step towards better power  
quality: measurement

**5/8**      Operating principles

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# Introduction

The Tmax XT circuit-breakers have been designed to manage all low voltage electrical installations with maximum efficiency: from industrial plants, naval applications, traditional and renewable power generation installations to buildings, shopping centers, data centers and communication networks.

Achieving maximum efficiency of an electrical installation in order to reduce consumption and waste requires intelligent management of power supplies and energy. For this reason, the new technologies used in the Tmax XT circuit-breakers with

Ekip Touch trip units allow the productivity and reliability of any installation to be optimized, and at the same time, power consumption to be reduced while fully respecting the environment.



**Class 1 in power and energy measurements**

Before starting to take any action on electrical systems and to analyze the available data, top accuracy on measurements must be guaranteed.

Thanks to the Ekip Touch trip units, the SACE Tmax XT range of circuit-breakers guarantees extremely accurate measures, in compliance with the relevant IEC 61557-2 Standard.

**Network Analyzer**

The quality of the power supply is an important factor to consider in order to preserve the loads, to avoid equipment malfunctions, and to optimize energy consumption. The power quality of a power system is never a perfect sinusoidal waveform, distortions and harmonics are always present. Several parameters that cause reductions in power quality can be monitored and controlled thanks to the Network Analyzer embedded function. In this way, the use of expensive external devices can be avoided.

## Class 1 accuracy

With the Ekip Touch/Hi-Touch trip units the embedded measurement functionalities allow the measurement of power and energy to a Class 1 degree of accuracy, as specified by the IEC 61557-12 Standard, avoiding the need of additional device, saving costs, space and installation time.

With the Ekip Touch/Hi-Touch trip units, measurements of power and energy to a IEC 61557-12 Standard compliant, Class 1 level of accuracy, are guaranteed by the embedded measurement functionalities. Thus, there is no need for additional devices, with consequent advantages in terms of cost savings, space reduction and installation time optimization.

When energy needs monitoring, even a minimal percentage of errors would result in a waste of money. Accuracy is everything and depends on the design and manufacturing quality of solution used. The Tmax XT with Ekip Touch trip units guarantee 1% accuracy for power and energy monitoring.



Thanks to the extremely accurate Rogowsky coil, ABB Ekip Touch/Hi-Touch trip units are able to guarantee Class 0.5 for voltage and current measurements and Class 1 for active power and energy measurements, complying with and certified by the IEC 61557-12 Standard (see Chapter 3 for more detailed information about the accuracy and the monitored parameters of the electrical system). IEC 61557-12 can be applied to both AC and DC electrical networks up to 1000 V AC or 1500V DC.

Moreover, an upgrade of the device is always guaranteed to be quick and easy: the measurement functions not included in an installed trip unit can be downloaded directly from the ABB Ability Marketplace™ via Ekip Connect Mobile, thus allowing new system requirements to be met with ease.

Measurement data can be displayed in several ways:

- On the embedded display on the trip unit
- On a smartphone via Bluetooth (Ekip Connect Mobile App)
- Using the Ekip Connect software on a PC
- On an Ekip Multimeter external display
- On a cloud-platform thanks to ABB Ability™ Energy and Asset Manager
- In the supervision system (ex SCADA) thanks to several communication protocols
- On the control panel display

# Network Analyzer

Thanks to the Network Analyzer function available in all Ekip Touch/Hi-Touch trip units, the quality of energy based on harmonics, micro-interruptions or voltage dips is monitored without the need for dedicated instrumentation.

Thanks to Ekip Touch/Hi-Touch Network Analyzer, effective preventive and corrective actions can be implemented through accurate analysis of faults, thereby improving the efficiency of the system.

## Applications

Electrical equipment is designed for optimum operation under constant and uniform voltage level, as close as possible to the rated value. In addition, industrial equipment, working on a three phase supply, requires the three phase voltage levels to be balanced. Power quality is a description of how well a power system complies with the above ideal conditions. Power quality issues can have negative consequences on the components and on the energy efficiency of the network. Thus, power quality monitoring is becoming more important in modern power systems, and will be a key part of the smart grid of the future.

In particular, power quality evaluation includes the following aspects:

- Deviations of voltage average value from the rated value
- Short decreases (sags) or increases (swells) of voltage value
- Voltage unbalance, i.e. difference in voltage values between different phases
- The presence of current and voltage harmonics.

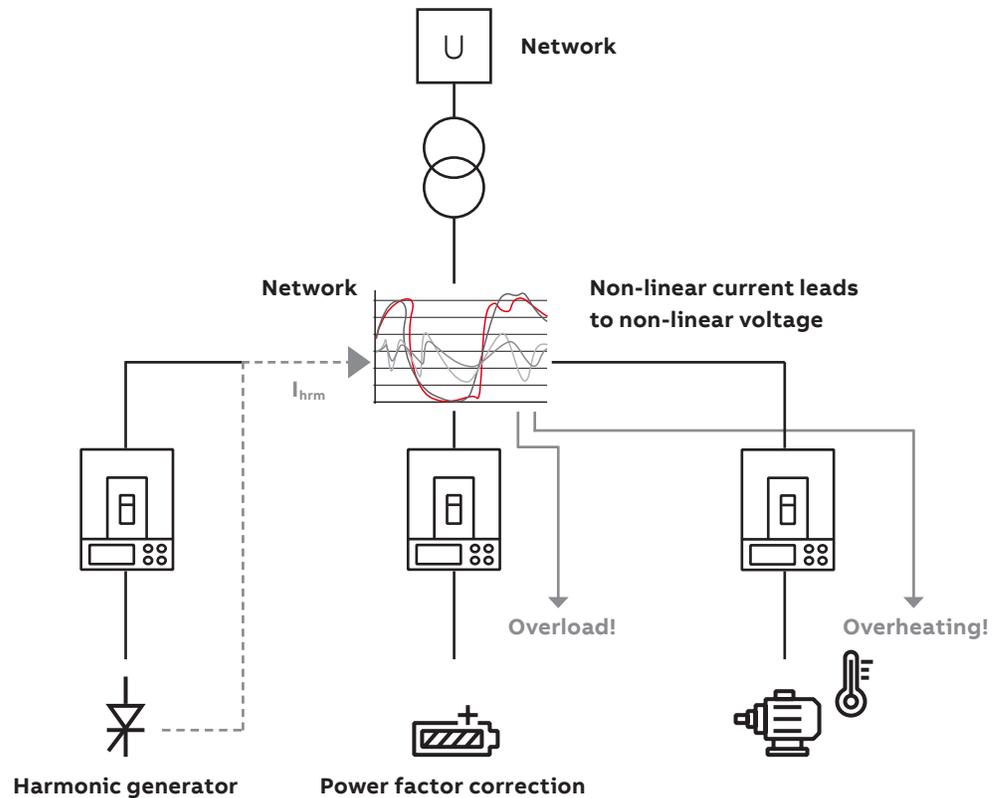
Distortions of the voltage value (sags, swells) and/or frequency can have fatal consequences, especially for process industries, leading to possible production stoppages with consequently expensive downtime, damage to motor drives and damage to PLCs. Examples of process industries that can be badly hit by voltage instabilities include the plastics, petrochemicals, textiles, paper, semiconductor, and glass industries.

Voltage sag is defined as when the value of the voltage is reduced below the rated one for a certain amount of time. Similarly, voltage swell is defined as when the voltage is increased above the rated value for a certain amount of time.

RMS voltage values and frequency are two fundamental features of a voltage signal, but the “purity” of the voltage waveform is also an important point. An ideal voltage waveform should be a perfect sinusoid, but this is not something that is normally seen in the real world. Frequencies other than the fundamental are always present.

These frequencies are called harmonics: a harmonic of a signal is a component frequency of the wave spectrum that is a multiple of the fundamental frequency. Harmonic content is an issue that is becoming increasingly debated: technological developments in the industrial and household field have led to the spread of electronic equipment which, due to their operating principles, absorb a non-sinusoidal current (non-linear load). Such current causes a non-sinusoidal voltage drop on the supply side of the network with the consequence that the linear loads are also supplied with a distorted voltage.

# Network Analyzer



Power electronics produce harmonic content that can affect other loads in the plant: the result can be an overheating of the asynchronous motor and an overload (that could lead to a trip of the protecting MCCB) on the power factor correction capacitors.

To get information about the harmonic content of voltage and current waveforms and to take measures if such values are high, a dedicated index has been defined. The total harmonic distortion (THD) of a signal is a measurement of the harmonic distortion present.

## The first step towards better Power Quality: accurate measurement

A Power Quality monitor is the most commonly used tool for detecting voltage sags and power quality issues. Measurement is the first step for checking the status of the installation and starting the root cause analysis. Power Quality measurements and related instrumentation are described in specific industrial Standards such as IEC61000-4-30 and IEEE 1250. For the first time, thanks to the Ekip Touch trip units for the Tmax XT, the power quality monitor is embedded in a low voltage molded case circuit-breaker. The Network Analyzer function complies with the prescriptions of IEC 61000-4-30 and IEEE 1250.

The Network Analyzer function allows the user to set controls on the voltage in order to analyze the operation of the system: any time a control parameter exceeds a preset threshold, an alarm is generated. The accuracy of voltage measurements by the Tmax XT is excellent at 0.5%. The Tmax XT Network Analyzer complies with IEEE 1250-2011, Section 3 for the monitoring of the voltage value, unbalance and harmonic content, which is the equivalent of IEC61000-4-30 Class S for voltage values and unbalance and Class B for the harmonic content.

### Network Analyzer

Hourly average voltage value
Short voltage interruption
Short voltage spikes
Slow voltage sags and swells
Voltage unbalance
Harmonic analysis

Referring to the voltage sag ambit, as an example, the Network Analyzer function has the ability to monitor three kinds of sag classes, defined by the user:

Parameter	Description
Sag Threshold (First Class)	This defines the first alarm threshold. It is expressed as % Un.
Sag Times (First Class)	In the event of dropping under the first alarm threshold, this defines the time beyond which the alarm counter is increased.
Sag Threshold (Second Class)	This defines the second alarm threshold. It is expressed as % Un.
Sag Times (Second Class)	In the event of dropping under the second alarm threshold, this defines the time beyond which the alarm counter is increased.
Sag Threshold (Third Class)	This defines the third alarm threshold. It is expressed as % Un.
Sag Times (Third Class)	In the event of dropping under the third alarm threshold, this defines the time beyond which the alarm counter is increased.

Two different types of counters for each power quality monitoring function are made available directly on the trip unit touch screen: one is a cumulative counter, which stores all the alarms (for example, all the voltage sags) from the beginning, and one is a 24h counter, that shows the alarms in the last 24 hours.

With the optional communication module (Modbus, Profibus, Profinet, etc.) eight counters for each power quality monitoring function are available: one is the cumulative and the other seven are the daily counters of the last seven days of activity.

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# Network Analyzer

## Operating Principle

The Network Analyzer function performs continuous monitoring of the quality of energy, and shows all results through a display or communication module. In particular:

- **Hourly average voltage value:** in accordance with international Standards, this must remain within 10% of the rated value, but different limits can be defined according to the needs of the installation. The positive sequence voltage is compared with the limits. If the limits are exceeded, the Ekip Hi-Touch generates a signaling event. The number of these events is stored in a suitable counter. The counter values are available for each of the last 7 days, as well as the total. The measures available are the positive and negative sequence voltages and positive and negative sequence currents of the last interval monitored. The time of the calculation of the average values can be set between 5 minutes and 2 hours.
- **Interruptions / short dips in voltage:** if the voltage remains below a threshold for more than 40ms, the Ekip Hi-Touch generates an event that is counted in a dedicated log. The voltage is monitored on all lines.
- **Short voltage spikes** (voltage transients, spikes): if the voltage exceeds a threshold for 40ms, set for a pre-determined time, the Ekip Hi-Touch generates an event that is counted.
- **Slow voltage sags and swells:** when the voltage strays outside a range of acceptable limit values for a time greater than the one set, the Ekip Hi-Touch generates an event that is counted. Three values can be configured for voltage sags and two for voltage swells, each associated with a time limit: this enables verification of whether the voltage remains within a curve of values that are acceptable by equipment such as computers. The voltage is monitored on all lines.

- **Voltage unbalances:** if the voltage values are not equal or the phase displacements between them are not exactly 120°, an unbalance occurs, which is manifested with a negative sequence voltage value. If this limit exceeds the threshold value set, an event is stored which is counted.
- **Harmonic analysis:** the harmonic content of voltages and currents, measured to the 50th harmonic, as well as the value of the total harmonic distortion (THD), are available in real time on the display or through the communication modules. The Ekip Hi-Touch also generates an alarm if the THD value or a magnitude of at least one of the harmonics exceeds the values set. The voltage and current values are monitored on all phases.

All information can be displayed directly on the screen (for the XT5, XT7, XT7 M) or on a smartphone, a PC or in a network system with any of the communication modules. This is an embedded function of Ekip Touch/Hi-Touch trip units and analyzes important parameters of the distribution network including:

- The average voltage value
- Short voltage interruptions and spikes
- Slow voltage sags and swells
- Voltage unbalance
- Harmonic analysis

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# Solutions

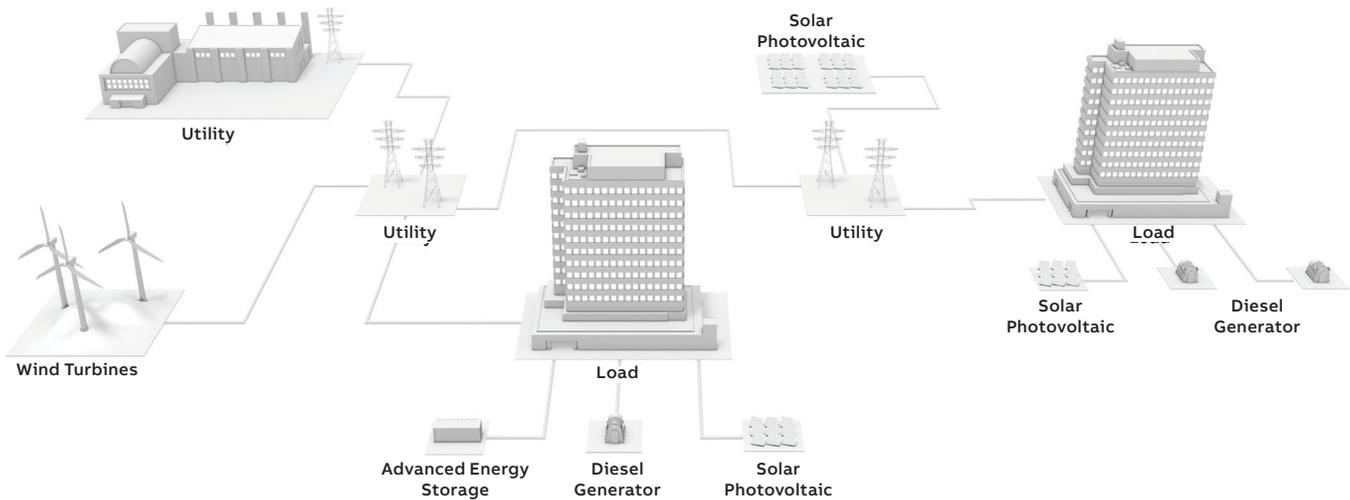
- 6/2**      **Introduction**
- 6/4**      **Power Controller**
- 6/7**      **Adaptive protections**
- 6/9**      **Load Shedding**
- 6/11**     **Automatic Transfer Switch (ATS)  
function**

# Introduction

The use of renewables has been growing over the last 10 years reducing the polluting emission for a greener world. Due to environmental changes, people have started to think about ecology and sustainability, increasing their awareness of energy self-consumption and increasingly concerned about energy efficiency.

The Tmax XT is the first smart moulded case circuit-breaker enabling all-in-one solutions that combine advanced protection, programmable logics, full connectivity, easy integration and comprehensive energy management in a single revolutionary device or at the local generation side.

Installed downstream the MV/LV transformer, Tmax XT and its adaptive protections recognize the network changes and automatically set new thresholds to guarantee protection and coordination in on-grid and off-grid conditions.



The Tmax XT is able to integrate programmable logics for protection features and Automatic Transfer Switching (ATS) in one device. This unique integrated solution avoids the usage of other external control units, guaranteeing a minimal switchgear footprint and saving commissioning time. A strong reduction in the connection wiring simplifies the installation and commissioning phase. The load shedding embedded algorithm is able to manage the power system for comprehensive microgrid energy management. Before the transfer from the main grid to the local line, selected loads are shed to support power balance. Using a frequency slope, the Tmax XT disconnects loads only in cases of emergency unbalanced conditions.

In grid-connected operations, the Tmax XT manages the **Power Controller** algorithm to shave peaks and shift loads in order to optimize system performance and productivity.

The advanced features of the Tmax XT are easily customized thanks to commissioning software tools which do not require high level engineering competencies. Ready to use templates enable the download of all the logics directly in the trip unit. The solutions are plug & play, increasing modularization and standardization for design and installation. The advanced functionalities which have been developed and integrated in the Tmax XT are described in the following compatibility table.

	Load Shedding	Automatic Transfer Switch	Power Controller
Load Shedding			●
Automatic Transfer Switch		●	●
Power Controller	●	●	●

# Power Controller

The Tmax XT is able to control loads and generators to ensure bill savings and enable demand response according to power management strategies.

## Purpose

Thanks to the Power Controller software, Tmax XT manages the power to shave the peaks and shift the loads. In this way, it is possible to cut electricity bills, increase energy efficiency by up to 20% and be ready for demand response programs.

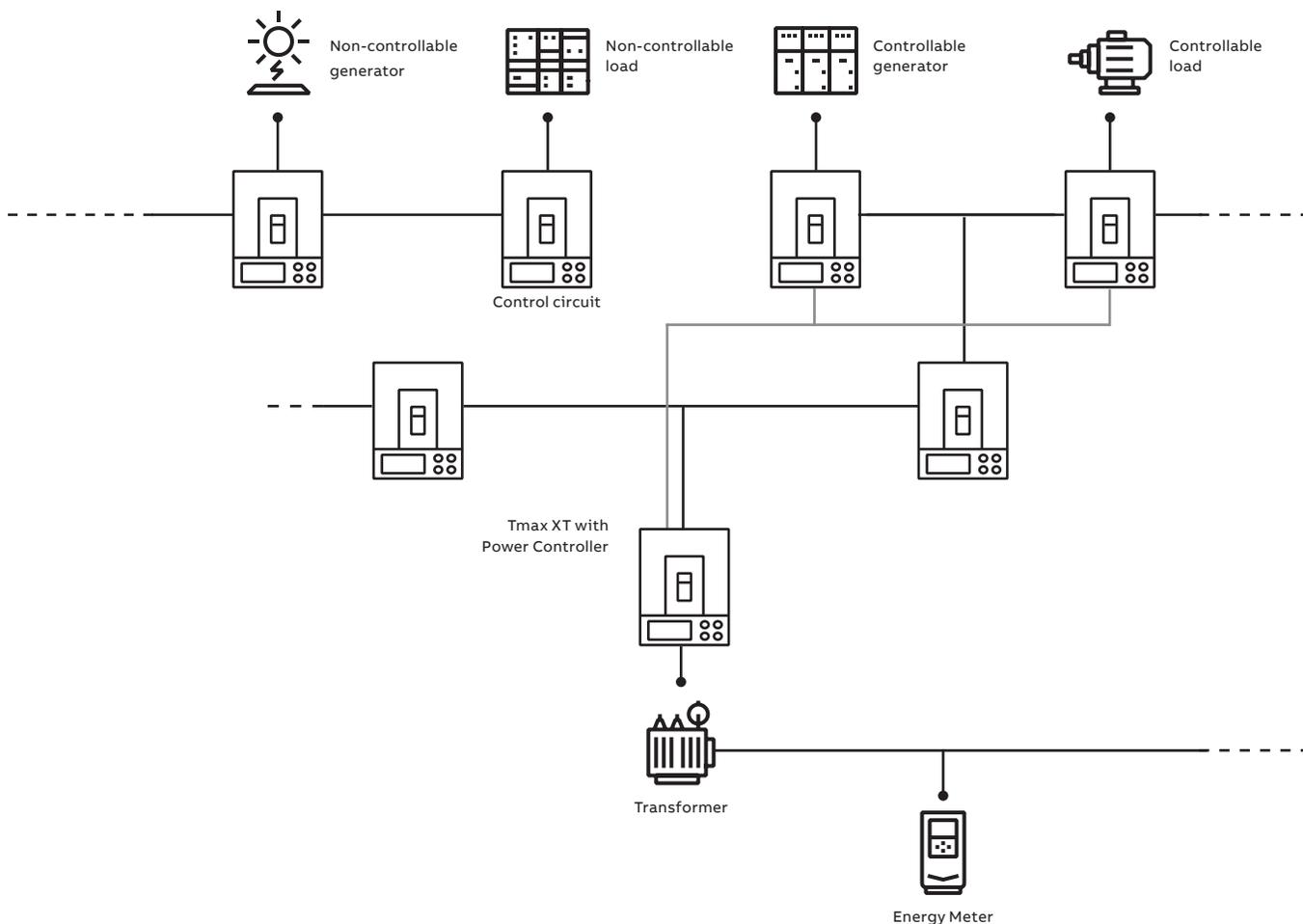
The Power Controller function is based on a patented calculation algorithm that allows a load list to be controlled via the remote command of relevant switching devices or control circuits according to a defined priority. The user (locally), or the load aggregator / utility (remotely) - define the load disconnection priority based on their own requirements and types of loads.

The algorithm is designed for the anticipated average power absorption which can be set by the user over a determined time interval.

Whenever this value exceeds the fixed power, the Power Controller function intervenes to bring it back within the limits.

This system can be realized with a single Tmax XT Control equipped with this function and installed as the low voltage plant controller.

Furthermore, the control unit, not only manages passive loads, but it can also manage a reserve generator.



The Ekip Power Controller can be used with all Ekip Touch/Hi-Touch trip units of the Tmax XT series and effectively helps to improve energy efficiency by managing the entire low-voltage electrical system. It is fully able to adapt the demand for power according to the availability of the energy source, the time of day and the costs indicated in the current pricing plan.

In this way, the Ekip Power Controller is able to maintain power consumption within the limits defined, thereby optimizing the costs of managing the installation and reducing emissions.

Commands sent to downstream devices can be performed in two different ways:

- through the wired solution, by commanding the shunt opening/closing releases or acting on the motor operators of the loads to be managed;
- through a dedicated communication system.

The ability to control the loads according to a list of priorities already defined provides significant advantages from both the economic as well as technical points of view:

- **Economic:** energy consumption optimization is focused on the control of the costs linked in particular to penalties that are levied when the contractual power is exceeded or when the contractual power is increased by the Distribution System Operator (DSO) as a consequence of exceeding the limit repeatedly.
- **Technical:** the solution provides the ability to absorb power over the contractual limits for shorter periods and also the management and the control of the power consumption over long periods of time. Thus, it is possible to reduce the likelihood of malfunctioning due to overloads, or worse, complete inefficiency of the entire plant due to tripping of the LV main switching device.

---

The exclusive Power Controller function available on the new Tmax XT circuit-breakers monitors the power, keeping it below the limits set by the user. As a result of this more effective use, the peak of power consumed can be limited allowing savings on electricity bills.

The Power Controller, patented by ABB, disconnects non-priority utilities, such as electric car charging stations, lighting or refrigeration units, during the times when consumption limits need to be respected, and connects them again as soon as it is appropriate. When required, it automatically activates auxiliary power supplies such as generator sets. No other supervision and control system is required: it is sufficient to set the required load limit on the Tmax XT, which can control any switching device located downstream, even if it is not equipped with a measurement function.

#### **Application examples**

Electricity bill savings, demand response, and avoiding power overloads are the typical scenarios where the Power Controller is used.

The Power Controller is commonly used in office buildings, shopping malls, hotels, campuses, waste and water industries or any plant that works like a low voltage microgrid.

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# Power Controller

## Benefits

Thanks to the Tmax XT with the embedded Power Controller, you gain the assurance to support:

- **Reduction of energy costs with minimum impact**

The loads are disconnected from the power supply for short periods, in the minimum number necessary and in a fixed order of priority, enabling power consumption peaks to be limited. This allows the contract drawn up with the energy provider to be renegotiated, reducing the power allocated, with a consequent reduction in total energy costs.

- **Power limited only when necessary**

The Power Controller function manages up to four different time bands. It is therefore possible to respect a particular power limit according to whether it is during the day (peak) or night (off peak). In this way, consumption during the day when rates are at their highest can be limited.

- **Easy of use**

The Power Controller function allows the installation to be managed efficiently with a simple architecture. Thanks to a patented design, it is sufficient to measure the total power of the installation without having to measure the power consumed by each load. Installation costs and times are thereby reduced to a minimum.

The Power Controller function does not require the writing, implementation or testing of complicated programmes for PLC or computer because the logic has already been implemented in the protection unit and is ready to use. It is sufficient to set the installation parameters from a smartphone or directly from the switching device display.

Thanks to the integrated communication modules, the Power Controller can receive the maximum absorbable power directly from the medium voltage control system, determining consumption for the next 15 minutes. According to the information received, the Ekip Power Controller manages the switching off of non-priority loads or the switching on of reserve generators. The software gives maximum priority to non-programmable preferred energy sources, such as wind and solar, and they are therefore considered uninterruptable. In the event that the production of internal power to the controlled network is reduced, due, for example, to decreased production of solar power, the Power Controller will disconnect the necessary loads to respect the set consumption limit.

This benefit is used, for example, in installations with a system of cogeneration. Indeed, the Power Controller controls the total consumption drawn from the electrical network, disconnecting non-priority loads when generation is reduced and reconnecting them when generator power is sufficient not to exceed limits.

There are multiple advantages of the system including: reduction in energy costs, maximum use of local generation and greater overall energy efficiency.

# Adaptive Protections

The Tmax XT adds a dual setting capability to the switching device to ensure continuous coordination

## Purpose

User's plants can work as a LV microgrid thanks to the energy produced by renewable and local power sources, in particular as a consequence of the lack of an utility power supply, e.g. due to a fault on the MV voltage side. In order to still guarantee a high level of selectivity and continuity of service, it is important to take into account the variation of the short-circuit power when moving from on-grid to off-grid operation.

Indeed, during grid connected conditions the fault current on a microgrid feeder is also supplied by the utility, thus resulting higher than the one supplied only by local generation during islanded conditions. As a result, it is desirable that several protection thresholds of the units can be automatically changed during the transition to islanding conditions.

## Application example

A plant is connected to the MV utility by means of a MV/LV transformer. If the utility shuts down, the plant will become a microgrid supplied by a local generator G, which will feed priority loads by using the load shedding feature of the Tmax XT.

In a grid-connected condition, the generator G is disconnected. With reference to Fig. 1:

- Circuit-breaker A is closed
- Circuit-breaker B is open
- Circuit-breakers at position C are closed. The protection of the circuit-breaker at C that supplies the feeders at D are adjusted using "Set A" of the Tmax XT unit.
- Circuit-breakers at position D are closed
- Circuit-breaker E is closed
- Molded case switch QS1 is closed
- All loads are supplied.

The circuit-breakers at position C are selectively coordinated with the upstream main circuit-breaker A, supplied by the utility, and the downstream load circuit-breakers at position D (see Fig. 2 at the following page).

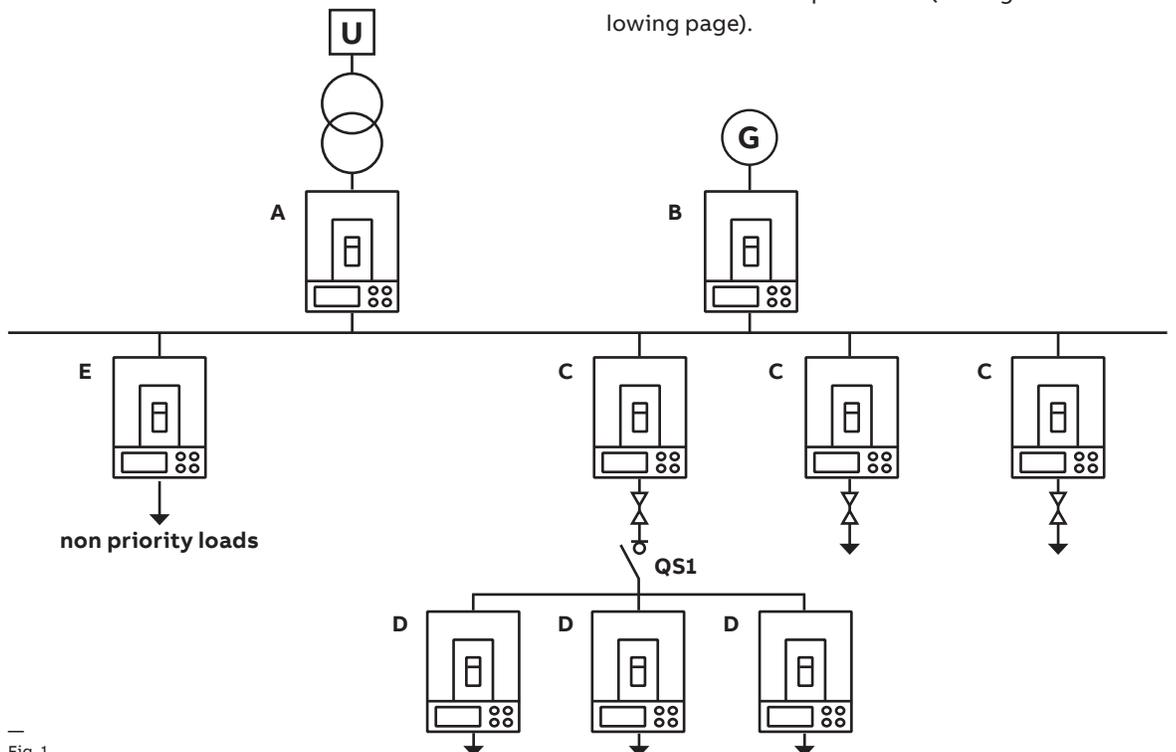


Fig. 1

# Adaptive Protections

With the adaptive protections, when there is an utility outage, circuit-breaker A opens and B closes in order to achieve an islanded condition. In order to still guarantee selectivity, another set of protection settings is required. Adding Tmax XT adaptive protections to the circuit-breaker C1 ensures this behaviour. The second protection setting is optimized for the characteristics of the local generator ensuring the incoming supply. Additionally, selective coordination with the load side switching devices is also guaranteed.

With reference to Fig. 1:

- Circuit-breaker A is open
- Circuit-breaker B is closed
- Circuit-breakers at position C are closed and the protection thresholds move automatically to “Set B”
- Circuit-breakers at position D are closed
- Circuit-breaker E is open
- Molded case switch QS1 is closed
- Non-priority loads can be disconnected using another functionality of the Tmax XT units (see next paragraph).

Fig. 3 shows how it is possible to switch to a set of parameters which guarantees selective coordination between circuit-breakers C and B by means of the Adaptive Protection function embedded in the trip unit of the C circuit-breakers.

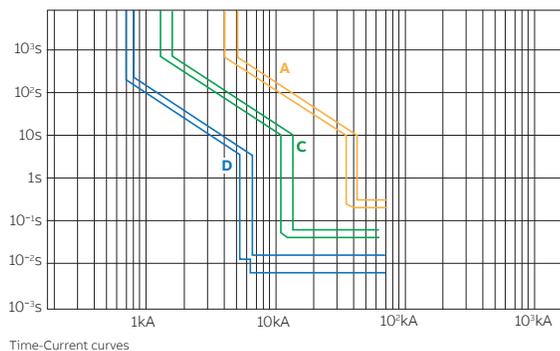


Fig. 2 - Protection thresholds during on-grid operation

## Benefits

Thanks to the Tmax XT it is possible to have two sets of settings implemented in a single device. As a result, the following benefits are guaranteed:

- Overcurrent protection and selectivity 100% guaranteed both in grid-connected and islanded conditions.
- Service continuity is guaranteed by just adding a single unit to the switchboard in every plant condition.
- Ease of use, thanks to the Ekip Connect software which allows an immediate and intuitive commissioning phase.

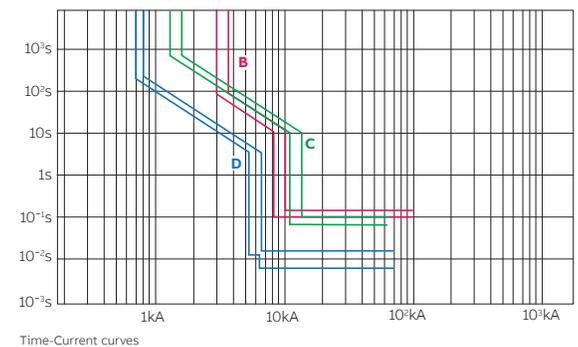


Fig. 3 - Protection thresholds during islanded operation

# Load Shedding

The Tmax XT has many load shedding algorithms to avoid power unbalance in low voltage plants and to reduce stress for all the components.

## Purpose

The Tmax XT embeds patented functions based on load shedding which reduce the microgrid stress. Typically, it is the main protection trip unit of the low voltage microgrid located at the interface point with the medium voltage grid that is able to control the plant in all circumstances.

## A microgrid under islanding conditions

After the Tmax XT circuit-breaker opens, due to the interface protection system intervention or external command, the microgrid should seamlessly pass from an on-grid to off-grid state. When it operates in a stand-alone capacity, the power absorption from the main grid ceases, so that the microgrid loads remain supplied by local generation, such as from a diesel GenSet or an energy storage system. This microgrid generation can be always active or started by Automatic Transfer Switching (ATS) logic after the disconnection from the main grid, depending on the plant configuration. During the islanding transition, it is very important to avoid a frequency drop, otherwise the generation protections could trip and jeopardize the microgrid stability with a consequently long downtime. The Tmax XT employs current and voltage measurements, and integrates two different fast load shedding types of logic to reduce this blackout risk. This protects the microgrid during intentional or unintentional islanding operations:

- The Basic Load Shedding algorithm is a simple form of logic able to recognize the microgrid disconnection event and shed a group of not priority loads thus ensuring a fast time response and power balance.
- The Adaptive Load Shedding algorithm is an advanced algorithm available with the Tmax XT as an enhancement of the basic version. The intelligent software embedded in the unit sheds the non-priority loads very quickly according to the microgrid power consumption and frequency measurements. Moreover, the software has a dedicated configuration for backup generation related to Automatic Transfer Switching (ATS) and the software itself is even able to estimate the energy produced by a solar plant based on the plant geography settings.

Load Shedding is available on the Tmax XT platform sharing some information about the loads under control in the plant.

## Application examples

- **Grid-connected plants with running GenSets**  
These contribute to self-consumption together with potential renewable sources and support the load power supply in emergency conditions. This is the case for hybrid photovoltaic diesel remote communities connected to weak distribution grids where there are a lot of daily faults, or facilities located in geographical areas where there are frequent environmental events, for example hurricanes or earthquakes.
- **Grid-connected plants with back-up GenSets**  
These are started up after main generator transfer switching logics and require high reliability. For example, hospitals, banks or data centers.

# Load Shedding

## Benefits

Thanks to Tmax XT with the embedded Load Shedding innovations, the following benefits are guaranteed:

### Service continuity

When a plant remains disconnected from the main grid, even if local generation is present, there is a significant stress that may imply that the generators fail with a consequent blackout.

Load Shedding logic embedded in the Tmax XT reduces the frequency drop that usually makes the local generation protection trip, maintaining a live plant.

### Space saving

- No other programmable logic controllers (PLCs) are needed as the Tmax XT has embedded intelligence for the load shedding logics, taking advantage of the current and voltage sensors for electrical parameter measurements.
- In addition, static converters for low voltage photovoltaic production typically have anti-islanding protection: this implies another power deficit to be added to the main grid contribution during the microgrid islanding. The Tmax XT estimates solar production without additional sensors.

- The Load Shedding algorithm is suitable with ATS architectures to distinguish priority and non-priority loads.

Where feasible, a BusTie switching device is no longer required and this means:

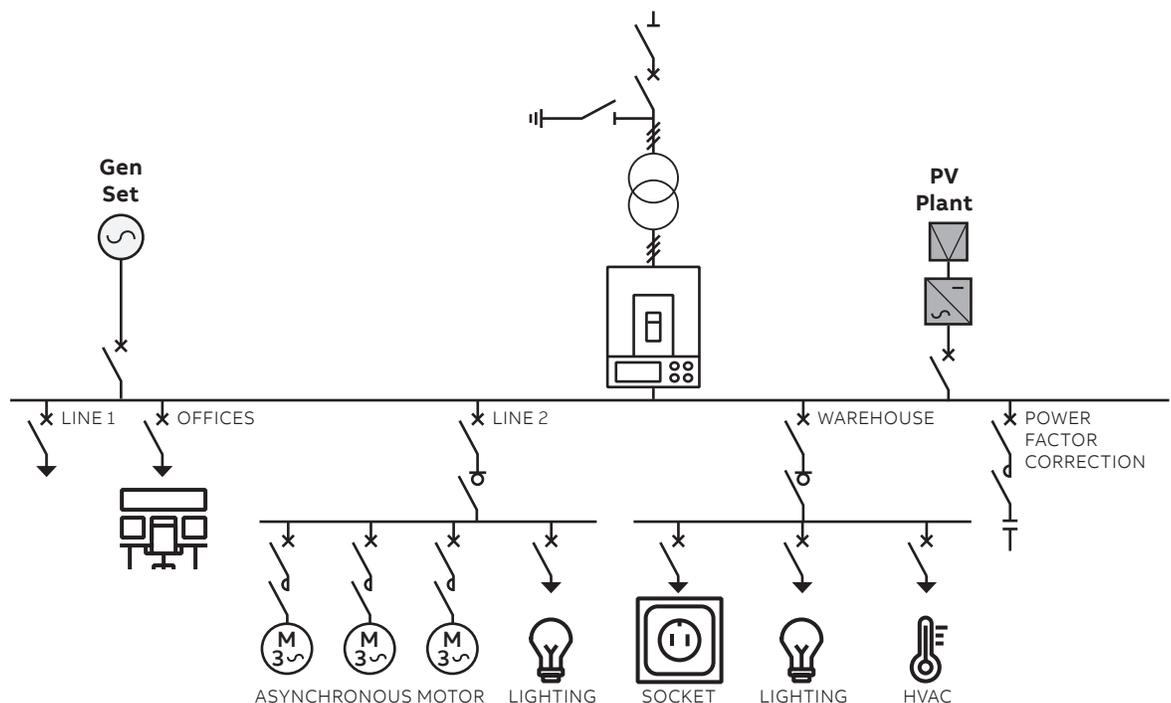
- Significant space and material savings of up to 50% in the power distribution switchgear for panel builders.
- The Load Shedding algorithm is self-tuned with specific power unbalance identification and dynamically chooses the controllable loads to be shed, reducing constraints for consultants during plant design.
- The ATS unit only manages two sources, without interlock, logic programming or wiring connections for the third circuit-breaker with less time required for installation.

## Ease of use

Load shedding logic is generally set using top engineering skills and customization efforts with devices as programmable logic controllers.

The Tmax XT guarantees easy installation thanks to predefined templates and the user-friendly graphic interface in the software commissioning tool.

Typical Load Shedding application



# Automatic Transfer Switch (ATS) function

The Tmax XT is ready for transfer switching applications reducing time

## The ATS solution

ABB Automatic Transfer Switch system (ATS) takes advantage of the new capabilities provided by the new Ekip Connect 3 Software with intelligent digital units such as the Tmax XT to deliver versatile and reliable solutions.

A Main-Gen solution is available for XT2-XT4-XT5-XT7M frames and a Main-Tie-Main solution is available for XT2-XT4-XT5

## Application example

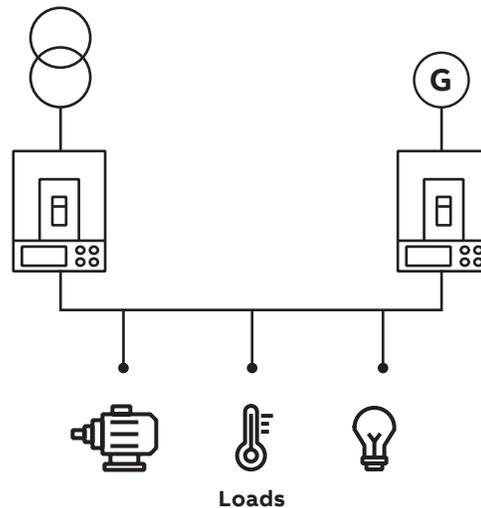
Automatic transfer switch systems are common in all applications where service continuity is essential and where there are multi source supplies.

The main applications are:

- Power supplies of UPS groups
- Oil & Gas
- Operating theatres and primary hospital services
- Emergency power supplies for civil buildings, hotels and airports
- Data banks and telecommunication systems
- Power supply of industrial line for continuous processes.

An ATS can be used also whenever a portion of a grid with local generation, known as a microgrid, can be disconnected from the main grid.

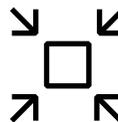
ATS application example



### Benefits

#### Ready-to-go programming

Estimated time and cost savings on the ATS engineering on a low voltage project: 95%.



#### Tmax XT compactness

Space saving on the power switchboard: up to 30%.



#### Simplify the connections

Estimated time and cost savings on cabling and commissioning of the power switchboard: 50%.



#### Top rate reliability

With watchdog functions and fewer installed components.



# Accessories

## Execution and installation

- 7/4** Fixed, plug-in and withdrawable version
- 7/6** Conversion kits
- 7/6** Connectors for electrical accessories
- 7/9** Bracket for fixing on DIN-rail
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## Power connection

- 7/10** Connection terminals

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- 7/19** Auxiliary Position Contacts - AUP
- 7/26** Auxiliary Position Contacts - AUP
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M/2
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- 7/32** Telescopic Rod - RHE\_ST
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- 7/43 Motor Operators
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- 7/45 Stored energy motor operators - MOE and MOE-E (XT2-XT4)
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**Safety and protection**

- 7/49 Terminal covers
- 7/49 Phase separators
- 7/49 Sealable screws for terminal covers
- 7/50 Padlocks and key locks
- 7/53 IP Protection Kit
- 7/53 IP54 Protection for transmitted rotary handle (RHE)
- 7/53 IP54 Protection flange for direct rotary handle (RHD)
- 7/53 IP54 Protection flange for MOE and XT7 M
- 7/54 Protection device for opening and closing pushbuttons - PBC
- 7/54 Mechanical operation counter - MOC
- 7/54 Flanges

**Interlocks**

- 7/55** Rear mechanical interlock
- 7/56** Cable interlocks

**Residual current protection**

- 7/57** Residual current release

- 7/67** **Compatibility of accessories**

# Execution and installation

## Fixed, plug-in and withdrawable version

SACE Tmax XT circuit-breakers are available in the following versions:



Fixed circuit-breaker



Plug-in circuit-breaker



Withdrawable circuit-breaker

- **FIXED**

Fixed circuit-breakers consist of a current-interrupting part connected to the trip unit, to be installed on the back plate of the cubicle or on a DIN-rail;

- **PLUG-IN**

Plug-in circuit-breakers consist of a fixed part that must be installed on the back plate of the cubicle, and of a moving part, obtained from the fixed circuit-breaker plus the relative kit that converts it from the fixed version into the moving part of the plug-in version;

- **WITHDRAWABLE**

Withdrawable circuit-breakers consist of a fixed part that must be installed on the back plate of the cubicle equipped with side runners to allow the moving part to be easily racked -in and -out. Such a solution is obtained from the fixed circuit-breaker plus the relative kit that converts it from the fixed version to a withdrawable moving part. To obtain the withdrawable version, a front accessory to be applied to the front of the circuit-breaker must be ordered so as to maintain the IP40 degree of protection over the entire disconnection run of the circuit-breaker (except for the XT7). This mandatory accessory is a standard supply for circuit-breakers fitted with accessories in the factory.

If the plug-in circuit-breaker is fitted with electrical accessories, the appropriate connectors for disconnection of the relative auxiliary circuits must also be ordered. For the withdrawable version there are dedicated accessories, fitted with connectors, which allow automatic disconnection in the case of racking-out. Starting from the fixed version, the SACE Tmax XT circuit-breakers can be easily converted into plug-in and withdrawable versions by using the relative conversion kits.

The moving parts can always be obtained for the required version, fully pre-engineered from the factory, by ordering the fixed circuit-breaker and the conversion kit at the same time.

	Version		
	Fixed	Plug-in	Withdrawable
XT1	■	■	-
XT2	■	■	■
XT3	■	■	-
XT4	■	■	■
XT5	■	■	■
XT6	■	-	■
XT7	■	-	■
XT7 M	■	-	■

The fixed version, which is connected directly to the power system through the circuit-breaker terminals, is recommended for applications in which the need for space can be satisfied by compact products without affecting the performance.

The plug-in version is recommended for applications for which service continuity is a fundamental requirement: the replacement of the moving part with a new one does not require any intervention on the power supply connections.

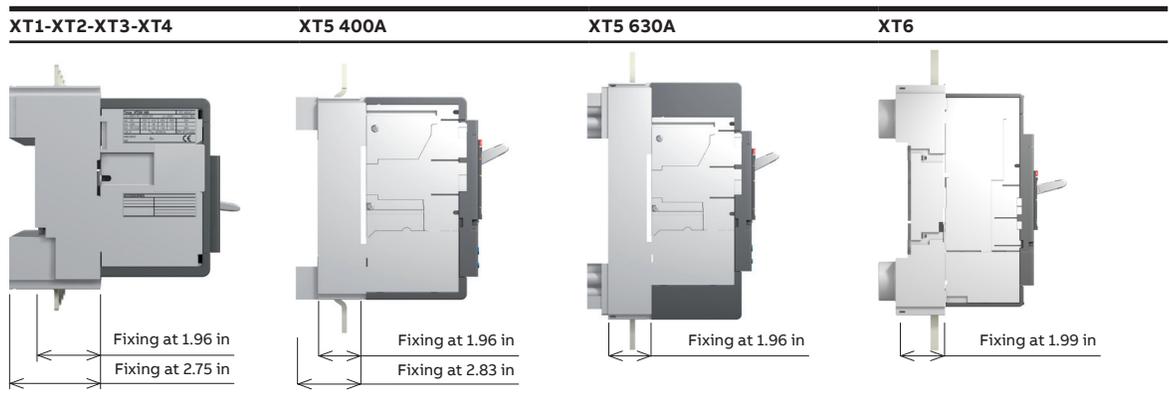
The withdrawable version, in addition to the advantages of the plug-in version, offers three different positions:

- connected: power and auxiliary circuits are connected
- test: power circuits are disconnected, while auxiliary circuits are connected (only for XT5, XT6 and XT7)
- disconnected: both power and auxiliary circuits are disconnected.

#### Fixed part of plug-in and withdrawable versions

The fixed part of the plug-in/withdrawable versions is available with front terminals (EF), with horizontal rear terminals (HR) or with vertical rear terminals (VR). The terminals are factory mounted in the horizontal position if the code is shared between HR and VR. In this case, it is possible to easily rotate the terminals into the vertical position. For the XT5 and XT6 circuit-breakers, the fixed part can be fully pre-engineered in the factory with the required combination of terminals, by ordering the dedicated configurable fixed part code and the terminals at the same time.

These fixed parts can be equipped with the same terminals, terminal-covers and phase separator kits used for the fixed circuit-breakers, using the proper adapter (see the "Power connection" section). For Tmax XT1, XT2, XT3, XT4 and XT5 400A, the fixed part of a plug-in/withdrawable circuit-breaker can be installed at two different distances from the back of the panel, according to the picture below. For XT1, XT2, XT3 and XT4, installation at 1.96 in is only compulsory in the case where rear horizontal or vertical terminals (HR/VR) are used.



# Execution and installation

## Conversion kits

The following conversion kits can be ordered for the different versions. This is applicable to the whole Tmax XT family, up to Tmax XT6.



Conversion kit for converting a fixed circuit-breaker into the moving part of a plug-in circuit-breaker

- **Kit for converting a fixed circuit-breaker into the moving part of plug-in/withdrawable versions**

The conversion kit converts a fixed circuit-breaker into a moving part of the plug-in/withdrawable versions. When withdrawable versions are required, it is essential to order an accessory for the front of the circuit-breaker to maintain the IP40 degree of protection along the entire insulation run. This accessory is made of the following options:

- front for the lever operating mechanism (FLD);
- motor operator (MOE);
- direct or transmitted rotary handle operating mechanisms (RHD or RHE).

In the case where no accessory to be applied onto the front is indicated, the front for the lever operating mechanism (FLD) is automatically included in the order.



Conversion kit for converting a fixed circuit-breaker into the moving part of a withdrawable circuit-breaker

- **Kit for converting a fixed part of a plug-in version into the fixed part of withdrawable versions**

The kit comprises:

- a guide for transforming the fixed part of the plug-in circuit-breaker into a fixed part of a withdrawable circuit-breaker;
- a racking-out lever that allows the moving part to be inserted and withdrawn. The mechanism allows the circuit-breaker to be set to the disconnected position (with the power and auxiliary circuits disconnected) with the compartment door closed, which is an advantage for operator safety. The rotary handle can only be inserted when the circuit-breaker is open. Once it has been removed or withdrawn, the circuit-breaker can be set to the open/closed position;
- a flange for the compartment door, which replaces the one supplied with the fixed version of the circuit-breaker.



Conversion kit for converting a fixed part of plug-in version into the fixed part of a withdrawable version

- **Kit for converting a fixed circuit-breaker into the plug-in version for RC Sel residual current devices for XT2-XT4-XT5**

The RC Sel 4-pole residual current devices for the XT2, XT4 and XT5 can be converted from fixed versions to plug-in versions using the special kit.

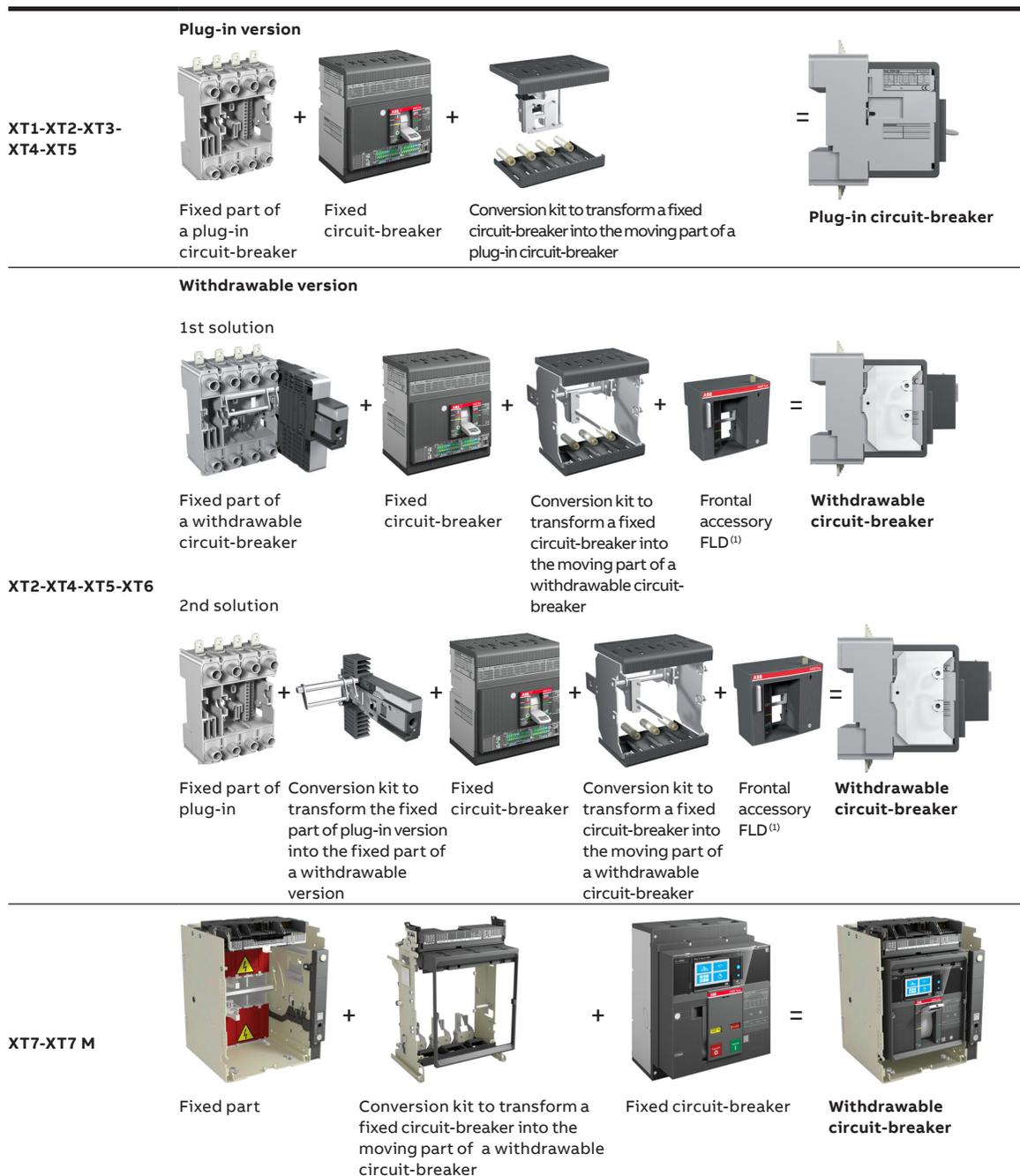
- **Kit for converting plug-in circuit-breakers into withdrawable versions for RC Sel residual current devices for the XT2-XT4-XT5**

The RC Sel 4-pole residual current devices for the XT2, XT4 and XT5 can be converted from the plug-in version to the withdrawable version using a special kit, which includes a component to apply to the front of the residual current device so as to allow it to be withdrawn when the panel door is closed. This kit can also be assembled on fixed circuit-breakers equipped with a front for a lever operating mechanism or the direct rotary handle, thus allowing the use of residual current devices.

In the plug-in to withdrawable conversion kit, there are also PIN connectors to be applied onto the right side of the circuit-breaker to facilitate disconnection of the auxiliary circuits connected to the residual current device.

For the XT1, XT2, XT3 and XT4, this kit also contains the opening solenoid of the residual current device dedicated to the withdrawable version, which is fitted with a connector for the fixed part and the moving part.

For the SACE Tmax XT7 and XT7 M there is a dedicated conversion kit to transform a fixed circuit-breaker into the moving part of the withdrawable version. No additional accessory is required.



(1) Frontal accessory mandatory. If not specified in the order, the FLD is supplied automatically

# Execution and installation

## Connectors for electrical accessories

### Plug-in circuit-breaker

In the plug-in version of the SACE Tmax XT circuit-breakers, the auxiliary circuits can be disconnected by means of two different types of adapter:

- a plug and socket to be fixed on the bottom of the panel: for the XT1, XT2, XT3, XT4 and XT5;
- a plug and socket installed on the rear of the circuit-breaker and in the fixed part of the plug-in devices: for the XT2, XT4 and XT5.

### Plug and socket on the back of the panel

To make it easier to connect/disconnect the auxiliary circuits, wired electrical accessories can be connected to one or more plug and socket connectors on the back of the panel.

3, 6, 9 and 15 PIN connectors are available. The cables connect/disconnect the auxiliary circuits in a fast and simple way without the aid of any dedicated tools.

Consider the number of cables of each electrical accessory when calculating the number of connectors required.



Plug and socket adapters on the back of the panel

Number of cables	XT1-XT2-XT3-XT4 accessories	XT5-XT6 accessories
2	SOR, UVR / External Neutral Ekip Dip trip units / Ekip Com Modbus RTU / Ekip Com Modbus TCP STA	YO, YU / Ekip Com Modbus RTU / Ekip Com Modbus TCP STA
3	RC SA / 1 AUX	1 AUX
4	24V DC/Internal bus cable / Ekip Com Modbus RTU STA / AUE / Ekip Com Modbus RTU Dip	24V DC/Internal bus cable / Ekip Com Modbus RTU STA / AUE
5	MOE-E / Selectivity cable	Selectivity cable / Ekip Signaling 1K
6	Residual current device	Residual current device, MOE-E
7	MOE (with AUX-MO) / MOD (with AUX-MO)	-
8	-	MOE (with AUX-MO)



Plug and socket adapter placed on the back of the moving part

### Plug and socket adapters on the rear of the circuit-breaker and inside the fixed part

For the plug-in versions of the XT2, XT4 and XT5 circuit-breakers, the auxiliary circuits can be automatically disconnected by means of an adapter installed on the rear of the circuit-breaker and inside the fixed part of plug-in versions.

The 12 PIN connector can be used only with accessories functioning at a voltage lower than 250V AC/DC. The cables connect/disconnect the auxiliary circuits in a fast and simple way without the aid of any dedicated tools. Wiring is to be carried out by the Customer.

Circuit-breaker	Number of plugs and sockets installed on the rear of the circuit-breaker and inside the fixed part
XT2-XT4	1
XT5	2



Plug and socket adapter in the fixed part



—  
Cabling of withdrawable versions

### Withdrawable circuit-breaker

When withdrawable circuit-breakers are used, the codes of the electrical accessories specifically designed for this version must be ordered. These dedicated codes include the wired electrical accessory with a connector for the moving part and for the fixed part to be inserted on the side of the fixed part. If the MOE motor operator is ordered, connectors for the fixed part and moving part are always supplied since there is no dedicated code for the withdrawable version. This type of connection allows the auxiliary circuits to be disconnected automatically when the circuit-breaker is withdrawn from the fixed part. If cabling of the fixed part is required before wiring the moving part, the fixed part mounting connectors can be ordered as spare parts.

### XT7 and XT7 M

Two different areas for the auxiliary connection terminal boxes can be clearly identified on the top of the XT7 and XT7 M circuit-breakers:

- The terminal area housing the terminals for wiring the auxiliary connections. The terminals can be wired first and then installed in the circuit-breaker terminal box, thereby facilitating cable connection for the operator;
- The cartridge modules area, housing the Ekip modules. These are installed directly on the upper part of the circuit-breaker without removing the Ekip electronic trip unit, thereby minimizing the time required for the installation and commissioning of accessories.

These areas are the same also in case of withdrawable versions.

### Bracket for fixing on DIN-rail

This is a support designed to be installed on the back of the circuit-breakers to simplify assembly on standardized DIN EN 50022 rails.

The following circuit-breakers can be installed on the DIN EN 50022 rail:

- XT1, XT2, XT3 and XT4 circuit-breakers in the fixed 3-pole or 4-pole versions;
- XT1, XT3 circuit-breakers equipped with RC Sel 200; RC Inst, RC Sel for XT1 and XT3 residual current releases.



—  
Bracket for fixing on DIN-rail

### Motorizable version

The XT7 M can be equipped with a spring charging motor. To allow complete remote control with the XT7 M, the circuit-breaker must be fitted with:

- A shunt opening release (YO)
- A shunt closing release (YC)
- A spring charging motor (M)



—  
Tmax XT7 M

# Power connection

Power connection		XT1	XT2	XT3	XT4	XT5	XT6	XT7	XT7 M
Terminals for circuit-breaker	F - Front	■	■	■	■	■	■	■	■
	EF - Front extended	■	■	■	■	■	■	■	■
	ES - Front extended spread <sup>(1)</sup>	■	■	■	■	■	■	■	■
	FCCu - Front for copper cables <sup>(1)</sup>	■	■	■	■	-	-	-	-
	FCCuAl - Front for copper/aluminium cables <sup>(1)</sup>	■	■	■	■	■	■	■	■
	FB - Flexible busbars <sup>(1)</sup>	■	■	■	■	-	-	-	-
	MC - Multi-cable <sup>(1)</sup>	■	■	■	■	■	-	-	-
	R - Rear orientated	■	■	■	■	■	■	-	-
	HR/VR - Rear orientable terminal	-	-	-	-	-	-	■	■
Terminals for fixed part	EF - Extended front for fixed part	■	■	■	■	■	■	■	■
	HR/VR – Horizontal/vertical rear for fixed part <sup>(2)</sup>	■	■	■	■	■	■	■	■
	ES - Extended spread front for fixed part	-	-	-	-	-	-	■	■
	SHR - horizontal rear spread terminals for fixed part	-	-	-	-	-	-	■	■
	FCCuAl – Front copper/aluminium cables for fixed part	-	-	-	-	-	-	■	■
Terminals for Residual current Device	HR for RC - for residual current release	■	-	■	-	-	-	-	-

(1) From XT1 to XT6, the same terminals of fixed circuit-breakers can be mounted on the fixed part if the adapter is installed.

(2) For the XT5 600A and the XT6 fixed part, the HR and VR have different codes

## Connection terminals

Connection terminals allow the circuit-breaker to be connected to the system in the way most suitable for the installation requirements. They consist of:

- front terminals: for connecting cables or busbars directly from the front of the circuit-breaker;
- rear terminals: for installing circuit-breakers in segregated panels with rear access.

Where possible, the terminals have a laser marking on the surface indicating the tightening torques for the correct insulation of cables and bars.

### Fixed version

The standard fixed version of the SACE Tmax XT circuit-breakers are supplied with front terminals (F). However, they can be fitted with the following types of terminals as accessories thanks to the special kits:

- extended front (EF);
- extended spread front (ES);
- front for copper/aluminium cables (FCCuAl). A pitch adapter must be applied to the terminal zone of the circuit-breaker to ensure that copper and aluminium cables can be connected to all the circuit-breakers. The pitch adapter is automatically supplied when it is necessary;
- front for copper cables (FCCu);
- for flexible busbars (FB);
- multicable (MC);
- rear oriented (R).



Fixed part adapters

### Plug-in and withdrawable versions

The fixed part of the plug-in and withdrawable versions of the XT1, XT2, XT3 and XT4 circuit-breakers are normally supplied with extended front terminals (EF) or horizontal/vertical rear terminals (HR/VR).

The terminals are factory-mounted in the horizontal position. If needed, the customer can easily rotate the terminals into the vertical position. A fixed part with front terminals (EF) can be converted into a fixed part with rear terminals (HR/VR) by ordering the appropriate terminal kit.

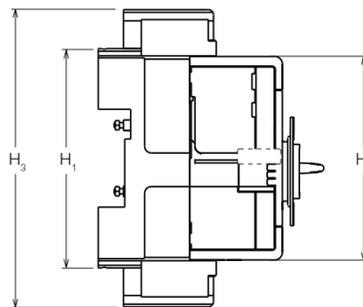
The fixed part of the plug-in and withdrawable versions of the XT5 and XT6 circuit-breakers can be accessorized directly when ordering with extended front terminals (EF) or horizontal/vertical rear terminals (HR/VR), that can be different from the top and bottom terminals.

The terminals are factory-mounted in the horizontal position. If needed, the customer can easily rotate the terminals into the vertical position. For the XT5 600A and the XT6 fixed part, the HR and VR terminals are different and not interchangeable.

The fixed parts can also be fitted with the same types of terminals available on the fixed circuit-breaker after an adapter has been installed on the terminal area of the fixed part itself. Consequently, the following types of connection terminals are also available for the fixed part:

- extended spread front (ES);
- for copper-aluminium cables (FCCuAl);
- for copper cables (FCCu);
- for flexible busbars (FB);
- multi-cable (MC).

The adapter reproduces the terminal area of the fixed circuit-breaker. This means that the fixed parts can also be equipped with the same terminal covers and phase separators as those used for fixed circuit-breakers. In order to mount terminals on the adapter, the front terminals "F" kit provided with the circuit-breaker is needed.



### Fixed part adapter

Circuit breakers	"H1 fixed part [mm/in]"	"H2 circuit breaker [mm/in]"	"H3 fixed part with two adapters [mm/in]"
XT1	146/5.75	134/5.28	181/7.13
XT2	153/6.02	134/5.28	188/7.40
XT3	166/6.54	154/6.06	225/8.86
XT4	182/7.17	164/1.46	228/8.98
XT5 400A	209/8.23	209/8.23	283/11.14
XT5 600A	273/10.75	273/10.75	347/13.66
XT6	295/11.61	273/10.75	408/16.06

For the XT7 and XT7 M, dedicated terminals for fixed part must be ordered.

# Power connection

## Terminals for circuit-breaker

### Front terminals - F



Front terminal - F



F terminal with cable lug



F terminal with busbar

CB	Vers.	Busbars dimensions							Cables terminals [mm/in]	Tightening [Nm/lb-in]	Terminal covers height					Phase Separators height				
		[mm/in]									W	Ø	Cable or busbar / Terminal	[mm/in]					25/ 100/ 200/ 0.98 3.94 7.87	
		Pieces <sup>(1)</sup>	W min	W max	D min	D max	Ø	H						2/ 0.08	25/ 0.98	50/ 1.97	60/ 2.36	68/ 2.68		
XT1	F	1	13/ 0.512	16/ 0.630	3.5/ 0.138	5/ 0.197	6.5/ 0.256	7.5/ 0.295	16/ 0.630	6.5/ 0.256	M6	6/ 53.1	-	-	R	-	-	S <sub>CB</sub>	R	R
XT2	F	1	13/ 0.512	20/ 0.787	2.5/ 0.098	5/ 0.197	6.5/ 0.256	7.5/ 0.295	20/ 0.787	6.5/ 0.256	M6	6/ 53.1	-	-	R	-	-	S <sub>CB</sub>	R	R
XT3	F	1	17/ 0.669	24/ 0.945	5/ 0.197	8/ 0.315	8.5/ 0.335	9.5/ 0.374	24/ 0.945	8.5/ 0.335	M8	8/ 70.8	-	-	-	R	-	S <sub>CB</sub>	R	R
XT4	F	1	17/ 0.669	25/ 0.984	5/ 0.197	8/ 0.315	8.5/ 0.335	10/ 0.394	25/ 0.984	8.5/ 0.335	M8	8/ 70.8	-	-	-	R	-	S <sub>CB</sub>	R	R
XT5	F	1	25/ 0.984	32.5/ 1.279	5/ 0.197	10/ 0.394	10.5/ 0.413	12/ 0.472	32.5/ 1.279	10.5/ 0.413	M10	36/ 318.6	-	-	-	R	-	S <sub>CB</sub> <sup>(2)</sup>	R	R
XT6	F	2	40/ 1.575	40/ 1.575	5/ 0.197	5/ 0.197	2x6.5/ 0.256	12/ 0.472	40/ 1.575	2x6.5/ 0.256	M6	9/ 79.65	R	-	-	R	-	-	R	R
XT7 - XT7M	F	2	40/ 1.575	50/ 1.969	10/ 0.394	10/ 0.394	2x11/ 0.433	14/ 0.551	2x24/ 0.945	2x11/ 0.433	M10	18/ 159.31	R	-	-	-	R	-	R	R

(1) Number of busbars considering W max and D max

(2) Phase barriers 25 mm are mandatory according indications on instructions sheet

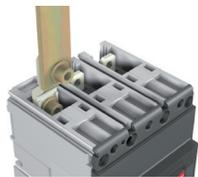
### Extended front terminals - EF



Front extended terminal - F

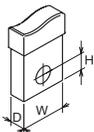


EF terminal with cable lug



EF terminal with busbar

CB	Vers.	Busbars dimensions MAX			Cables terminals		Tightening			Terminal covers height					Phase Separators height				
		[mm/in]			[mm/in]		[Nm/lb-in]			[mm/in]					[mm/in]				
		Pieces <sup>(1)</sup>	W	D	Ø	W	Ø	Terminal/ CB	Cable or busbar / Terminal	2/ 0.08	25/ 0.98	50/ 1.97	60/ 2.36	68/ 2.68	25/ 0.98	100/ 3.94	200/ 7.87		
XT1	F	1	20/ 0.787	4/ 0.157	8.5/ 0.335	20/ 0.787	8.5/ 0.335	M6	6/ 53.1	M8	9/ 79.7	-	-	R	-	-	S <sub>T</sub>	R	
XT2	F	1	20/ 0.787	4/ 0.157	8.5/ 0.335	20/ 0.787	8.5/ 0.335	M6	6/ 53.1	M8	9/ 79.7	-	-	S <sub>T</sub>	-	-	S <sub>T</sub>	R	
XT3	F	1	20/ 0.787	6/ 0.236	10/ 0.394	20/ 0.787	10/ 0.394	M8	8/ 70.8	M10	18/ 159.3	-	-	-	R	-	S <sub>T</sub>	R	
XT4	F	1	20/ 0.787	10/ 0.394	10/ 0.394	20/ 0.787	10/ 0.394	M8	8/ 70.8	M10	18/ 159.3	-	-	-	S <sub>T</sub>	-	S <sub>T</sub>	R	
XT5	F	2	32/ 1.259	8/ 0.315	11/ 0.433	32.5/ 1.28	11/ 0.433	M10	36/ 318.6	M10	18/ 159.3	-	-	-	R	-	S <sub>T</sub>	R	
XT6	F	2	50/ 1.969	5/ 0.197	14/ 0.551	50/ 1.969	14/ 0.551	M6	9/ 79.97	M12	30/ 265.52	-	-	-	-	-	S <sub>T</sub>	R	
XT7 - XT7M	F	2	50/ 1.969	10/ 0.394	4x11/ 0.433	4x20/ 0.787	11/ 0.433	M10	18/ 159.93	M10	40/ 354.03	-	-	-	-	R	-	S <sub>T</sub>	R



W Width  
H Hole height  
D Depth  
F Fixed

P Plug-in  
W Withdrawable  
Ø Diameter  
R On Request

S<sub>CB</sub> Supplied as standard with circuit-breaker, not available in the loose terminals kit  
S<sub>T</sub> Supplied as standard with the terminals kit



Front extended spread terminal - F



ES terminal with cable lug



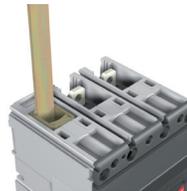
ES terminal with busbar



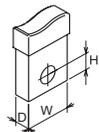
FCCu terminal



FCCu terminal with cable



FCCu terminal with busbar



Front extended spread terminals - ES

CB	Vers.	Busbars dimensions MAX [mm/in]			Cables terminals [mm/in]		Tightening [Nm/lb-in]		Extended spread terminal covers			Phase Separators height [mm/in]			
		Pieces	W	D	Ø	W	Ø	Terminal/CB	Cable or busbar / Terminal	25/0.98	100/3.94	200/7.87	S <sub>T</sub>		
XT1	F-P	1	25/0.984	4/0.157	8.5/0.335	25/0.984	8.5/0.335	M6	6/53.1	M8	9/79.7	-	-	-	S <sub>T</sub>
XT2	F-P-W	1	30/1.181	4/0.157	10.5/0.413	30/1.181	10.5/0.413	M6	6/53.1	M10	18/159.3	-	-	-	S <sub>T</sub>
XT3	F-P	1	30/1.181	4/0.157	10.5/0.413	30/1.181	10.5/0.413	M8	8/70.8	M10	18/159.3	-	-	-	S <sub>T</sub>
XT4	F-P-W	1	30/1.181	10/0.394	10.5/0.413	30/1.181	10.5/0.413	M8	8/70.8	M10	18/159.3	-	-	-	S <sub>T</sub>
XT5	F-P-W	1	40/1.575	10/0.394	11/0.433	40/1.575	11/0.433	M10	36/318.6	M10	18/159.3	R	-	-	S <sub>T</sub>
XT6	F-W	1	80/3.15	10/0.394	3x13/0.512	3x45/1.772	13/0.512	M6	9/79.7	M12	30/265.5	-	-	-	S <sub>T</sub>
XT7 - XT7M	F	2	90/3.54	10/0.394	3x13/0.512	4x45/1.772	13/0.512	M10	18/159.3	M12	40/354	-	-	-	S <sub>T</sub>

Terminals for copper cables - FCCu

CB	Type of terminal	Vers.	Cable		Inner dimensions [mm/in]	Tightening [Nm/lb-in]	L cable stripping [mm/in]	Terminal covers height [mm/in]			Phase separators height [mm/in]"		
			AWG/kcmil	mm <sup>2</sup>				Cable or busbar / Terminal	2/0.08	50/1.97	60/2.36	25/0.98	100/3.94
XT1	internal <sup>(1)</sup>	F-P	1x14...1/0	1x2.5...70	12x12/0.472x0.472	7/62	12/0.47	-	R	-	S <sub>CB</sub>	R	R
XT1	internal	F-P	1x14...1/0	1x1.5...70	12x16/0.472x0.63	7/62	16/0.63	-	R	-	S <sub>CB</sub>	R	R
XT2	internal	F-P-W	1x14...1/0	1x1...95	14x14/0.551x0.551	7/62	14/0.55	-	R	-	S <sub>CB</sub>	R	R
XT3	internal	F-P	1x10...250	1x6...185	18x20/0.709x0.787	14/124	20/0.79	-	-	R	S <sub>CB</sub>	R	R
XT4	internal	F-P-W	1x10...250	1x6...185	18x20/0.709x0.787	14/124	20/0.79	-	-	R	S <sub>CB</sub>	R	R

(1) Not suitable for MA trip units.

W Width      P Plug-in      S<sub>CB</sub> Supplied as standard with circuit-breaker, not available in the loose terminals kit  
 H Hole height      W Withdrawable      S<sub>T</sub> Supplied as standard with the terminals kit  
 D Depth      Ø Diameter  
 F Fixed      R On Request

# Power connection



Internal FCCuAl terminal for copper/aluminum cables



Internal FCCuAl terminal for copper and aluminum cable with take-up of auxiliary voltage



FCCuAl external terminal with cable



FCCuAl internal terminal with cable

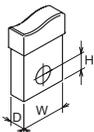


FCCuAl external terminal with cables

## Terminals for copper/aluminium cables - FCCuAl

CB	Type of terminal	Vers.	Cable	Tightening		L cable stripping height		Terminal covers		Phase separators height						
				[Nm/lb-in]	[mm/in]	[mm/in]	[mm/in]	[mm/in]	[mm/in]							
			AWG/ kcmil	mm <sup>2</sup>	Terminal/ CB	Cable or busbar/ Terminal		2/ 0.08	25/ 0.98	50/ 1.97	60/ 2.36	68/ 2.68	70/ 2.75	25/ 0.98	100/ 3.94	200/ 7.87
XT1	internal F-P	1x10...2/0	1x4...70	3.4/30	5/32	≤6mm <sup>2</sup> (8 AWG):4.5/40 >6mm <sup>2</sup> (8 AWG) 9/80	14/0.55	-	-	R	-	-	-	S <sub>CB</sub>	R	R
	internal F-P-W	1x14...1/0	1x2.5...50	2.5/22	3/16	≤10mm <sup>2</sup> (8 AWG):4.5/40 >10mm <sup>2</sup> (8 AWG) 5.7/50	15.5/0.61	-	-	R	-	-	-	S <sub>CB</sub>	R	R
XT2	internal F-P-W	1x10...2/0	1x4...70	3.4/30	5/32	≤6mm <sup>2</sup> (8 AWG):4.5/40 >6mm <sup>2</sup> (8 AWG) 9/80	14/0.55	-	-	R	-	-	-	S <sub>CB</sub>	R	R
	internal F-P	1x14...1/0	1x2.5...50	9/80	slot	≤6mm <sup>2</sup> (10 AWG) 2.3/20.4 >6mm <sup>2</sup> (10 AWG) 5.6/50	15.5/0.61	-	-	-	R	-	-	S <sub>CB</sub>	R	R
XT3	internal F-P	1x4...300	1x35...150	9/80	CH6	22.6/200	20/0.79	-	-	-	R	-	-	S <sub>CB</sub>	R	R
	internal F-P-W	1x14...1/0	1x2.5...50	9/80	slot	≤6mm <sup>2</sup> (10 AWG) 2.3/20.4 >6mm <sup>2</sup> (10 AWG) 5.6/50	15.5/0.61	-	-	-	R	-	-	S <sub>CB</sub>	R	R
XT4	internal F-P-W	1x4...300	1x35...150	9/80	CH6	22.6/200	20/0.79	-	-	-	R	-	-	S <sub>CB</sub>	R	R
	internal F-P-W	1x3/0...350	1x95...185	9/80	CH6	22.6/200	27/1.06	-	-	-	R	-	-	S <sub>CB</sub>	R	R
XT5	external <sup>(1)</sup> F-P-W	1x3/0...350	1x95...185	10/88.5	CH6	22.6/200	27/1	-	-	-	S <sub>T</sub>	-	-	-	R	R
	internal F-P-W	1x4...350	1x35...185	28/250	CH8	≤50mm <sup>2</sup> (1 AWG) 13.5/120 >50mm <sup>2</sup> (1 AWG) 23/204	28/1.1	-	R	-	R	-	-	S <sub>CB</sub>	R	R
XT6	internal F-P-W	1x4/0...500	1x120...240	28/250	CH8	23/203.6	28/1.1	-	R	-	R	-	-	S <sub>CB</sub>	R	R
	external F-P-W	2x2/0...500	2x70...240	28/250	CH8	31/274	front cable 30/1.18 rear cable 50/1.97	-	-	-	R	-	-	-	S <sub>T</sub>	R
XT7	external <sup>(2)</sup> F-P-W	1x350...750	1x185...380	36/319	50/440		35/1.38	-	-	-	-	-	-	S <sub>T</sub>	-	-
	external <sup>(2)</sup> F-P-W	2x500...750	2x240...380	36/319		≤600kcmil 50/440 ≥700kcmil 60/530	front cable 42/1.6 rear cable 76/3	-	-	-	-	-	-	S <sub>T</sub>	-	-
XT8	internal F-W	2x250-500	2x120...240	5/44	CH8	31/274	24/0.95	-	-	-	S <sub>T</sub>	-	-	-	-	-
	external F-W	3x2/0...400	3x70...185	9/80	CH10	≤95mm <sup>2</sup> (2/0-4/0) 34/301 >95mm <sup>2</sup> (250-400) 43/380	31/1.22	-	-	-	S <sub>T</sub>	-	-	-	-	-
XT9	external F-W	2x500...750	2x240...380	9/80		67/593	front cable 35/1.38 rear cable 48/1.89	-	-	-	S <sub>T</sub>	-	-	-	-	-
	external F	4x4/0...500	4x120...240	18/160	CH10	43/380	30/1.18	-	-	-	-	S <sub>T</sub>	-	-	-	-
XT10	external F	3x500...750	4x240...380	18/160	CH12	67/593	30/1.18	-	-	-	-	S <sub>T</sub>	-	-	-	-

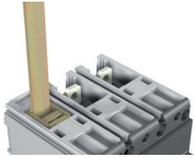
(1) To be mounted on EF terminals supplied with the kit  
 (2) Limited to L breaking capacity level



- W Width
- H Hole height
- D Depth
- F Fixed
- P Plug-in
- W Withdrawable
- Ø Diameter
- R On Request
- S<sub>CB</sub> Supplied as standard with circuit-breaker, not available in the loose terminals kit
- S<sub>T</sub> Supplied as standard with the terminals kit



Terminal for flexible busbars (FB)



FB terminal with flexible busbars



Multi-cable terminals (MC)



Multi-cable terminals with cables



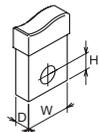
Rear horizontal terminals (R)



R terminal with horizontal busbar



R terminal with vertical busbar



**Terminals for flexible busbars - FB**

CB	Type of terminal	Vers.	Busbar dimensions MIN [mm]			Busbar dimensions MAX [mm]			Tightening [mm]	Terminal covers height [mm/in]			Phase separators height [mm/in]		
			W	D	Nr	W	D	Nr		2/0.08	50/1.97	60/2.36	25/0.98	100/3.94	200/7.87
XT1	internal	F-P	10/0.394	0.8/0.031	2/0.078	10/0.394	0.8/0.031	9/0.354	7/61.95	-	R	-	S <sub>CB</sub>	R	R
XT2	internal	F-P-W	10/0.394	0.8/0.031	2/0.078	10/0.394	0.8/0.031	9/0.354	7/61.95	-	R	-	S <sub>CB</sub>	R	R
XT3	internal	F-P	16/0.629	0.8/0.031	2/0.078	16/0.629	0.8/0.031	10/0.394	14/123.91	-	-	R	S <sub>CB</sub>	R	R
XT4	internal	F-P-W	16/0.629	0.8/0.031	2/0.078	16/0.629	0.8/0.031	10/0.394	14/123.91	-	-	R	S <sub>CB</sub>	R	R

**Multi-cable terminals - MC Cu<sup>(1)</sup>**

CB	Type of terminal	Vers.	Cable		Tightening [Nm/lb-in]	L cable stripping [mm/in]	Terminal covers height [mm/in]			Phase separators height [mm/in]					
			AWG/kcmil	mm <sup>2</sup>			Terminal/CB	Cable or busbar/Terminal	2/0.08	50/1.97	60/2.36	70/2.75	25/0.98	100/3.94	200/7.87
XT1	external	F-P	6x14...2	6x2.5...35	6/53.1	7/61.95	10, 20, 30 / 0.394, 0.787, 1.181	-	S <sub>T</sub>	-	-	-	-	-	-
XT2	external	F-P-W	6x14...2	6x2.5...35	6/53.1	7/61.95	10, 20, 30 / 0.394, 0.787, 1.181	-	S <sub>T</sub>	-	-	-	-	-	-
XT3 <sup>(2)</sup>	external	F-P	6x12...2	6x2.5...35	8/70.8	7/61.95	15, 30 / 0.591, 1.181	-	-	S <sub>T</sub>	-	-	-	-	-
XT4 <sup>(2)</sup>	external	F-P-W	6x12...2	6x2.5...35	8/70.8	7/61.95	15, 30 / 0.591, 1.181	-	-	S <sub>T</sub>	-	-	-	-	-
XT5 <sup>(3)</sup>	external	F-P-W	6x14...1/0	6x2.5...50	36/319	5.7/50.4	16, 32, 48 / 0.393, 1.259, 1.889	-	-	-	S <sub>T</sub>	-	-	-	-

- (1) Installation on load side only
- (2) Take up auxiliary voltage device included
- (3) for CuAl cables

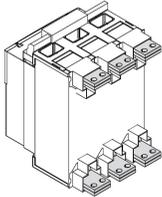
**Rear horizontal terminals - R**

CB	Vers.	Pieces	Busbar dimensions MAX [mm]				Tightening [Nm/lb-in]				Terminal covers height [mm/in]					Phase separators height [mm/in]		
			W	D	Ø	H	Terminal/CB	Cable or busbar/Terminal	2/0.08	25/0.98	50/1.97	60/2.36	68/2.68	25/0.98	100/3.94	200/7.87		
XT1 <sup>(1)</sup>	F	1	15/0.590	5/0.196	6.5/0.255	7.5/0.295	M5	5/44.2	M6	6/53.1	S <sub>T</sub>	-	-	-	-	-	-	-
XT2	F	1	20/0.787	4/0.157	8.5/0.335	9/0.354	M6	6/53.1	M8	6/53.1	S <sub>T</sub>	-	-	-	-	-	-	-
XT3	F	1	20/0.787	6/0.236	8.5/0.335	9/0.354	M8	8/70.8	M8	8/70.8	S <sub>T</sub>	-	-	-	-	-	-	-
XT4	F	1	20/0.787	6/0.236	8.5/0.335	9/0.354	M8	8/70.8	M8	8/70.8	S <sub>T</sub>	-	-	-	-	-	-	-
XT5	F	2	30/1.181	10/0.394	11/0.433	18/0.708	M10	28/247.8	M10	18/159.3	-	S <sub>T</sub>	-	-	-	-	-	-
XT6	F	2	50/1.968	10/0.394	14/0.551	18/0.708	M6	18/159.3	M12	30/265.5	S <sub>T</sub>	-	-	-	-	-	-	-

- (1) Not suitable for MA trip units

- W Width
- H Hole height
- D Depth
- F Fixed
- P Plug-in
- W Withdrawable
- Ø Diameter
- R On Request
- S<sub>CB</sub> Supplied as standard with circuit-breaker, not available in the loose terminals kit
- S<sub>T</sub> Supplied as standard with the terminals kit

# Power connection



Rear orientable terminal - HR VR

## Rear horizontal terminals - R

CB	Vers.	Busbar dimensions MAX [mm]				Tightening [Nm/lb-in]		Terminal covers height [mm/in]				Phase separators height [mm/in]					
		Pieces	W	D	Ø	H	Terminal/ CB	Cable or busbar / Terminal	2/ 0.08	25/ 0.98	50/ 1.97	60/ 2.36	68/ 2.68	25/ 0.98	100/ 3.94	200/ 7.87	
XT7 - XT7M	F	2	50/ 1.96	10/ 0.394	2x11/ 0.433	14/ 0.55	M10 20/ 177.01	M10 40/ 354.02	S <sub>T</sub>	-	-	-	-	-	-	-	-

## Terminals for fixed part

### Extended front terminals for fixed part - EF

CB	Vers.	Busbars dimensions MAX [mm/in]				Cables terminals [mm/in]		Tightening [Nm/lb-in]		Rear Separators [mm/in]	
		Pieces	W	D	Ø	W	Ø	Terminal/CB	Cable or busbar / Terminal	90/3.543	
XT1	P	1	20/0.787	5/0.197	6.5/0.335	21/0.827	6.5/0.256	6/53.1	M6	9/79.7	
XT2	P-W	1	20/0.787	5/0.197	6.5/0.335	21/0.827	6.5/0.256	6/53.1	M6	9/79.7	
XT3	P	1	25/0.984	8/0.315	8.5/0.335	30/1.181	8.5/0.335	6/53.1	M8	18/159.3	
XT4	P-W	1	25/0.984	8/0.315	8.5/0.335	30/1.181	8.5/0.335	6/53.1	M8	18/159.3	
XT5	P-W	1	30/1.181	15/0.591	10/0.397	30/1.182	10/0.397	6/53.1 <sup>(1)</sup> - 4/35.4 <sup>(2)</sup>	M10	18/159.3	
XT6	W	2	50/1.968	5/0.197	14/0.551	50/1.97	14/0.551	5/44.3	M14	30/265.5	
XT7 - XT7M	W	2	50/1.968	10/0.394	11/0.433	4x 20/ 0.787	11/0.433	12/ 106.2	M10	40/354	

(1) for 400A fixed part

(2) for 600A fixed part



HR terminals for fixed part XT1...XT4

### Rear flat horizontal terminals for fixed part - HR

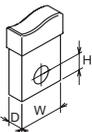
CB	Vers.	Busbars dimensions MAX [mm/in]				Cables terminals [mm/in]		Tightening [Nm/lb-in]		Rear Separators [mm/in]	
		Pieces	W	D	Ø	W	Ø	Terminal/ CB	Cable or busbar / Terminal	90/3.543	
XT1	P	1	20/0.787	4/0.157	8.5/0.335	20/0.787	8.5/0.335	6/53.1	9/79.7	R	
XT2	P-W	1	20/0.787	4/0.157	8.5/0.335	20/0.787	8.5/0.335	6/53.1	9/79.7	R	
XT3	P	1	25/0.984	6/0.236	8.5/0.335	25/0.984	8.5/0.335	6/53.1	9/79.7	R	
XT4	P-W	1	25/0.984	10/0.394	8.5/0.335	25/0.984	8.5/0.335	6/53.1	9/79.7	R	
XT5 400A	P-W	1	30/1.181	10/0.394	11/0.433	25/0.984	11/0.433		18/159.4	R	
XT5 600A	P-W	2	40/1.575	8/0.315	11/0.433	40/1.575	11/0.433		18/159.4	R	
XT6	W	2	50/1.969	8/0.315	14/0.551	50/1.969	14/0.551	5/44.3	30/265.6	-	
XT7 - XT7M	W	2	50/1.969	15/0.59	2x11/0.433	4x20/0.787	11/0.433	12/106.2	40/354.2	-	

W Width P Plug-in S<sub>CB</sub> Supplied as standard with circuit-breaker, not available in the loose terminals kit

H Hole height W Withdrawable S<sub>T</sub> Supplied as standard with the terminals kit

D Depth Ø Diameter

F Fixed R On Request

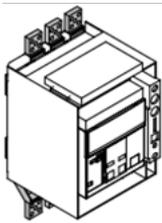




VR terminals for fixed part XT1...XT4

**Rear flat vertical terminals for fixed part - VR**

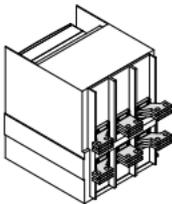
CB	Vers.	Busbars dimensions MAX				Cables terminals		Tightening		Rear Separators [mm/in]
		[mm/in]				[mm/in]		[Nm/lb-in]		
		Pieces	W	D	Ø	W	Ø	Terminal/CB	Cable or busbar/ Terminal	
XT1	P	1	20/0.787	4/0.157	8.5/0.335	20/0.787	8.5/0.335	6/53.1	9/79.7	R
XT2	P-W	1	20/0.787	4/0.157	8.5/0.335	20/0.787	8.5/0.335	6/53.1	9/79.7	R
XT3	P	1	25/0.984	6/0.236	8.5/0.335	25/0.984	8.5/0.335	6/53.1	9/79.7	R
XT4	P-W	1	25/0.984	10/0.394	8.5/0.335	25/0.984	8.5/0.335	6/53.1	9/79.7	R
XT5 400A	P-W	1	30/1.181	10/0.394	11/0.433	25/0.984	11/0.433		18/159.4	R
XT5 600A	P-W	2	40/1.575	8/0.315	11/0.433	40/1.575	11/0.433		18/159.4	R
XT6	W	2	50/1.969	5/0.197	14/0.551	50/1.969	14/0.551	5/44.3	30/265.6	-
XT7 - XT7M	W	2	50/1.969	10/0.39	2x11/0.433	4x20/0.787	11/0.433	12/106.2	40/354.2	-



Extended front terminal - EF

**Front extended spread terminals for fixed part - ES**

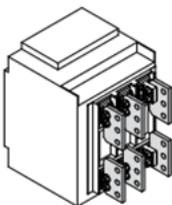
CB	Vers.	Busbars dimensions MAX				Cables terminals		Tightening	
		[mm/in]				[mm/in]		[Nm/lb-in]	
		Pieces	W	D	Ø	W	Ø	Terminal/CB	Cable or busbar/ Terminal
XT7 - XT7 M	W	2	80/3.15	10/0.394	3x13/0.511	4x45/1.771	13/0.511	M6 12/106.2	M12 40/354.2



Horizontal rear terminals -SHR

**Horizontal rear spread terminals for fixed part -SHR**

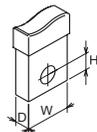
CB	Vers.	Busbar dimensions MAX [mm]				Cable terminals [mm]		Tightening [Nm/lb-in]	
		Pieces	W	D	Ø	W	Ø	Terminal/CB	Cable or busbar/ Terminal
		XT7 - XT7 M	W	2	60/2.362	10/0.394	2x11/0.433	4x30/1.18	11/0.433



Terminal for cable FcCuAl 4x240mm<sup>2</sup> - FCCuAl

**Front copper/aluminium cables for fixed part - FCCuAl**

CB	Vers.	Cables terminals [mm/in]		Tightening [Nm/lb-in]			
		Rigid	Flexible	Terminal/CB	Cable or busbar / Terminal		
		XT7 - XT7 M	W	6x25/0.984	6x25/0.984	M10	48/425
		4x35/1.378	4x35/1.378			M14	



- W Width
- H Hole height
- D Depth
- F Fixed
- P Plug-in
- W Withdrawable
- Ø Diameter
- R On Request
- S<sub>CB</sub> Supplied as standard with circuit-breaker, not available in the loose terminals kit
- S<sub>T</sub> Supplied as standard with the terminals kit



### Auxiliary contacts - AUX

The SACE Tmax XT circuit-breakers can be equipped with auxiliary contacts that signal the status of the breaker and can be routed outside the circuit-breaker itself. The following information is available:

- **open/closed (Q):** indication of the status of the circuit-breaker power contacts;
- **trip (SY):** signals that the circuit-breaker is opening due to the intervention of the trip unit, or to the intervention residual current device, or to the opening of undervoltage/shunt opening releases, or to the use of the emergency opening pushbutton of the motor operator, or to the use of the test button;
- **trip unit tripping / Bell Alarm (S51):** indicates that one of the protection functions of the electronic or thermal-magnetic trip unit has tripped. In case of the Tmax XT5 equipped with thermal-magnetic trip unit and residual current device, S51 is activated also by the intervention of the residual current device.
- **YO/YU tripping (S52):** indicates that the under voltage or shunt opening release has been activated. The signaling depends on the service release used. For Tmax XT6 S52 can be used only with YU and is not available for YO. For Tmax XT5, in case of YO, shunt opening release must be permanently supplied to maintain the S52 signal.

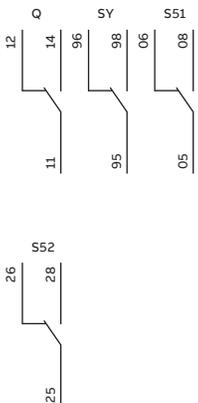
#### AUX for XT1, XT2, XT3, XT4, XT5 and XT6

Circuit -breakers	XT1-XT3		XT2-XT4		XT5			XT6					
AUX	Q	SY	Q	SY	S51	Q	SY	S51	S52	Q	SY	S51	S52
24V DC	■	■	■	■	■	■	■	■	■	■	■	■	■
250V AC/DC	■	■	■	■	■	■	■	■	■	■	■	■	■
400V AC	-	-	■	■	-	■	■	-	-	-	-	-	-

#### 24V DC and 250V AC/DC auxiliary contacts

##### Auxiliary contacts Q (open/closed), SY (trip), S51 (trip unit tripping) and S52 (YO/YU tripping) status during sequences

Actions	Q	SY	S51	S52
<b>Normal Sequence</b>				
CB Opened	12	96	06	26
CB Closed	14	96	06	26
<b>Trip sequence (caused by: Trip Test)</b>				
CB Opened	12	96	06	26
CB Closed	14	96	06	26
CB Tripped	12	98	06	26
CB Reset	12	96	06	26
<b>Trip sequence (caused by: trip unit)</b>				
CB Opened	12	96	06	26
CB Closed	14	96	06	26
CB Tripped	12	98	08	26
CB Reset	12	96	06	26
<b>Trip sequence (caused by: YU / YO)</b>				
CB Opened	12	96	06	26
CB Closed	14	96	06	26
CB Tripped	12	98	06	28
CB Reset	12	96	06	26



# Signaling



Cabled auxiliary contact



Uncabled auxiliary contact



Cabled auxiliary contact for withdrawable circuit-breaker

250V AC/DC and 24V AC/DC auxiliary contacts are installed without the need for any screws. They are extremely easy to fit. Simply apply a slight pressure in the appropriate place. The following versions of auxiliary contacts are available:

- cabled (AWG20 cable section -0.5mm<sup>2</sup>):
  - for fixed/plug-in circuit-breakers with 3.28ft long cables;
  - for withdrawable circuit-breakers with fixed part and moving part connector;
- not cabled:
  - for fixed/plug-in circuit-breakers with cables from AWG 20 up to AWG 15 cross-section.

Auxiliary contacts are supplied for each circuit-breaker in the SACE XT family in various different combinations, as shown in the table. The following items can be ordered to make the installation even more flexible:

- an uncabled auxiliary contact can generate different signals (Q, SY or S52) according to the position where the circuit-breaker is installed;
- an uncabled S51 auxiliary contact, which can be used for XT2, XT4, XT5 and XT6 circuit-breakers;
- a cabled auxiliary contact, with unnumbered cables. It can generate different signals (Q, SY or S52) according to the position where the circuit-breaker is installed.

Combinations of cabled auxiliary contacts with numbered cables	XT1	XT2	XT3	XT4
	3/4p	3/4p	3/4p	3/4p
1Q 1SY 24V DC	F-P	F-P-W	F-P	F-P-W
3Q 1SY 24V DC	-	F-P-W	F-P	F-P-W
1S51 24V DC	-	F-P-W	-	F-P-W
1Q 1SY 250V AC/DC	F-P	F-P-W	F-P	F-P-W
2Q 2SY 1S51 250V AC/DC	-	F-P-W	-	F-P-W
3Q 2SY 250V AC/DC	-	F-P-W	-	F-P-W
3Q 1SY 250V AC/DC	-	F-P-W	F-P	F-P-W
1S51 250V AC/DC	-	F-P-W	-	F-P-W
2Q 1SY 250V AC/DC	F-P	F-P	F-P	F-P
3Q on the left 250V AC/DC	F-P	F-P	F-P	F-P

F = Fixed, P = Plug-in, W = Withdrawable

Combinations of cabled auxiliary contacts with numbered cables	XT5	XT6
	Thermal-magnetic and Ekip Dip trip unit	Ekip Touch and Hi-Touch trip unit
1Q + 1SY on the left 24V DC	F-P	-
1Q + 1SY 24V DC	F-P-W	F-P-W
3Q + 1SY 24V DC	F-P-W	F-P-W
1S51 24V DC	F-P-W	F-P-W
1S52 24V DC	F-P-W	F-P-W
1Q + 1SY on the left 250V AC/DC	F-P	-
1Q + 1SY 250V AC/DC	F-P-W	F-P-W
2Q + 1SY 250V AC/DC	F-P-W	F-P-W
3Q + 1SY 250V DC	F-P-W	F-P-W
1S51 250V AC/DC	F-P-W	F-P-W
1S52 250V AC/DC	F-P-W	F-P-W

F = Fixed, P = Plug-in, W = Withdrawable

Auxiliary contacts 24V DC - 250V AC/DC

	3-pole circuit-breaker	4-pole circuit-breaker
XT1		
XT3		
XT2 XT4		
XT2 XT4 with Ekip Touch and Hi-Touch trip units		
XT5		
XT5 with Ekip Touch and Hi-Touch trip units		
XT6		

# Signaling

## AUX 250V AC/DC - Electrical specifications

Power supply voltage	Operating current according to the utilization category					
	AC-15	AC-14	AC-13	DC-14	DC-13	DC-12
250V AC	4 A	5 A	6 A	-	-	-
125V AC	5 A	6 A	6 A	-	-	-
250V DC	-	-	-	0.03 A	0.03 A	0.3 A
110V DC	-	-	-	0.05 A	0.05 A	0.5 A

## AUX 24V DC - Electrical specifications

Power supply voltage	Operating current
5 V DC	0.001 A
30 V DC	0.1 A

## 400V AC auxiliary contacts

400V AC auxiliary contacts are available only for the XT2, XT4 and XT5 circuit-breakers in the following versions:

- cabled (AWG17 cable section -1mm<sup>2</sup>):
  - for fixed/plug-in circuit-breakers with 3.28ft long cables;
  - for withdrawable circuit-breakers with a fixed part and moving part connector.

With the XT2 and XT4, the 400V auxiliary contacts take up the whole right-hand slot of the circuit-breaker. For the XT5 1Q+1SY, the 400V auxiliary contacts are available only with thermal-magnetic or Ekip Dip trip units.



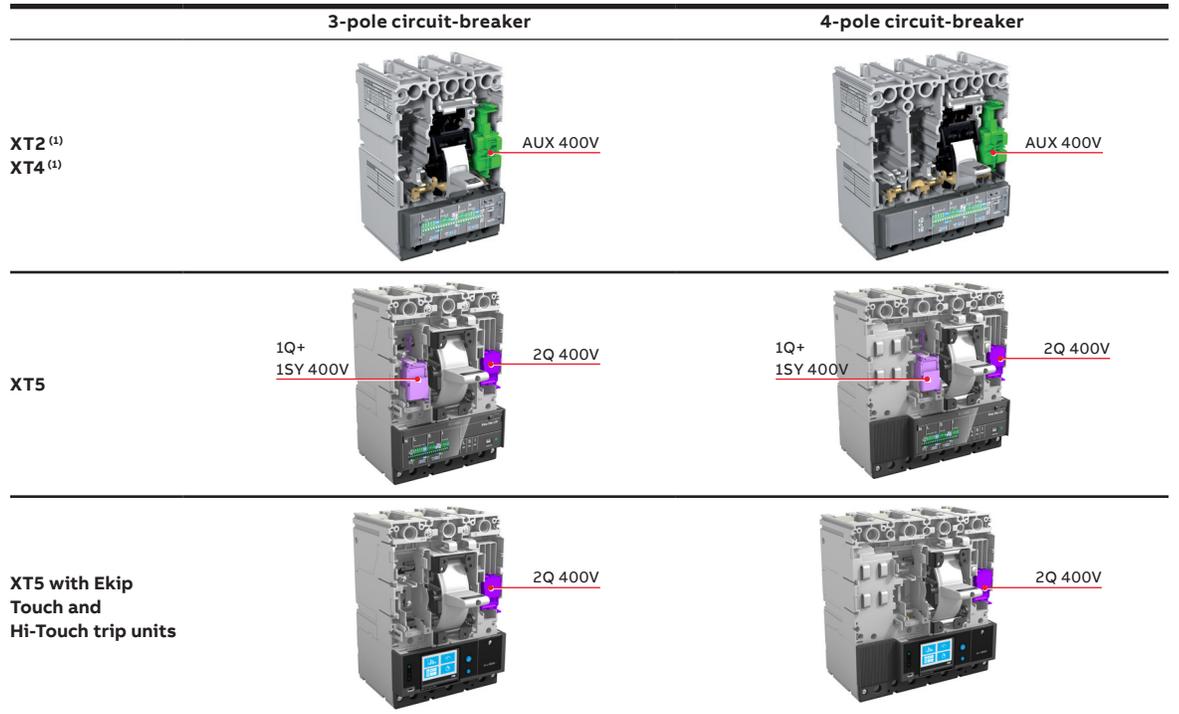
Cabled auxiliary contact

Combinations	XT2	XT4	XT5
	3/4p	3/4p	3/4p
1Q 1SY 400V	F-P-W	F-P-W	F-P-W <sup>(1)</sup>
2Q 400V	F-P-W	F-P-W	F-P-W

F = Fixed, P = Plug-in, W = Withdrawable

(1) Only for circuit-breakers with thermal-magnetic or Ekip Dip trip units.

**400V AC auxiliary contacts**



(1) Not available with Ekip Touch and Hi-Touch trip units

**AUX 400V AC - Electrical specifications**

Power supply voltage [V]	Operating current [A]	
	AC	DC
125 AC/DC	-	0.5
250 AC/DC	12	0.3
400 AC <sup>(1)</sup>	3	-

(1) Only ENEC approved

# Signaling

## AUX for XT7 and XT7 M

Circuit -breakers	XT7				XT7 M		
	Q	SY	S51	S52	Q	S51	RTC
24V DC	■	■	■	■	■	■	■
250V AC/DC	■ <sup>(1)</sup>	■ <sup>(1)</sup>	■	■	■ <sup>(1)</sup>	■	■
400V AC	■	■	-	-	■	-	-

(1) Same commercial code of AUX 400V

## Open / closed auxiliary contacts - Q

The XT7 and XT7 M circuit-breakers can be equipped with auxiliary contacts that signal the open or closed status of the circuit-breaker. The contacts are available in the following configurations:

Open / closed auxiliary contacts (AUX 4Q)	XT7	XT7 M
4 auxiliary contacts	4Q 400V AC	■
	4Q 24V DC	■
	2Q 400V AC + 2Q 24V DC	■
15 auxiliary contacts	15Q 400V AC	■
	15Q 24V DC	■

	400V AC - 250V AC/DC contact	24V DC contact
Type	Changeover contacts	Changeover contacts
Minimum load	100mA @ 24V	1mA @ 5V
<b>Breaking capacity</b>		
DC	24V	-
	125V	0.3A @ 10ms
	250V	0.15A @ 10ms
AC	250V	5A @ cosφ 1
		5A @ cosφ 0.7
		5A @ cosφ 0.3
	400V	3A @ cosφ 1
		2A @ cosφ 0.7
		1A @ cosφ 0.3

The AUX 15Q is an alternative to the mechanical interlock (MI), the DLC for XT7 M lock or the DLP lock if mounted on the right side.



Open and close auxiliary contacts



15 auxiliary contacts

### Trip auxiliary contact - SY

The XT7 circuit-breakers can be equipped with auxiliary contacts that signal that the circuit-breaker is opening due to the intervention of the trip unit, or to the opening of undervoltage/shunt opening releases, or to the use of the test button. The contacts are available in the following configurations:

		400V/250V AC/DC contact	24V DC contact
Type		Switching	Switching
Minimum load		100mA @ 24V	1mA @ 5V
<b>Breaking capacity</b>			
DC	24V	-	0.1A
	125V	0.3A	-
	250V	0.15A	-
AC	250V	12A	-
	400V	3A	-

### Contact signaling the tripping of the protection unit Ekip – S51 (Bell Alarm)

This contact signals the opening of the circuit-breaker after the Ekip protection trip unit has tripped.

The contact is available for the XT7 and XT7 M.

For the XT7 M circuit-breaker, the closing operation can be carried out only after the “TU Reset” push-button has been restored to its normal operating position. The switching contact can also be associated with an optional accessory for remote resetting - YR.



Contact signaling the tripping of the Ekip trip unit protection - S51

		250V AC/DC contact	24V DC contact
Type		Switching	Switching
Minimum load		100mA @ 24V	1mA @ 5V
<b>Breaking capacity</b>			
DC	24V	-	0.1A
	250V	0.5A @ 0ms / 0.2A @ 10ms	-
	AC	250V	3A @ cos $\Phi$ 0.7

### Contact signaling tripping of the YO2/YU – S52

This contact signals that the undervoltage (YU) or the shunt opening release (YO2) have been activated. The contact is the same and depends on the service release mounted in the dedicated position.

It is available for the XT7 only, with YU/YO2 installed in the dedicated slot.

Auxiliary contact S52 doesn't read the tripping of the YO.

		250V AC/DC contact	24V DC contact
Type		Switching	Switching
Minimum load		100mA @ 24V	1mA @ 5V
<b>Breaking capacity</b>			
DC	24V	-	0.1A
	250V	0.5A @ 0ms / 0.2A @ 10ms	-
AC	250V	3A @ cos $\varphi$ 0.7	-

# Signaling

## Auxiliary Position Contacts – AUP

Auxiliary position contacts provide information about the position of the circuit-breaker in relation to the fixed part of plug-in or withdrawable versions.

Three types of position contacts (AUPs) are available:

- racked-in contact for all plug-in and withdrawable Tmax XT circuit-breakers;
- racked-out contact for all withdrawable Tmax XT circuit-breakers;
- test contact for withdrawable Tmax XT5, XT6, XT7 and XT7 M circuit-breakers.

Circuit-breaker		Max number of racked-in contacts	Max number of test contacts	Max number of racked-out contacts	Max number of AUP
XT1	3/4 poles	4	-	-	4
XT2	3 poles	2	-	2	4
	4 poles	4	-	2	6
XT3	3/4 poles	4	-	-	4
XT4	3/4 poles	4	-	2	6
XT5	3/4 poles	3	1	1	5
XT6	3/4 poles	3	1	1	5
XT7	3/4 poles	2	2	2	6
XT7 M	3/4 poles	2	2	2	6

Auxiliary position contacts, which provide electrical signaling of the circuit-breaker position in relation to the fixed part, are available in the following versions:

AUP	XT1	XT2	XT3	XT4	XT5	XT6	XT7	XT7 M
24V DC	■	■	■	■	■	■	■	■
250V AC/DC	■	■	■	■	■	■	■ <sup>(1)</sup>	■ <sup>(1)</sup>
400V AC	-	-	-	-	-	-	■	■

(1) Same commercial code of AUX 400V

### AUP for XT1, XT2, XT3 and XT4

#### AUP 250V AC/DC - Electrical specifications

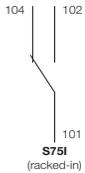
Power supply voltage [V]	Operating current	
	L/R = 10 ms	Resistive load
250V AC	-	6 A - 5 A (UL/CSA)
125V AC	-	6 A
220V DC	0,2 A	0,3 A
110V DC	0,3 A	0,45 A

#### AUP 24V DC - Electrical specifications

Power supply voltage [V]	Operating current	
	L/R = 10 ms	Resistive load
24V DC	5 A	5 A



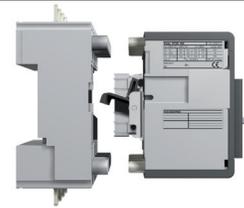
Auxiliary position contact



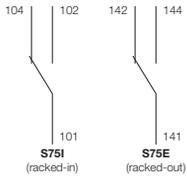
**Plug-in circuit-breaker with racked-in contact**



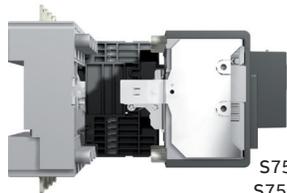
S75I=104



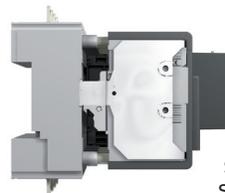
S75I=102



**Withdrawable circuit-breaker with racked-in/racked-out contacts**



S75I=102  
S75E=144



S75I=102  
S75E=142



S75I=104  
S75E=142

**AUP for XT5 and XT6**

**AUP 250V AC/DC - Electrical specifications**

Power supply voltage [V]	Operating current	
	L/R = 10 ms	Resistive load
250V AC	-	6 A - 5 A (UL/CSA)
125V AC	-	6 A
220V DC	0,2 A	0,3 A
110V DC	0,3 A	0,45 A

**AUP 24V DC - Electrical specifications**

Power supply voltage [V]	Operating current	
	L/R = 10 ms	Resistive load
24V DC	5 A	5 A

**AUP for XT7 and XT7 M**

		400V/250V AC/DC contact	24V DC contact
Type		Changeover contacts	Changeover contacts
Minimum load		100mA @ 24V	1mA @ 5V
<b>Breaking capacity</b>			
DC	24V	-	0.1A
	125V	0.3A @ 10ms	-
	250V	0.15A @ 10ms	-
AC	250V	5A @ cosφ 1	-
		5A @ cosφ 0.7	-
		5A @ cosφ 0.3	-
	400V	3A @ cosφ 1	-
		2A @ cosφ 0.7	-
		1A @ cosφ 0.3	-



Auxiliary position contact



Auxiliary position contacts - AUP

# Signaling



—  
Early Auxiliary Contacts

## Early Auxiliary Contacts – AUE

Early closing auxiliary contacts: these allow the undervoltage release to be supplied before the main contacts close, in accordance with IEC 60204-1 and VDE 0113 standards. Early opening auxiliary contacts: these allow any electronic devices connected to the system to be disconnected in advance before the system is damaged by an overvoltage caused by the circuit-breaker opening. The early opening/closing auxiliary contacts can be installed inside the direct and transmitted rotary handle operating mechanisms for all the SACE Tmax XT family circuit-breakers except for the XT7 (max two contacts @ 400V):

- the cabled version includes 3.28ft long cables (AWG20 cable sections);
- a dedicated code is available in the withdrawable version which includes the connector for the moving and fixed parts;

For the XT7 with a lever operating mechanism, these are mounted directly on the circuit-breaker.

	XT1	XT2	XT3	XT4	XT5	XT6	XT7	XT7 M
<b>AUE closing</b>	■	■	■	■	■	■	■	-
<b>AUE opening</b>	■	■	■	■	-	-	-	-

### Early Auxiliary Contacts – AUE for XT7

<b>400V/250V AC/DC contact</b>		
Type	Switching	
Minimum load	100mA @ 24V	
<b>Breaking capacity</b>		
DC	125V	0.3A
	250V	0.15A
AC	250V	12A
	400V <sup>(1)</sup>	3A

(1) Only ENEC approved



— Ready to close signaling contact

## Ready to close signaling contact - RTC

The ready to close signaling contact – RTC – indicates that the circuit-breaker is ready to receive the closing command and is available only for the XT7 M. The circuit-breaker is ready to close when the following conditions are fulfilled:

- the circuit-breaker is open
- the springs are loaded
- there are no opening command or locks on the opening command
- the circuit-breaker is reset following tripping of the Ekip protection trip unit.

		250V AC/DC contact	24V DC contact
Type		Switching	Switching
Minimum load		100mA @ 24V	1mA @ 5V
<b>Breaking capacity</b>			
DC	24V	-	0.1A
	250V	0.5A @ 0ms / 0.2A @ 10ms	-
	250V	3A @ cosφ 0.7	-
AC	250V	3A @ cosφ 0.7	-

## Contact signaling loaded springs - S33 M/2

This contact is available for XT7 M only and signals the spring status of the circuit-breaker operating mechanism. It is available in both 400V AC/DC and 24V DC versions and it is not included in the motor but must be order separately.

		400V AC/DC contact	24V DC contact
Type		Changeover contacts	Changeover contacts
Minimum load		100mA @ 24V	1mA @ 5V
<b>Breaking capacity</b>			
DC	24V	-	0.1A
	125V	0.3A @ 10ms	-
	250V	0.15A @ 10ms	-
AC	250V	5A @ cosφ 1	-
		5A @ cosφ 0.7	-
		5A @ cosφ 0.3	-
	400V	3A @ cosφ 1	-
		2A @ cosφ 0.7	-
		1A @ cosφ 0.3	-

## Mechanical signaling of tripping the protection trip unit - TU Reset

XT7 M circuit-breakers are always equipped with a mechanical device that signals the tripping status of the protection trip units. After the Ekip trip unit has been tripped due to an electrical fault, the signaling device clearly indicates the tripping status on the front of the circuit-breaker. The circuit-breaker can be reset only after the signaling pushbutton has been restored to its normal operating position.



— TU Reset

# Operating mechanism

		XT1	XT2	XT3	XT4	XT5	XT6	XT7	XT7 M	
Rotary handle complete operating mechanism	RHD - Direct rotary handle <sup>(1)</sup>	■	■	■	■	■	■	■	-	
	RHD + 2PLL	-	-	-	-	■	■	■	-	
	RHE - Transmitted rotary handle <sup>(1)</sup>	■	■	■	■	■	■	■	-	
	RHE + 2PLL <sup>(1)</sup>	■	■	■	■	-	-	-	-	
	RHS - Side Rotary handle <sup>(1)</sup>	■	■	■	■	-	-	-	-	
Rotary handle loose components	Base mechanism	RHE_B	■	■	■	■	■	■	-	
		RHE_B + 2PLL	■	■	■	■	■	■	-	
		RHE_MB - Metallic base	■	■	■	■	■	■	■	-
	Shaft	RHE_S	■	■	■	■	■	■	■	-
		Handle	RHE_H <sup>(1)</sup>	■	■	■	■	■	■	■
	RHE_LH Large handle <sup>(1)</sup>		■	■	■	■	-	-	-	-
Others	Conversion kit for telescopic rod	-	■	-	■	■	■	■	-	
	Conversion kit RHE->RHS	-	-	-	-	■	-	-	-	
Flange handle	FH - Flange handle	■	■	■	■	■	■	■	-	
NFPA handle	NFPA handle	■	■	■	■	■	■	-	-	
Front lever op. mech.	FLD - Front for locks	-	■	-	■	■	■	-	-	
Toggle extension	Toggle extension for circuit-breaker operations	-	-	-	-	■	■	-	-	
Foldable handle	Foldable handle	-	-	-	-	-	-	■	-	
Shaft support	RHE_SS for RHE_MB <sup>(2)</sup>	■	■	■	■	-	-	-	-	

(1) Available in standard and emergency version; (2) Compatible only with RHE\_MB

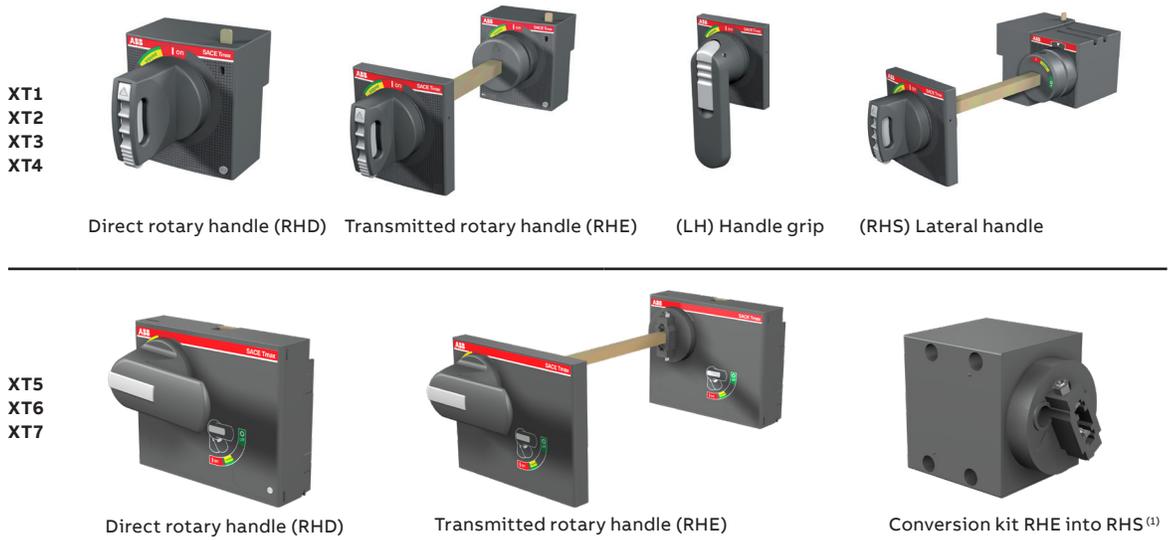
## Rotary handle operating mechanism

This is an operating device that allows the circuit-breaker to be operated by means of a rotary handle, which makes the circuit-breaker easier to open and close thanks to its ergonomic handgrip.

Different types of handles are available:

- direct (RHD): installed on the front of the circuit-breaker for frontal operation;
- transmitted (RHE): installed on the panel door. It allows the circuit-breaker to be operated by means of a rod which acts on a base installed on the front of the circuit-breaker. A version (RHE-PL) with padlock on the base is also available; also a heavy duty version (RHE\_MB) is available (For XT1-4, must be combined with dedicated 10mm metallic solid shaft and Nema rated handles);
- lateral (RHS): installed directly on the front of the circuit-breaker for side operations.

For the XT1, XT2, XT3 and XT4 a large handle grip (LH) is also available, which can be combined with the transmitted handle (RHE) and with the lateral handle (RHS).



(1) Available for XT5 only

# Operating mechanism

All rotary handles are available in two versions:

- standard: grey color;
- emergency color: red on a yellow background. Suitable for operating machine tools.

Transmitted rotary handles can be ordered in the following ways:

- by one single commercial code (for RHD, RHE, RHS L/R);
- by listing the commercial codes of the following three components (for RHE only):
  - the base of the rotary handle to be fixed onto the circuit-breaker (RHE\_B or RHE\_MB);
  - a 19.68in transmission rod (RHE\_S). The minimum and maximum distances between the fixing plate and the door are 2.38in and 18.5in respectively;
  - a rotary handle on the compartment door with a normal standard handgrip (RHE\_H, RHE\_H LH) or emergency handgrip (RHE\_H\_EM, RHE\_H\_EM LH).

To install the lateral rotary handle (RHS) on the XT5, the transmitted rotary handle (RHE code) and the conversion kit (from RHE to RHS) must be ordered.

The use of the rotary handle is an alternative to the motor operator and to all accessories mounted on the front of the circuit-breaker.

The rotary handles can be locked by means of a wide range of key locks and padlocks (see the Chapter "Safety and Protection" - section "Locks").

The direct and transmitted rotary handle operating mechanisms allow early closing auxiliary contacts to be used when closing to supply the undervoltage release before the circuit-breaker closes.

For XT5, XT6 and XT7 there is a special version of the RHD and RHE\_B with an additional padlock (2PLL).

For XT1 and XT4 there is a special version of RHE with an additional padlock on the base (2PLL).

For heavy duty applications, where a stronger solution is needed, the metallic base mechanism (RHE\_MB) is available. This base mechanism is completely in metal and is able to resist to a stronger application force. It has the padlock directly embedded on the base. It can be used with the RHE\_S plus either RHE\_H or RHE\_LH in order to get the complete RHE solution. However, it can be used also with the OT handles and shafts available in the "Ordering Code" Chapter. Also a shaft support is available (RHE\_SS) - as optional - to be used for RHE\_MB with XT1 to XT4.

Fig. 1  
RHD XT5  
additional padlock



Fig. 2  
RHE XT5  
additional padlock



Fig. 3  
RHD XT7  
additional padlock



Fig. 4  
RHE XT7  
additional padlock



Fig. 1

Fig. 3

Fig. 2

Fig. 4

### Conversion kit for telescopic rod

This device must be installed on the rod of the extended rotary handle (RHE) and allows the panel door to be closed even with the withdrawable circuit-breaker in the racked-out position.

# Operating mechanism



Flange handle

## Flange handle

Installed on the panel door. It allows fixed circuit breakers to be operated in accordance with NFPA and UL508A Standards by means of cables of different length, which act on a base installed on the front of the circuit breaker. Two different versions of handles are available in order to fully meet the Standard prescriptions required by the application. The flange handle solution is defined by the selection of three ordering codes based on the circuit breaker frame, the cable length and the handle size and NEMA grade.



NFPA handle

## NFPA handle

Thanks to this handle mounted on the shaft of the RHE mechanism, the operator is allowed to operate the circuit breaker and to lock it in OFF position by means of an embedded padlock device also in case of panel door open, as prescribed by the Standards NFPA 79 and UL508A.



Front for the operating lever mechanism

## Front for the lever operating mechanism

This device can be installed on the front of the circuit-breaker and for withdrawable circuit-breakers inside switchboards, it allows the IP40 degree of protection to be maintained for the whole insulation run of the circuit-breaker.

It is always fitted with a compartment door lock and with a slot for a padlock device in the open position (0.236in Ø stem up to three padlocks - not supplied) which prevents closing the circuit-breaker and the compartment door.

The front for the lever operating mechanism can only be installed on the XT2, XT4, XT5 and XT6 circuit-breakers. The front for the lever operating mechanism can be fitted with a wide range of key locks and padlocks (see the Chapter "Safety and Protection" - section "Locks").

The use of the front for the lever operating mechanism is an alternative to the motor operator and to all of the front type accessories.



Toggle extension for XT5-XT6

## Toggle extension for XT5-XT6

This device can be used to easily operate the toggle of the circuit-breaker, during manual closing and opening operations.

The device is removable and does not need screws in order to mount and operate it.

## Foldable handle for XT7

This device can be used to reduce the installation depth of XT7. It can be mounted instead of the standard toggle and folded on a side after using.

# Remote control

Remote control		XT1	XT2	XT3	XT4	XT5	XT6	XT7	XT7 M
Service release	SOR - Shunt opening release / shunt trip	■	■	■	■	-	-	-	-
	UVR - Undervoltage release	■	■	■	■	-	-	-	-
	YO - Shunt opening release / shunt trip	-	-	-	-	■	■	■	■
	YU - Undervoltage release	-	-	-	-	■	■	■	■
	YC - Shunt closing release	-	-	-	-	-	-	-	■
Remote reset	YR - Resetting remotely	-	-	-	-	-	-	-	■
YO/YC Test Unit	YO/YC Test Unit	■	■	■	■	■	■	■	■
Time delay device for YU	UVD - Time delay device for YU	■	■	■	■	■	■	■	■
Motor operator	MOD	■	-	■	-	-	-	-	-
	MOE	-	■	-	■	■	■	-	-
	MOE-E	-	■	-	■	■	-	-	-
	M - Motor	-	-	-	-	-	-	-	■

## Service releases

The SACE Tmax XT circuit-breakers can be fitted with service releases (shunt opening release / shunt trip, shunt closing release for XT7M only and undervoltage release).

### XT1, XT2, XT3 and XT4

#### Shunt opening release / shunt trip – SOR

This allows the circuit-breaker to open by means of a non-permanent electrical control. Release operation is guaranteed for voltage between 70% and 110% of the rated power supply voltage  $U_n$ , in both alternating and direct current. The SOR is equipped with a built-in limit contact to shut-off the power supply in the open position with the trip unit tripped.

A remote-controlled emergency opening command can be generated by connecting an opening button to the SOR.



Cabled SOR - UVR



Cabled SOR - UVR for withdrawable circuit-breaker



Uncabled SOR - UVR

#### Undervoltage release – UVR

This allows the circuit-breaker to open when the release is subject either to a power failure or a voltage drop. As prescribed in the Standards, opening is guaranteed when the voltage is between 70% to 35%  $U_n$ . After tripping, the circuit-breaker can be closed again if the voltage exceeds the 85%  $U_n$ . When the undervoltage release is not energized, neither the circuit-breaker or the main contacts can be closed. A remote-controlled emergency opening command can be generated by connecting an opening button to the UVR.

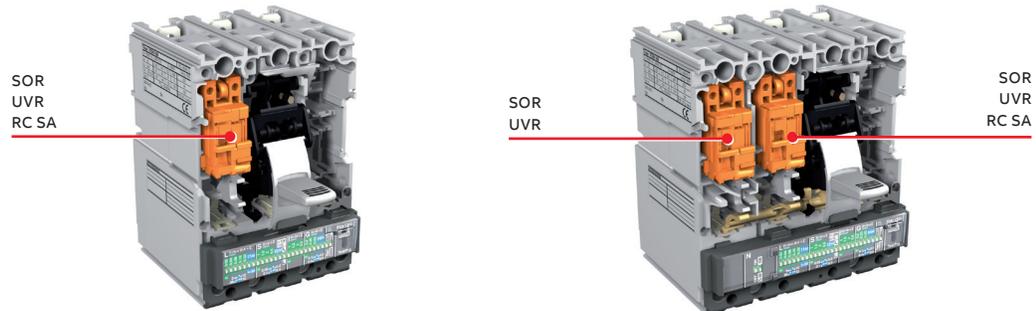
None of the service releases require screws for installation. They are extremely easy to fit. Just use slight pressure in the appropriate place. All service releases are available in two versions:

- cabled (AWG 20 cable section - 0.5mm<sup>2</sup> up to 300V, AWG 18 - 1mm<sup>2</sup> up to 525V):
  - for fixed/plug-in circuit-breakers with 3.28 ft long cables;
  - for withdrawable circuit-breakers with a fixed and moving part connector;
- not cabled:
  - for fixed/plug-in circuit-breakers with cables from AWG 20 in cross-section.

# Remote control

Installation in circuit-breakers:

- 3-pole: as an alternative, the SOR or UVR can be installed in the slot on the left of the operating lever;
- 4-pole: the SOR or UVR can be housed at the same time in the slot of the third and fourth pole. For withdrawable circuit-breakers, the connector for the fourth pole must be ordered to be able to install the SOR and UVR in the fourth pole. If there is a residual current release, the opening solenoid (RC SA) of the residual current device must be installed in the slot of the third pole on the left of the operating lever.



## SOR Electrical specifications for XT1-XT2-XT3-XT4

Version	Max power absorbed on inrush		Resistance	
	AC [VA]	DC [W]	Internal [ohm]	External [ohm]
12V DC		50	2.67	0
24-30V AC/DC	50	50	11	0
48-60V AC/DC	60	60	62	0
110...127V AC-110...125V DC	50	50	248	0
220...240V AC-220...250V DC	50	50	930	0
380-440V AC	55		2300	0
480-525V AC	55		5830	0
<b>Opening time (SOR)</b>				
XT1, XT2, XT3 and XT4	30ms			

## UVR Electrical specifications for XT1-XT2-XT3-XT4

Version	Power absorbed during normal operation		Resistance	
	AC [VA]	DC [W]	Internal [ohm]	External [ohm]
24-30V AC/DC	1.5	1.5	399	0
48V AC/DC	1	1	1447	100
60V AC/DC	1	1	2405	100
110...127V AC-110...125V DC	2	2	8351	390
220...240V AC-220...250V DC	2.5	2.5	20502	9000
380-440V AC	3		20502	39000
480-525V AC	4		20502	59000
<b>Opening time (UVR)</b>				
XT1, XT2, XT3 and XT4	30ms			

**XT5 and XT6**

**Shunt opening release / shunt trip – YO**

This allows the circuit-breaker to open by means of a permanent electrical control. Release operation is guaranteed for voltages between 70% and 110% of the rated power supply voltage  $U_n$ , in both alternating and direct current. The YO can be permanently supplied.

A remote-controlled emergency opening command can be created by connecting an opening button to the YO.

**Undervoltage release – YU**

This allows the circuit-breaker to open when the release is subject either to a power failure or a voltage drop. As prescribed in the standards, opening is guaranteed when the voltage is between 70% to 35%  $U_n$ . After tripping, the circuit-breaker can be closed again if the voltage exceeds 85%  $U_n$ . When the undervoltage release is not energized, neither the circuit-breaker nor the main contacts can be closed. A remote-controlled emergency opening command can be generated by connecting an opening button to the YU.

None of the service releases require screws to be installed. They are extremely easy to fit: just use a slight pressure on the part indicated in the installation manual. All service releases are available in two versions:

- cabled (AWG16 - minimum cable section 1.25mm<sup>2</sup>):
  - for fixed/plug-in circuit-breakers with 3.28ft long cables;
  - for withdrawable circuit-breakers with fixed and moving part connectors;
- not cabled:
  - for fixed/plug-in circuit-breakers (suggested cables section 1.5 mm<sup>2</sup> AWG15).

For the fixed version of Tmax XT5, the YO and the YU can be mounted as an alternative in the slot on the left (third pole) or in the slot on the right (first pole) of the operating lever. For the withdrawable version of Tmax XT5, the YO and YU are installed as standard in the first pole. If two different coils are needed in the same circuit-breakers or the YO or YU are required in the third pole (on the left), an uncabled coil and the dedicated cables and connectors for the withdrawable version must be ordered.

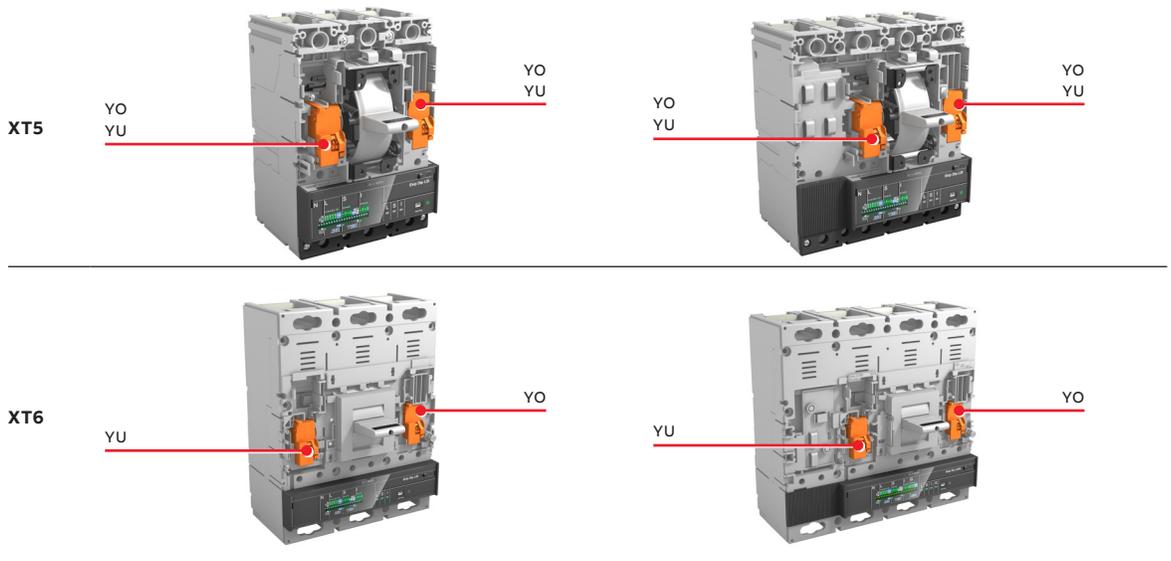
Instead, for Tmax XT6 in each versions (withdrawable or fixed) YU can be mounted only in the third pole (on the left) and YO can be mounted only in the first pole (on the right).



Shunt opening release - YO



Undervoltage release - YU



# Remote control

## Shunt opening release / shunt trip – YO for XT5-XT6

Version	Max power absorbed on inrush		Current I <sub>pk</sub> Pull [A]	Power	
	AC [VA]	DC [W]		Pavg Holding [VA]	Pavg Holding [W]
12V DC	-	132	11		3.5
24-60V AC/DC	264@24V	264@24V	11	5	3.5
	660@60V	660@60V			
110...250V AC/DC	363@110V	363@110V	3.3	2.5	2
	825@250V	825@250V			
380-440V AC	304@380V	304@380V	0.8	4.7	
	352@440V	352@440V			
480-525V AC	384@480V	384@480V	0.8	6	
	420@525V	420@525V			
<b>Opening time (YO)</b>					
XT5 and XT6	50ms				

## Undervoltage release – YU for XT5-XT6

Version	Max power absorbed on inrush		Current I <sub>pk</sub> Pull [A]	Power	
	AC [VA]	DC [W]		Pavg Holding [VA]	Pavg Holding [W]
12V DC	-	132	11		3.5
24-30V AC/DC	330	330	11	6.5	4.5
48-60V AC/DC	660	660		6.5	5.5
110...127V AC-110...125V DC	419	419	3.3	5.2	3.7
220...240V AC-220...250V DC	825	825		5.2	2.6
380-440V AC	352	352	0.8	4.7	
480-525V AC	440	440		6	
<b>Opening time (YU)</b>					
XT5 and XT6	50ms				



—  
Shunt opening release

### XT7 and XT7M

#### Shunt opening and shunt closing releases - YO/YC

These opening and closing releases enable the circuit-breaker to be controlled remotely. Opening is always possible, while closing is available only for the XT7 M when the closing springs of the operating mechanism are loaded and the circuit-breakers are ready to close. The releases operate by means of minimum impulse current duration time of 100 ms. Furthermore, they can operate in permanent service. In this case, if the opening command is given by means of the opening release, the circuit-breaker can be closed by de-energizing the opening release and, after a time of at least 30 ms, by controlling the closing.

A second open release is an alternative to an undervoltage release.

#### General characteristics

Power supply (Un)	AC	DC
24V	■	■
30V	■	■
48V	■	■
60V	■	■
110V...120V	■	■
120V...127V	■	■
220V...240V	■	■
240V...250V	■	■
380V...400V	■	-
415V...440V	■	-
480V...500V	■	-
<b>Operating limits</b>	YO/YO2: 70%...110% Un	YC: 85%...110% Un
<b>Inrush power (Ps)</b>	300VA	300W
<b>Continuous power (Pc)</b>	3.5VA	3.5W
<b>Opening time (YO/YO2)</b>		
XT7-XT7 M	20 ms	
<b>Closing time (YC/YC2)</b>		
XT7-XT7 M	50 ms	

# Remote control



Undervoltage release

## Undervoltage release – YU

The undervoltage release opens the circuit-breaker when there is a significant voltage drop or power failure. It can be used for safe remote tripping, for blocking closing or to control the voltage in the primary and secondary circuits. The power supply for the release is therefore obtained from the supply side of the circuit-breaker or from an independent source.

Circuit-breaker closing is permitted only when the release is powered. The undervoltage release is an alternative to the second shunt opening release.

As prescribed in the Standards, opening is guaranteed when the voltage is between 70% to 35%  $U_n$ . After tripping, the circuit-breaker can be closed again if the voltage exceeds the 85%  $U_n$ .

### General characteristics

Power supply ( $U_n$ )	AC	DC
24V	■	■
30V	■	■
48V	■	■
60V	■	■
110V...120V	■	■
120V...127V	■	■
220V...240V	■	■
240V...250V	■	■
380V...400V	■	-
415V...440V	■	-
480V...500V	■	-
<b>Operating limits</b>	70%...100% $U_n$	
<b>Inrush power (<math>P_s</math>)</b>	300VA	300W
<b>Continuous power (<math>P_c</math>)</b>	3.5VA	3.5W
<b>Opening time (YU)</b>		
XT7-XT7 M	30 ms	



Remote resetting

## Remote resetting - YR

Available on the XT7 M only, the YR reset coil permits the remote resetting of the circuit- breaker after tripping due to the protection unit.

### General characteristics

Power supply (Un)	AC	DC
24V	■	■
110V	■	■
220V	■	■
Operating limits	90%...110% Un	

## Opening and closing release test unit - YO/YC Test Unit

The opening and closing release test unit helps ensure that the releases are running smoothly, to guarantee a high level of reliability in controlling circuit-breaker opening. The test unit ensures the service continuity of the opening and closing releases with a rated operating voltage between 24V and 250V (AC and DC), in addition to verifying the functioning of the opening and closing coils electronic circuit. Continuity is checked cyclically at an interval of 30s between tests. The unit has optic signals via LEDs on the front, which provide the following information:

**POWER ON:** correct power supply of the YO/YC Test Unit;

**OPEN ON:** coil switch absent, power supply absent or insufficient, interrupted cables;

**SHORT ON:** coil switch failure, short-circuited cables;

**OPEN and SHORT FLASHING:** faulty coil switch or incorrect supply;

**OPEN and SHORT OFF:** correct operation of the coil switch.

Two relays with one change-over area are also available on board the unit, to allow remote signaling of the following events:

**Test failure** - resetting takes place automatically when the alarm stops;

**Failure of three tests** - resetting occurs only by pressing the manual RESET on the unit.

### Devices characteristics

Auxiliary power supply	24...250V AC/DC
------------------------	-----------------

### Specifications of the signaling relays

Maximum interrupted current	6A
Maximum interrupted voltage	250V AC

# Remote control



Time delay device for undervoltage release

## Electronic time-delay device for undervoltage release - UVD

The undervoltage release can be combined with an electronic time-delay device for the circuit-breaker, allowing for delayed external tripping with adjustable preset times. Use of the delayed undervoltage trip unit is recommended to prevent tripping when the power supply network for the trip unit is subject to brief voltage drops or power supply failures. Circuit-breaker closing is inhibited when the UVD is not powered. The time-delay device must be used with an undervoltage release with the same voltage. IEC standard certified.

Circuit-breaker	Power supply voltage [V AC/DC]
XT1...XT4	24...30
XT1...XT4	48...60
XT1...XT4	110...125
XT1...XT4	220...250
Delay which can be set [s]	0.25 - 0.5 - 0.75 - 1 - 1.25 - 2 - 2.5 - 3
XT5 - XT6	24...30
XT5 - XT6	48...60
XT5 - XT6	110...125
XT5 - XT6	220...250
Delay which can be set [s]	0.2 - 0.25 - 0.5 - 0.75 - 1 - 1.5 - 2 - 2.5 - 3
XT7	24...30
XT7	48
XT7	60
XT7	110...125
XT7	220...250
Delay which can be set [s]	0.5 - 1 - 1.5 - 2 - 3

## Motor Operators

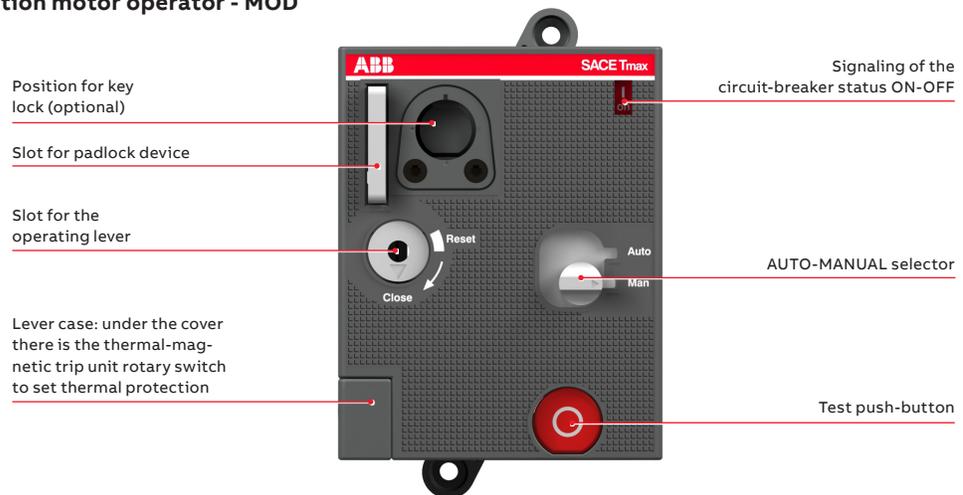
These are devices that allow circuit-breaker opening and closing:

- in remote mode, by means of electric controls;
- locally, directly from the front, by means of a special mechanism.

### Direct action motor operator - MOD



Direct action motor operator (MOD)



# Remote control

The direct action motor operator available for XT1 and XT3 is supplied:

- with 3.28 ft long cables;
- with a flange, to replace the standard one supplied with the circuit-breaker;
- with a padlock device, only removable when the motor is in the open position. The padlock device accepts up to three 0.3 in padlocks;
- auxiliary contacts (AU-MO), which allow the motor control mode (manual or auto) signal to be routed outside;
- (on request) the motor operator can be fitted with a key lock (see the Chapter "Accessories" - section "Locks").

Operating principles:

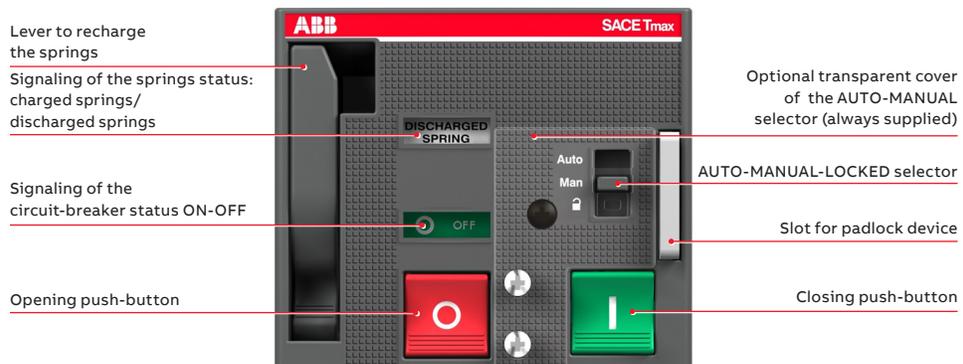
- a selector on the front of the MOD, is used for selecting the operating mode:
  - **AUTO:** when the selector is in this position, the circuit-breaker closing is commanded remotely only by means of an electric impulse, whereas opening is allowed both remotely and from the front of the motor;
  - **MANUAL:** when the selector is in this position, the circuit-breaker can only be opened/closed from the front of the motor by means of the relative lever housed in a slot made in the motor itself;
- via remote control, guaranteed by permanent electrical opening/closing impulses.



## Stored energy motor operators - MOE and MOE-E XT2-XT4



Stored energy motor operators (MOE)



The MOE or MOE-E stored energy motor operator available for XT2 and XT4 is supplied:

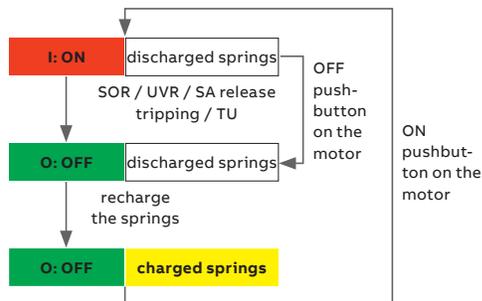
- with 3.28 ft long cables;
- with connectors for the fixed part and moving part of withdrawable devices. If the motor operator is used with fixed or plug-in circuit-breakers, the connector can be easily removed;
- with a flange, to be used instead of the standard one supplied with the circuit-breaker;
- with a padlock device, which is only removable when the motor is in the open position. The padlock device accepts up to three 0.3in padlocks;
- with a lock for the AUTO-MANUAL selector;
- with auxiliary contacts (AUX-MO) that allow the motor control mode (manual or remote) signal to be routed outside;
- (on request) the motor operator can be equipped with a key lock (see the Chapter "Accessories" - section "Locks");
- (on request) the motor operator can be equipped with a key lock to safeguard against manual operation (MOL-M) (see the Chapter "Accessories" - section "Locks").

Operating principles:

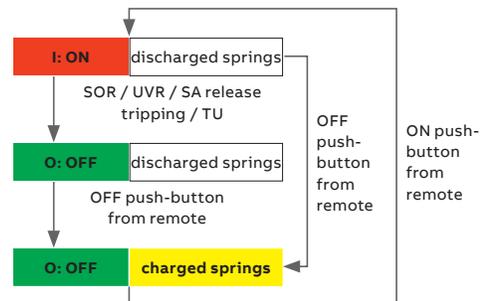
- a selector on the front of the MOE, is used for selecting the operating mode:
  - AUTO: when the selector is in this position, the push-buttons on the front of the motor are locked. Circuit-breaker closing is commanded remotely only by means of an electric impulse, whereas opening is allowed both remotely and from the front of the motor;
  - MANUAL: the circuit-breaker can only be opened/closed from the front of the motor using the relative push-buttons;
  - LOCKED: when the selector is in this position, the circuit-breaker is in the open position. The padlock device can be withdrawn and the motor can be locked in the open position;
- operation of the motor operator via remote control is also guaranteed by permanent electrical opening/closing impulses. Once an opening command has been given, the next closing command (permanent) is taken over by the motor operator once the opening has been completed. In the same way, an opening command is taken over once the previous closing operation has been completed.

When the Ekip Com module is used, the MOE-E motor operator must be used instead of the MOE motor operator. The MOE-E allows the digital signals from the supervision and monitoring system to be used by means of the release and Ekip Com contacts and to be converted into power signals to command the motor operator. All the features described above for the MOE motor operator are available also on the MOE-E version.

Operating mode: Manual



Operating mode: Auto

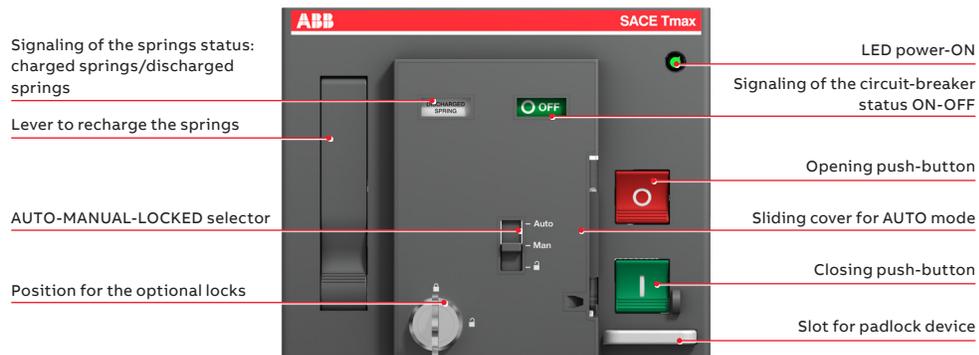


# Remote control

## Stored energy motor operators - MOE and MOE-E XT5 and MOE XT6



Stored energy motor operator (MOE)



The MOE or MOE-E stored energy motor operator available for the XT5 and XT6 is supplied:

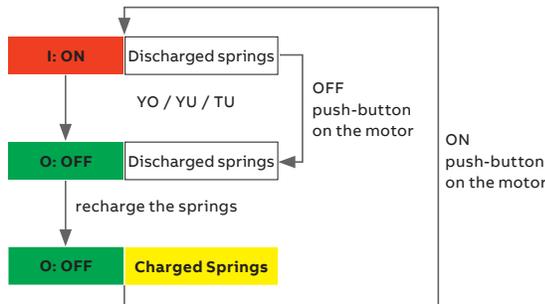
- with 3.28 ft long cables;
- with connectors for the fixed part and moving part of withdrawable devices. If the motor operator is used with fixed or plug-in circuit-breakers, the connector can be easily removed;
- with a flange, to use instead of the standard one supplied with the circuit-breaker;
- with a padlock device, only removable when the motor is in the open position. The padlock device accepts up to three 0.3in padlocks;
- with a lock for the AUTO-MANUAL selector;
- with auxiliary contacts that allow the motor control mode (manual or remote) signal to be routed outside;
- (on request) the motor operator can be equipped with a key lock (see the Chapter "Accessories" - section "Locks");
- (on request) the motor operator can be equipped with a key lock to safeguard against manual operation (MOL-M) (see the Chapter "Accessories" - section "Locks").

Operating principles:

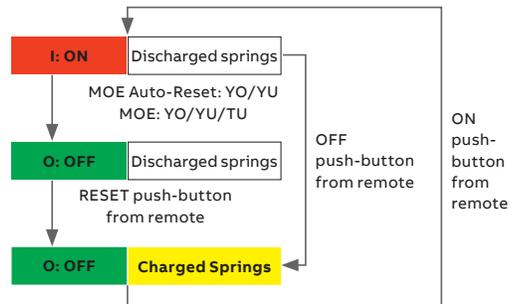
- a selector on the front of the MOE, is used to select the operating mode:
  - AUTO: when the selector is in this position, the push-buttons on the front of the motor are locked and covered by a sliding cover. It is possible to seal the sliding cover to avoid mode changing. Circuit-breaker closing is commanded remotely only by means of an electric impulse, whereas opening is allowed both remotely and from the front of the motor using a tool;
  - MANUAL: the circuit-breaker can only be opened/closed from the front of the motor using the relevant push-buttons. It is possible to seal the sliding cover to avoid mode changing;
  - LOCKED: the device can be used only if the motor is in the open position and the springs are charged. The padlock device can be withdrawn and the can be motor locked in the open position;
- operation of the motor operator via remote control is also guaranteed by permanent electrical opening/closing impulses. Once an opening command has been given, the next closing command (permanent) is taken over by the motor operator once the opening has been completed. In the same way, an opening command is taken over once the previous closing operation has been completed.

When the Ekip Com module is used, the MOE-E motor operator must be used instead of the MOE motor operator. The MOE-E allows digital signals from the supervision and monitoring system to be used by means of the release and Ekip Com contacts and to be converted into power signals to command the motor operator. All the features described above for the MOE motor operator are also available on the MOE-E version.

**Operating mode: Manual**



**Operating mode: Auto**

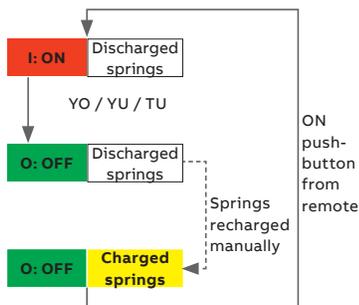


With the XT5 MOE and MOE-E and the XT6 MOE, it is possible to define some reset logic in order to charge the springs automatically once the circuit-breaker has tripped depending on the reset wiring diagram chosen. Three different options are available:

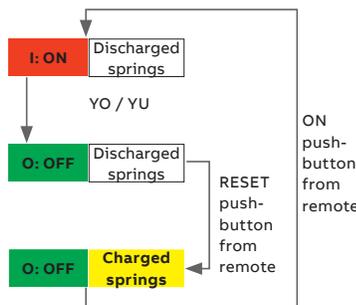
- Auto Reset: the circuit-breaker is automatically reset after a trip (not due to the trip unit) and the springs are charged;
- Remote Reset: it is possible to connect a push-button in order to charge the springs after a trip (not due to the trip unit);
- Manual Reset: charging springs must be done manually after a trip.

As explained in the motor circuit diagram, the auxiliary contact S51 must be properly connected to enable remote or automatic resetting. After a trip due to an overload or a short-circuit (trip unit), only a manual reset is permitted.

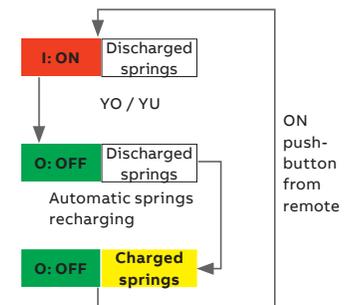
**Manual Reset**



**Remote Reset**



**Auto Reset**



# Remote control

Electrical specifications	MOD		MOE and MOE-E		MOE
	XT1 – XT3		XT2 – XT4	XT5	XT6
Rated voltage, Un	[V]	24 DC	24 DC	24 DC	24 DC
	[V]	48...60 DC	48...60 DC	48...60 DC	48...60 DC
	[V]	110...125 AC/DC	110...125 AC/DC	110...125 AC/DC	110...125 AC/DC
	[V]	220...250 AC/DC	220...250 AC/DC	220...250 AC/DC	220...250 AC/DC
	[V]	380...440 AC	380...440 AC	380 AC	380 AC
Operating voltage	[V]	480...525 AC	480...525 AC	-	-
	[% Un]	MIN=85% Un; MAX=110% Un			
Power absorbed on inrush Ps	[VA - W]	≤ 500	≤ 300	≤ 300	≤ 400
Power absorbed on continuing PC service	[VA - W]	≤ 300	≤ 150	≤ 150	≤ 150
Operating frequency	[Hz]	50..60	50..60		
	CL → OP [s]	< 0.1	< 1.5	1.5	3
Duration	OP → CL [s]	< 0.1	< 0.1	< 0.08	< 0.08
	TR → OP [s]	< 0.1	< 3	< 3	< 5
Mechanical life	N° operations	25000	25000	20000	10000
Minimum duration of electrical opening and closing command	[ms]	≥ 150	≥ 150	≥ 100	≥ 100

## Motor – M

Available on SACE Tmax XT7 M only, this motor automatically loads the closing springs of the circuit-breaker. The device automatically reloads the springs of the operating device when they are discharged and energized. In the event of a lack of power, the springs can be manually charged by using a dedicated lever on the operating device. The motor of the XT7 M can be equipped with an S33/M contact which signals the status of the springs that must be ordered separately.



Motor operator

Electrical specifications	Motor Operator XT7 M
Rated voltage, Un	[V] 24...30 AC/DC
	[V] 48...60 AC/DC
	[V] 100...130 AC/DC
	[V] 220...250 AC/DC
	[V] 380...415 AC
Operating voltage	[% Un] MIN=85% Un; MAX=110% Un
Power absorbed on inrush Ps	[VA - W] 300
Inrush time	[ms] 200
Power absorbed on continue PC service	[VA - W] 100
Operating frequency	[Hz] 50..60
Charging time	[s] 8

# Safety and protection



Terminal covers

## Terminal covers

Terminal covers are applied to the circuit-breaker to prevent accidental contact with live parts, thus providing protection against direct contact. The terminal covers are pre-punched to facilitate the installation of busbars and/or cables, guaranteeing the correct insulation. The terminal covers are able to guarantee adequate circuit-breaker installation and correct insulation and are listed in the Chapter “Power Connection”.

There are different types of terminal covers:

- High terminal covers (HTC)
- Low terminal covers (LTC)
- Extended high terminal covers (HTC-ES), for front extended terminals
- High terminal covers with back shield (HTC\_BS), with a back plate in order to guarantee insulation with the rear zone of the switchboard

The table below shows the terminal covers available for each frame:

	XT1		XT2		XT3		XT4		XT5		XT6		XT7/XT7 M	
	3p	4p	3p	4p	3p	4p	3p	4p	3p	4p	3p	4p	3p	4p
HTC - High terminal covers	■	■	■	■	■	■	■	■	■	■	■	■	■	■
LTC - Low terminal covers	■	■	■	■	■	■	■	■	■ <sup>(1)</sup>	■ <sup>(1)</sup>	■	■	■	■
HTC-ES - Extended high terminal covers	-	-	-	-	-	-	-	-	■	■	-	-	-	-
HTC_BS - High terminal cover with back shield <sup>(2)</sup>	-	-	-	-	-	-	-	-	■	■	-	-	-	-
HTC-ES_BS - Extended high terminal covers with back shield <sup>(2)</sup>	-	-	-	-	-	-	-	-	■	■	-	-	-	-

(1) LTC height for XT5 is equal to 0.98 in; (2) Not compatible with XT5 Fixed Part



Phase separators

## Phase separators

Phase separators increase the insulation characteristics between phases at the connection level. They are mounted from the front, even when the circuit-breaker has already been installed, by inserting them into the corresponding slots. The phase separators guarantee adequate circuit-breaker installation and correct insulation and are listed in the Chapter “Power connection”.

The following versions of phase separators are available:

- Low phase separators
- Medium phase separators
- High phase separators
- Rear phase separators for fixed part only

	XT1	XT2	XT3	XT4	XT5	XT6	XT7/XT7 M
Phase separator - low	[in] 0.98	0.98	0.98	0.98	0.98	-	-
Phase separator - medium	[in] 3.94	3.94	3.94	3.94	3.94	3.94	3.94
Phase separator - high	[in] 7.87	7.87	7.87	7.87	7.87	7.87	7.87
Rear phase separator for FP	[in] 3.54	3.54	3.54	3.54	3.54	-	-

## Sealable screws for terminal covers

The lead sealing kit consists of screws which prevent the removal of the terminal covers, providing protection against direct contacts and tampering. The screws can be locked with wire and lead seals. Each sealing kit consists of two screws. The maximum number of sealable screws that can be used for each circuit-breaker is given in the table below.

	[No.]	XT1		XT2		XT3		XT4		XT5		XT6	
		3p	4p										
Max number sealable screws for each terminal cover		1	1	1	1	1	2	1	1	1	1	1	1



Sealable screws

# Safety and protection



Fixed padlock in open position



Fixed padlock in the open/closed position



Removable padlock in the open position - PLL



Key lock



Padlock in the open position - PLC



Keylock - KLC



Lock to prevent door opening - DLC

## Padlocks and key locks

Padlocks or key locks prevent the circuit-breaker from being closed and/or opened. They can be fitted:

- directly on the front of the circuit-breaker;
- on the rotary handle operating mechanism;
- on the front for lever operating mechanism;
- on the motor;
- to the fixed part of withdrawable version, to prevent a moving part from being inserted;
- on the front of the thermal-magnetic trip unit, to prevent the adjuster of the thermal part from being tampered with;
- on the shutters of the fixed part.

In the closed position, the locks do not prevent the mechanism from tripping due to the trip unit or a service release.

### Padlocks and keylock for circuit-breaker

Type of lock	Circuit-breaker	Optional/standard supply	Position of circuit-breaker lock	Type of lock	Removability of key	
PLL Fixed padlock device	XT1...XT4	Optional	OPEN/CLOSE	Padlocks max 3 padlocks Ø 0.275 in stem (not supplied)	-	
	XT1...XT4	Optional	OPEN	Padlocks max 3 padlocks Ø 0.275 in stem (not supplied)	-	
	XT5, XT6	Optional	OPEN/CLOSE	Padlocks max 3 padlocks Ø 0.315 in stem (not supplied)	-	
	XT5, XT6	Optional	OPEN	Padlocks max 3 padlocks Ø 0.315 in stem (not supplied)	-	
	XT7 <sup>(1)</sup>	Optional	OPEN	Padlocks max 3 padlocks Ø 0.315 in stem (not supplied)	-	
PLC Fixed padlock device	XT7 M	Optional	OPEN	Padlocks max 3 padlocks Ø 0.157 in stem (not supplied) Padlocks max 2 padlocks Ø 0.315 in stem (not supplied) Padlocks max 1 padlocks Ø 0.275 in stem (not supplied)	-	
	Circuit-breaker	XT1, XT3	Optional	OPEN	Padlocks max 3 padlocks Ø 0.275 in stem (not supplied)	-
		XT5, XT6	Optional	OPEN	Padlocks max 3 padlocks Ø 0.315 in stem (not supplied)	-
KLC Key lock <sup>(2)</sup>	XT1...XT7	Optional	OPEN	Ronis 1228 Same key (A, B, C, D type)	OPEN	
	XT1...XT7	Optional	OPEN	Ronis 1228 Different key	OPEN	
	XT1...XT7	Optional	OPEN	Ronis 1228 Same key (A, B, C, D type)	OPEN/CLOSE	
	XT7 M	Optional	OPEN	Giussani Same key (20005/6/7/8/9)	OPEN	
	XT7 M	Optional	OPEN	Giussani Different key	OPEN	
KLC Arrangement key lock	XT5...XT6	Optional	OPEN	Kirk, Ronis 1104 and STI key lock	OPEN	
	XT7	Optional	OPEN	Kirk, Ronis 1104, STI and Castell key lock	OPEN	
	XT7 M	Optional	OPEN	Kirk, Ronis 1104, STI and Castell <sup>(3)</sup> key lock	OPEN	
DLC - Lock to prevent door opening when the circuit-breaker is in the closed position	XT7, XT7 M	Optional	-	This prevents the compartment door from being opened when the circuit-breaker is in the closed position (and with the circuit-breaker racked-in in case of withdrawable circuit-breakers). It also blocks the circuit-breaker from closing when the compartment door is open.	-	

(1) For XT7, the PLL is directly integrated in the plastic cover of the circuit-breaker

(2) For the XT1, XT2, XT3 and XT4, the KLC is incompatible with the electrical accessories mounted on the third pole.

(3) Factory mounted only

**Padlocks and keylocks for handles**



RHD with key lock



RHE with key lock

Type of lock	Circuit-breaker	Optional/standard supply	Position of circuit-breaker lock	Type of lock	Removability of key
RHL Key lock <sup>(1)</sup>	XT1...XT7	Optional	OPEN	Ronis 1228 Same key (A, B, C, D type)	OPEN
	XT1...XT7	Optional	OPEN	Ronis 1228 Different key	OPEN
	XT1...XT7	Optional	OPEN	Ronis 1228 Same key (A, B, C, D type)	OPEN/CLOSE
RHL Key lock for panel door with RHE	XT5...XT7	Optional	OPEN/CLOSE	Ronis 1228 Different key	OPEN/CLOSE
Rotary handle (RHD/RHE/RHS)	Padlock device XT1...XT4	standard	OPEN	Padlocks max 3 padlocks Ø 0.236 in stem (not supplied)	-
	Padlock device XT5...XT7	standard	OPEN	Padlocks max 3 padlocks Ø 0.314 in stem (not supplied)	-
	Additional padlock device XT5...XT7	standard with dedicated RH code	OPEN	Padlocks max 3 padlocks Ø 0.314 in stem (not supplied)	-
Door lock <sup>(2)</sup>	XT1...XT7	standard	Door locked when CB is closed	-	-

(1) On the transmitted rotary handle (RHE), the lock is mounted on the base. The key lock is not available on the lateral handle (RHS).

(2) The door lock can be temporarily excluded with a specific tool in exceptional cases, so that the door can be opened without opening the circuit-breaker.

**Padlocks and keylocks for front for the lever operating mechanism**



FLD with key lock

Type of lock	Circuit-breaker	Optional/standard supply	Position of circuit-breaker lock	Type of lock	Removability of key
KLC Key lock	XT1...XT6	Optional	OPEN	Ronis 1228 Same key (A, B, C, D type)	OPEN
	XT1...XT6	Optional	OPEN	Ronis 1228 Different key	OPEN
	XT1...XT6	Optional	OPEN	Ronis 1228 Same key (A, B, C, D type)	OPEN/CLOSE
Front for the lever operating mechanism (FLD)	Padlock device XT1...XT4	standard	OPEN	Padlocks max 3 padlocks Ø 0.236 in stem (not supplied)	-
	Padlock device XT5...XT6	standard	OPEN	Padlocks max 3 padlocks Ø 0.314 in stem (not supplied)	-
Door lock	XT2, XT4, XT5, XT6	standard	Door locked when CB is closed	-	-

# Safety and protection

## Padlocks and keylocks for motors



MOD with key lock



MOE with key lock



Key lock/padlock for withdrawable fixed part



Withdrawable fixed part with key lock/padlock



Padlock in racked-in/ test/racked-out position - PLP

Type of lock	Circuit-breaker	Optional/standard supply	Position of circuit-breaker lock	Type of lock	Removability of key	
Motor (MOD, MOE, MOE-E)	Key lock on motor MOL-D	XT1...XT6	Optional	OPEN	Ronis 1228 Same key (A, B, C, D type)	OPEN
	MOL-S	XT1...XT6	Optional	OPEN	Ronis 1228 Different key	OPEN
	Key lock against manual operation MOL-M <sup>(1)</sup>	XT2-XT4-XT5-XT6	Optional	MANUAL	Ronis 1228 Different key	WITH LOCK INSERTED
	Padlock device	XT1...XT6	standard	OPEN	Padlocks max 3 padlocks Ø 0.314 in stem (not supplied)	-

(1) For MOE and MOE-E only.

## Padlocks and keylocks for fixed parts

Type of lock	Circuit-breaker	Optional/standard supply	Position of circuit-breaker lock	Type of lock	Removability of key
KLF-FP Key lock / padlock for fixed part of withdrawable device <sup>(1)</sup>	XT2, XT4, XT5, XT6	Optional	Key WITHDRAWN/ INSERTED/TEST (if available)	Ronis key 1228 Different + padlocks max 3 padlocks Ø 0.236 in stem (not supplied)	-
			Padlock WITHDRAWN		
	XT2, XT4, XT5, XT6	Optional	Key WITHDRAWN/ INSERTED/TEST (if available)	Ronis key 1228 Same + padlocks max 3 padlocks Ø 0.236 in stem (not supplied)	-
			Padlock WITHDRAWN		
	XT2, XT4	Optional	Key WITHDRAWN/ INSERTED	Giussani key Different + padlocks max 3 padlocks Ø 0.236 in stem (not supplied)	-
			Padlock WITHDRAWN		
	XT2, XT4	Optional	Key WITHDRAWN/ INSERTED	Giussani key Same + padlocks max 3 padlocks Ø 0.236 in stem (not supplied)	-
			Padlock WITHDRAWN		
	XT5, XT6	Optional	Key WITHDRAWN/ INSERTED/TEST (if available)	Arrangement for STI, Ronis 1104B key + padlocks max 3 padlocks Ø 0.236 in stem (not supplied)	-
KLP Key lock in racked-in/racked/ test/racked-out position - KLP	XT7, XT7 M	Optional	Key WITHDRAWN/ INSERTED/ TEST	Giussani Same key (20005/6/7/8/9)	-
			Key WITHDRAWN/ INSERTED/TEST	Giussani Different key	-
Arrangement KLP Key lock in racked-in/racked/ test/racked-out position - KLP	XT7, XT7 M	Optional	Key WITHDRAWN/ INSERTED/TEST	Kirk, Ronis 1104 and STI key lock	-
PLP Padlock in racked-in / test / racked-out position	XT7, XT7 M	Optional	Key WITHDRAWN / INSERTED / TEST	Padlocks max 3 padlocks Ø 314 in stem (not supplied)	-

(1) For the XT5 and XT6 this lock/padlock cannot be used with rear mechanical interlock

### Lock for thermal regulation

Type of lock	Circuit-breaker	Optional/standard supply	Position of circuit-breaker lock	Type of lock	Removability of key
Trip Unit	Lock for thermal regulation <sup>(1)</sup>	XT1, XT3	Optional	-	-
		XT2, XT4, XT5, XT6	standard	-	-

(1) This is applied to the cover of the circuit-breakers on level with the regulator of the thermal element of the thermal-magnetic release TMD and prevents it from being tampered with.

### Lock for shutters of fixed parts

Type of lock	Circuit-breaker	Optional/standard supply	Position of circuit-breaker lock	Type of lock	Removability of key
Fixed Part	Shutter lock - SL	XT7, XT7 M	Optional	Padlocks max 3 padlocks Ø 8mm stem (not supplied)	-

## IP Protection Kit

In order to improve the IP protection degree, some additional kits can be used.

### IP54 Protection flange for direct rotary handle (RHD)

This flange can be mounted with the direct rotary handle of the XT5, XT6 and XT7 to guarantee an IP54 degree of protection.

With this flange is not possible to open the panel door when the circuit-breaker is in the closed position.

### IP54 Protection for transmitted rotary handle (RHE)

This device can be fixed onto the transmitted rotary and lateral handle of the XT1, XT2, XT3 and XT4 allowing an IP54 degree of protection to be achieved. The IP degree of the transmitted rotary handle for the XT5, XT6 and XT7 is IP65 as standard without an additional accessory.



IP54 protection



IP54 protection for XT7 M

### IP54 Protection flange for the MOE and XT7 M

This transparent cover completely protects the front of the circuit-breaker, guaranteeing an IP54 degree of protection. This accessory is provided with a double key lock (same or different keys).

This cover is available for the XT5 MOE/MOE-E, XT6 MOE and for the XT7 M circuit-breaker.

# Safety and protection



Protection device for opening and closing pushbuttons - PBC

## Protection device for opening and closing pushbuttons - PBC

This accessory is applied to the safety cover of the XT7 M and is available in two versions.

The push-button protection device blocks the operations on both the opening and closing push-buttons unless a special key is used.

The padlockable push-button protection device makes it possible to block either or both push-buttons and to lock the covers in place. It does not trip the breaker as a standard "Padlock device" would. The protection device for opening and closing push-buttons is an alternative to PLC padlocks.



Mechanical operation counter - MOC

## Mechanical operation counter - MOC

The mechanical operation counter is available on the Tmax XT7 M only. This mechanical operation counter is visible on the front of the circuit-breaker and allows the user to see how many mechanical operations the device has performed.



Circuit-breaker with optional flange

## Flange

This is a plastic plate that acts as an interface between the circuit-breaker and the hole in the panel door. All the Tmax XT flanges are newly designed and do not require screws for installation. The flanges can be applied:

- around the front part of the fixed/plug-in circuit-breaker;
- around the operating lever for all fixed/plug-in/withdrawable version circuit-breakers;
- around the MOD or MOE motor operator;
- around the front of FLD locks;
- around the direct rotary handle operating mechanism;
- around the RC Inst, RC Sel for the XT1 and XT3, and around the RC Sel for the XT2, XT4 and XT5.



Rotary handle with flange

## Anti tampering transparent sealable cover

This transparent sealable cover offers the possibility to have an additional protection against tampering with the installation of a lead seal.

Transparent sealable cover is available for 3P versions of Ekip Touch and Ekip Hi-Tuouch.



MOE with flange



XT1-XT3 circuit-breaker with standard flange



XT7 and XT7 M flanges



MOD with flange



XT2-XT4 circuit-breaker with standard flange

# Interlocks

Operating mechanism		XT1	XT2	XT3	XT4	XT5	XT6	XT7	XT7 M
Rear mechanical interlock	MIR Horizontal	■	■	■	■	■	■	-	-
	MIR Vertical	■	■	■	■	■	■	-	-
Cable interlocks	Type A (2 CBs)	-	-	-	-	-	-	■	■
	Type B, C and D (3 CBs)	-	-	-	-	-	-	■	■



Interlock

## Rear mechanical interlock

This is a support designed for installation on the rear of two circuit-breakers to be interlocked. It prevents the two circuit-breakers on which it is installed from closing simultaneously by linking components. Tmax XT circuit-breakers can be interlocked two-by-two (IO-OI-OO) by means of a chassis and special plates. Interlocked circuit-breakers can be in fixed, plug-in or withdrawable versions. Both circuit-breakers and switch-disconnectors in the 3 and 4 pole versions can be interlocked.

The allowed combinations are:

	XT1	XT2	XT3	XT4	XT5	XT6
XT1	■	■	■	■		
XT2	■	■	■	■		
XT3	■	■	■	■		
XT4	■	■	■	■	■	
XT5				■	■	■
XT6					■	■

The following equipment must be ordered to make a rear interlock:

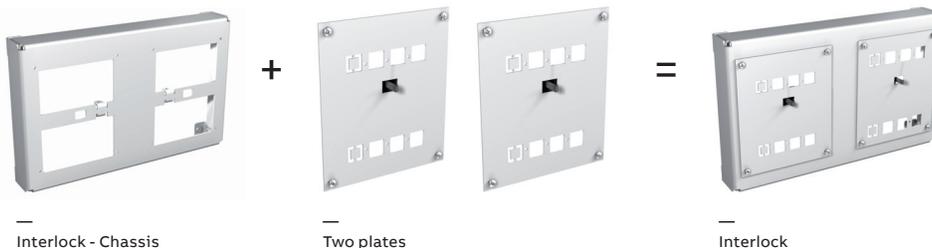
- a vertical or horizontal chassis;
- a plate for each circuit-breaker to be interlocked.

For using an XT4 on an XT5 chassis and an XT5 on an XT6 chassis, dedicated plates are necessary.

Please note that remote closing commands sent to interlocked circuit-breakers in the open position must be prevented in order to ensure the correct functioning of the mechanical interlock. If this is not possible, key locks in the open position for the MOE are necessary.

With the XT5 and XT6 interlock chassis, for withdrawable version circuit-breakers, the use of the key-lock/padlock for fixed parts (KLF) is not allowed.

When vertical chassis is used, the bottom terminals of the upper circuit-breaker and the top terminals of the lower circuit-breaker must be of rear type.



Interlock - Chassis

Two plates

Interlock

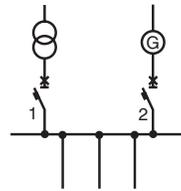
# Interlocks

## Cable interlocks

These interlock systems, for the Tmax XT7 and XT7 M, enable various opening and closing configurations to be obtained between two or three circuit-breakers. Four types of interlock configuration are available:

### Type A

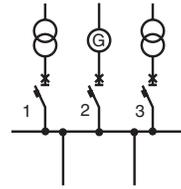
Excludes the possibility of having two circuit-breakers in the closed position at the same time.



1	2
O	O
I	O
O	I

### Type B

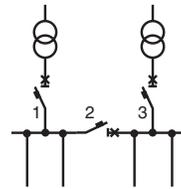
Permits a pair of circuit-breakers to be closed if the third is open. The latter can only be closed when the paired circuit-breakers are open.



1	2	3
O	O	O
I	O	O
O	O	I
I	O	I
O	I	O

### Type C

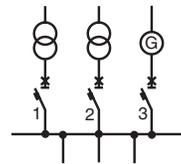
Permits two out of three circuit-breakers to be closed at the same time.



1	2	3
O	O	O
I	O	O
O	I	O
O	O	I
O	I	I
I	I	O
I	O	I

### Type D

Permits one out of three interlocked circuit-breakers to be closed.



1	2	3
O	O	O
I	O	O
O	I	O
O	O	I

The mechanical interlocks offer multiple solutions for installation that simplify their integration into the switchgear. The interlocks can be mounted:

- vertically VR
- horizontally HR

Maximum distance between two interlocked XT7 breakers is 2750mm in the horizontal configuration and 1000mm in the vertical one. Mechanical interlocks are not compatible with AUX 15Q and the lock for preventing door opening when the circuit-breaker is in the closed position (DLC) and mounted on the right side.

# Residual current protection according to IEC 60947-2 Annex B <sup>(1)</sup>

## Residual current release

Both circuit-breakers and molded case switches are pre-engineered for assembly combined with residual current releases.

Residual current circuit-breakers derived from the circuit-breaker are known as “mixed”, meaning that, besides protection against the typical overloads and short-circuits, they also provide protection for people and against earth fault currents, thus protecting against direct, indirect contacts and risk of fire. Residual current circuit-breakers derived from molded case switches are “pure” residual current circuit-breakers, i.e. they only provide residual current protection and not the protection typical of circuit-breakers. “Pure” residual current circuit-breakers are only sensitive to earth fault currents and are generally used as main switches in small panels for distribution to end users.

Use of “pure” and “mixed” residual current circuit-breakers allows the insulation state of the installation to be continuously monitored. It ensures efficient protection against the risk of fire and explosions and also protects people against indirect and direct contacts, thereby integrating the compulsory measures established by the accident prevention Standards and Regulations.

The residual current releases comply with the following Standards:

- IEC 60947-2 Annex B;
- IEC 61000 for protection against unwanted tripping.

The table below gives all the residual current devices that can be used in combination with SACE Tmax XT family:

		XT1		XT2		XT3		XT4		XT5	
		3p	4p	3p	4p	3p	4p	3p	4p	3p	4p
Instantaneous residual current device	RC Inst	F	F			F	F				
Selective residual current device	RC Sel XT1-XT3	F	F			F	F				
	RC Sel 200		F								
	RC Sel XT2-XT4						F-P-W			F-P-W	
	RC Sel XT5										F-P-W
Type B residual current device	RC Type B XT3						F				
	RC Type B XT5										F-P-W

Tmax XT residual current devices:

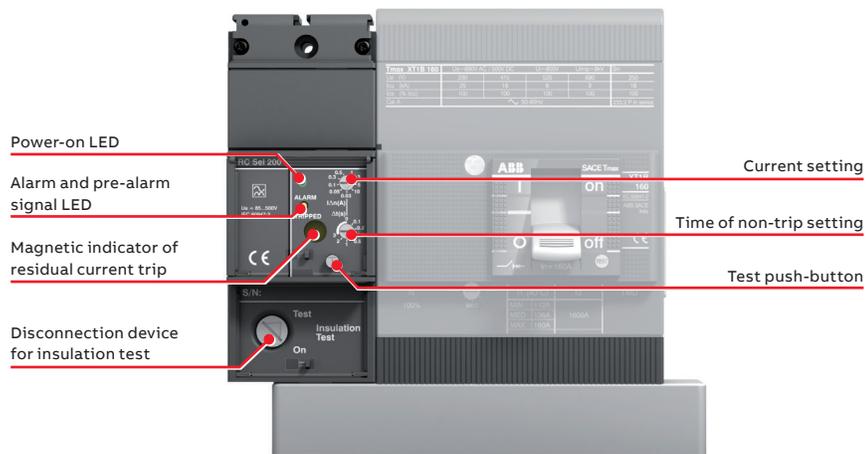
- are designed for XT1, XT2, XT3 and XT4 microprocessor technology and act directly on the circuit-breaker by means of a dedicated opening solenoid (supplied with the residual current release and also available as a spare part) which must be housed in the relevant slot formed in the third pole on the left of the operating lever;
- are designed for XT5 feature microprocessor technology and act directly on the circuit-breaker by means of a dedicated mechanism integrated in the residual current itself;
- do not need an auxiliary supply as they are powered directly from the mains;
- can be supplied either from above or below;
- provide guaranteed functionality even with a single phase plus neutral or just two live phases and in the presence of pulsating unidirectional currents with direct components (minimum auxiliary voltage PHASE-NEUTRAL 85 Vrms);
- permit all possible connection combinations, as long as the neutral connection to the first pole on the left in the four-pole version is guaranteed.

(1) All the devices described in this section are not UL listed

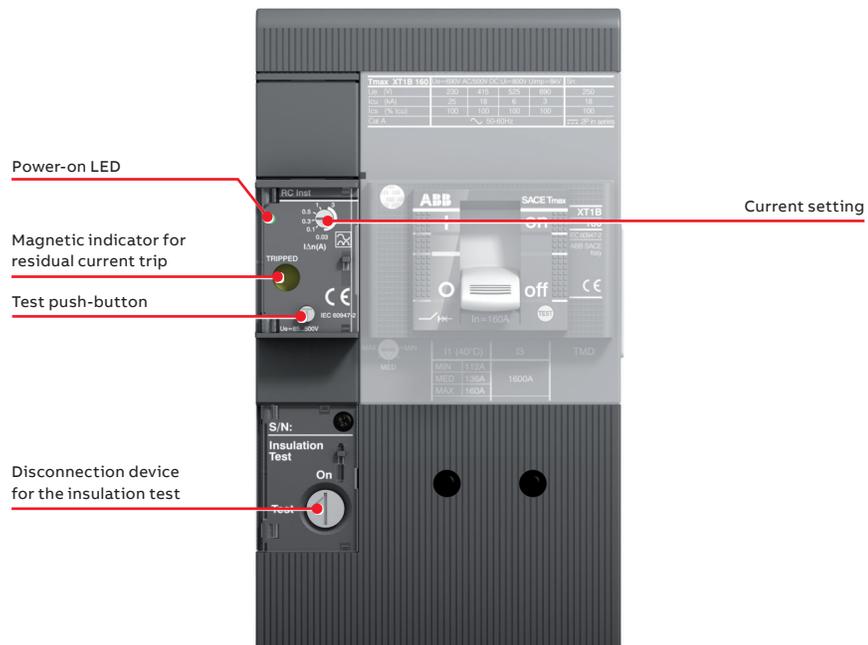
# Residual current protection

## RC Sel residual current releases (type A) XT1

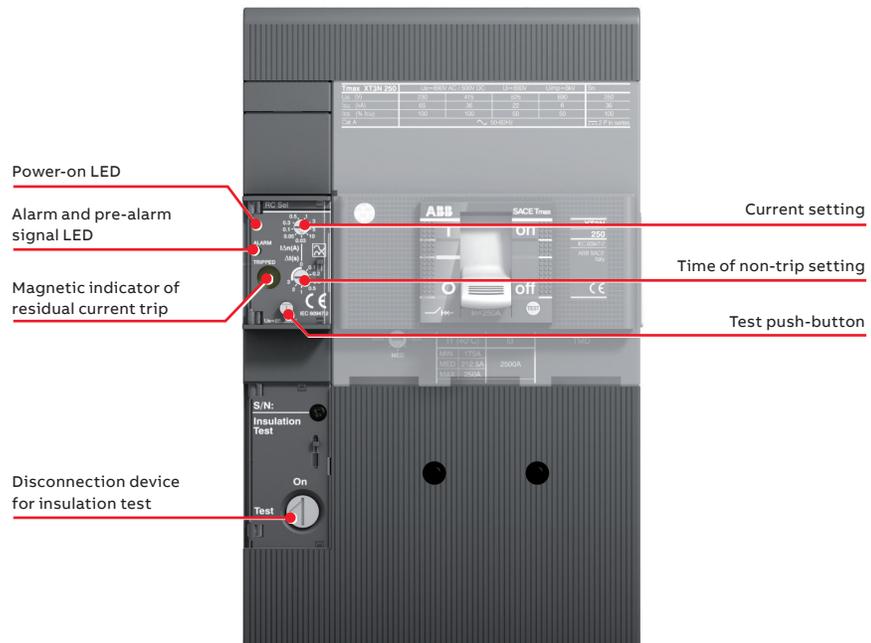
Thanks to its low height, the RC Sel 200 residual current release can be installed in 7.87in modules. Moreover, its special shape reduces the overall size of the installation if two or more units are installed side by side.



## RC Inst residual current releases for XT1 and XT3

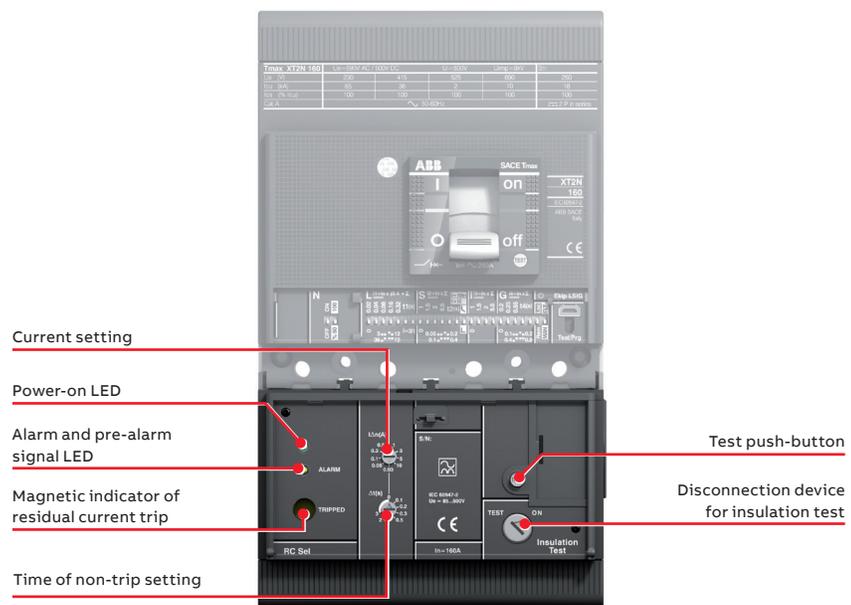


**RC Sel current releases (type A) for XT1 and XT3**



With the RC Inst and RC Sel residual current releases for the XT1 - XT3 available in fixed versions only, it is possible to make rear terminal connections by ordering the RC Rear terminal 4p kits.

**RC Sel residual current releases for XT2 and XT4**



# Residual current protection

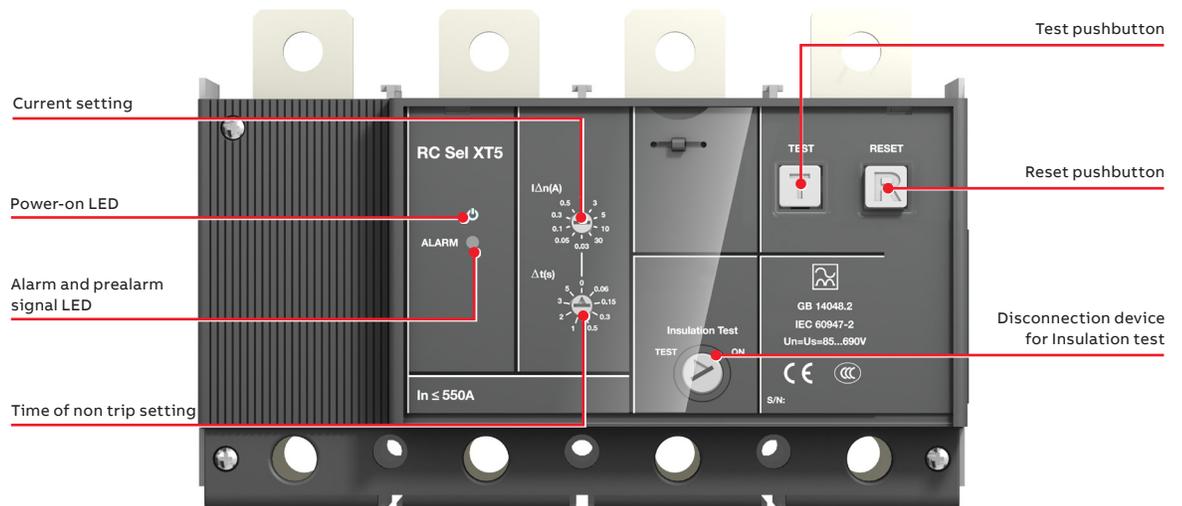
The fixed version of the RC Sel residual current release can be easily converted:

- into a plug-in type of release:
  - by ordering the kit for converting the residual current release from the fixed to the plug-in version
- into a withdrawable type of release:
  - by ordering the kit for converting the residual current release from the plug-in to the withdrawable version. This kit contains the shunt opening release of the withdrawable residual current device to replace the shunt opening release supplied with the fixed version. The shunt opening release of the withdrawable residual current device contains both the connector for the moving part and the connector for the fixed part.

With the RC Sel residual current release for the XT2-XT4, it is possible to use the same terminals for the fixed circuit-breaker and for the fixed parts of the plug-in and withdrawable circuit-breakers.

With the withdrawable and plug-in versions, frame 160A with RC can be used up to a maximum current of 135A, whereas frame 250A can be used up to 210A.

## RC Sel current releases (type A) for XT5



The fixed version of the RC Sel residual current release can easily be converted:

- into a plug-in type of release:
  - by ordering the kit for converting the residual current release from the fixed to the plug-in version into a withdrawable type of release:
- by ordering the kit for converting the residual current release from the plug-in to the withdrawable version.

With the RC Sel residual current release for the XT5, it is possible to use the same terminals for the fixed circuit-breaker and for the fixed parts of the plug-in and withdrawable circuit-breakers.

RC Sel for XT5 is a four poles version that can be mounted on a four pole circuit breaker.



# Residual current protection

Electrical characteristics	Residual current devices				
	RC Sel 200 XT1	RC Inst XT1-XT3	RC Sel XT1-XT3	RC Sel XT2-XT4	RC Sel XT5 <sup>(3)</sup>
Primary power supply voltage [V]	85...690	85...690	85...690	85...690	85...690
Operating frequency [Hz]	45...66	45...66	45...66	45...66	45...66
Fault frequency [Hz]	50-60	50-60	50-60	50-60	50-60
Test operating range [V]	85...690	85...690	85...690	85...690	85...690
Rated operating current [A]	up to 160	XT1 up to 160 XT3 up to 250	up to 160 XT1 up to 250 XT3	up to 160 XT2 <sup>(2)</sup> up to 250 XT4 <sup>(2)</sup>	up to 550A <sup>(2)</sup>
Adjustable trip thresholds [A]	0.03-0.05-0.1- 0.3-0.5-1-3-5-10	0.03-0.1-0.3 0.5-1-3	0.03-0.05-0.1- 0.3-0.5-1-3-5-10	0.03-0.05-0.1- 0.3-0.5-1-3-5-10	0.03-0.05-0.1-0.3 0.5-1-3-5-10-30
Selective type S	■	-	■	■	■
Adjustable NON-trip time settings [s] at 2xI <sub>Δn</sub>	Instantaneous 0.1-0.2-0.3- 0.5-1-2-3	Instantaneous	Instantaneous 0.1-0.2-0.3- 0.5-1-2-3	Instantaneous 0.1-0.2-0.3- 0.5-1-2-3	Instantaneous 0.06-0.15-0.3- 0.5-1-2-3-5
Power input	<5 W at 690V AC	<5 W at 690V AC	<5 W at 690V AC	<5 W at 690V AC	<5 W at 690V AC
Trip Coil with switch contact for trip signal	■	■	■	■	■
Input for remote controlled opening command	■	-	■	■	■
NO contact for pre-alarm signal	■	-	■	■	■
NO contact for alarm signal	■	-	■	■	■
Pre-alarm indication from 25% I <sub>Δn</sub> . Steady yellow LED light	■	-	■	■	■
Alarm timing indication at 75% I <sub>Δn</sub> . Flashing yellow LED light <sup>(1)</sup>	■	-	■	■	■
Type A for pulsating alternating current	■	■	■	■	■
Type AC for alternating current	■	■	■	■	■

(1) Indication of alarm timing at 90% I<sub>Δn</sub> for 30mA for XT1, XT2, XT3 and XT4. Indication of alarm timing at 75%I<sub>Δn</sub> for 30mA for XT5

(2) Plug-in and withdrawable version: the 160 frame can be used with a max I<sub>n</sub> = 135A  
the 250 frame can be used with a max I<sub>n</sub> = 210A  
the 400 frame can be used with a max I<sub>n</sub> = 300A  
the 600 frame can be used with a max I<sub>n</sub> = 400A

(3) Bottom supply only for circuit-breakers with U<sub>e</sub> up to 500V

Electrical characteristics	Residual current devices	
	RC B Type XT3	RC Type B XT5
Primary power supply voltage [V]	110...500	85...690 <sup>(3)</sup>
Operating frequency [Hz]	45...66	45...66
Fault frequency [Hz]	400-700-1000	400-700-1000
Test operating voltage [V]	110...500	85...690
Rated operating current [A] <sup>(2)</sup>	Up to 225	Up to 550
Adjustable NON-trip time settings [s] at 2xI $\Delta$	Instantaneous 0-0.1-0.2-0.3-0.5-1-2-3	Instantaneous 0 - 0.06 - 0.15 - 0.3 - 0.5 - 1 - 2 - 3 - 5
Power Consumption	<10 W	<10 W at 500V AC
Trip Coil with switch contact for trip signal	■	■
Input for remote controlled opening command	■	■
NO contact for pre-alarm signal	■	■
NO contact for alarm signal	■	■
Steady yellow LED light	■	■
Flashing yellow LED light <sup>(1)</sup>	■	■
Type A for pulsating alternating current, Type AC for alternating current	■	■
Type B for pulsating current and direct current	■	■

(1) XT3 Type B RC: Indication of alarm timing at 90% I $\Delta$ n for 30mA

(2) Plug-in and withdrawable version: the 250 frame can be used with a max I $n$  = 210A  
the 400 frame can be used with a max I $n$  = 300A  
the 600 frame can be used with a max I $n$  = 400A

(3) XT5 Type B RC bottom supply only for circuit-breakers with U $e$  up to 500V

# Residual current protection

## **SACE RCQ020 panel type residual current release**

SACE Tmax XT circuit-breakers can also be used in conjunction with RCQ020 panel type residual current releases with a separate toroid to be installed on the line conductors (“/A” indicates the necessity for an auxiliary power supply).

Thanks to its wide range of settings, the panel release is suitable for:

- applications where the installation conditions are particularly restrictive, such as for circuit-breakers that are already installed or where there is limited space in a compartment where the circuit-breaker is installed;
- creating a residual current protection system coordinated at various distribution levels, from the main switchboard to the end user;
- where residual current protection with low sensitivity is required, e.g. in partial (current) or total (time) selective chains;
- highly sensitive applications (physiological sensitivity) for protecting people against direct contacts.

Thanks to the 115-230...415V external auxiliary power supply, the RCQ020 panel type residual current device is able to detect current leakages from 30mA to 30A and to act with a trip time that can be adjusted from instantaneous to a delay of 5s. The opening mechanism is an indirect action type and acts on the circuit-breaker release mechanism by means of the shunt opening or an undervoltage release of the circuit-breaker itself.

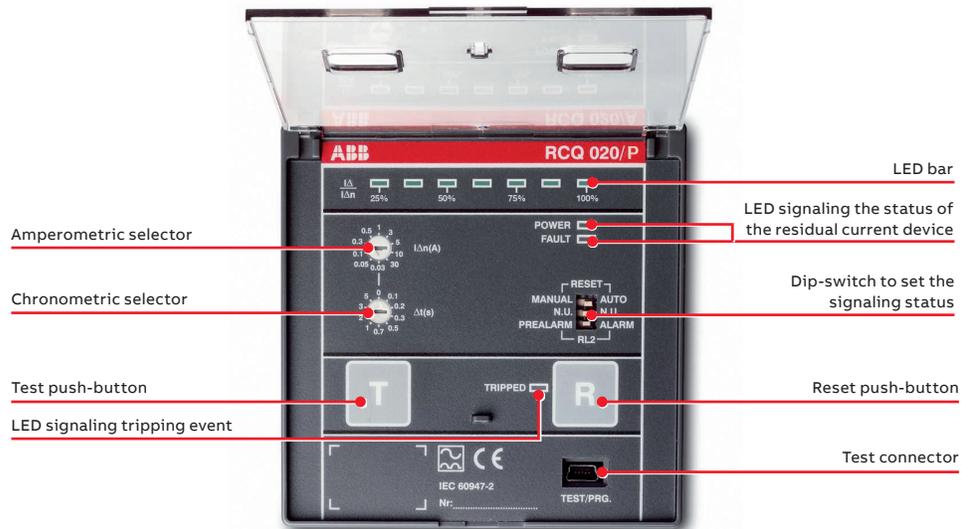
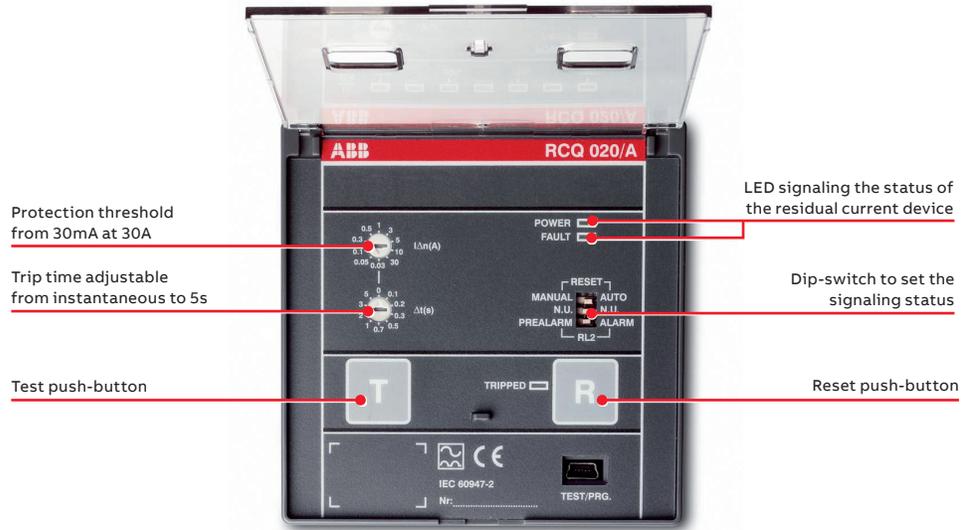
The opening command to the circuit-breaker (trip delay) can be temporarily inhibited, and the circuit-breaker can be opened by remote control by means of the RCQ020 device.

The following equipment must be requested when ordering:

- the RCQ020 device itself;
- an opening coil (SOR) or an undervoltage release (UVR) of the circuit-breaker to be housed in the relative slot made in the left pole of the circuit-breaker itself;
- a closed toroid, which can be used for both cables and busbars, with a diameter from 60mm to 185mm.

Signals available:

- LED to indicate the status of the residual current device (supplied or not supplied). The RCQ020 is equipped with a positive safety function thanks to which the RCQ020 sends an automatic circuit-breaker opening command in the absence of auxiliary voltage;
- LED for fault signaling;
- LED for signaling tripping of the residual current device;
- electrical pre-alarm/alarm/trip signals.



# Residual current protection

Power supply Voltage	/A	AC [V]	115-230...415
	/P	AC [V]	110...690
	/P	DC [V]	110...125
Operating frequency		[Hz]	45÷66
Inrush current	/A	@115 V AC	500 mA for 50 ms
	/A	@230 V AC	150 mA for 50 ms
	/A	@415 V AC	100 mA for 50 ms
	/P	@110 V AC	300 mA for 50 ms
	/P	@690 V AC	2 A for 50 ms
	/P	@125 V DC	500 mA for 50 ms
Rated Power	/A		2 [VA] / 2 [W]
	/P	@115 V AC	max 3 W
	/P	@230 V AC	max 3 W
	/P	@690 V AC	max 4 W
	/P	@125 V DC	max 2 W
Trip threshold adjustment I $\Delta$ n		[A]	0.03-0.05-0.1-0.3-0.5-1-3-5-10-30
No trip time adjustment		[s]	instantaneous 0.1-0.2-0.3-0.5-0.7-1-2-3-5
Pre-alarm threshold		x I $\Delta$ n	25%
A type for pulsing alternate current			■
<b>Signals</b>			
Device powered visual signaling			■
Visual signaling of device not functioning / not configured			■
Visual signaling of residual current protection			■
Electrical alarm/pre-alarm signal			■
Electric trip signal			■
<b>Controls</b>			
Remotely controlled opening command			■
Remotely controlled reset command			■
<b>Operating range of closed transformers</b>			
Ø 2.36 [in] toroidal transformer		[A]	In max = 250 A - Use 0.03...30 A
Ø 4.33 [in] toroidal transformer		[A]	In max = 400 A - Use 0.03...30 A
Ø 7.28 [in] toroidal transformer		[A]	In max = 800 A - Use 0.1...30 A
Connection to toroidal transformer			By means of 4 shielded or twisted conductors. Maximum tolerated length: 50 ft
Dimensions W x H x D		[mm/in]	[96x96x77] / [3.77x3.77x3]
Drilling for assembly on door standard		[mm/in]	[92x92] / [6.62x3.62]
			IEC 60947-2 annex M

# Compatibility of accessories

## Fixed and plug-in versions

Check whether the different devices are compatible/incompatible with each other when ordering accessories. The following table provides a simple check of the compatibility between mechanical and electrical accessories. To understand the abbreviations used to identify the accessories more easily, refer to the "Glossary" at the end of the section.



Three-pole circuit-breaker



Four-pole circuit-breaker

### How to read compatibility tables - an example

Fixed/plug-in circuit-breaker compatibility XT1-XT3						
	SOR 3p	UVR 3p	3Q 3p	SOR 4p	UVR 4p	.....
SOR 3p	↑	↑	↑	✓	✓	
UVR 3p <sup>1</sup>	→	→	→	✓	✓	
3Q sx 3p				✓	✓	
SOR 4p	✓	✓	✓		✓	
UVR 4p	✓	✓	✓	✓ [...]		
[...]						

The UVR positioned in the slot of the 3rd pole<sup>(1)</sup> is:

- incompatible with the SOR positioned on the 3<sup>rd</sup> pole<sup>(2)</sup>;
- incompatible with the UVR positioned on the 3<sup>rd</sup> pole<sup>(3)</sup>;
- incompatible with the 3Q contacts on the left of the 3<sup>rd</sup> pole<sup>(4)</sup>;
- compatible with the SOR positioned in the slot of the 4<sup>th</sup> pole<sup>(5)</sup>;
- compatible with the UVR positioned in the slot of the 4<sup>th</sup> pole<sup>(6)</sup>.
- [...]

### Tmax XT1-XT3

	RHD	RHE	RHS	FLD	MOD	Flange handle	PLL on CB	KLC on CB	RHL	MOL on motor	SOR/UVR 3p	3Q left 3p	RC SA 3p	SOR/UVR 4p	3Q left 4p	1Q+1SY	2Q+1SY	3Q+1SY	AUE
RHD									✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
RHE									✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
RHS											✓	✓	✓	✓	✓	✓	✓	✓	✓
FLD									✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
MOD										✓	✓	✓	✓	✓	✓	✓	✓	✓	✓ <sup>(1)</sup>
Flange handle											✓	✓	✓	✓	✓	✓	✓	✓	✓
PLL on CB											✓	✓	✓	✓	✓	✓	✓	✓	✓
KLC on CB																			
RHL	✓	✓		✓							✓	✓	✓		✓	✓	✓	✓	✓
MOL on motor					✓						✓	✓			✓	✓	✓	✓	✓
SOR/UVR 3p	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓
3Q left 3p	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓
RC SA 3p	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓
SOR/UVR 4p	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
3Q left 4p	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓
1Q+1SY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
2Q+1SY	✓	✓	✓	✓	✓ <sup>(1)</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
3Q+1SY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AUE	✓	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ Compatible; (1) Not valid for XT1

# Compatibility of accessories

## Tmax XT2-XT4

### Circuit-breakers with thermal-magnetic or electronic Ekip Dip trip units

	RHD	RHE	RHS	FLD	MOE/MOE-E	Flange handle	PLL on CB	KLC on CB	RHL	MOL on motor	SOR/UVR 3p	3Q left 3p	RC SA 3p	SOR/UVR 4p	3Q left 4p	1Q+1SY	2Q+1SY	3Q+1SY	3Q+2SY	2Q+2SY+1S51	1S51	400V 2Q	400V 1Q+1SY	AUE	Ekip COM STA RTU / Ekip Com Modbus RTU Dip <sup>(1)</sup>	Ekip COM STA TCP	
RHD									✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RHE									✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RHS											✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FLD									✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MOE/MOE-E										✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Flange handle											✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PLL on CB											✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
KLC on CB														✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RHL	✓	✓		✓							✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MOL on motor					✓						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SOR/UVR 3p	✓	✓	✓	✓	✓	✓	✓		✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3Q left 3p	✓	✓	✓	✓	✓	✓	✓		✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RC SA 3p	✓	✓	✓	✓	✓	✓	✓		✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SOR/UVR 4p	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3Q left 4p	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1Q+1SY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						✓		✓				
2Q+1SY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							✓		✓			
3Q+1SY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓								✓		✓		
3Q+2SY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓									✓			
2Q+2SY+1S51	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓										✓		
1S51	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
400V 2Q	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓									✓			
400V 1Q+1SY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓									✓			
AUE	✓	✓							✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ekip COM STA RTU / Ekip Com Modbus RTU Dip <sup>(1)</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						✓		✓		✓		
Ekip COM STA TCP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓									✓			

✓ Compatible

(1) Ekip Com Modbus RTU Dip is only available with Ekip C Dip LSI and LSIG trip units

## Circuit-breakers with electronic Ekip Touch and Ekip Hi-Touch trip units

	RHD	RHE	RHS	FLD	MOE/MOE-E	Flange handle	PLL on CB	KLC on CB	RHL	MOL on motor	SOR/UVR 3p	3Q LEFT 3p	RC SA 3p	SOR/UVR 4p	3Q left 4p	AUE	EKIP COM	1Q+1SY	
RHD									✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
RHE									✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
RHS											✓	✓	✓	✓	✓		✓	✓	✓
FLD									✓		✓	✓	✓	✓	✓		✓	✓	✓
MOE/MOE-E										✓	✓	✓	✓	✓	✓		✓	✓	✓
Flange handle											✓	✓	✓	✓	✓		✓	✓	✓
PLL on CB											✓	✓	✓	✓	✓		✓	✓	✓
KLC on CB														✓	✓		✓	✓	✓
RHL	✓	✓		✓							✓	✓	✓	✓	✓	✓	✓	✓	✓
MOL on motor					✓						✓	✓	✓	✓	✓		✓	✓	✓
SOR/UVR 3p	✓	✓	✓	✓	✓	✓	✓		✓	✓				✓	✓	✓	✓	✓	✓
3Q left 3p	✓	✓	✓	✓	✓	✓	✓		✓	✓				✓	✓	✓	✓	✓	✓
RC SA 3p	✓	✓	✓	✓	✓	✓	✓		✓	✓				✓	✓	✓	✓	✓	✓
SOR/UVR 4p	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
3Q left 4p	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
AUE	✓	✓							✓		✓	✓	✓	✓	✓		✓	✓	✓
Ekip COM	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓*
1Q+1SY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓*

✓ Compatible

\*compatibility only in case of Slim Ekip COM RS-485

# Compatibility of accessories

## Tmax XT5

### Circuit-breakers with thermal-magnetic or electronic Ekip Dip trip units

	RHD	RHE	CK RHE->RHS	FLD	MOE/MOE-E	Flange handle	PLL on CB	KLC on CB	RHL	MOL on motor	YO/YU 3p	YO/YU 1p	1Q+1SY	1Q+1SY left	2Q+1SY	3Q+1SY	1S51	1S52	400V 2Q	400V 1Q+1SY	AUE	Ekip COM STA RTU/TCP	
RHD	✓								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RHE		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CK RHE->RHS		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FLD				✓					✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MOE/MOE-E					✓					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Flange handle						✓					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PLL on CB							✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
KLC on CB								✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RHL	✓	✓	✓	✓							✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MOL on motor					✓					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YO/YU 3p	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YO/YU 1p	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1Q+1SY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓	✓	✓	✓	✓	✓
1Q+1SY left	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓
2Q+1SY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓	✓	✓	✓	✓	✓	✓
3Q+1SY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓	✓	✓	✓	✓
1S51	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1S52	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
400V 2Q	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
400V 1Q+1SY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AUE	✓	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ekip COM STA RTU/TCP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ Compatible

## Circuit-breakers with electronic Ekip Touch and Ekip Hi-Touch trip units

	RHD	RHE	CK RHE->RHS	FLD	MOE/MOE-E	Flange handle	PLL on CB	KLC on CB	RHL	MOL on motor	YO/YU 3p	YO/YU 1p	1Q+1SY	2Q+1SY	3Q+1SY	1S51	1S52	400V 2Q	AUE	Ekip COM	Ekip 1K	
RHD									✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RHE			✓						✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CK RHE->RHS		✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FLD									✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MOE/MOE-E										✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Flange handle											✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PLL on CB											✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
KLC on CB												✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RHL	✓	✓	✓	✓							✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MOL on motor					✓						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YO/YU 3p	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
YO/YU 1p	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1Q+1SY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓	✓	✓	✓	✓
2Q+1SY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓	✓	✓	✓	✓
3Q+1SY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓	✓	✓	✓	✓
1S51	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
1S52	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
400V 2Q	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓
AUE	✓	✓							✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ekip COM	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ekip 1K	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ Compatible

# Compatibility of accessories

## Tmax XT6

	RHD	RHE	FLD	MOE/MOE-E	Flange handle	PLL on CB	KLC on CB	RHL	MOL on motor	YU 3p	YO 1p	1Q+1SY	2Q+1SY	3Q+1SY	1S51	1S52
RHD								✓		✓	✓	✓	✓	✓	✓	✓
RHE								✓		✓	✓	✓	✓	✓	✓	✓
FLD								✓		✓	✓	✓	✓	✓	✓	✓
MOE/MOE-E									✓	✓	✓	✓	✓	✓	✓	✓
Flange handle										✓	✓	✓	✓	✓	✓	✓
PLL on CB										✓	✓	✓	✓	✓	✓	✓
KLC on CB											✓	✓	✓	✓	✓	✓
RHL	✓	✓	✓							✓	✓	✓	✓	✓	✓	✓
MOL on motor				✓						✓	✓	✓	✓	✓	✓	✓
YU 3p	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓
YO 1p	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
1Q+1SY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓
2Q+1SY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓
3Q+1SY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓
1S51	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
1S52	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	

✓ Compatible

**Tmax XT7**

In addition to the accessories listed in the table below, it is always possible to complement the XT7 circuit-breakers with the Ekip Supply module and up to other two modules. Alternatives to the Ekip supply, 24V and CAN modules can be directly connected by using appropriate terminal blocks.

	RHD	RHE	Flange handle	PLC on CB	KLC on CB	RHL	YO	YU / YO2	4Q	1SY	1551	1552	AUE	Ekip COM act.
RHD						✓	✓	✓	✓	✓	✓	✓	✓	✓
RHE						✓	✓	✓	✓	✓	✓	✓	✓	✓
Flange handle							✓	✓	✓	✓	✓	✓		✓
PLC on CB					✓			✓	✓	✓	✓	✓		✓
KLC on CB				✓			✓	✓	✓	✓	✓	✓		✓
RHL	✓	✓					✓	✓	✓	✓	✓	✓		✓
YO	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
YU / YO2	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
4Q	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓
1SY	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
1551	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
1552	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓
AUE	✓	✓				✓	✓	✓	✓	✓	✓	✓		✓
Ekip COM act.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ Compatible

**Tmax XT7 M**

In addition to the accessories listed in the table below, it is always possible to complement the XT7 M circuit-breakers with the Ekip Supply module and up to other two modules. Alternatives to the Ekip supply, 24V and CAN modules can be directly connected by using appropriate terminal blocks.

	PLC on CB	KLC on CB	PBC	MOC	YO	YU / YO2	YC	YR	RTC	4Q	1551	S33M/2	M	Ekip COM act.	RTC Ekip
PLC on CB		✓													
KLC on CB	✓														
PBC		✓													
MOC	✓	✓													
YO	✓	✓	✓												
YU / YO2	✓	✓	✓	✓											
YC	✓	✓	✓	✓	✓										
YR	✓	✓	✓	✓	✓										
RTC	✓	✓	✓	✓	✓	✓									
4Q	✓	✓	✓	✓	✓	✓									
1551	✓	✓	✓	✓	✓	✓									
S33M/2	✓	✓	✓	✓	✓	✓									
M	✓	✓	✓	✓	✓	✓									
Ekip COM act.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
RTC Ekip	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ Compatible

# Compatibility of accessories

## Withdrawable versions

### Tmax XT2-XT4

#### Circuit-breakers with thermal-magnetic or electronic Ekip Dip trip units

	1S1	1Q+1SY	3Q+1SY	3Q+2SY	2Q+2SY+1S51	2Q 400V	1Q+1SY 400V	Ekip COM STA TCP	Ekip COM STA RTU/ Ekip Com Modbus RTU Dip <sup>(1)</sup>	NE	MOE	MOE-E	AUX-MO	AUE	SOR/UVR 3p	RC SA 3p	SOR/UVR 4p	RHD	RHE	FLD	RHL	MOL on motor	
1S1	✓								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1Q+1SY	✓									✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3Q+1SY										✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3Q+2SY											✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2Q+2SY+1S51											✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2Q 400V										✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1Q+1SY 400V										✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ekip COM STA TCP										✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ekip COM STA RTU/ Ekip Com Modbus RTU Dip <sup>(1)</sup>	✓									✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NE	✓	✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MOE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
MOE-E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
AUX-MO	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
AUE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓	✓	✓	✓	✓	✓	✓
SOR/UVR 3p	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
RC SA 3p	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓
SOR/UVR 4p	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
RHD	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓	✓	✓	✓	✓	✓	✓
RHE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓	✓	✓	✓	✓	✓	✓
FLD	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓	✓	✓	✓	✓	✓	✓
RHL	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓	✓	✓	✓	✓	✓	✓
MOL on motor	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ Compatible

(1) Ekip Com Modbus RTU Dip is only available with Ekip C Dip LSI and LSIG trip units

**Circuit-breakers with electronic Ekip Touch and Ekip Hi-Touch trip units**

	1Q+1SY	Slim Ekip COM Modbus RS 485	Ekip COM	NE	MOE	MOE-E	AUX-MO	AUE	SOR/UVR 3p	RC SA 3p	SOR/UVR 4p	RHD	RHE	FLD	RHL	MOL on motor
1Q+1SY		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Slim Ekip COM Modbus RS 485	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ekip COM				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
NE	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MOE	✓	✓	✓	✓			✓		✓	✓	✓					✓
MOE-E	✓	✓	✓	✓			✓		✓	✓	✓					✓
AUX-MO	✓	✓	✓	✓	✓	✓			✓	✓	✓					✓
AUE	✓	✓	✓	✓					✓	✓	✓	✓	✓		✓	
SOR/UVR 3p	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
RC SA 3p	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
SOR/UVR 4p	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
RHD	✓	✓	✓	✓				✓	✓	✓	✓				✓	
RHE	✓	✓	✓	✓				✓	✓	✓	✓				✓	
FLD	✓	✓	✓	✓					✓	✓	✓					✓
RHL	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓		
MOL on motor	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓					

✓ Compatible

# Compatibility of accessories

## Tmax XT5

### Circuit-breakers with thermal-magnetic or electronic Ekip Dip trip units

	1S52	1S51	1Q+1SY	2Q+1SY	3Q+1SY	2Q 400V	1Q+1SY 400V	Ekip COM STA RTU	Ekip COM STA TCP	MOE	MOE-E	AUE	YO/YU 3p <sup>(1)</sup>	YO/YU 1p	RHD	RHE	FLD	RHL	MOL on motor
1S52		✓	✓	✓	✓					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1S51	✓		✓	✓	✓					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1Q+1SY	✓	✓								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2Q+1SY	✓	✓								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3Q+1SY	✓	✓								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2Q 400V		✓	✓							✓	✓	✓	✓		✓	✓	✓	✓	✓
1Q+1SY 400V		✓	✓	✓	✓	✓				✓	✓	✓		✓	✓	✓	✓	✓	✓
Ekip COM STA RTU		✓	✓	✓		✓				✓	✓	✓		✓	✓	✓	✓	✓	✓
Ekip COM STA TCP		✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MOE	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓					✓
MOE-E	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓					✓
AUE	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓		✓	
YO/YU 3p <sup>(1)</sup>	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
YO/YU 1p	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
RHD	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓					✓
RHE	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓					✓
FLD	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓					✓
RHL	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓		
MOL on motor	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓					

✓ Compatible

(1) JS connector is needed to be able to mount the YO/YU 3p version in the proper slot of the withdrawable fixed part shoulder

**Circuit-breakers with electronic Ekip Touch and Ekip Hi-Touch trip units**

	1S51	1Q+1SY	2Q+1SY	3Q+1SY	2Q 400V	Ekip COM RTU	Ekip COM	MOE	MOE-E	AUE	YO/YU 3p <sup>(1)</sup>	YO/YU 1p	Ekip 1K	RHD	RHE	FLD	RHL	MOL on motor	
1S51	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1Q+1SY	✓					✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
2Q+1SY	✓					✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓
3Q+1SY	✓						✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓
2Q 400V	✓					✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓
Ekip COM RTU	✓	✓	✓		✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ekip COM	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MOE	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓						✓
MOE-E	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓						✓
AUE	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓				✓
YO/YU 3p <sup>(1)</sup>	✓	✓				✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓
YO/YU 1p	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ekip 1K	✓					✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓
RHD	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓						✓
RHE	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓						✓
FLD	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓						✓
RHL	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓			✓
MOL on motor	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓						✓

✓ Compatible

(1) JW connector is needed to enable mounting of the YO/YU 3p version in the proper slot of the withdrawable shoulder  
 The above table is made considering 24V + CAN connectors always present in the withdrawable fixed part shoulder

# Compatibility of accessories

## Tmax XT6

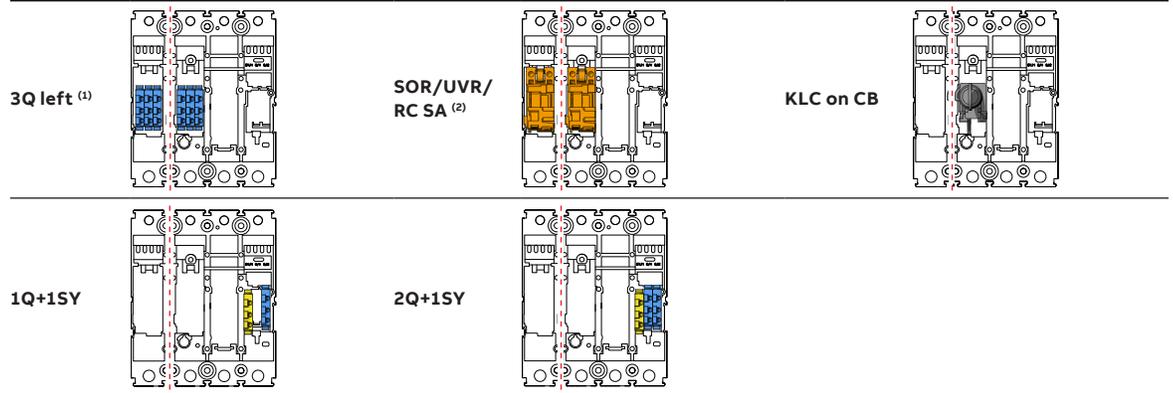
### Circuit-breakers with thermal-magnetic or electronic Ekip Dip trip units

	1S52	1S51	1Q+1SY	2Q+1SY	3Q+1SY	MOE	MOE-E	YU 3p	YO 1p	RHD	RHE	FLD	RHL	MOL on motor
1S52		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
1S51	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1Q+1SY	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓
2Q+1SY	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓
3Q+1SY	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓
MOE	✓	✓	✓	✓	✓			✓	✓					✓
MOE-E	✓	✓	✓	✓	✓			✓	✓					✓
YU 3p		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
YO 1p	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
RHD	✓	✓	✓	✓	✓			✓	✓				✓	
RHE	✓	✓	✓	✓	✓			✓	✓				✓	
FLD	✓	✓	✓	✓	✓			✓	✓					✓
RHL	✓	✓	✓	✓	✓			✓	✓	✓	✓			
MOL on motor	✓	✓	✓	✓	✓	✓	✓	✓	✓					

✓ Compatible

## Position of the internal accessories for the Tmax XT1

### Tmax XT1



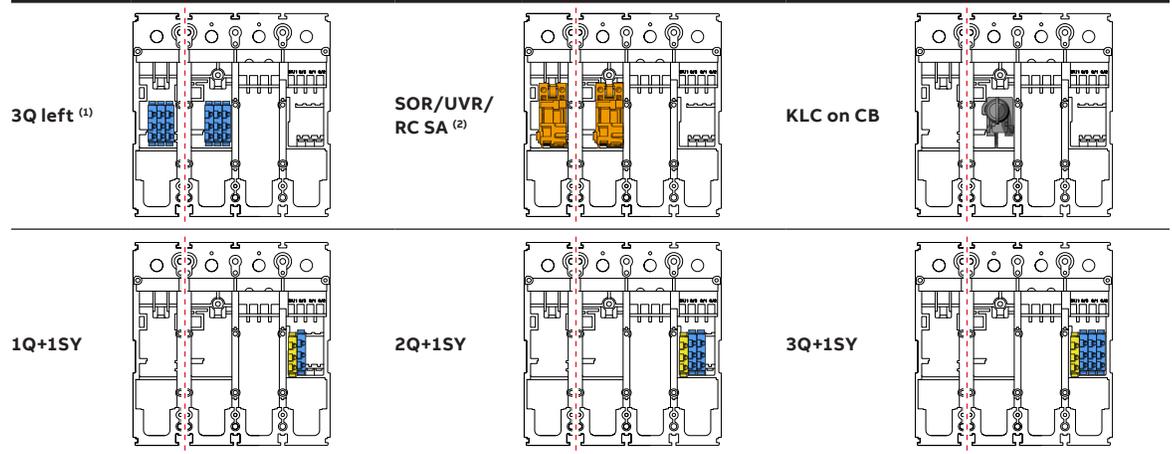
(1) For 4-pole version, 3Q left on the fourth pole only.

(2) RC SA on the third pole only.

# Compatibility of accessories

Position of the internal accessories for the Tmax XT3

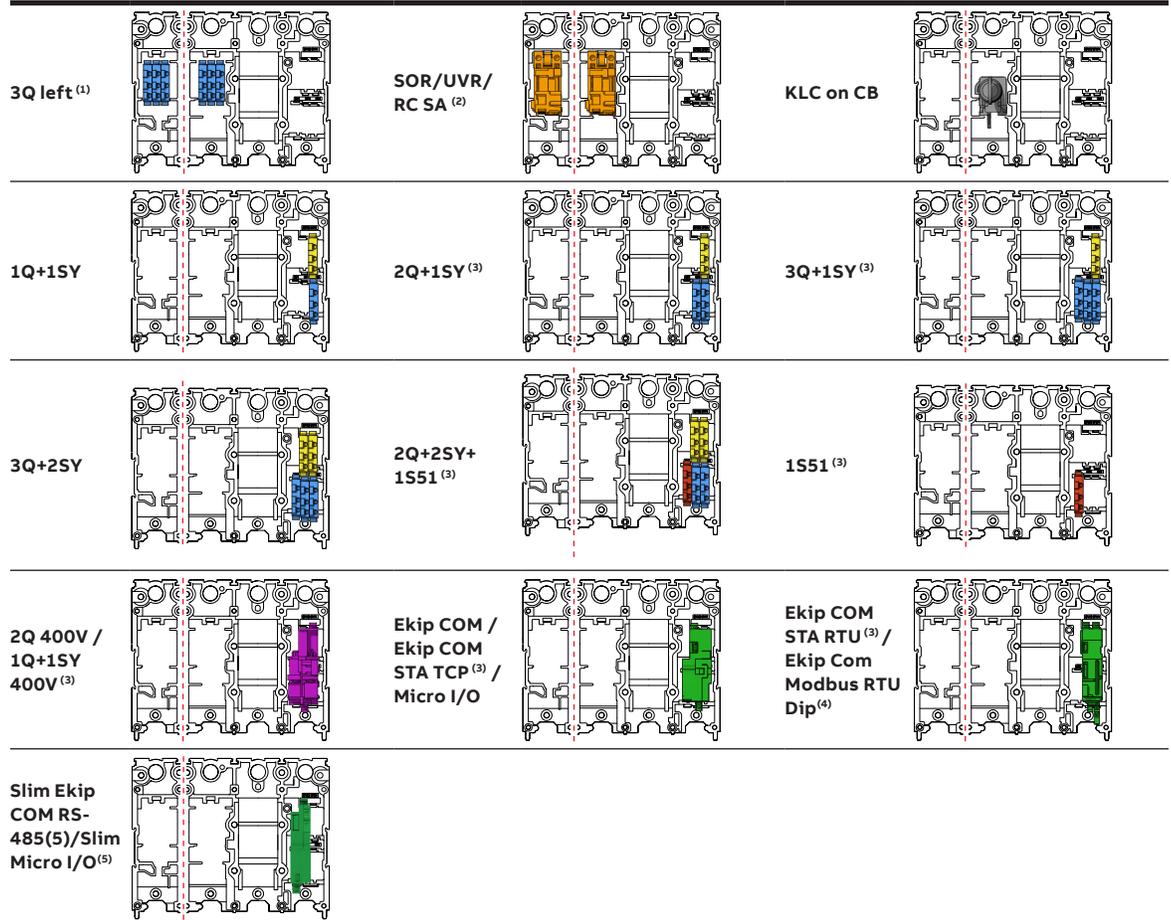
## Tmax XT3



(1) For 4-pole version, 3Q left on the fourth pole only.  
 (2) RC SA on the third pole only.

## Position of the internal accessories for the Tmax XT2-XT4

## Tmax XT2-XT4



(1) For 4-pole version, 3Q left on the fourth pole only.

(2) RC SA on the third pole only.

(3) Not available for the Ekip Touch and Hi-Touch trip units.

(4) Available only on Ekip C Dip LSI and Ekip C Dip LSIG.

(5) Available only on Ekip Touch/Hi-Touch trip units.

# Compatibility of accessories

## Position of the internal accessories for the Tmax XT5

### Tmax XT5

With 4-pole circuit-breakers, it is not possible to add accessories to the fourth pole.



(1) YO or YU must be mounted on the third pole to make S52 signaling available.

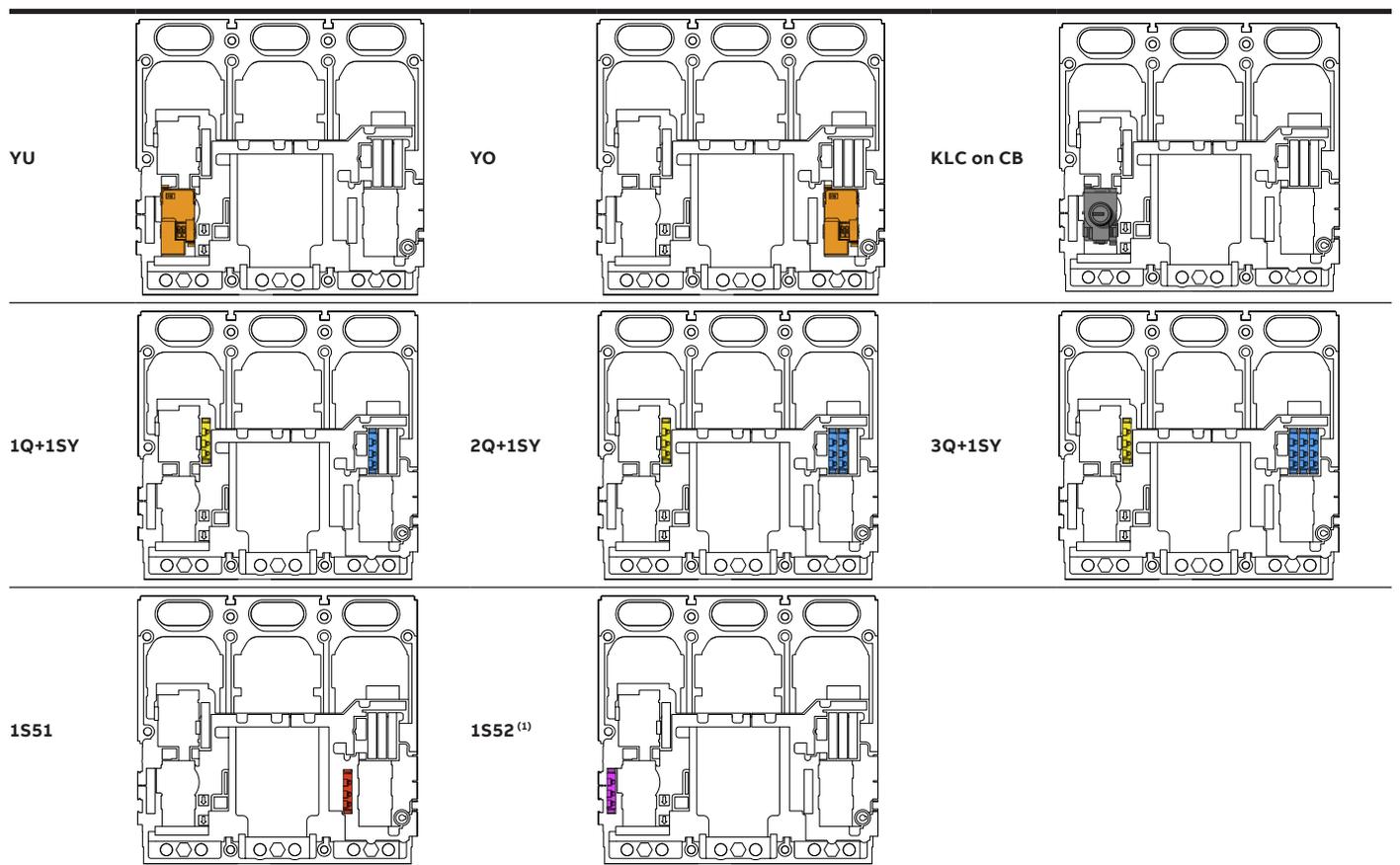
(2) Ekip COM or stand-alone module, depending on the trip unit.

(3) Available for the TM trip unit, Ekip Dip trip unit and molded case switches only.

## Position of the internal accessories for the Tmax XT6

### Tmax XT6

With 4-pole circuit-breakers, it is not possible to add accessories to the fourth pole.



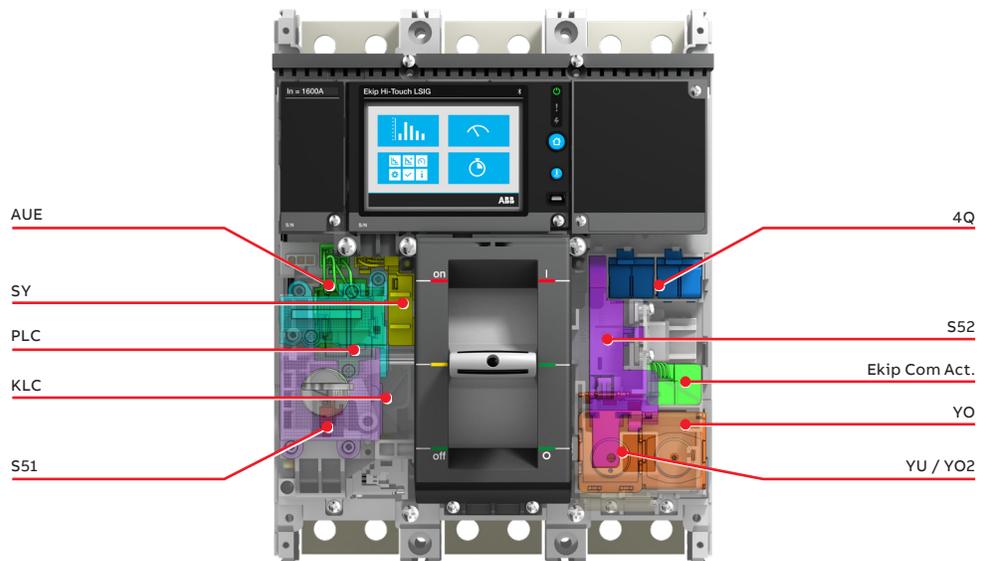
(1) The YU must be mounted on the third pole to make S52 signaling available.

# Compatibility of accessories

## Position of the internal accessories for the Tmax XT7

### Tmax XT7

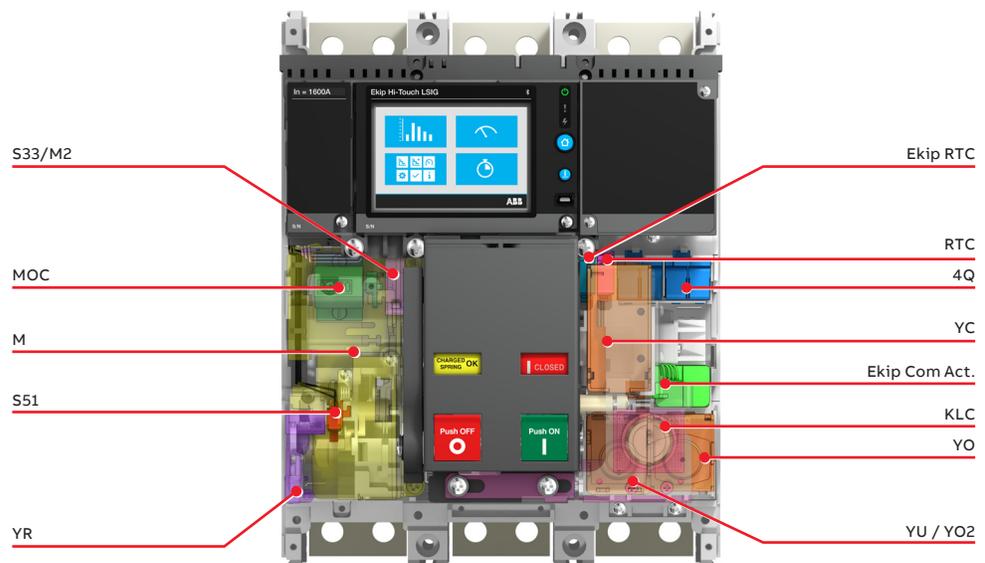
All internal accessories for the XT7 can be mounted at the same time without any restriction concerning their compatibility. To guarantee proper operation of all accessories, please refer to the relevant tables (see previous pages).



## Position of the internal accessories for the Tmax XT7 M

### Tmax XT7 M

All internal accessories for the XT7 M can be mounted at the same time without any restriction concerning their compatibility. To guarantee proper operation of all accessories, please refer to the relevant tables (see previous pages).



# Compatibility of accessories

## Reading information

### Glossary

RHD	= Direct rotary handle	S51	= Contact signaling tripping due to trip unit
RHE	= Transmitted rotary handle	S52	= Contact signaling YO/YU tripping
RHS	= Lateral transmitted rotary handle	S33M/2	= Contact signaling loaded springs
CK RHE->RHS	= Conversion kit for converting an RHE into an RHS	AUE	= Early auxiliary contacts
FLD	= Front for lever operating mechanism	RTC	= Ready to close signaling contact
MOD	= Direct action motor operator	PBC	= Protection device for opening and closing pushbuttons
MOE/MOE-E	= Stored energy motor operator	MOC	= Mechanical operation counter
M	= Motor operator	NE	= Neutral external
PLL on CB	= Padlock device on circuit-breaker	AUX-MO	= Auxiliary contacts for stored energy motor operator
KLC on CB	= Keylock device on circuit-breaker	Micro I/O	= Module for Touch and Hi-Touch trip unit
RHL	= Keylock for rotary handle and front for lever operating mechanism	Ekip COM STA	= Communication module stand-alone
MOL on motor	= Keylock for motor operator	Ekip COM STA RTU	= Communication module stand-alone Modbus RTU
SOR	= Shunt opening release	Ekip COM STA TCP	= Communication module stand-alone Modbus TCP
UVR	= Undervoltage release	Ekip COM	= Communication module
YO	= Shunt opening release	Ekip COM act.	= Ekip COM actuator
YU	= Undervoltage release	Ekip 1K	= Ekip 1K signaling
YC	= Closing release	Ekip Com Modbus	= Communication module for Ekip C Dip LSI and LSI
YR	= Remote resetting	RTU Dip	= Ekip C Dip LSI and LSI
RC SA	= Coil for residual current device		
Q	= Contact signaling open/closed		
SY	= Contact signaling tripping		

# Ordering codes

## U.S./CA Product ordering code construction

**8/4** XT1 - XT2 - XT3 - XT4 - XT5 - XT6 - XT7  
**8/5** XT7 M

### Ordering codes for XT1

**8/6** Automatic circuit-breakers

### Ordering codes for XT2

**8/8** Automatic circuit-breakers  
**8/27** Breaking part  
**8/28** Trip units  
**8/29** Breaking part + trip unit solution

### Ordering codes for XT3

**8/30** Automatic circuit-breakers

### Ordering codes for XT4

**8/32** Automatic circuit-breakers  
**8/59** Breaking part  
**8/60** Trip units  
**8/62** Breaking part + trip unit solution

### Ordering codes for XT5

**8/64** Automatic circuit-breakers  
**8/92** Breaking part  
**8/93** Trip units  
**8/95** Breaking part + trip unit solution

### Ordering codes for XT6

**8/96** Automatic circuit-breakers  
**8/102** Breaking part  
**8/103** Trip units  
**8/104** Breaking part + trip unit solution

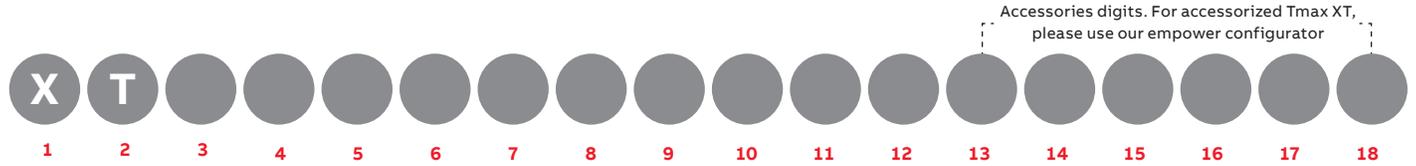
# Ordering codes

	<b>Ordering codes for XT7/XT7 M</b>
<b>8/105</b>	Automatic circuit-breakers – XT7
<b>8/116</b>	Automatic circuit-breakers – XT7 M
<b>8/129</b>	Trip units – XT7/XT7 M
	<b>Ordering codes for accessories</b>
<b>8/130</b>	Execution and installation
<b>8/130</b>	Fixed parts
<b>8/131</b>	Conversion kits
<b>8/132</b>	Plug and socket adapters
<b>8/132</b>	Bracket for fixing on DIN-rail
<b>8/132</b>	Floor fixing plate
<b>8/132</b>	Cable rack
<b>8/133</b>	Power connection
<b>8/133</b>	Terminals for circuit-breaker
<b>8/137</b>	Terminals for fixed parts
<b>8/138</b>	Fixed part adapters
<b>8/139</b>	Signaling
<b>8/139</b>	Auxiliary contacts - AUX
<b>8/142</b>	Auxiliary position contacts – AUP
<b>8/142</b>	Early auxiliary contacts – AUE
<b>8/143</b>	Operating mechanism
<b>8/143</b>	Rotary and flange handle operating mechanism
<b>8/148</b>	Front for operating lever mechanism - FLD
<b>8/148</b>	Toggle extension
<b>8/149</b>	Remote control
<b>8/149</b>	Shunt opening release
<b>8/150</b>	Undervoltage release
<b>8/152</b>	Shunt opening test unit
<b>8/152</b>	Delay device for undervoltage release - UVD

<b>8/153</b>	Connectors for shunt opening and undervoltage release for withdrawable version
<b>8/153</b>	Resetting remotely - YR
<b>8/153</b>	Motor operator
<b>8/155</b>	Safety and protection
<b>8/155</b>	Terminals covers and phase separators
<b>8/157</b>	IP Protections
<b>8/157</b>	MOC
<b>8/158</b>	Keylocks and padlocks
<b>8/163</b>	Flanges
<b>8/164</b>	Interlocks and switching devices
<b>8/164</b>	Automatic transfer devices
<b>8/166</b>	Residual current devices
<b>8/167</b>	Accessories for Ekip Dip trip units
<b>8/167</b>	Connectivity modules
<b>8/167</b>	Other modules
<b>8/167</b>	Current sensors
<b>8/168</b>	Rating plug
<b>8/169</b>	Accessories for Ekip Touch trip units
<b>8/169</b>	Ekip cartridge
<b>8/169</b>	Power supply modules
<b>8/169</b>	Connectivity modules
<b>8/171</b>	Signaling modules
<b>8/171</b>	Other modules
<b>8/173</b>	Advanced functionality
<b>8/174</b>	Display and supervision systems
<b>8/175</b>	Current sensors
<b>8/175</b>	Rating plug
<b>8/176</b>	Other accessories for trip units
<b>8/176</b>	Test and configuration
<b>8/177</b>	Further documentation

# U.S./CA Product ordering code construction

## XT1 - XT2 - XT3 - XT4 - XT5 - XT6 - XT7



### 1 & 2 Version

Digit
X T

### 3 Frame

Digit
1 2 3 4 5 6 7

### 4 Interrupting ratings – 480 V AC <sup>(1)</sup>

Digits	XT1	XT2	XT3	XT4	XT5	XT6	XT7
N	25	25	25	25	35	35	–
S	35	35	35	35	50	50	50
H	65	65	–	65	65	65	65
L	–	100	–	100	100	–	100
V	–	150	–	150	150	–	–
X	–	200	–	200	200	–	–

### 5 Standard UL and IEC

Digit	
U	UL 80%
Q	UL 100%
C	UL 80% + CCC
D	UL 100% + CCC
E	IEC only
S	IEC 50 °C
M	UL489SB

### 6 Number of poles

Digit	
2	2 Poles
3	3 Poles
4	4 Poles 100%
N	4 Poles 50% (IEC only)

### 7, 8, 9 Frame amps

XT1–4		XT5–7	
Digits	Amps	Digits	Amps
0 1 0	10	2 5 A	250 (XT5)
0 1 5	15	3 0 A	300 (XT5)
0 2 0	20	3 2 A	320 (XT5 IEC <sup>(3)</sup> )
0 2 5	25	4 0 A	400 (XT5)
0 3 0	30	5 0 B	500 (XT5)
0 3 5	35	6 0 B	600 (XT5)
0 4 0	40	6 0 0	600 (XT6)
0 4 5	45	6 0 C	600 (XT7)
0 5 0	50	6 3 B	630 (XT5 IEC <sup>(3)</sup> )
0 6 0	60	6 3 0	630 (XT6 IEC <sup>(3)</sup> )
0 7 0	70	8 0 0	800 (XT6)
0 8 0	80	8 0 C	800 (XT7)
0 9 0	90	1 K 0	1000 (XT6 IEC <sup>(3)</sup> )
1 0 0	100	1 0 D	1000 (XT7)
1 1 0	110	1 2 E	1200/1250 (XT7)
1 2 5	125	1 6 F	1600 (XT7 IEC <sup>(3)</sup> )
1 5 0	150		
1 7 5	175		
2 0 0	200		
2 2 5	225		
2 5 0	250		

### 10 Trip unit

Digit	
A	TMF/TMD
B	TMA
C	Ekip Dip LIG
D	MCS
E	Ekip Dip LS/I
F	Ekip Dip LSI (XT5, XT6, XT7)
G	Ekip Dip LSIG (XT5, XT6, XT7)
J	Ekip M Dip I (XT2-XT4)
K	Ekip M Dip I (XT5-XT7)
L	Ekip M Dip LIU
M	MA (MCP)
N	TMG
P	Ekip Touch LSI
Q	Ekip Touch LSIG
R	Ekip Touch Measuring LSI
S	Ekip Touch Measuring LSIG
T	Ekip Hi-Touch LSI
U	Ekip Hi-Touch LSIG
V	Ekip M DIP LRIU (IEC)
W	Ekip M Touch LRIU
X	Ekip G Dip LS/I
Y	Ekip G Touch LSIG
Z	Ekip G Hi-Touch LSIG
1	Ekip Dip LSI (XT2, XT4)
2	Ekip Dip LSIG (XT2, XT4)

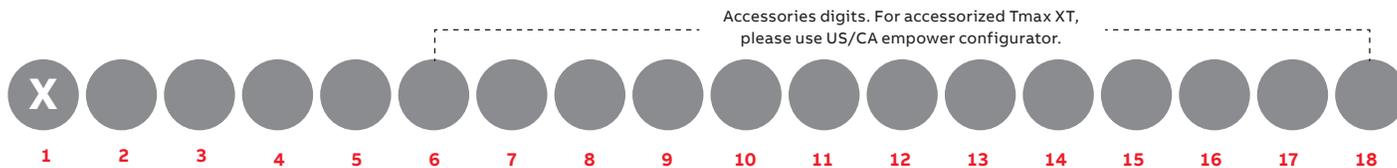


1) For 240 V AC and 600 V AC ratings, refer to pages 2/2 - 2/9.2z  
 3) IEC only.

This ordering code structure is meant for field identification of a SACE Tmax XT. For a breaker selection, please refer to ordering codes below or build your accessorized Tmax XT through our empower configurator.

# U.S./CA Product ordering code construction

## XT7 M



**1 Version**

Digit	
X	XT7 M

**2 Interrupting ratings — 480 V AC<sup>(1)</sup>**

Digit	kA
S	50
H	65
L	100

**3 Standard**

Digit	
U	UL 80%
D	UL 100%
E	IEC only

**4 Frame/Amperage/Number of Poles**

Digit	Amps
A (UL only)	1200A F/ 600A T – 3 Poles
B (UL only)	1200A F/ 600A T – 4 Poles
C	800A F/T – 3 Poles
D	800A F/T – 4 Poles
E	1000A F/T – 3 Poles
F	1000A F/T – 4 Poles
G	1200A F/T – 3 Poles
H	1200A F/T – 4 Poles
J (IEC only)	1250A F/T – 3 Poles
K (IEC only)	1250A F/T – 4 Poles
L (IEC only)	1600A F/T – 3 Poles
M (IEC only)	1600A F/T – 4 Poles
N (UL only)	1200A F/ 800A T – 3 Poles
P (UL only)	1200A F/ 800A T – 4 Poles
Q (UL only)	1200A F/ 1000A T – 3 Poles
R (UL only)	1200A F/ 1000A T – 4 Poles

**5 Trip unit**

Digit	
A	Ekip DIP LS/I
B	Ekip DIP LIG
C	Ekip DIP LSI
D	Ekip DIP LSIG
E	Ekip Touch LSI
F	Ekip Touch LSIG
G	Ekip Touch Measuring LSI
H	Ekip Touch Measuring LSIG
J	Ekip Hi-Touch LSI
L	Ekip Hi-Touch LSIG
M	Ekip M DIP I
N	Ekip M Touch LRIU
P	Ekip G DIP LS/I
Q	Ekip G Touch LSIG
R	Ekip G Hi-Touch LSIG
S	MCS



1) For 240 V AC and 600 V AC ratings, refer to pages 2/2 - 2/9.

# Ordering codes for XT1

## Automatic circuit-breakers



XT1 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT1N TMF Front terminals (F)

Size	Int. Rating (480V)	Iu	Trip units	In	3 poles		4 poles	
					Product ID	US/CA PN	Product ID	US/CA PN
XT1	25kA	125	TMF	15	1SDA074634R1	XT1NU3015AFF000XXX	1SDA074649R1	XT1NU4015AFF000XXX
				20	1SDA074635R1	XT1NU3020AFF000XXX	1SDA074650R1	XT1NU4020AFF000XXX
				25	1SDA074636R1	XT1NU3025AFF000XXX	1SDA074651R1	XT1NU4025AFF000XXX
				30	1SDA074637R1	XT1NU3030AFF000XXX	1SDA074652R1	XT1NU4030AFF000XXX
				35	1SDA074638R1	XT1NU3035AFF000XXX	1SDA074653R1	XT1NU4035AFF000XXX
				40	1SDA074639R1	XT1NU3040AFF000XXX	1SDA074654R1	XT1NU4040AFF000XXX
				45	1SDA074640R1	XT1NU3045AFF000XXX	1SDA074655R1	XT1NU4045AFF000XXX
				50	1SDA074641R1	XT1NU3050AFF000XXX	1SDA074656R1	XT1NU4050AFF000XXX
				60	1SDA074642R1	XT1NU3060AFF000XXX	1SDA074657R1	XT1NU4060AFF000XXX
				70	1SDA074643R1	XT1NU3070AFF000XXX	1SDA074658R1	XT1NU4070AFF000XXX
				80	1SDA074644R1	XT1NU3080AFF000XXX	1SDA074659R1	XT1NU4080AFF000XXX
				90	1SDA074645R1	XT1NU3090AFF000XXX	1SDA074660R1	XT1NU4090AFF000XXX
				100	1SDA074646R1	XT1NU3100AFF000XXX	1SDA074661R1	XT1NU4100AFF000XXX
				110	1SDA074647R1	XT1NU3110AFF000XXX	1SDA074662R1	XT1NU4110AFF000XXX
				125	1SDA074648R1	XT1NU3125AFF000XXX	1SDA074663R1	XT1NU4125AFF000XXX

#### SACE XT1S TMF Front terminals (F)

Size	Int. Rating (480V)	Iu	Trip units	In	3 poles		4 poles	
					Product ID	US/CA PN	Product ID	US/CA PN
XT1	35kA	125	TMF	15	1SDA074664R1	XT1SU3015AFF000XXX	1SDA074679R1	XT1SU4015AFF000XXX
				20	1SDA074665R1	XT1SU3020AFF000XXX	1SDA074680R1	XT1SU4020AFF000XXX
				25	1SDA074666R1	XT1SU3025AFF000XXX	1SDA074681R1	XT1SU4025AFF000XXX
				30	1SDA074667R1	XT1SU3030AFF000XXX	1SDA074682R1	XT1SU4030AFF000XXX
				35	1SDA074668R1	XT1SU3035AFF000XXX	1SDA074683R1	XT1SU4035AFF000XXX
				40	1SDA074669R1	XT1SU3040AFF000XXX	1SDA074684R1	XT1SU4040AFF000XXX
				45	1SDA074670R1	XT1SU3045AFF000XXX	1SDA074685R1	XT1SU4045AFF000XXX
				50	1SDA074671R1	XT1SU3050AFF000XXX	1SDA074686R1	XT1SU4050AFF000XXX
				60	1SDA074672R1	XT1SU3060AFF000XXX	1SDA074687R1	XT1SU4060AFF000XXX
				70	1SDA074673R1	XT1SU3070AFF000XXX	1SDA074688R1	XT1SU4070AFF000XXX
				80	1SDA074674R1	XT1SU3080AFF000XXX	1SDA074689R1	XT1SU4080AFF000XXX
				90	1SDA074675R1	XT1SU3090AFF000XXX	1SDA074690R1	XT1SU4090AFF000XXX
				100	1SDA074676R1	XT1SU3100AFF000XXX	1SDA074691R1	XT1SU4100AFF000XXX
				110	1SDA074677R1	XT1SU3110AFF000XXX	1SDA074692R1	XT1SU4110AFF000XXX
				125	1SDA074678R1	XT1SU3125AFF000XXX	1SDA074693R1	XT1SU4125AFF000XXX



XT1 - circuit-breaker

**SACE XT1H TMF Front terminals (F)**

Size	Int. Rating (480V)	Iu	Trip units	In	3 poles		4 poles	
					Product ID	US/CA PN	Product ID	US/CA PN
XT1	65kA	125	TMF	15	1SDA074694R1	XT1HU3015AFF000XXX	1SDA074709R1	XT1HU4015AFF000XXX
				20	1SDA074695R1	XT1HU3020AFF000XXX	1SDA074710R1	XT1HU4020AFF000XXX
				25	1SDA074696R1	XT1HU3025AFF000XXX	1SDA074711R1	XT1HU4025AFF000XXX
				30	1SDA074697R1	XT1HU3030AFF000XXX	1SDA074712R1	XT1HU4030AFF000XXX
				35	1SDA074698R1	XT1HU3035AFF000XXX	1SDA074713R1	XT1HU4035AFF000XXX
				40	1SDA074699R1	XT1HU3040AFF000XXX	1SDA074714R1	XT1HU4040AFF000XXX
				45	1SDA074700R1	XT1HU3045AFF000XXX	1SDA074715R1	XT1HU4045AFF000XXX
				50	1SDA074701R1	XT1HU3050AFF000XXX	1SDA074716R1	XT1HU4050AFF000XXX
				60	1SDA074702R1	XT1HU3060AFF000XXX	1SDA074717R1	XT1HU4060AFF000XXX
				70	1SDA074703R1	XT1HU3070AFF000XXX	1SDA074718R1	XT1HU4070AFF000XXX
				80	1SDA074704R1	XT1HU3080AFF000XXX	1SDA074719R1	XT1HU4080AFF000XXX
				90	1SDA074705R1	XT1HU3090AFF000XXX	1SDA074720R1	XT1HU4090AFF000XXX
				100	1SDA074706R1	XT1HU3100AFF000XXX	1SDA074721R1	XT1HU4100AFF000XXX
				110	1SDA074707R1	XT1HU3110AFF000XXX	1SDA074722R1	XT1HU4110AFF000XXX
				125	1SDA074708R1	XT1HU3125AFF000XXX	1SDA074723R1	XT1HU4125AFF000XXX

## Motor protection circuit-breaker (MCP)

**SACE XT1H MA Front terminals (F)**

Size	Int. Rating (480V)	Iu	Trip units	In	3 poles	
					Product ID	US/CA PN
XT1	65kA	125	MA	3	1SDA074724R1	XT1HU3003MFF000XXX
				7	1SDA074725R1	XT1HU3007MFF000XXX
				15	1SDA074726R1	XT1HU3015MFF000XXX
				30	1SDA074727R1	XT1HU3030MFF000XXX
				50	1SDA074728R1	XT1HU3050MFF000XXX
				70	1SDA074729R1	XT1HU3070MFF000XXX
				80	1SDA074730R1	XT1HU3080MFF000XXX
				100	1SDA074731R1	XT1HU3100MFF000XXX
				125	1SDA074732R1	XT1HU3125MFF000XXX

## Molded case switches

**SACE XT1D - MCS**

Size	Iu	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT1	125	1SDA075610R1	XT1NU3125DFF000XXX	1SDA075611R1	XT1NU4125DFF000XXX
		1SDA075612R1	XT1SU3125DFF000XXX	1SDA075613R1	XT1SU4125DFF000XXX
		1SDA075614R1	XT1HU3125DFF000XXX	1SDA075615R1	XT1HU4125DFF000XXX

## 100% rated distribution circuit-breakers

**100% rated version extra code**

Size	3 poles	4 poles
	Product ID	Product ID
XT1	1SDA076603R1	1SDA080698R1

Note: to be specified only in addition to the code of the automatic circuit-breaker

# Ordering codes for XT2

## Automatic circuit-breakers



XT2 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT2N TMF/TMA Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles			
				Product ID	US/CA PN	Product ID	US/CA PN		
XT2	25kA	125	TMF	15	1SDA074733R1	XT2NU3015AFF000XXX	1SDA074747R1	XT2NU4015AFF000XXX	
				20	1SDA074734R1	XT2NU3020AFF000XXX	1SDA074748R1	XT2NU4020AFF000XXX	
				25	1SDA074735R1	XT2NU3025AFF000XXX	1SDA074749R1	XT2NU4025AFF000XXX	
				30	1SDA074736R1	XT2NU3030AFF000XXX	1SDA074750R1	XT2NU4030AFF000XXX	
				35	1SDA074737R1	XT2NU3035AFF000XXX	1SDA074751R1	XT2NU4035AFF000XXX	
				40	1SDA074738R1	XT2NU3040AFF000XXX	1SDA074752R1	XT2NU4040AFF000XXX	
				50	1SDA074739R1	XT2NU3050AFF000XXX	1SDA074753R1	XT2NU4050AFF000XXX	
				60	1SDA074740R1	XT2NU3060AFF000XXX	1SDA074754R1	XT2NU4060AFF000XXX	
				70	1SDA074741R1	XT2NU3070AFF000XXX	1SDA074755R1	XT2NU4070AFF000XXX	
				TMA	80	1SDA074742R1	XT2NU3080BFF000XXX	1SDA074756R1	XT2NU4080BFF000XXX
					90	1SDA074743R1	XT2NU3090BFF000XXX	1SDA074757R1	XT2NU4090BFF000XXX
					100	1SDA074744R1	XT2NU3100BFF000XXX	1SDA074758R1	XT2NU4100BFF000XXX
					110	1SDA074745R1	XT2NU3110BFF000XXX	1SDA074759R1	XT2NU4110BFF000XXX
					125	1SDA074746R1	XT2NU3125BFF000XXX	1SDA074760R1	XT2NU4125BFF000XXX

#### SACE XT2N Ekip Dip LS/I Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	25kA	125	Ekip Dip LS/I	10	1SDA074900R1	XT2NU3010EFF000XXX	1SDA074905R1	XT2NU4010EFF000XXX
				25	1SDA074901R1	XT2NU3025EFF000XXX	1SDA074906R1	XT2NU4025EFF000XXX
				60	1SDA074902R1	XT2NU3060EFF000XXX	1SDA074907R1	XT2NU4060EFF000XXX
				100	1SDA074903R1	XT2NU3100EFF000XXX	1SDA074908R1	XT2NU4100EFF000XXX
				125	1SDA074904R1	XT2NU3125EFF000XXX	1SDA074909R1	XT2NU4125EFF000XXX

#### SACE XT2N Ekip Dip LSI Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	25kA	125	Ekip Dip LSI	10	1SDA102037R1	XT2NU30101FF000XXX	1SDA102102R1	XT2NU40101FF000XXX
				25	1SDA102038R1	XT2NU30251FF000XXX	1SDA102103R1	XT2NU40251FF000XXX
				60	1SDA102039R1	XT2NU30601FF000XXX	1SDA102104R1	XT2NU40601FF000XXX
				100	1SDA102040R1	XT2NU31001FF000XXX	1SDA102105R1	XT2NU41001FF000XXX
				125	1SDA102041R1	XT2NU31251FF000XXX	1SDA102106R1	XT2NU41251FF000XXX



XT2 - circuit-breaker

**SACE XT2N Ekip Dip LSI Front terminals (F)**

Size	Int. Rating (480V)	lu	Trip units	In	3 poles		4 poles	
					Product ID	US/CA PN	Product ID	US/CA PN
XT2	25kA	125	Ekip Dip LSI	10	1SDA102042R1	XT2NU30102FF000XXX	1SDA102107R1	XT2NU40102FF000XXX
				25	1SDA102043R1	XT2NU30252FF000XXX	1SDA102108R1	XT2NU40252FF000XXX
				60	1SDA102044R1	XT2NU30602FF000XXX	1SDA102109R1	XT2NU40602FF000XXX
				100	1SDA102045R1	XT2NU31002FF000XXX	1SDA102110R1	XT2NU41002FF000XXX
				125	1SDA102046R1	XT2NU31252FF000XXX	1SDA102111R1	XT2NU41252FF000XXX

**SACE XT2N Ekip Dip LIG Front terminals (F)**

Size	Int. Rating (480V)	lu	Trip units	In	3 poles		4 poles	
					Product ID	US/CA PN	Product ID	US/CA PN
XT2	25kA	125	Ekip Dip LIG	10	1SDA102047R1	XT2NU3010CFF000XXX	1SDA102112R1	XT2NU4010CFF000XXX
				25	1SDA102048R1	XT2NU3025CFF000XXX	1SDA102113R1	XT2NU4025CFF000XXX
				60	1SDA102049R1	XT2NU3060CFF000XXX	1SDA102114R1	XT2NU4060CFF000XXX
				100	1SDA102050R1	XT2NU3100CFF000XXX	1SDA102115R1	XT2NU4100CFF000XXX
				125	1SDA102051R1	XT2NU3125CFF000XXX	1SDA102116R1	XT2NU4125CFF000XXX

**SACE XT2N Ekip Touch LSI Front terminals (F)**

Size	Int. Rating (480V)	lu	Trip units	In	3 poles		4 poles	
					Product ID	US/CA PN	Product ID	US/CA PN
XT2	25kA	125	Ekip Touch LSI	40	Only available with the Breaking Part + Trip unit solution	XT2NU3040PFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2NU4040PFF000XXX
				60		XT2NU3060PFF000XXX		XT2NU4060PFF000XXX
				100		XT2NU3100PFF000XXX		XT2NU4100PFF000XXX
				125		XT2NU3125PFF000XXX		XT2NU4125PFF000XXX

**SACE XT2N Ekip Touch LSI - Front terminals (F)**

Size	Int. Rating (480V)	lu	Trip units	In	3 poles		4 poles	
					Product ID	US/CA PN	Product ID	US/CA PN
XT2	25kA	125	Ekip Touch LSI	40	Only available with the Breaking Part + Trip unit solution	XT2NU3040QFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2NU4040QFF000XXX
				60		XT2NU3060QFF000XXX		XT2NU4060QFF000XXX
				100		XT2NU3100QFF000XXX		XT2NU4100QFF000XXX
				125		XT2NU3125QFF000XXX		XT2NU4125QFF000XXX

**SACE XT2N Ekip Touch Measuring LSI - Front terminals (F)**

Size	Int. Rating (480V)	lu	Trip units	In	3 poles		4 poles	
					Product ID	US/CA PN	Product ID	US/CA PN
XT2	25kA	125	Ekip Touch Measuring LSI	40	Only available with the Breaking Part + Trip unit solution	XT2NU3040RFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2NU4040RFF000XXX
				60		XT2NU3060RFF000XXX		XT2NU4060RFF000XXX
				100		XT2NU3100RFF000XXX		XT2NU4100RFF000XXX
				125		XT2NU3125RFF000XXX		XT2NU4125RFF000XXX

# Ordering codes for XT2

## Automatic circuit-breakers



XT2 - circuit-breaker

### SACE XT2N Ekip Touch Measuring LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	25kA	125	Ekip Touch Measuring LSIG	40	Only available with the Breaking Part + Trip unit solution	XT2NU3040SFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2NU4040SFF000XXX
				60		XT2NU3060SFF000XXX		XT2NU4060SFF000XXX
				100		XT2NU3100SFF000XXX		XT2NU4100SFF000XXX
				125		XT2NU3125SFF000XXX		XT2NU4125SFF000XXX

### SACE XT2N Ekip Hi-Touch LSI - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	25kA	125	Ekip Hi-Touch LSI	40	Only available with the Breaking Part + Trip unit solution	XT2NU3040TFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2NU4040TFF000XXX
				60		XT2NU3060TFF000XXX		XT2NU4060TFF000XXX
				100		XT2NU3100TFF000XXX		XT2NU4100TFF000XXX
				125		XT2NU3125TFF000XXX		XT2NU4125TFF000XXX

### SACE XT2N Ekip Hi-Touch LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	25kA	125	Ekip Hi-Touch LSIG	40	Only available with the Breaking Part + Trip unit solution	XT2NU3040UFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2NU4040UFF000XXX
				60		XT2NU3060UFF000XXX		XT2NU4060UFF000XXX
				100		XT2NU3100UFF000XXX		XT2NU4100UFF000XXX
				125		XT2NU3125UFF000XXX		XT2NU4125UFF000XXX



XT2 - circuit-breaker

## Distribution circuit-breakers

## SACE XT2S TMF/TMA Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	35kA	125	TMF	15	1SDA074761R1	XT2SU3015AFF000XXX	1SDA074775R1	XT2SU4015AFF000XXX
				20	1SDA074762R1	XT2SU3020AFF000XXX	1SDA074776R1	XT2SU4020AFF000XXX
				25	1SDA074763R1	XT2SU3025AFF000XXX	1SDA074777R1	XT2SU4025AFF000XXX
				30	1SDA074764R1	XT2SU3030AFF000XXX	1SDA074778R1	XT2SU4030AFF000XXX
				35	1SDA074765R1	XT2SU3035AFF000XXX	1SDA074779R1	XT2SU4035AFF000XXX
				40	1SDA074766R1	XT2SU3040AFF000XXX	1SDA074780R1	XT2SU4040AFF000XXX
				50	1SDA074767R1	XT2SU3050AFF000XXX	1SDA074781R1	XT2SU4050AFF000XXX
			60	1SDA074768R1	XT2SU3060AFF000XXX	1SDA074782R1	XT2SU4060AFF000XXX	
			70	1SDA074769R1	XT2SU3070AFF000XXX	1SDA074783R1	XT2SU4070AFF000XXX	
			TMA	80	1SDA074770R1	XT2SU3080BFF000XXX	1SDA074784R1	XT2SU4080BFF000XXX
				90	1SDA074771R1	XT2SU3090BFF000XXX	1SDA074785R1	XT2SU4090BFF000XXX
				100	1SDA074772R1	XT2SU3100BFF000XXX	1SDA074786R1	XT2SU4100BFF000XXX
				110	1SDA074773R1	XT2SU3110BFF000XXX	1SDA074787R1	XT2SU4110BFF000XXX
				125	1SDA074774R1	XT2SU3125BFF000XXX	1SDA074788R1	XT2SU4125BFF000XXX

## SACE XT2S Ekip Dip LS/I Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	35kA	125	Ekip Dip LS/I	10	1SDA074910R1	XT2SU3010EFF000XXX	1SDA074915R1	XT2SU4010EFF000XXX
				25	1SDA074911R1	XT2SU3025EFF000XXX	1SDA074916R1	XT2SU4025EFF000XXX
				60	1SDA074912R1	XT2SU3060EFF000XXX	1SDA074917R1	XT2SU4060EFF000XXX
				100	1SDA074913R1	XT2SU3100EFF000XXX	1SDA074918R1	XT2SU4100EFF000XXX
				125	1SDA074914R1	XT2SU3125EFF000XXX	1SDA074919R1	XT2SU4125EFF000XXX

## SACE XT2S Ekip Dip LSI Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	35kA	125	Ekip Dip LSI	10	1SDA102056R1	XT2SU30101FF000XXX	1SDA102117R1	XT2SU40101FF000XXX
				25	1SDA102057R1	XT2SU30251FF000XXX	1SDA102118R1	XT2SU40251FF000XXX
				60	1SDA102058R1	XT2SU30601FF000XXX	1SDA102119R1	XT2SU40601FF000XXX
				100	1SDA102059R1	XT2SU31001FF000XXX	1SDA102120R1	XT2SU41001FF000XXX
				125	1SDA102060R1	XT2SU31251FF000XXX	1SDA102121R1	XT2SU41251FF000XXX

## SACE XT2S Ekip Dip LSI Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	35kA	125	Ekip Dip LSI	10	1SDA102061R1	XT2SU30102FF000XXX	1SDA102122R1	XT2SU40102FF000XXX
				25	1SDA102062R1	XT2SU30252FF000XXX	1SDA102123R1	XT2SU40252FF000XXX
				60	1SDA102063R1	XT2SU30602FF000XXX	1SDA102124R1	XT2SU40602FF000XXX
				100	1SDA102064R1	XT2SU31002FF000XXX	1SDA102125R1	XT2SU41002FF000XXX
				125	1SDA102065R1	XT2SU31252FF000XXX	1SDA102126R1	XT2SU41252FF000XXX

# Ordering codes for XT2

## Automatic circuit-breakers



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XT2 - circuit-breaker

### SACE XT2S Ekip Dip LIG Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	35kA	125	Ekip Dip LIG	10	1SDA102066R1	XT2SU3010CFF000XXX	1SDA102127R1	XT2SU4010CFF000XXX
				25	1SDA102067R1	XT2SU3025CFF000XXX	1SDA102128R1	XT2SU4025CFF000XXX
				60	1SDA102068R1	XT2SU3060CFF000XXX	1SDA102129R1	XT2SU4060CFF000XXX
				100	1SDA102069R1	XT2SU3100CFF000XXX	1SDA102130R1	XT2SU4100CFF000XXX
				125	1SDA102070R1	XT2SU3125CFF000XXX	1SDA102131R1	XT2SU4125CFF000XXX

### SACE XT2S Ekip Touch LSI - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	35kA	125	Ekip Touch LSI	40	Only available with the Breaking Part + Trip unit solution	XT2SU3040PFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2SU4040PFF000XXX
				60	XT2SU3060PFF000XXX	XT2SU4060PFF000XXX		
				100	XT2SU3100PFF000XXX	XT2SU4100PFF000XXX		
				125	XT2SU3125PFF000XXX	XT2SU4125PFF000XXX		

### SACE XT2S Ekip Touch LSIg - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	35kA	125	Ekip Touch LSIg	40	Only available with the Breaking Part + Trip unit solution	XT2SU3040QFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2SU4040QFF000XXX
				60	XT2SU3060QFF000XXX	XT2SU4060QFF000XXX		
				100	XT2SU3100QFF000XXX	XT2SU4100QFF000XXX		
				125	XT2SU3125QFF000XXX	XT2SU4125QFF000XXX		

### SACE XT2S Ekip Touch Measuring LSI - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	35kA	125	Ekip Touch Measuring LSI	40	Only available with the Breaking Part + Trip unit solution	XT2SU3040RFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2SU4040RFF000XXX
				60	XT2SU3060RFF000XXX	XT2SU4060RFF000XXX		
				100	XT2SU3100RFF000XXX	XT2SU4100RFF000XXX		
				125	XT2SU3125RFF000XXX	XT2SU4125RFF000XXX		



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XT2 - circuit-breaker

**SACE XT2S Ekip Touch Measuring LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	35kA	125	Ekip Touch Measuring LSIG	40	Only available with the Breaking Part + Trip unit solution	XT2SU3040SFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2SU4040SFF000XXX
				60		XT2SU3060SFF000XXX		XT2SU4060SFF000XXX
				100		XT2SU3100SFF000XXX		XT2SU4100SFF000XXX
				125		XT2SU3125SFF000XXX		XT2SU4125SFF000XXX

**SACE XT2S Ekip Hi-Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	35kA	125	Ekip Hi-Touch LSI	40	Only available with the Breaking Part + Trip unit solution	XT2SU3040TFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2SU4040TFF000XXX
				60		XT2SU3060TFF000XXX		XT2SU4060TFF000XXX
				100		XT2SU3100TFF000XXX		XT2SU4100TFF000XXX
				125		XT2SU3125TFF000XXX		XT2SU4125TFF000XXX

**SACE XT2S Ekip Hi-Touch LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	35kA	125	Ekip Hi-Touch LSIG	40	Only available with the Breaking Part + Trip unit solution	XT2SU3040UFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2SU4040UFF000XXX
				60		XT2SU3060UFF000XXX		XT2SU4060UFF000XXX
				100		XT2SU3100UFF000XXX		XT2SU4100UFF000XXX
				125		XT2SU3125UFF000XXX		XT2SU4125UFF000XXX

# Ordering codes for XT2

## Automatic circuit-breakers



XT2 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT2H TMF/TMA Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles			
				Product ID	US/CA PN	Product ID	US/CA PN		
XT2	65kA	125	TMF	15	1SDA074789R1	XT2HU3015AFF000XXX	1SDA074803R1	XT2HU4015AFF000XXX	
				20	1SDA074790R1	XT2HU3020AFF000XXX	1SDA074804R1	XT2HU4020AFF000XXX	
				25	1SDA074791R1	XT2HU3025AFF000XXX	1SDA074805R1	XT2HU4025AFF000XXX	
				30	1SDA074792R1	XT2HU3030AFF000XXX	1SDA074806R1	XT2HU4030AFF000XXX	
				35	1SDA074793R1	XT2HU3035AFF000XXX	1SDA074807R1	XT2HU4035AFF000XXX	
				40	1SDA074794R1	XT2HU3040AFF000XXX	1SDA074808R1	XT2HU4040AFF000XXX	
				50	1SDA074795R1	XT2HU3050AFF000XXX	1SDA074809R1	XT2HU4050AFF000XXX	
				60	1SDA074796R1	XT2HU3060AFF000XXX	1SDA074810R1	XT2HU4060AFF000XXX	
				70	1SDA074797R1	XT2HU3070AFF000XXX	1SDA074811R1	XT2HU4070AFF000XXX	
				TMA	80	1SDA074798R1	XT2HU3080BFF000XXX	1SDA074812R1	XT2HU4080BFF000XXX
					90	1SDA074799R1	XT2HU3090BFF000XXX	1SDA074813R1	XT2HU4090BFF000XXX
					100	1SDA074800R1	XT2HU3100BFF000XXX	1SDA074814R1	XT2HU4100BFF000XXX
					110	1SDA074801R1	XT2HU3110BFF000XXX	1SDA074815R1	XT2HU4110BFF000XXX
					125	1SDA074802R1	XT2HU3125BFF000XXX	1SDA074816R1	XT2HU4125BFF000XXX

#### SACE XT2H Ekip Dip LS/I Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	65kA	125	Ekip Dip LS/I	10	1SDA074920R1	XT2HU3010EFF000XXX	1SDA074925R1	XT2HU4010EFF000XXX
				25	1SDA074921R1	XT2HU3025EFF000XXX	1SDA074926R1	XT2HU4025EFF000XXX
				60	1SDA074922R1	XT2HU3060EFF000XXX	1SDA074927R1	XT2HU4060EFF000XXX
				100	1SDA074923R1	XT2HU3100EFF000XXX	1SDA074928R1	XT2HU4100EFF000XXX
				125	1SDA074924R1	XT2HU3125EFF000XXX	1SDA074929R1	XT2HU4125EFF000XXX

#### SACE XT2H Ekip Dip LSI Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	65kA	125	Ekip Dip LSI	10	1SDA102075R1	XT2HU30101FF000XXX	1SDA102132R1	XT2HU40101FF000XXX
				25	1SDA102076R1	XT2HU30251FF000XXX	1SDA102133R1	XT2HU40251FF000XXX
				60	1SDA102077R1	XT2HU30601FF000XXX	1SDA102134R1	XT2HU40601FF000XXX
				100	1SDA102078R1	XT2HU31001FF000XXX	1SDA102135R1	XT2HU41001FF000XXX
				125	1SDA102079R1	XT2HU31251FF000XXX	1SDA102136R1	XT2HU41251FF000XXX



XT2 - circuit-breaker

**SACE XT2H Ekip Dip LSI Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	65kA	125	Ekip Dip LSI	10	1SDA102080R1	XT2HU30102FF000XXX	1SDA102137R1	XT2HU40102FF000XXX
				25	1SDA102081R1	XT2HU30252FF000XXX	1SDA102138R1	XT2HU40252FF000XXX
				60	1SDA102082R1	XT2HU30602FF000XXX	1SDA102139R1	XT2HU40602FF000XXX
				100	1SDA102083R1	XT2HU31002FF000XXX	1SDA102140R1	XT2HU41002FF000XXX
				125	1SDA102084R1	XT2HU31252FF000XXX	1SDA102141R1	XT2HU41252FF000XXX

**SACE XT2H Ekip Dip LIG Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	65kA	125	Ekip Dip LIG	10	1SDA102085R1	XT2HU3010CFF000XXX	1SDA102142R1	XT2HU4010CFF000XXX
				25	1SDA102086R1	XT2HU3025CFF000XXX	1SDA102143R1	XT2HU4025CFF000XXX
				60	1SDA102087R1	XT2HU3060CFF000XXX	1SDA102144R1	XT2HU4060CFF000XXX
				100	1SDA102088R1	XT2HU3100CFF000XXX	1SDA102145R1	XT2HU4100CFF000XXX
				125	1SDA102089R1	XT2HU3125CFF000XXX	1SDA102146R1	XT2HU4125CFF000XXX

**SACE XT2H Ekip Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	65kA	125	Ekip Touch LSI	40	Only available with the Breaking Part + Trip unit solution	XT2HU3040PFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2HU4040PFF000XXX
				60	XT2HU3060PFF000XXX	XT2HU4060PFF000XXX		
				100	XT2HU3100PFF000XXX	XT2HU4100PFF000XXX		
				125	XT2HU3125PFF000XXX	XT2HU4125PFF000XXX		

**SACE XT2H Ekip Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	65kA	125	Ekip Touch LSI	40	Only available with the Breaking Part + Trip unit solution	XT2HU3040QFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2HU4040QFF000XXX
				60	XT2HU3060QFF000XXX	XT2HU4060QFF000XXX		
				100	XT2HU3100QFF000XXX	XT2HU4100QFF000XXX		
				125	XT2HU3125QFF000XXX	XT2HU4125QFF000XXX		

**SACE XT2H Ekip Touch Measuring LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	65kA	125	Ekip Touch Measuring LSI	40	Only available with the Breaking Part + Trip unit solution	XT2HU3040RFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2HU4040RFF000XXX
				60	XT2HU3060RFF000XXX	XT2HU4060RFF000XXX		
				100	XT2HU3100RFF000XXX	XT2HU4100RFF000XXX		
				125	XT2HU3125RFF000XXX	XT2HU4125RFF000XXX		

# Ordering codes for XT2

## Automatic circuit-breakers



XT2 - circuit-breaker

### SACE XT2H Ekip Touch Measuring LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	65kA	125	Ekip Touch Measuring LSIG	40	Only available with the Breaking Part + Trip unit solution	XT2HU3040SFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2HU4040SFF000XXX
				60		XT2HU3060SFF000XXX		XT2HU4060SFF000XXX
				100		XT2HU3100SFF000XXX		XT2HU4100SFF000XXX
				125		XT2HU3125SFF000XXX		XT2HU4125SFF000XXX

### SACE XT2H Ekip Hi-Touch LSI - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	65kA	125	Ekip Hi-Touch LSI	40	Only available with the Breaking Part + Trip unit solution	XT2HU3040TFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2HU4040TFF000XXX
				60		XT2HU3060TFF000XXX		XT2HU4060TFF000XXX
				100		XT2HU3100TFF000XXX		XT2HU4100TFF000XXX
				125		XT2HU3125TFF000XXX		XT2HU4125TFF000XXX

### SACE XT2H Ekip Hi-Touch LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	65kA	125	Ekip Hi-Touch LSIG	40	Only available with the Breaking Part + Trip unit solution	XT2HU3040UFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2HU4040UFF000XXX
				60		XT2HU3060UFF000XXX		XT2HU4060UFF000XXX
				100		XT2HU3100UFF000XXX		XT2HU4100UFF000XXX
				125		XT2HU3125UFF000XXX		XT2HU4125UFF000XXX



XT2 - circuit-breaker

## Motor protection circuit-breaker (MCP)

### SACE XT2H MA Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT2	65kA	125	MA	3	1SDA074882R1	XT2HU3003MFF000XXX
				7	1SDA074883R1	XT2HU3007MFF000XXX
				15	1SDA074884R1	XT2HU3015MFF000XXX
				30	1SDA074885R1	XT2HU3030MFF000XXX
				50	1SDA074886R1	XT2HU3050MFF000XXX
				70	1SDA074887R1	XT2HU3070MFF000XXX
				80	1SDA074888R1	XT2HU3080MFF000XXX
				100	1SDA074889R1	XT2HU3100MFF000XXX
				125	1SDA074890R1	XT2HU3125MFF000XXX

### SACE XT2H Ekip M Dip I Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT2	65kA	125	Ekip M Dip I	10	1SDA075070R1	XT2HU3010JFF000XXX
				25	1SDA075071R1	XT2HU3025JFF000XXX
				60	1SDA075072R1	XT2HU3060JFF000XXX
				100	1SDA075073R1	XT2HU3100JFF000XXX
				125	1SDA075074R1	XT2HU3125JFF000XXX

## Motor protection circuit-breaker (MPCB)

### SACE XT2H Ekip M Dip LIU Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT2	65kA	125	Ekip M Dip LIU	25	1SDA075103R1	XT2HU3025LFF000XXX
				60	1SDA075104R1	XT2HU3060LFF000XXX
				100	1SDA075105R1	XT2HU3100LFF000XXX

### SACE XT2H Ekip M Touch LRIU Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT2	65kA	125	Ekip M Touch LRIU	40	1SDA102090R1	XT2HU3040WFF000XXX
				60	1SDA102091R1	XT2HU3060WFF000XXX
				100	1SDA102092R1	XT2HU3100WFF000XXX

# Ordering codes for XT2

## Automatic circuit-breakers



XT2 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT2L TMF/TMA Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles			
				Product ID	US/CA PN	Product ID	US/CA PN		
XT2	100kA	125	TMF	15	1SDA074817R1	XT2LU3015AFF000XXX	1SDA074831R1	XT2LU4015AFF000XXX	
				20	1SDA074818R1	XT2LU3020AFF000XXX	1SDA074832R1	XT2LU4020AFF000XXX	
				25	1SDA074819R1	XT2LU3025AFF000XXX	1SDA074833R1	XT2LU4025AFF000XXX	
				30	1SDA074820R1	XT2LU3030AFF000XXX	1SDA074834R1	XT2LU4030AFF000XXX	
				35	1SDA074821R1	XT2LU3035AFF000XXX	1SDA074835R1	XT2LU4035AFF000XXX	
				40	1SDA074822R1	XT2LU3040AFF000XXX	1SDA074836R1	XT2LU4040AFF000XXX	
				50	1SDA074823R1	XT2LU3050AFF000XXX	1SDA074837R1	XT2LU4050AFF000XXX	
				60	1SDA074824R1	XT2LU3060AFF000XXX	1SDA074838R1	XT2LU4060AFF000XXX	
				70	1SDA074825R1	XT2LU3070AFF000XXX	1SDA074839R1	XT2LU4070AFF000XXX	
				TMA	80	1SDA074826R1	XT2LU3080BFF000XXX	1SDA074840R1	XT2LU4080BFF000XXX
					90	1SDA074827R1	XT2LU3090BFF000XXX	1SDA074841R1	XT2LU4090BFF000XXX
					100	1SDA074828R1	XT2LU3100BFF000XXX	1SDA074842R1	XT2LU4100BFF000XXX
					110	1SDA074829R1	XT2LU3110BFF000XXX	1SDA074843R1	XT2LU4110BFF000XXX
					125	1SDA074830R1	XT2LU3125BFF000XXX	1SDA074844R1	XT2LU4125BFF000XXX

#### SACE XT2L Ekip Dip LS/I Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	100kA	125	Ekip Dip LS/I	10	1SDA074930R1	XT2LU3010EFF000XXX	1SDA074935R1	XT2LU4010EFF000XXX
				25	1SDA074931R1	XT2LU3025EFF000XXX	1SDA074936R1	XT2LU4025EFF000XXX
				60	1SDA074932R1	XT2LU3060EFF000XXX	1SDA074937R1	XT2LU4060EFF000XXX
				100	1SDA074933R1	XT2LU3100EFF000XXX	1SDA074938R1	XT2LU4100EFF000XXX
				125	1SDA074934R1	XT2LU3125EFF000XXX	1SDA074939R1	XT2LU4125EFF000XXX

#### SACE XT2L Ekip Dip LSI Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	100kA	125	Ekip Dip LSI	10	1SDA122986R1	XT2LU30101FF000XXX	1SDA122987R1	XT2LU40101FF000XXX
				25	1SDA123223R1	XT2LU30251FF000XXX	1SDA123224R1	XT2LU40251FF000XXX
				60	Only available with the Breaking Part	XT2LU30601FF000XXX	Only available with the Breaking Part	XT2LU40601FF000XXX
				100		XT2LU31001FF000XXX		XT2LU41001FF000XXX
				125	+ Trip unit solution	XT2LU31251FF000XXX	+ Trip unit solution	XT2LU41251FF000XXX



XT2 - circuit-breaker

**SACE XT2L Ekip Dip LSI Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	100kA	125	Ekip Dip LSI	10	1SDA122990R1	XT2LU30102FF000XXX	1SDA122991R1	XT2LU40102FF000XXX
				25	1SDA123227R1	XT2LU30252FF000XXX	1SDA123228R1	XT2LU40252FF000XXX
				60	Only available with the Breaking Part + Trip unit solution	XT2LU30602FF000XXX	Only available with the Breaking Part + Trip unit solution	XT2LU40602FF000XXX
				100		XT2LU31002FF000XXX		XT2LU41002FF000XXX
				125		XT2LU31252FF000XXX		XT2LU41252FF000XXX

**SACE XT2L Ekip Dip LIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	100kA	125	Ekip Dip LIG	60	Only available with the Breaking Part + Trip unit solution	XT2LU3060CFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2LU4060CFF000XXX
				100		XT2LU3100CFF000XXX		XT2LU4100CFF000XXX
				125		XT2LU3125CFF000XXX		XT2LU4125CFF000XXX

**SACE XT2L Ekip Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	100kA	125	Ekip Touch LSI	40	Only available with the Breaking Part + Trip unit solution	XT2LU3040PFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2LU4040PFF000XXX
				60		XT2LU3060PFF000XXX		XT2LU4060PFF000XXX
				100		XT2LU3100PFF000XXX		XT2LU4100PFF000XXX
				125		XT2LU3125PFF000XXX		XT2LU4125PFF000XXX

**SACE XT2L Ekip Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	100kA	125	Ekip Touch LSI	40	Only available with the Breaking Part + Trip unit solution	XT2LU3040QFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2LU4040QFF000XXX
				60		XT2LU3060QFF000XXX		XT2LU4060QFF000XXX
				100		XT2LU3100QFF000XXX		XT2LU4100QFF000XXX
				125		XT2LU3125QFF000XXX		XT2LU4125QFF000XXX

**SACE XT2L Ekip Touch Measuring LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	100kA	125	Ekip Touch Measuring LSI	40	Only available with the Breaking Part + Trip unit solution	XT2LU3040RFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2LU4040RFF000XXX
				60		XT2LU3060RFF000XXX		XT2LU4060RFF000XXX
				100		XT2LU3100RFF000XXX		XT2LU4100RFF000XXX
				125		XT2LU3125RFF000XXX		XT2LU4125RFF000XXX

# Ordering codes for XT2

## Automatic circuit-breakers



XT2 - circuit-breaker

### SACE XT2L Ekip Touch Measuring LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	100kA	125	Ekip Touch Measuring LSIG	40	Only available with the Breaking Part + Trip unit solution	XT2LU3040SFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2LU4040SFF000XXX
				60		XT2LU3060SFF000XXX		XT2LU4060SFF000XXX
				100		XT2LU3100SFF000XXX		XT2LU4100SFF000XXX
				125		XT2LU3125SFF000XXX		XT2LU4125SFF000XXX

### SACE XT2L Ekip Hi-Touch LSI - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	100kA	125	Ekip Hi-Touch LSI	40	Only available with the Breaking Part + Trip unit solution	XT2LU3040TFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2LU4040TFF000XXX
				60		XT2LU3060TFF000XXX		XT2LU4060TFF000XXX
				100		XT2LU3100TFF000XXX		XT2LU4100TFF000XXX
				125		XT2LU3125TFF000XXX		XT2LU4125TFF000XXX

### SACE XT2L Ekip Hi-Touch LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	100kA	125	Ekip Hi-Touch LSIG	40	Only available with the Breaking Part + Trip unit solution	XT2LU3040UFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2LU4040UFF000XXX
				60		XT2LU3060UFF000XXX		XT2LU4060UFF000XXX
				100		XT2LU3100UFF000XXX		XT2LU4100UFF000XXX
				125		XT2LU3125UFF000XXX		XT2LU4125UFF000XXX



XT2 - circuit-breaker

## Motor protection circuit-breaker (MCP)

### SACE XT2L MA Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT2	100kA	125	MA	3	1SDA074891R1	XT2LU3003MFF000XXX
				7	1SDA074892R1	XT2LU3007MFF000XXX
				15	1SDA074893R1	XT2LU3015MFF000XXX
				30	1SDA074894R1	XT2LU3030MFF000XXX
				50	1SDA074895R1	XT2LU3050MFF000XXX
				70	1SDA074896R1	XT2LU3070MFF000XXX
				80	1SDA074897R1	XT2LU3080MFF000XXX
				100	1SDA074898R1	XT2LU3100MFF000XXX
				125	1SDA074899R1	XT2LU3125MFF000XXX

### SACE XT2L Ekip M Dip I Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT2	100kA	125	Ekip M Dip I	10	1SDA075080R1	XT2LU3010JFF000XXX
				25	1SDA075081R1	XT2LU3025JFF000XXX
				60	1SDA075082R1	XT2LU3060JFF000XXX
				100	1SDA075083R1	XT2LU3100JFF000XXX
				125	1SDA075084R1	XT2LU3125JFF000XXX

## Motor protection circuit-breaker (MPCB)

### SACE XT2L Ekip M Dip LIU Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT2	100kA	125	Ekip M Dip LIU	25	1SDA075106R1	XT2LU3025LFF000XXX
				60	1SDA075107R1	XT2LU3060LFF000XXX
				100	1SDA075108R1	XT2LU3100LFF000XXX

### SACE XT2L Ekip M Touch LRIU Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT2	100kA	125	Ekip M Touch LRIU	40	1SDA102094R1	XT2LU3040WFF000XXX
				60	1SDA102095R1	XT2LU3060WFF000XXX
				100	1SDA102096R1	XT2LU3100WFF000XXX

# Ordering codes for XT2

## Automatic circuit-breakers



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XT2 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT2V TMF/TMA Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles			
				Product ID	US/CA PN	Product ID	US/CA PN		
XT2	150kA	125	TMF	15	1SDA074845R1	XT2VU3015AFF000XXX	1SDA074859R1	XT2VU4015AFF000XXX	
				20	1SDA074846R1	XT2VU3020AFF000XXX	1SDA074860R1	XT2VU4020AFF000XXX	
				25	1SDA074847R1	XT2VU3025AFF000XXX	1SDA074861R1	XT2VU4025AFF000XXX	
				30	1SDA074848R1	XT2VU3030AFF000XXX	1SDA074862R1	XT2VU4030AFF000XXX	
				35	1SDA074849R1	XT2VU3035AFF000XXX	1SDA074863R1	XT2VU4035AFF000XXX	
				40	1SDA074850R1	XT2VU3040AFF000XXX	1SDA074864R1	XT2VU4040AFF000XXX	
				50	1SDA074851R1	XT2VU3050AFF000XXX	1SDA074865R1	XT2VU4050AFF000XXX	
				60	1SDA074852R1	XT2VU3060AFF000XXX	1SDA074866R1	XT2VU4060AFF000XXX	
				70	1SDA074853R1	XT2VU3070AFF000XXX	1SDA074867R1	XT2VU4070AFF000XXX	
				TMA	80	1SDA074854R1	XT2VU3080BFF000XXX	1SDA074868R1	XT2VU4080BFF000XXX
					90	1SDA074855R1	XT2VU3090BFF000XXX	1SDA074869R1	XT2VU4090BFF000XXX
					100	1SDA074856R1	XT2VU3100BFF000XXX	1SDA074870R1	XT2VU4100BFF000XXX
					110	1SDA074857R1	XT2VU3110BFF000XXX	1SDA074871R1	XT2VU4110BFF000XXX
					125	1SDA074858R1	XT2VU3125BFF000XXX	1SDA074872R1	XT2VU4125BFF000XXX

#### SACE XT2V Ekip Dip LS/I Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	150kA	125	Ekip Dip LS/I	10	1SDA074940R1	XT2VU3010EFF000XXX	1SDA074945R1	XT2VU4010EFF000XXX
				25	1SDA074941R1	XT2VU3025EFF000XXX	1SDA074946R1	XT2VU4025EFF000XXX
				60	1SDA074942R1	XT2VU3060EFF000XXX	1SDA074947R1	XT2VU4060EFF000XXX
				100	1SDA074943R1	XT2VU3100EFF000XXX	1SDA074948R1	XT2VU4100EFF000XXX
				125	1SDA074944R1	XT2VU3125EFF000XXX	1SDA074949R1	XT2VU4125EFF000XXX

#### SACE XT2V Ekip Dip LSI Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	150kA	125	Ekip Dip LSI	10	1SDA122988R1	XT2VU30101FF000XXX	1SDA122989R1	XT2VU40101FF000XXX
				25	1SDA123225R1	XT2VU30251FF000XXX	1SDA123226R1	XT2VU40251FF000XXX
				60	Only available with the Breaking Part + Trip unit solution	XT2VU30601FF000XXX	Only available with the Breaking Part + Trip unit solution	XT2VU40601FF000XXX
				100		XT2VU31001FF000XXX		XT2VU41001FF000XXX
				125		XT2VU31251FF000XXX		XT2VU41251FF000XXX



XT2 - circuit-breaker

**SACE XT2V Ekip Dip LSI Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	150kA	125	Ekip Dip LSI	10	1SDA122992R1	XT2VU30102FF000XXX	1SDA122993R1	XT2VU40102FF000XXX
				25	1SDA123229R1	XT2VU30252FF000XXX	1SDA123230R1	XT2VU40252FF000XXX
				60	Only available with the Breaking Part + Trip unit solution	XT2VU30602FF000XXX	Only available with the Breaking Part + Trip unit solution	XT2VU40602FF000XXX
				100		XT2VU31002FF000XXX		XT2VU41002FF000XXX
				125		XT2VU31252FF000XXX		XT2VU41252FF000XXX

**SACE XT2V Ekip Dip LIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	150kA	125	Ekip Dip LIG	60	Only available with the Breaking Part + Trip unit solution	XT2VU3060CFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2VU4060CFF000XXX
				100		XT2VU3100CFF000XXX		XT2VU4100CFF000XXX
				125		XT2VU3125CFF000XXX		XT2VU4125CFF000XXX

**SACE XT2V Ekip Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	150kA	125	Ekip Touch LSI	40	Only available with the Breaking Part + Trip unit solution	XT2VU3040PFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2VU4040PFF000XXX
				60		XT2VU3060PFF000XXX		XT2VU4060PFF000XXX
				100		XT2VU3100PFF000XXX		XT2VU4100PFF000XXX
				125		XT2VU3125PFF000XXX		XT2VU4125PFF000XXX

**SACE XT2V Ekip Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	150kA	125	Ekip Touch LSI	40	Only available with the Breaking Part + Trip unit solution	XT2VU3040QFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2VU4040QFF000XXX
				60		XT2VU3060QFF000XXX		XT2VU4060QFF000XXX
				100		XT2VU3100QFF000XXX		XT2VU4100QFF000XXX
				125		XT2VU3125QFF000XXX		XT2VU4125QFF000XXX

**SACE XT2V Ekip Touch Measuring LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	150kA	125	Ekip Touch Measuring LSI	40	Only available with the Breaking Part + Trip unit solution	XT2VU3040RFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2VU4040RFF000XXX
				60		XT2VU3060RFF000XXX		XT2VU4060RFF000XXX
				100		XT2VU3100RFF000XXX		XT2VU4100RFF000XXX
				125		XT2VU3125RFF000XXX		XT2VU4125RFF000XXX

# Ordering codes for XT2

## Automatic circuit-breakers



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XT2 - circuit-breaker

### SACE XT2V Ekip Touch Measuring LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	150kA	125	Ekip Touch Measuring LSIG	40	Only available with the Breaking Part + Trip unit solution	XT2VU3040SFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2VU4040SFF000XXX
				60		XT2VU3060SFF000XXX		XT2VU4060SFF000XXX
				100		XT2VU3100SFF000XXX		XT2VU4100SFF000XXX
				125		XT2VU3125SFF000XXX		XT2VU4125SFF000XXX

### SACE XT2V Ekip Hi-Touch LSI - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	150kA	125	Ekip Hi-Touch LSI	40	Only available with the Breaking Part + Trip unit solution	XT2VU3040TFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2VU4040TFF000XXX
				60		XT2VU3060TFF000XXX		XT2VU4060TFF000XXX
				100		XT2VU3100TFF000XXX		XT2VU4100TFF000XXX
				125		XT2VU3125TFF000XXX		XT2VU4125TFF000XXX

### SACE XT2V Ekip Hi-Touch LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT2	150kA	125	Ekip Hi-Touch LSIG	40	Only available with the Breaking Part + Trip unit solution	XT2VU3040UFF000XXX	Only available with the Breaking Part + Trip unit solution	XT2VU4040UFF000XXX
				60		XT2VU3060UFF000XXX		XT2VU4060UFF000XXX
				100		XT2VU3100UFF000XXX		XT2VU4100UFF000XXX
				125		XT2VU3125UFF000XXX		XT2VU4125UFF000XXX



XT2 - circuit-breaker

## Motor protection circuit-breaker (MCP)

### SACE XT2V Ekip M Dip I Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT2	150kA	125	Ekip M Dip I	10	1SDA075090R1	XT2VU3010JFF000XXX
				25	1SDA075091R1	XT2VU3025JFF000XXX
				60	1SDA075092R1	XT2VU3060JFF000XXX
				100	1SDA075093R1	XT2VU3100JFF000XXX
				125	1SDA075094R1	XT2VU3125JFF000XXX

## Motor protection circuit-breaker (MPCB)

### SACE XT2V Ekip M Dip LIU Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT2	150kA	125	Ekip M Dip LIU	25	1SDA075100R1	XT2VU3025LFF000XXX
				60	1SDA075101R1	XT2VU3060LFF000XXX
				100	1SDA075102R1	XT2VU3100LFF000XXX

### SACE XT2V Ekip M Touch LRIU Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT2	150kA	125	Ekip M Touch LRIU	40	1SDA102098R1	XT2VU3040WFF000XXX
				60	1SDA102099R1	XT2VU3060WFF000XXX
				100	1SDA102100R1	XT2VU3100WFF000XXX

# Ordering codes for XT2

## Automatic circuit-breakers



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XT2 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT2X TMF/TMA Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles			
				Product ID	US/CA PN	Product ID	US/CA PN		
XT2	200kA	125	TMF	15	1SDA081937R1	XT2XU3015AFF000XXX	1SDA081938R1	XT2XU4015AFF000XXX	
				20	1SDA081939R1	XT2XU3020AFF000XXX	1SDA081940R1	XT2XU4020AFF000XXX	
				25	1SDA081941R1	XT2XU3025AFF000XXX	1SDA081942R1	XT2XU4025AFF000XXX	
				30	1SDA081943R1	XT2XU3030AFF000XXX	1SDA081944R1	XT2XU4030AFF000XXX	
				35	1SDA081945R1	XT2XU3035AFF000XXX	1SDA081946R1	XT2XU4035AFF000XXX	
				40	1SDA081947R1	XT2XU3040AFF000XXX	1SDA081948R1	XT2XU4040AFF000XXX	
				50	1SDA081949R1	XT2XU3050AFF000XXX	1SDA081950R1	XT2XU4050AFF000XXX	
				60	1SDA081951R1	XT2XU3060AFF000XXX	1SDA081952R1	XT2XU4060AFF000XXX	
				70	1SDA081953R1	XT2XU3070AFF000XXX	1SDA081954R1	XT2XU4070AFF000XXX	
				TMA	80	1SDA081933R1	XT2XU3080BFF000XXX	1SDA081934R1	XT2XU4080BFF000XXX
					90	1SDA081935R1	XT2XU3090BFF000XXX	1SDA081936R1	XT2XU4090BFF000XXX
					100	1SDA081927R1	XT2XU3100BFF000XXX	1SDA081928R1	XT2XU4100BFF000XXX
					110	1SDA081929R1	XT2XU3110BFF000XXX	1SDA081930R1	XT2XU4110BFF000XXX
					125	1SDA081931R1	XT2XU3125BFF000XXX	1SDA081932R1	XT2XU4125BFF000XXX

### Molded case switches

#### SACE XT2D - MCS

Size	Iu	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT2	125	1SDA076617R1	XT2NU3125DFF000XXX	1SDA076618R1	XT2NU4125DFF000XXX
		1SDA076619R1	XT2HU3125DFF000XXX	1SDA076620R1	XT2HU4125DFF000XXX
		1SDA076621R1	XT2LU3125DFF000XXX	1SDA076622R1	XT2LU4125DFF000XXX
		1SDA076623R1	XT2VU3125DFF000XXX	1SDA076624R1	XT2VU4125DFF000XXX

# Ordering codes for XT2

## Breaking part



XT2 - breaking part

### SACE XT2 - Breaking part

Size	Iu	Icu (415V)	3 poles	4 poles
			Product ID	Product ID
XT2	125	25	1SDA075630R1	1SDA075635R1
		35	1SDA075631R1	1SDA075636R1
		65	1SDA075632R1	1SDA075637R1
		100	1SDA075633R1	1SDA075638R1
		150	1SDA075634R1	1SDA075639R1

### 100% rated distribution circuit-breakers

#### 100% rated version extra code

Size	3 poles	4 poles
	Product ID	Product ID
XT2	1SDA076604R1	1SDA080699R1

Note: to be specified only in addition to the code of the automatic circuit-breaker or of the breaking part

# Ordering codes for XT2

## Trip units



Thermal magnetic trip unit



Dip trip unit



Touch trip unit

### Trip units - distribution protection

Size	Type	3 poles	4 poles
		Product ID	Product ID
XT2	TMF 50-500	1SDA075650R1	1SDA075658R1
	TMF 60-600	1SDA075651R1	1SDA075659R1
	TMF 70-700	1SDA075652R1	1SDA075661R1
	TMA 80-800	1SDA075653R1	1SDA075662R1
	TMA 90-900	1SDA075654R1	1SDA075663R1
	TMA 100-1000	1SDA075655R1	1SDA075664R1
	TMA 110-1100	1SDA075656R1	1SDA075665R1
	TMA 125-1250	1SDA075657R1	1SDA075666R1
	Ekip Dip LS/I In=60A	1SDA075672R1	1SDA075675R1
	Ekip Dip LS/I In=100A	1SDA075673R1	1SDA075676R1
	Ekip Dip LS/I In=125A	1SDA075674R1	1SDA075677R1
	Ekip C Dip LSI In=60A	1SDA075678R1	1SDA075681R1
	Ekip C Dip LSI In=100A	1SDA075679R1	1SDA075682R1
	Ekip C Dip LSI In=125A	1SDA075680R1	1SDA075683R1
	Ekip C Dip LSIG In=60A	1SDA075684R1	1SDA075687R1
	Ekip C Dip LSIG In=100A	1SDA075685R1	1SDA075688R1
	Ekip C Dip LSIG In=125A	1SDA075686R1	1SDA075689R1
	Ekip Dip LSI In=60A	1SDA102148R1	1SDA102194R1
	Ekip Dip LSI In=100A	1SDA102149R1	1SDA102195R1
	Ekip Dip LSI In=125A	1SDA102150R1	1SDA102196R1
	Ekip Dip LSIG In=60A	1SDA102154R1	1SDA102200R1
	Ekip Dip LSIG In=100A	1SDA102155R1	1SDA102201R1
	Ekip Dip LSIG In=125A	1SDA102156R1	1SDA102202R1
	Ekip Dip LIG In=60A	1SDA102188R1	1SDA102230R1
	Ekip Dip LIG In=100A	1SDA102189R1	1SDA102231R1
	Ekip Dip LIG In=125A	1SDA102190R1	1SDA102232R1
	Ekip Touch LSI In=40A	1SDA102159R1	1SDA102205R1
	Ekip Touch LSI In=60A	1SDA102160R1	1SDA102206R1
	Ekip Touch LSI In=100A	1SDA102161R1	1SDA102207R1
	Ekip Touch LSI In=125A	1SDA102162R1	1SDA102208R1
	Ekip Touch LSIG In=40A	1SDA102163R1	1SDA102209R1
	Ekip Touch LSIG In=60A	1SDA102164R1	1SDA102210R1
	Ekip Touch LSIG In=100A	1SDA102165R1	1SDA102211R1
	Ekip Touch LSIG In=125A	1SDA102166R1	1SDA102212R1
	Ekip Touch Measuring LSI In=40A	1SDA102167R1	1SDA102213R1
	Ekip Touch Measuring LSI In=60A	1SDA102168R1	1SDA102214R1
	Ekip Touch Measuring LSI In=100A	1SDA102169R1	1SDA102215R1
	Ekip Touch Measuring LSI In=125A	1SDA102170R1	1SDA102216R1
	Ekip Touch Measuring LSIG In=40A	1SDA102171R1	1SDA102217R1
	Ekip Touch Measuring LSIG In=60A	1SDA102172R1	1SDA102218R1
	Ekip Touch Measuring LSIG In=100A	1SDA102173R1	1SDA102219R1
	Ekip Touch Measuring LSIG In=125A	1SDA102174R1	1SDA102220R1
Ekip Hi-Touch LSI In=40A	1SDA102175R1	1SDA102221R1	
Ekip Hi-Touch LSI In=60A	1SDA102176R1	1SDA102222R1	
Ekip Hi-Touch LSI In=100A	1SDA102177R1	1SDA102223R1	
Ekip Hi-Touch LSI In=125A	1SDA102178R1	1SDA102224R1	
Ekip Hi-Touch LSIG In=40A	1SDA102179R1	1SDA102225R1	
Ekip Hi-Touch LSIG In=60A	1SDA102180R1	1SDA102226R1	
Ekip Hi-Touch LSIG In=100A	1SDA102181R1	1SDA102227R1	
Ekip Hi-Touch LSIG In=125A	1SDA102182R1	1SDA102228R1	

# Ordering codes for XT2

## Breaking part + trip unit solution



XT2 - breaking part



TMA trip unit



Ekip Dip trip unit



Ekip Touch trip unit

Breaking Part	Icu Poles	N (25kA)	S (35kA)	H (65kA)	L (100kA)	V (150kA)
		3	1SDA075630R1	1SDA075631R1	1SDA075632R1	1SDA075633R1
	4	1SDA075635R1	1SDA075636R1	1SDA075637R1	1SDA075638R1	1SDA075639R1

Trip units	In Poles	40	50	60	70	80	90	100	110	125
		TMF	3		1SDA075650R1	1SDA075651R1	1SDA075652R1			
	4		1SDA075658R1	1SDA075659R1	1SDA075661R1					
TMA	3					1SDA075653R1	1SDA075654R1	1SDA075655R1	1SDA075656R1	1SDA075657R1
	4					1SDA075662R1	1SDA075663R1	1SDA075664R1	1SDA075665R1	1SDA075666R1
Ekip Dip	3			1SDA075672R1				1SDA075673R1		1SDA075674R1
LS/I	4			1SDA075675R1				1SDA075676R1		1SDA075677R1
Ekip C Dip	3			1SDA075678R1				1SDA075679R1		1SDA075680R1
LSI	4			1SDA075681R1				1SDA075682R1		1SDA075683R1
Ekip C Dip	3			1SDA075684R1				1SDA075685R1		1SDA075686R1
LSIG	4			1SDA075687R1				1SDA075688R1		1SDA075689R1
Ekip Dip	3			1SDA102148R1				1SDA102149R1		1SDA102150R1
LSI	4			1SDA102194R1				1SDA102195R1		1SDA102196R1
Ekip Dip	3			1SDA102154R1				1SDA102155R1		1SDA102156R1
LSIG	4			1SDA102200R1				1SDA102201R1		1SDA102202R1
Ekip Dip	3			1SDA102188R1				1SDA102189R1		1SDA102190R1
LIG	4			1SDA102230R1				1SDA102231R1		1SDA102232R1
Ekip Touch	3	1SDA102159R1		1SDA102160R1				1SDA102161R1		1SDA102162R1
LSI	4	1SDA102205R1		1SDA102206R1				1SDA102207R1		1SDA102208R1
Ekip Touch	3	1SDA102163R1		1SDA102164R1				1SDA102165R1		1SDA102166R1
LSIG	4	1SDA102209R1		1SDA102210R1				1SDA102211R1		1SDA102212R1
Ekip Touch	3	1SDA102167R1		1SDA102168R1				1SDA102169R1		1SDA102170R1
Measuring	4	1SDA102213R1		1SDA102214R1				1SDA102215R1		1SDA102216R1
LSI										
Ekip Touch	3	1SDA102171R1		1SDA102172R1				1SDA102173R1		1SDA102174R1
Measuring	4	1SDA102217R1		1SDA102218R1				1SDA102219R1		1SDA102220R1
LSIG										
Ekip Hi-	3	1SDA102175R1		1SDA102176R1				1SDA102177R1		1SDA102178R1
Touch	4	1SDA102221R1		1SDA102222R1				1SDA102223R1		1SDA102224R1
LSI										
Ekip Hi-	3	1SDA102179R1		1SDA102180R1				1SDA102181R1		1SDA102182R1
Touch	4	1SDA102225R1		1SDA102226R1				1SDA102227R1		1SDA102228R1
LSIG										

Note: When a single code for the complete circuit-breaker is not available, please configure the breaking part code with the trip unit code to order a factory-assembled circuit-breaker

# Ordering codes for XT3

## Automatic circuit-breakers



XT3 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT3N TMF Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT3	25kA	225	TMF	60	1SDA075109R1	XT3NU3060AFF000XXX	1SDA075119R1	XT3NU4060AFF000XXX
				70	1SDA075110R1	XT3NU3070AFF000XXX	1SDA075120R1	XT3NU4070AFF000XXX
				80	1SDA075111R1	XT3NU3080AFF000XXX	1SDA075121R1	XT3NU4080AFF000XXX
				90	1SDA075112R1	XT3NU3090AFF000XXX	1SDA075122R1	XT3NU4090AFF000XXX
				100	1SDA075113R1	XT3NU3100AFF000XXX	1SDA075123R1	XT3NU4100AFF000XXX
				110	1SDA080071R1	XT3NU3110AFF000XXX	1SDA080072R1	XT3NU4110AFF000XXX
				125	1SDA075114R1	XT3NU3125AFF000XXX	1SDA075124R1	XT3NU4125AFF000XXX
				150	1SDA075115R1	XT3NU3150AFF000XXX	1SDA075125R1	XT3NU4150AFF000XXX
				175	1SDA075116R1	XT3NU3175AFF000XXX	1SDA075126R1	XT3NU4175AFF000XXX
				200	1SDA075117R1	XT3NU3200AFF000XXX	1SDA075127R1	XT3NU4200AFF000XXX
				225	1SDA075118R1	XT3NU3225AFF000XXX	1SDA075128R1	XT3NU4225AFF000XXX

#### SACE XT3S TMF Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT3	25kA	225	TMF	60	1SDA075129R1	XT3SU3060AFF000XXX	1SDA075139R1	XT3SU4060AFF000XXX
				70	1SDA075130R1	XT3SU3070AFF000XXX	1SDA075140R1	XT3SU4070AFF000XXX
				80	1SDA075131R1	XT3SU3080AFF000XXX	1SDA075141R1	XT3SU4080AFF000XXX
				90	1SDA075132R1	XT3SU3090AFF000XXX	1SDA075142R1	XT3SU4090AFF000XXX
				100	1SDA075133R1	XT3SU3100AFF000XXX	1SDA075143R1	XT3SU4100AFF000XXX
				110	1SDA080073R1	XT3SU3110AFF000XXX	1SDA080074R1	XT3SU4110AFF000XXX
				125	1SDA075134R1	XT3SU3125AFF000XXX	1SDA075144R1	XT3SU4125AFF000XXX
				150	1SDA075135R1	XT3SU3150AFF000XXX	1SDA075145R1	XT3SU4150AFF000XXX
				175	1SDA075136R1	XT3SU3175AFF000XXX	1SDA075146R1	XT3SU4175AFF000XXX
				200	1SDA075137R1	XT3SU3200AFF000XXX	1SDA075147R1	XT3SU4200AFF000XXX
				225	1SDA075138R1	XT3SU3225AFF000XXX	1SDA075148R1	XT3SU4225AFF000XXX



XT3 - circuit-breaker

## Motor protection circuit-breaker (MCP)

### SACE XT3S MA Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles	
				Product ID	US/CA PN
XT3	35kA	225	MA	100	1SDA075149R1 XT3SU3100MFF000XXX
				110	1SDA076600R1 XT3SU3110MFF000XXX
				125	1SDA075150R1 XT3SU3125MFF000XXX
				150	1SDA075151R1 XT3SU3150MFF000XXX
				200	1SDA075152R1 XT3SU3200MFF000XXX

## Molded case switches

### SACE XT3D - MCS

Size	Int. Rating Iu (480V)		3 poles		4 poles	
			Product ID	US/CA PN	Product ID	US/CA PN
XT3	35kA	225	1SDA075616R1	XT3NU3225DFF000XXX	1SDA075617R1	XT3NU4225DFF000XXX
			1SDA075618R1	XT3SU3225DFF000XXX	1SDA075619R1	XT3SU4225DFF000XXX

## 100% rated distribution circuit-breakers

### 100% rated version extra code

Size	3 poles		4 poles	
	Product ID		Product ID	
XT3	1SDA076605R1		1SDA080700R1	

Note: to be specified only in addition to the code of the automatic circuit-breaker

# Ordering codes for XT4

## Automatic circuit-breakers



XT4 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT4N TMF/TMA Front terminals (F)

Size	Int. Rating (480V)	Iu	Trip units	In	2 poles		3 poles		4 poles				
					Product ID	Product ID	US/CA PN	Product ID	US/CA PN				
XT4	25kA	250	TMF	25	1SDA080117R1	1SDA075153R1	XT4NU3025AFF000XXX	1SDA075170R1	XT4NU4025AFF000XXX				
				30	1SDA080128R1	1SDA075154R1	XT4NU3030AFF000XXX	1SDA075171R1	XT4NU4030AFF000XXX				
				35	1SDA080129R1	1SDA075155R1	XT4NU3035AFF000XXX	1SDA075173R1	XT4NU4035AFF000XXX				
				40	1SDA080130R1	1SDA075156R1	XT4NU3040AFF000XXX	1SDA075174R1	XT4NU4040AFF000XXX				
				50	1SDA080131R1	1SDA075157R1	XT4NU3050AFF000XXX	1SDA075175R1	XT4NU4050AFF000XXX				
				60	1SDA080132R1	1SDA075158R1	XT4NU3060AFF000XXX	1SDA075176R1	XT4NU4060AFF000XXX				
				70	1SDA080133R1	1SDA075159R1	XT4NU3070AFF000XXX	1SDA075177R1	XT4NU4070AFF000XXX				
				80		1SDA080135R1	XT4NU3080AFF000XXX						
				90		1SDA080137R1	XT4NU3090AFF000XXX						
				100		1SDA080102R1	XT4NU3100AFF000XXX						
				110		1SDA080104R1	XT4NU3110AFF000XXX						
				125		1SDA080106R1	XT4NU3125AFF000XXX						
				150		1SDA080108R1	XT4NU3150AFF000XXX						
				175		1SDA080110R1	XT4NU3175AFF000XXX						
				200		1SDA080112R1	XT4NU3200AFF000XXX						
				225		1SDA080114R1	XT4NU3225AFF000XXX						
				250		1SDA080116R1	XT4NU3250AFF000XXX						
				TMA				80	1SDA080134R1	1SDA075160R1	XT4NU3080BFF000XXX	1SDA075178R1	XT4NU4080BFF000XXX
								90	1SDA080136R1	1SDA075161R1	XT4NU3090BFF000XXX	1SDA075179R1	XT4NU4090BFF000XXX
								100	1SDA080101R1	1SDA075162R1	XT4NU3100BFF000XXX	1SDA075180R1	XT4NU4100BFF000XXX
110	1SDA080103R1	1SDA075163R1	XT4NU3110BFF000XXX					1SDA075181R1	XT4NU4110BFF000XXX				
125	1SDA080105R1	1SDA075164R1	XT4NU3125BFF000XXX					1SDA075182R1	XT4NU4125BFF000XXX				
150	1SDA080107R1	1SDA075165R1	XT4NU3150BFF000XXX					1SDA075183R1	XT4NU4150BFF000XXX				
175	1SDA080109R1	1SDA075166R1	XT4NU3175BFF000XXX					1SDA075184R1	XT4NU4175BFF000XXX				
200	1SDA080111R1	1SDA075167R1	XT4NU3200BFF000XXX					1SDA075185R1	XT4NU4200BFF000XXX				
225	1SDA080113R1	1SDA075168R1	XT4NU3225BFF000XXX					1SDA075186R1	XT4NU4225BFF000XXX				
250	1SDA080115R1	1SDA075169R1	XT4NU3250BFF000XXX					1SDA075187R1	XT4NU4250BFF000XXX				



XT4 - circuit-breaker

**SACE XT4N Ekip Dip LS/I Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	25kA	250	Ekip Dip LS/I	40	1SDA075358R1	XT4NU3040EFF000XXX	1SDA075364R1	XT4NU4040EFF000XXX
				60	1SDA075359R1	XT4NU3060EFF000XXX	1SDA075365R1	XT4NU4060EFF000XXX
				100	1SDA075360R1	XT4NU3100EFF000XXX	1SDA075366R1	XT4NU4100EFF000XXX
				150	1SDA075361R1	XT4NU3150EFF000XXX	1SDA075367R1	XT4NU4150EFF000XXX
				225	1SDA075362R1	XT4NU3225EFF000XXX	1SDA075368R1	XT4NU4225EFF000XXX
				250	1SDA075363R1	XT4NU3250EFF000XXX	1SDA075369R1	XT4NU4250EFF000XXX

**SACE XT4N Ekip Dip LSI Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	25kA	250	Ekip Dip LSI	40	1SDA102235R1	XT4NU30401FF000XXX	1SDA102301R1	XT4NU40401FF000XXX
				60	1SDA102236R1	XT4NU30601FF000XXX	1SDA102302R1	XT4NU40601FF000XXX
				100	1SDA102237R1	XT4NU31001FF000XXX	1SDA102303R1	XT4NU41001FF000XXX
				150	1SDA102238R1	XT4NU31501FF000XXX	1SDA102304R1	XT4NU41501FF000XXX
				225	1SDA102239R1	XT4NU32251FF000XXX	1SDA122947R1	XT4NU42251FF000XXX
				250	1SDA102240R1	XT4NU32501FF000XXX	1SDA102305R1	XT4NU42501FF000XXX

**SACE XT4N Ekip Dip LSI Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	25kA	250	Ekip Dip LSI	40	1SDA102241R1	XT4NU30402FF000XXX	1SDA102306R1	XT4NU40402FF000XXX
				60	1SDA102242R1	XT4NU30602FF000XXX	1SDA102307R1	XT4NU40602FF000XXX
				100	1SDA102243R1	XT4NU31002FF000XXX	1SDA102308R1	XT4NU41002FF000XXX
				150	1SDA102244R1	XT4NU31502FF000XXX	1SDA102309R1	XT4NU41502FF000XXX
				225	1SDA102245R1	XT4NU32252FF000XXX	1SDA122952R1	XT4NU42252FF000XXX
				250	1SDA102246R1	XT4NU32502FF000XXX	1SDA122953R1	XT4NU42502FF000XXX

**SACE XT4N Ekip Dip LIG Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	25kA	250	Ekip Dip LIG	40	1SDA102247R1	XT4NU3040CFF000XXX	1SDA102311R1	XT4NU4040CFF000XXX
				60	1SDA102248R1	XT4NU3060CFF000XXX	1SDA102312R1	XT4NU4060CFF000XXX
				100	1SDA102249R1	XT4NU3100CFF000XXX	1SDA102313R1	XT4NU4100CFF000XXX
				150	1SDA102250R1	XT4NU3150CFF000XXX	1SDA102314R1	XT4NU4150CFF000XXX
				225	1SDA102251R1	XT4NU3225CFF000XXX	1SDA102310R1	XT4NU4225CFF000XXX
				250	1SDA102252R1	XT4NU3250CFF000XXX	1SDA102315R1	XT4NU4250CFF000XXX

# Ordering codes for XT4

## Automatic circuit-breakers



XT4 - circuit-breaker

### SACE XT4N Ekip Touch LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	25kA	250	Ekip Touch LSI	100	Only available with the Breaking Part + Trip unit solution	XT4NU3100PFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4NU4100PFF000XXX
				150		XT4NU3150PFF000XXX		XT4NU4150PFF000XXX
				225		XT4NU3225PFF000XXX		XT4NU4225PFF000XXX
				250		XT4NU3250PFF000XXX		XT4NU4250PFF000XXX

### SACE XT4N Ekip Touch LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	25kA	250	Ekip Touch LSI	100	Only available with the Breaking Part + Trip unit solution	XT4NU3100QFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4NU4100QFF000XXX
				150		XT4NU3150QFF000XXX		XT4NU4150QFF000XXX
				225		XT4NU3225QFF000XXX		XT4NU4225QFF000XXX
				250		XT4NU3250QFF000XXX		XT4NU4250QFF000XXX

### SACE XT4N Ekip Touch Measuring LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	25kA	250	Ekip Touch Measuring LSI	100	Only available with the Breaking Part + Trip unit solution	XT4NU3100RFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4NU4100RFF000XXX
				150		XT4NU3150RFF000XXX		XT4NU4150RFF000XXX
				225		XT4NU3225RFF000XXX		XT4NU4225RFF000XXX
				250		XT4NU3250RFF000XXX		XT4NU4250RFF000XXX

### SACE XT4N Ekip Touch Measuring LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	25kA	250	Ekip Touch Measuring LSI	100	Only available with the Breaking Part + Trip unit solution	XT4NU3100SFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4NU4100SFF000XXX
				150		XT4NU3150SFF000XXX		XT4NU4150SFF000XXX
				225		XT4NU3225SFF000XXX		XT4NU4225SFF000XXX
				250		XT4NU3250SFF000XXX		XT4NU4250SFF000XXX



XT4 - circuit-breaker

**SACE XT4N Ekip Hi-Touch LSI - Front terminals (F)**

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	25kA	250	Ekip Hi-Touch LSI	100	Only available with the Breaking Part + Trip unit solution	XT4NU3100TFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4NU4100TFF000XXX
				150		XT4NU3150TFF000XXX		XT4NU4150TFF000XXX
				225		XT4NU3225TFF000XXX		XT4NU4225TFF000XXX
				250		XT4NU3250TFF000XXX		XT4NU4250TFF000XXX

**SACE XT4N Ekip Hi-Touch LSiG - Front terminals (F)**

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	25kA	250	Ekip Hi-Touch LSiG	100	Only available with the Breaking Part + Trip unit solution	XT4NU3100UFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4NU4100UFF000XXX
				150		XT4NU3150UFF000XXX		XT4NU4150UFF000XXX
				225		XT4NU3225UFF000XXX		XT4NU4225UFF000XXX
				250		XT4NU3250UFF000XXX		XT4NU4250UFF000XXX

# Ordering codes for XT4

## Automatic circuit-breakers



XT4 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT4S TMF/TMA Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles						
				Product ID	US/CA PN	Product ID	US/CA PN					
XT4	35kA	250	TMF	25	1SDA075188R1	XT4SU3025AFF000XXX	1SDA075205R1	XT4SU4025AFF000XXX				
				30	1SDA075189R1	XT4SU3030AFF000XXX	1SDA075206R1	XT4SU4030AFF000XXX				
				35	1SDA075190R1	XT4SU3035AFF000XXX	1SDA075208R1	XT4SU4035AFF000XXX				
				40	1SDA075191R1	XT4SU3040AFF000XXX	1SDA075209R1	XT4SU4040AFF000XXX				
				50	1SDA075192R1	XT4SU3050AFF000XXX	1SDA075210R1	XT4SU4050AFF000XXX				
				60	1SDA075193R1	XT4SU3060AFF000XXX	1SDA075211R1	XT4SU4060AFF000XXX				
				70	1SDA075194R1	XT4SU3070AFF000XXX	1SDA075212R1	XT4SU4070AFF000XXX				
				80	1SDA080148R1	XT4SU3080AFF000XXX						
				90	1SDA080149R1	XT4SU3090AFF000XXX						
				100	1SDA080140R1	XT4SU3100AFF000XXX						
				110	1SDA080141R1	XT4SU3110AFF000XXX						
				125	1SDA080142R1	XT4SU3125AFF000XXX						
				150	1SDA080143R1	XT4SU3150AFF000XXX						
				175	1SDA080144R1	XT4SU3175AFF000XXX						
				200	1SDA080145R1	XT4SU3200AFF000XXX						
				225	1SDA080146R1	XT4SU3225AFF000XXX						
				250	1SDA080147R1	XT4SU3250AFF000XXX						
							TMA	80	1SDA075195R1	XT4SU3080BFF000XXX	1SDA075213R1	XT4SU4080BFF000XXX
								90	1SDA075196R1	XT4SU3090BFF000XXX	1SDA075214R1	XT4SU4090BFF000XXX
								100	1SDA075197R1	XT4SU3100BFF000XXX	1SDA075215R1	XT4SU4100BFF000XXX
110	1SDA075198R1	XT4SU3110BFF000XXX	1SDA075216R1					XT4SU4110BFF000XXX				
125	1SDA075199R1	XT4SU3125BFF000XXX	1SDA075217R1					XT4SU4125BFF000XXX				
150	1SDA075200R1	XT4SU3150BFF000XXX	1SDA075218R1					XT4SU4150BFF000XXX				
175	1SDA075201R1	XT4SU3175BFF000XXX	1SDA075219R1					XT4SU4175BFF000XXX				
200	1SDA075202R1	XT4SU3200BFF000XXX	1SDA075220R1					XT4SU4200BFF000XXX				
225	1SDA075203R1	XT4SU3225BFF000XXX	1SDA075221R1					XT4SU4225BFF000XXX				
250	1SDA075204R1	XT4SU3250BFF000XXX	1SDA075222R1	XT4SU4250BFF000XXX								



XT4 - circuit-breaker

**SACE XT4S Ekip Dip LS/I Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	35kA	250	Ekip Dip LS/I	40	1SDA075370R1	XT4SU3040EFF000XXX	1SDA075376R1	XT4SU4040EFF000XXX
				60	1SDA075371R1	XT4SU3060EFF000XXX	1SDA075377R1	XT4SU4060EFF000XXX
				100	1SDA075372R1	XT4SU3100EFF000XXX	1SDA075378R1	XT4SU4100EFF000XXX
				150	1SDA075373R1	XT4SU3150EFF000XXX	1SDA075379R1	XT4SU4150EFF000XXX
				225	1SDA075374R1	XT4SU3225EFF000XXX	1SDA075380R1	XT4SU4225EFF000XXX
				250	1SDA075375R1	XT4SU3250EFF000XXX	1SDA075381R1	XT4SU4250EFF000XXX

**SACE XT4S Ekip Dip LSI Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	35kA	250	Ekip Dip LSI	40	1SDA102256R1	XT4SU30401FF000XXX	1SDA102316R1	XT4SU40401FF000XXX
				60	1SDA102257R1	XT4SU30601FF000XXX	1SDA102317R1	XT4SU40601FF000XXX
				100	1SDA102258R1	XT4SU31001FF000XXX	1SDA102318R1	XT4SU41001FF000XXX
				150	1SDA102259R1	XT4SU31501FF000XXX	1SDA102319R1	XT4SU41501FF000XXX
				225	1SDA122948R1	XT4SU32251FF000XXX	1SDA122949R1	XT4SU42251FF000XXX
				250	1SDA102260R1	XT4SU32501FF000XXX	1SDA102320R1	XT4SU42501FF000XXX

**SACE XT4S Ekip Dip LSiG Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	35kA	250	Ekip Dip LSiG	40	1SDA102261R1	XT4SU30402FF000XXX	1SDA102321R1	XT4SU40402FF000XXX
				60	1SDA102262R1	XT4SU30602FF000XXX	1SDA102322R1	XT4SU40602FF000XXX
				100	1SDA102263R1	XT4SU31002FF000XXX	1SDA102323R1	XT4SU41002FF000XXX
				150	1SDA102264R1	XT4SU31502FF000XXX	1SDA102324R1	XT4SU41502FF000XXX
				225	1SDA122954R1	XT4SU32252FF000XXX	1SDA122956R1	XT4SU42252FF000XXX
				250	1SDA122955R1	XT4SU32502FF000XXX	1SDA122957R1	XT4SU42502FF000XXX

**SACE XT4N Ekip Dip LIG Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	35kA	250	Ekip Dip LIG	40	1SDA102247R1	XT4NU3040CFF000XXX	1SDA102311R1	XT4NU4040CFF000XXX
				60	1SDA102248R1	XT4NU3060CFF000XXX	1SDA102312R1	XT4NU4060CFF000XXX
				100	1SDA102249R1	XT4NU3100CFF000XXX	1SDA102313R1	XT4NU4100CFF000XXX
				150	1SDA102250R1	XT4NU3150CFF000XXX	1SDA102314R1	XT4NU4150CFF000XXX
				225	1SDA102251R1	XT4NU3225CFF000XXX	1SDA102310R1	XT4NU4225CFF000XXX
				250	1SDA102252R1	XT4NU3250CFF000XXX	1SDA102315R1	XT4NU4250CFF000XXX

# Ordering codes for XT4

## Automatic circuit-breakers



XT4 - circuit-breaker

### SACE XT4S Ekip Touch LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	35kA	250	Ekip Touch LSI	100	Only available with the Breaking Part + Trip unit solution	XT4SU3100PFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4SU4100PFF000XXX
				150		XT4SU3150PFF000XXX		XT4SU4150PFF000XXX
				225		XT4SU3225PFF000XXX		XT4SU4225PFF000XXX
				250		XT4SU3250PFF000XXX		XT4SU4250PFF000XXX

### SACE XT4S Ekip Touch LSI G - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	35kA	250	Ekip Touch LSI G	100	Only available with the Breaking Part + Trip unit solution	XT4SU3100QFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4SU4100QFF000XXX
				150		XT4SU3150QFF000XXX		XT4SU4150QFF000XXX
				225		XT4SU3225QFF000XXX		XT4SU4225QFF000XXX
				250		XT4SU3250QFF000XXX		XT4SU4250QFF000XXX

### SACE XT4S Ekip Touch Measuring LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	35kA	250	Ekip Touch Measuring LSI	100	Only available with the Breaking Part + Trip unit solution	XT4SU3100RFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4SU4100RFF000XXX
				150		XT4SU3150RFF000XXX		XT4SU4150RFF000XXX
				225		XT4SU3225RFF000XXX		XT4SU4225RFF000XXX
				250		XT4SU3250RFF000XXX		XT4SU4250RFF000XXX

### SACE XT4S Ekip Touch Measuring LSI G - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	35kA	250	Ekip Touch Measuring LSI G	100	Only available with the Breaking Part + Trip unit solution	XT4SU3100SFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4SU4100SFF000XXX
				150		XT4SU3150SFF000XXX		XT4SU4150SFF000XXX
				225		XT4SU3225SFF000XXX		XT4SU4225SFF000XXX
				250		XT4SU3250SFF000XXX		XT4SU4250SFF000XXX



XT4 - circuit-breaker

**SACE XT4S Ekip Hi-Touch LSI - Front terminals (F)**

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	35kA	250	Ekip Hi-Touch LSI	100	Only available with the Breaking Part + Trip unit solution	XT4SU3100TFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4SU4100TFF000XXX
				150		XT4SU3150TFF000XXX		XT4SU4150TFF000XXX
				225		XT4SU3225TFF000XXX		XT4SU4225TFF000XXX
				250		XT4SU3250TFF000XXX		XT4SU4250TFF000XXX

**SACE XT4S Ekip Hi-Touch LSIG - Front terminals (F)**

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	35kA	250	Ekip Hi-Touch LSIG	100	Only available with the Breaking Part + Trip unit solution	XT4SU3100UFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4SU4100UFF000XXX
				150		XT4SU3150UFF000XXX		XT4SU4150UFF000XXX
				225		XT4SU3225UFF000XXX		XT4SU4225UFF000XXX
				250		XT4SU3250UFF000XXX		XT4SU4250UFF000XXX

# Ordering codes for XT4

## Automatic circuit-breakers



XT4 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT4H TMF/TMA Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles						
				Product ID	US/CA PN	Product ID	US/CA PN					
XT4	65kA	250	TMF	25	1SDA075223R1	XT4HU3025AFF000XXX	1SDA075240R1	XT4HU4025AFF000XXX				
				30	1SDA075224R1	XT4HU3030AFF000XXX	1SDA075241R1	XT4HU4030AFF000XXX				
				35	1SDA075225R1	XT4HU3035AFF000XXX	1SDA075242R1	XT4HU4035AFF000XXX				
				40	1SDA075226R1	XT4HU3040AFF000XXX	1SDA075243R1	XT4HU4040AFF000XXX				
				50	1SDA075227R1	XT4HU3050AFF000XXX	1SDA075244R1	XT4HU4050AFF000XXX				
				60	1SDA075228R1	XT4HU3060AFF000XXX	1SDA075245R1	XT4HU4060AFF000XXX				
				70	1SDA075229R1	XT4HU3070AFF000XXX	1SDA075246R1	XT4HU4070AFF000XXX				
				80	1SDA080085R1	XT4HU3080AFF000XXX						
				90	1SDA080086R1	XT4HU3090AFF000XXX						
				100	1SDA080077R1	XT4HU3100AFF000XXX						
				110	1SDA080078R1	XT4HU3110AFF000XXX						
				125	1SDA080079R1	XT4HU3125AFF000XXX						
				150	1SDA080080R1	XT4HU3150AFF000XXX						
				175	1SDA080081R1	XT4HU3175AFF000XXX						
				200	1SDA080082R1	XT4HU3200AFF000XXX						
				225	1SDA080083R1	XT4HU3225AFF000XXX						
				250	1SDA080084R1	XT4HU3250AFF000XXX						
				TMA				80	1SDA075230R1	XT4HU3080BFF000XXX	1SDA075247R1	XT4HU4080BFF000XXX
								90	1SDA075231R1	XT4HU3090BFF000XXX	1SDA075248R1	XT4HU4090BFF000XXX
								100	1SDA075232R1	XT4HU3100BFF000XXX	1SDA075249R1	XT4HU4100BFF000XXX
								110	1SDA075233R1	XT4HU3110BFF000XXX	1SDA075250R1	XT4HU4110BFF000XXX
								125	1SDA075234R1	XT4HU3125BFF000XXX	1SDA075251R1	XT4HU4125BFF000XXX
								150	1SDA075235R1	XT4HU3150BFF000XXX	1SDA075252R1	XT4HU4150BFF000XXX
								175	1SDA075236R1	XT4HU3175BFF000XXX	1SDA075253R1	XT4HU4175BFF000XXX
								200	1SDA075237R1	XT4HU3200BFF000XXX	1SDA075254R1	XT4HU4200BFF000XXX
225	1SDA075238R1	XT4HU3225BFF000XXX	1SDA075255R1					XT4HU4225BFF000XXX				
250	1SDA075239R1	XT4HU3250BFF000XXX	1SDA075256R1					XT4HU4250BFF000XXX				



XT4 - circuit-breaker

**SACE XT4H Ekip Dip LS/I Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	65kA	250	Ekip Dip LS/I	40	1SDA075394R1	XT4HU3040EFF000XXX	1SDA075400R1	XT4HU4040EFF000XXX
				60	1SDA075395R1	XT4HU3060EFF000XXX	1SDA075401R1	XT4HU4060EFF000XXX
				100	1SDA075396R1	XT4HU3100EFF000XXX	1SDA075402R1	XT4HU4100EFF000XXX
				150	1SDA075397R1	XT4HU3150EFF000XXX	1SDA075403R1	XT4HU4150EFF000XXX
				225	1SDA075398R1	XT4HU3225EFF000XXX	1SDA075404R1	XT4HU4225EFF000XXX
				250	1SDA075399R1	XT4HU3250EFF000XXX	1SDA075405R1	XT4HU4250EFF000XXX

**SACE XT4H Ekip Dip LSI Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	65kA	250	Ekip Dip LSI	40	1SDA102274R1	XT4HU30401FF000XXX	1SDA102331R1	XT4HU40401FF000XXX
				60	1SDA102275R1	XT4HU30601FF000XXX	1SDA102332R1	XT4HU40601FF000XXX
				100	1SDA102276R1	XT4HU31001FF000XXX	1SDA102333R1	XT4HU41001FF000XXX
				150	1SDA102277R1	XT4HU31501FF000XXX	1SDA102334R1	XT4HU41501FF000XXX
				225	1SDA122950R1	XT4HU32251FF000XXX	1SDA122951R1	XT4HU42251FF000XXX
				250	1SDA102278R1	XT4HU32501FF000XXX	1SDA102335R1	XT4HU42501FF000XXX

**SACE XT4H Ekip Dip LSIG Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	65kA	250	Ekip Dip LSIG	40	1SDA102279R1	XT4HU30402FF000XXX	1SDA102336R1	XT4HU40402FF000XXX
				60	1SDA102280R1	XT4HU30602FF000XXX	1SDA102337R1	XT4HU40602FF000XXX
				100	1SDA102281R1	XT4HU31002FF000XXX	1SDA102338R1	XT4HU41002FF000XXX
				150	1SDA102282R1	XT4HU31502FF000XXX	1SDA102339R1	XT4HU41502FF000XXX
				225	1SDA122958R1	XT4HU32252FF000XXX	1SDA122960R1	XT4HU42252FF000XXX
				250	1SDA122959R1	XT4HU32502FF000XXX	1SDA122961R1	XT4HU42502FF000XXX

**SACE XT4H Ekip Dip LIG Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	65kA	250	Ekip Dip LIG	40	1SDA102284R1	XT4HU3040CFF000XXX	1SDA102341R1	XT4HU4040CFF000XXX
				60	1SDA102285R1	XT4HU3060CFF000XXX	1SDA102342R1	XT4HU4060CFF000XXX
				100	1SDA102286R1	XT4HU3100CFF000XXX	1SDA102343R1	XT4HU4100CFF000XXX
				150	1SDA102287R1	XT4HU3150CFF000XXX	1SDA102344R1	XT4HU4150CFF000XXX
				225	1SDA102283R1	XT4HU3225CFF000XXX	1SDA102340R1	XT4HU4225CFF000XXX
				250	1SDA102288R1	XT4HU3250CFF000XXX	1SDA102345R1	XT4HU4250CFF000XXX

# Ordering codes for XT4

## Automatic circuit-breakers



XT4 - circuit-breaker

### SACE XT4H Ekip Touch LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	65kA	250	Ekip Touch LSI	100	Only available with the Breaking Part + Trip unit solution	XT4HU3100PFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4HU4100PFF000XXX
				150		XT4HU3150PFF000XXX		XT4HU4150PFF000XXX
				225		XT4HU3225PFF000XXX		XT4HU4225PFF000XXX
				250		XT4HU3250PFF000XXX		XT4HU4250PFF000XXX

### SACE XT4H Ekip Touch LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	65kA	250	Ekip Touch LSI	100	Only available with the Breaking Part + Trip unit solution	XT4HU3100QFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4HU4100QFF000XXX
				150		XT4HU3150QFF000XXX		XT4HU4150QFF000XXX
				225		XT4HU3225QFF000XXX		XT4HU4225QFF000XXX
				250		XT4HU3250QFF000XXX		XT4HU4250QFF000XXX

### SACE XT4H Ekip Touch Measuring LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	65kA	250	Ekip Touch Measuring LSI	100	Only available with the Breaking Part + Trip unit solution	XT4HU3100RFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4HU4100RFF000XXX
				150		XT4HU3150RFF000XXX		XT4HU4150RFF000XXX
				225		XT4HU3225RFF000XXX		XT4HU4225RFF000XXX
				250		XT4HU3250RFF000XXX		XT4HU4250RFF000XXX

### SACE XT4H Ekip Touch Measuring LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	65kA	250	Ekip Touch Measuring LSI	100	Only available with the Breaking Part + Trip unit solution	XT4HU3100SFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4HU4100SFF000XXX
				150		XT4HU3150SFF000XXX		XT4HU4150SFF000XXX
				225		XT4HU3225SFF000XXX		XT4HU4225SFF000XXX
				250		XT4HU3250SFF000XXX		XT4HU4250SFF000XXX



XT4 - circuit-breaker

**SACE XT4H Ekip Hi-Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	65kA	250	Ekip Hi-Touch LSI	100	Only available with the Breaking Part + Trip unit solution	XT4HU3100TFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4HU4100TFF000XXX
				150		XT4HU3150TFF000XXX		XT4HU4150TFF000XXX
				225		XT4HU3225TFF000XXX		XT4HU4225TFF000XXX
				250		XT4HU3250TFF000XXX		XT4HU4250TFF000XXX

**SACE XT4H Ekip Hi-Touch LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	65kA	250	Ekip Hi-Touch LSIG	100	Only available with the Breaking Part + Trip unit solution	XT4HU3100UFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4HU4100UFF000XXX
				150		XT4HU3150UFF000XXX		XT4HU4150UFF000XXX
				225		XT4HU3225UFF000XXX		XT4HU4225UFF000XXX
				250		XT4HU3250UFF000XXX		XT4HU4250UFF000XXX

## Motor protection circuit-breaker (MCP)

**SACE XT4H MA Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles	
				Product ID	US/CA PN
XT4	65kA	MA	25	1SDA075336R1	XT4HU3025MFF000XXX
			50	1SDA075337R1	XT4HU3050MFF000XXX
			80	1SDA075338R1	XT4HU3080MFF000XXX
			100	1SDA075339R1	XT4HU3100MFF000XXX
			110	1SDA075340R1	XT4HU3110MFF000XXX
			125	1SDA075341R1	XT4HU3125MFF000XXX
			150	1SDA075342R1	XT4HU3150MFF000XXX
			175	1SDA075343R1	XT4HU3175MFF000XXX
			200	1SDA075344R1	XT4HU3200MFF000XXX
			225	1SDA075345R1	XT4HU3225MFF000XXX
			250	1SDA075346R1	XT4HU3250MFF000XXX

**SACE XT4H (65kA) Ekip M Dip I Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT4	65kA	250	Ekip M Dip I	40	1SDA075562R1	XT4HU3040JFF000XXX
				60	1SDA075563R1	XT4HU3060JFF000XXX
				100	1SDA075564R1	XT4HU3100JFF000XXX
				150	1SDA075565R1	XT4HU3150JFF000XXX
				225	1SDA075566R1	XT4HU3225JFF000XXX
				250	1SDA075567R1	XT4HU3250JFF000XXX

# Ordering codes for XT4

## Automatic circuit-breakers



—  
XT4 - circuit-breaker

Motor protection circuit-breaker (MPCB)

### SACE XT4H Ekip M Dip LIU Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT4	65kA	250	Ekip M Dip LIU	40	1SDA075602R1	XT4HU3040LFF000XXX
				60	1SDA075603R1	XT4HU3060LFF000XXX
				100	1SDA075604R1	XT4HU3100LFF000XXX
				150	1SDA075605R1	XT4HU3150LFF000XXX

### SACE XT4H Ekip M Touch LRIU Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT4	65kA	250	Ekip M Touch LRIU	100	1SDA102289R1	XT4HU3100WFF000XXX
				150	1SDA102290R1	XT4HU3150WFF000XXX
				200	1SDA102291R1	XT4HU3200WFF000XXX



XT4 - circuit-breaker

## Distribution circuit-breakers

## SACE XT4L TMF/TMA Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles					
				Product ID	US/CA PN	Product ID	US/CA PN				
XT4	100kA	250	TMF	25	1SDA075257R1	XT4LU3025AFF000XXX	1SDA075274R1	XT4LU4025AFF000XXX			
				30	1SDA075258R1	XT4LU3030AFF000XXX	1SDA075275R1	XT4LU4030AFF000XXX			
				35	1SDA075259R1	XT4LU3035AFF000XXX	1SDA075276R1	XT4LU4035AFF000XXX			
				40	1SDA075260R1	XT4LU3040AFF000XXX	1SDA075277R1	XT4LU4040AFF000XXX			
				50	1SDA075261R1	XT4LU3050AFF000XXX	1SDA075278R1	XT4LU4050AFF000XXX			
				60	1SDA075262R1	XT4LU3060AFF000XXX	1SDA075279R1	XT4LU4060AFF000XXX			
				70	1SDA075263R1	XT4LU3070AFF000XXX	1SDA075280R1	XT4LU4070AFF000XXX			
				80	1SDA080097R1	XT4LU3080AFF000XXX					
				90	1SDA080098R1	XT4LU3090AFF000XXX					
				100	1SDA080089R1	XT4LU3100AFF000XXX					
				110	1SDA080090R1	XT4LU3110AFF000XXX					
				125	1SDA080091R1	XT4LU3125AFF000XXX					
				150	1SDA080092R1	XT4LU3150AFF000XXX					
				175	1SDA080093R1	XT4LU3175AFF000XXX					
				200	1SDA080094R1	XT4LU3200AFF000XXX					
				225	1SDA080095R1	XT4LU3225AFF000XXX					
				250	1SDA080096R1	XT4LU3250AFF000XXX					
						TMA	80	1SDA075264R1	XT4LU3080BFF000XXX	1SDA075281R1	XT4LU4080BFF000XXX
							90	1SDA075265R1	XT4LU3090BFF000XXX	1SDA075282R1	XT4LU4090BFF000XXX
							100	1SDA075266R1	XT4LU3100BFF000XXX	1SDA075283R1	XT4LU4100BFF000XXX
							110	1SDA075267R1	XT4LU3110BFF000XXX	1SDA075284R1	XT4LU4110BFF000XXX
							125	1SDA075268R1	XT4LU3125BFF000XXX	1SDA075285R1	XT4LU4125BFF000XXX
							150	1SDA075269R1	XT4LU3150BFF000XXX	1SDA075286R1	XT4LU4150BFF000XXX
							175	1SDA075270R1	XT4LU3175BFF000XXX	1SDA075287R1	XT4LU4175BFF000XXX
							200	1SDA075271R1	XT4LU3200BFF000XXX	1SDA075288R1	XT4LU4200BFF000XXX
		225	1SDA075272R1	XT4LU3225BFF000XXX	1SDA075289R1		XT4LU4225BFF000XXX				
		250	1SDA075273R1	XT4LU3250BFF000XXX	1SDA075290R1		XT4LU4250BFF000XXX				

## SACE XT4L Ekip Dip LS/I Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	100kA	250	Ekip Dip LS/I	40	1SDA075382R1	XT4LU3040EFF000XXX	1SDA075388R1	XT4LU4040EFF000XXX
				60	1SDA075383R1	XT4LU3060EFF000XXX	1SDA075389R1	XT4LU4060EFF000XXX
				100	1SDA075384R1	XT4LU3100EFF000XXX	1SDA075390R1	XT4LU4100EFF000XXX
				150	1SDA075385R1	XT4LU3150EFF000XXX	1SDA075391R1	XT4LU4150EFF000XXX
				225	1SDA075386R1	XT4LU3225EFF000XXX	1SDA075392R1	XT4LU4225EFF000XXX
				250	1SDA075387R1	XT4LU3250EFF000XXX	1SDA075393R1	XT4LU4250EFF000XXX

# Ordering codes for XT4

## Automatic circuit-breakers



XT4 - circuit-breaker

### SACE XT4L Ekip Dip LSI Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT4	100kA	250	Ekip Dip LSI	40			
				60	Only available with the Breaking Part + Trip unit solution		
				100			
				150			
				225			
				250			

### SACE XT4L Ekip Dip LSI Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT4	100kA	250	Ekip Dip LSI	40			
				60	Only available with the Breaking Part + Trip unit solution		
				100			
				150			
				225			
				250			

### SACE XT4L Ekip Dip LIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT4	100kA	250	Ekip Dip LIG	40			
				60	Only available with the Breaking Part + Trip unit solution		
				100			
				150			
				225			
				250			



XT4 - circuit-breaker

**SACE XT4L Ekip Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles			
				Product ID	US/CA PN	Product ID	US/CA PN		
XT4	100kA	250	Ekip Touch LSI	100	Only available with the Breaking Part + Trip unit solution	XT4LU3100PFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4LU4100PFF000XXX	
				150				XT4LU3150PFF000XXX	XT4LU4150PFF000XXX
				225				XT4LU3225PFF000XXX	XT4LU4225PFF000XXX
				250				XT4LU3250PFF000XXX	XT4LU4250PFF000XXX

**SACE XT4L Ekip Touch LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles			
				Product ID	US/CA PN	Product ID	US/CA PN		
XT4	100kA	250	Ekip Touch LSIG	100	Only available with the Breaking Part + Trip unit solution	XT4LU3100QFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4LU4100QFF000XXX	
				150				XT4LU3150QFF000XXX	XT4LU4150QFF000XXX
				225				XT4LU3225QFF000XXX	XT4LU4225QFF000XXX
				250				XT4LU3250QFF000XXX	XT4LU4250QFF000XXX

**SACE XT4L Ekip Touch Measuring LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles			
				Product ID	US/CA PN	Product ID	US/CA PN		
XT4	100kA	250	Ekip Touch Measuring LSI	100	Only available with the Breaking Part + Trip unit solution	XT4LU3100RFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4LU4100RFF000XXX	
				150				XT4LU3150RFF000XXX	XT4LU4150RFF000XXX
				225				XT4LU3225RFF000XXX	XT4LU4225RFF000XXX
				250				XT4LU3250RFF000XXX	XT4LU4250RFF000XXX

**SACE XT4L Ekip Touch Measuring LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles			
				Product ID	US/CA PN	Product ID	US/CA PN		
XT4	100kA	250	Ekip Touch Measuring LSIG	100	Only available with the Breaking Part + Trip unit solution	XT4LU3100SFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4LU4100SFF000XXX	
				150				XT4LU3150SFF000XXX	XT4LU4150SFF000XXX
				225				XT4LU3225SFF000XXX	XT4LU4225SFF000XXX
				250				XT4LU3250SFF000XXX	XT4LU4250SFF000XXX

**SACE XT4L Ekip Hi-Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles			
				Product ID	US/CA PN	Product ID	US/CA PN		
XT4	100kA	250	Ekip Hi-Touch LSI	100	Only available with the Breaking Part + Trip unit solution	XT4LU3100TFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4LU4100TFF000XXX	
				150				XT4LU3150TFF000XXX	XT4LU4150TFF000XXX
				225				XT4LU3225TFF000XXX	XT4LU4225TFF000XXX
				250				XT4LU3250TFF000XXX	XT4LU4250TFF000XXX

**SACE XT4L Ekip Hi-Touch LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles			
				Product ID	US/CA PN	Product ID	US/CA PN		
XT4	100kA	250	Ekip Hi-Touch LSIG	100	Only available with the Breaking Part + Trip unit solution	XT4LU3100UFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4LU4100UFF000XXX	
				150				XT4LU3150UFF000XXX	XT4LU4150UFF000XXX
				225				XT4LU3225UFF000XXX	XT4LU4225UFF000XXX
				250				XT4LU3250UFF000XXX	XT4LU4250UFF000XXX

# Ordering codes for XT4

## Automatic circuit-breakers



—  
XT4 - circuit-breaker

Motor protection circuit-breaker (MCP)

### SACE XT4L MA Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT4	100kA	250	MA	25	1SDA075347R1	XT4LU3025MFF000XXX
				50	1SDA075348R1	XT4LU3050MFF000XXX
				80	1SDA075349R1	XT4LU3080MFF000XXX
				100	1SDA075350R1	XT4LU3100MFF000XXX
				110	1SDA075351R1	XT4LU3110MFF000XXX
				125	1SDA075352R1	XT4LU3125MFF000XXX
				150	1SDA075353R1	XT4LU3150MFF000XXX
				175	1SDA075354R1	XT4LU3175MFF000XXX
				200	1SDA075355R1	XT4LU3200MFF000XXX
				225	1SDA075356R1	XT4LU3225MFF000XXX
				250	1SDA075357R1	XT4LU3250MFF000XXX

### SACE XT4L Ekip M Dip I Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT4	100kA	250	Ekip M Dip I	40	1SDA075574R1	XT4LU3040JFF000XXX
				60	1SDA075575R1	XT4LU3060JFF000XXX
				100	1SDA075576R1	XT4LU3100JFF000XXX
				150	1SDA075577R1	XT4LU3150JFF000XXX
				225	1SDA075578R1	XT4LU3225JFF000XXX
				250	1SDA075579R1	XT4LU3250JFF000XXX



XT4 - circuit-breaker

## Motor protection circuit-breaker (MPCB)

### SACE XT4L Ekip M Dip LIU Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT4	100kA	250	Ekip M Dip LIU	40	1SDA075606R1	XT4LU3040LFF000XXX
				60	1SDA075607R1	XT4LU3060LFF000XXX
				100	1SDA075608R1	XT4LU3100LFF000XXX
				150	1SDA075609R1	XT4LU3150LFF000XXX

### SACE XT4L Ekip M Touch LRIU Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT4	100kA	250	Ekip M Touch LRIU	100	1SDA102292R1	XT4LU3100WFF000XXX
				150	1SDA102293R1	XT4LU3150WFF000XXX
				200	1SDA102294R1	XT4LU3200WFF000XXX

# Ordering codes for XT4

## Automatic circuit-breakers



XT4 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT4V TMF/TMA Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles						
				Product ID	US/CA PN	Product ID	US/CA PN					
XT4	150kA	250	TMF	25	1SDA075291R1	XT4VU3025AFF000XXX	1SDA075308R1	XT4VU4025AFF000XXX				
				30	1SDA075292R1	XT4VU3030AFF000XXX	1SDA075309R1	XT4VU4030AFF000XXX				
				35	1SDA075293R1	XT4VU3035AFF000XXX	1SDA075310R1	XT4VU4035AFF000XXX				
				40	1SDA075294R1	XT4VU3040AFF000XXX	1SDA075311R1	XT4VU4040AFF000XXX				
				50	1SDA075295R1	XT4VU3050AFF000XXX	1SDA075312R1	XT4VU4050AFF000XXX				
				60	1SDA075296R1	XT4VU3060AFF000XXX	1SDA075313R1	XT4VU4060AFF000XXX				
				70	1SDA075297R1	XT4VU3070AFF000XXX	1SDA075314R1	XT4VU4070AFF000XXX				
				80	1SDA080160R1	XT4VU3080AFF000XXX						
				90	1SDA080161R1	XT4VU3090AFF000XXX						
				100	1SDA080152R1	XT4VU3100AFF000XXX						
				110	1SDA080153R1	XT4VU3110AFF000XXX						
				125	1SDA080154R1	XT4VU3125AFF000XXX						
				150	1SDA080155R1	XT4VU3150AFF000XXX						
				175	1SDA080156R1	XT4VU3175AFF000XXX						
				200	1SDA080157R1	XT4VU3200AFF000XXX						
				225	1SDA080158R1	XT4VU3225AFF000XXX						
				250	1SDA080159R1	XT4VU3250AFF000XXX						
							TMA	80	1SDA075298R1	XT4VU3080BFF000XXX	1SDA075315R1	XT4VU4080BFF000XXX
								90	1SDA075299R1	XT4VU3090BFF000XXX	1SDA075316R1	XT4VU4090BFF000XXX
								100	1SDA075300R1	XT4VU3100BFF000XXX	1SDA075317R1	XT4VU4100BFF000XXX
								110	1SDA075301R1	XT4VU3110BFF000XXX	1SDA075318R1	XT4VU4110BFF000XXX
								125	1SDA075302R1	XT4VU3125BFF000XXX	1SDA075319R1	XT4VU4125BFF000XXX
								150	1SDA075303R1	XT4VU3150BFF000XXX	1SDA075320R1	XT4VU4150BFF000XXX
								175	1SDA075304R1	XT4VU3175BFF000XXX	1SDA075321R1	XT4VU4175BFF000XXX
								200	1SDA075305R1	XT4VU3200BFF000XXX	1SDA075322R1	XT4VU4200BFF000XXX
225	1SDA075306R1	XT4VU3225BFF000XXX	1SDA075323R1					XT4VU4225BFF000XXX				
250	1SDA075307R1	XT4VU3250BFF000XXX	1SDA075324R1					XT4VU4250BFF000XXX				



XT4 - circuit-breaker

**SACE XT4V Ekip Dip LS/I Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	150kA	250	Ekip Dip LS/I	40	1SDA075406R1	XT4VU3040EFF000XXX	1SDA075412R1	XT4VU4040EFF000XXX
				60	1SDA075407R1	XT4VU3060EFF000XXX	1SDA075413R1	XT4VU4060EFF000XXX
				100	1SDA075408R1	XT4VU3100EFF000XXX	1SDA075414R1	XT4VU4100EFF000XXX
				150	1SDA075409R1	XT4VU3150EFF000XXX	1SDA075415R1	XT4VU4150EFF000XXX
				225	1SDA075410R1	XT4VU3225EFF000XXX	1SDA075416R1	XT4VU4225EFF000XXX
				250	1SDA075411R1	XT4VU3250EFF000XXX	1SDA075417R1	XT4VU4250EFF000XXX

**SACE XT4V Ekip Dip LSI Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	150kA	250	Ekip Dip LSI	40		XT4VU30401FF000XXX	XT4VU40401FF000XXX	
				60	Only available with the Breaking Part + Trip unit solution	XT4VU30601FF000XXX	Only available with the Breaking Part + Trip unit solution	XT4VU40601FF000XXX
				100		XT4VU31001FF000XXX		XT4VU41001FF000XXX
				150		XT4VU31501FF000XXX		XT4VU41501FF000XXX
				225		XT4VU32251FF000XXX		XT4VU42251FF000XXX
				250		XT4VU32501FF000XXX		XT4VU42501FF000XXX

**SACE XT4V Ekip Dip LSI G Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	150kA	250	Ekip Dip LSI G	40		XT4VU30402FF000XXX	XT4VU40402FF000XXX	
				60	Only available with the Breaking Part + Trip unit solution	XT4VU30602FF000XXX	Only available with the Breaking Part + Trip unit solution	XT4VU40602FF000XXX
				100		XT4VU31002FF000XXX		XT4VU41002FF000XXX
				150		XT4VU31502FF000XXX		XT4VU41502FF000XXX
				225		XT4VU32252FF000XXX		XT4VU42252FF000XXX
				250		XT4VU32502FF000XXX		XT4VU42502FF000XXX

**SACE XT4V Ekip Dip LIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	150kA	250	Ekip Dip LIG	40		XT4VU3040CFF000XXX	XT4VU4040CFF000XXX	
				60	Only available with the Breaking Part + Trip unit solution	XT4VU3060CFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4VU4060CFF000XXX
				100		XT4VU3100CFF000XXX		XT4VU4100CFF000XXX
				150		XT4VU3150CFF000XXX		XT4VU4150CFF000XXX
				225		XT4VU3225CFF000XXX		XT4VU4225CFF000XXX
				250		XT4VU3250CFF000XXX		XT4VU4250CFF000XXX

**SACE XT4V Ekip Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	150kA	250	Ekip Touch LSI	100	Only available with the Breaking Part + Trip unit solution	XT4VU3100PFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4VU4100PFF000XXX
				150		XT4VU3150PFF000XXX		XT4VU4150PFF000XXX
				225		XT4VU3225PFF000XXX		XT4VU4225PFF000XXX
				250		XT4VU3250PFF000XXX		XT4VU4250PFF000XXX

# Ordering codes for XT4

## Automatic circuit-breakers



XT4 - circuit-breaker

### SACE XT4V Ekip Touch LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	150kA	250	Ekip Touch LSI	100	Only available with the Breaking Part + Trip unit solution	XT4VU3100QFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4VU4100QFF000XXX
				150		XT4VU3150QFF000XXX		XT4VU4150QFF000XXX
				225		XT4VU3225QFF000XXX		XT4VU4225QFF000XXX
				250		XT4VU3250QFF000XXX		XT4VU4250QFF000XXX

### SACE XT4V Ekip Touch Measuring LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	150kA	250	Ekip Touch Measuring LSI	100	Only available with the Breaking Part + Trip unit solution	XT4VU3100RFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4VU4100RFF000XXX
				150		XT4VU3150RFF000XXX		XT4VU4150RFF000XXX
				225		XT4VU3225RFF000XXX		XT4VU4225RFF000XXX
				250		XT4VU3250RFF000XXX		XT4VU4250RFF000XXX

### SACE XT4V Ekip Touch Measuring LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	150kA	250	Ekip Touch Measuring LSI	100	Only available with the Breaking Part + Trip unit solution	XT4VU3100SFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4VU4100SFF000XXX
				150		XT4VU3150SFF000XXX		XT4VU4150SFF000XXX
				225		XT4VU3225SFF000XXX		XT4VU4225SFF000XXX
				250		XT4VU3250SFF000XXX		XT4VU4250SFF000XXX

### SACE XT4V Ekip Hi-Touch LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	150kA	250	Ekip Hi-Touch LSI	100	Only available with the Breaking Part + Trip unit solution	XT4VU3100TFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4VU4100TFF000XXX
				150		XT4VU3150TFF000XXX		XT4VU4150TFF000XXX
				225		XT4VU3225TFF000XXX		XT4VU4225TFF000XXX
				250		XT4VU3250TFF000XXX		XT4VU4250TFF000XXX



XT4 - circuit-breaker

**SACE XT4V Ekip Hi-Touch LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	150kA	250	Ekip Hi-Touch LSIG	100	Only available with the Breaking Part + Trip unit solution	XT4VU3100UFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4VU4100UFF000XXX
				150		XT4VU3150UFF000XXX		XT4VU4150UFF000XXX
				225		XT4VU3225UFF000XXX		XT4VU4225UFF000XXX
				250		XT4VU3250UFF000XXX		XT4VU4250UFF000XXX

## Motor protection circuit-breaker (MCP)

**SACE XT4V Ekip M Dip I Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT4	150kA	250	Ekip M Dip I	40	1SDA075586R1	XT4VU3040JFF000XXX
				60	1SDA075587R1	XT4VU3060JFF000XXX
				100	1SDA075588R1	XT4VU3100JFF000XXX
				150	1SDA075589R1	XT4VU3150JFF000XXX
				225	1SDA075590R1	XT4VU3225JFF000XXX
				250	1SDA075591R1	XT4VU3250JFF000XXX

## Motor protection circuit-breaker (MPCB)

**SACE XT4V Ekip M Dip LIU Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT4	150kA	250	Ekip M Dip LIU	40	1SDA075598R1	XT4VU3040LFF000XXX
				60	1SDA075599R1	XT4VU3060LFF000XXX
				100	1SDA075600R1	XT4VU3100LFF000XXX
				150	1SDA075601R1	XT4VU3150LFF000XXX

**SACE XT4V Ekip M Touch LRIU Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT4	150kA	250	Ekip M Touch LRIU	100	1SDA102295R1	XT4VU3100WFF000XXX
				150	1SDA102296R1	XT4VU3150WFF000XXX
				200	1SDA102297R1	XT4VU3200WFF000XXX

# Ordering codes for XT4

## Automatic circuit-breakers



XT4 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT4X TMF/TMA Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles							
				Product ID	US/CA PN	Product ID	US/CA PN						
XT4	200kA	250	TMF	25		XT4XU3025AFF000XXX	XT4XU4025AFF000XXX						
				30		XT4XU3030AFF000XXX	XT4XU4030AFF000XXX						
				35		XT4XU3035AFF000XXX	XT4XU4035AFF000XXX						
				40		XT4XU3040AFF000XXX	XT4XU4040AFF000XXX						
				50		XT4XU3050AFF000XXX	XT4XU4050AFF000XXX						
				60		XT4XU3060AFF000XXX	XT4XU4060AFF000XXX						
				70		XT4XU3070AFF000XXX	XT4XU4070AFF000XXX						
				80	Only available with the Breaking Part + Trip unit solution	XT4XU3080AFF000XXX	Only available with the Breaking Part + Trip unit solution						
				90		XT4XU3090AFF000XXX							
				100		XT4XU3100AFF000XXX							
				110		XT4XU3110AFF000XXX							
				125		XT4XU3125AFF000XXX							
				150		XT4XU3150AFF000XXX							
				175		XT4XU3175AFF000XXX							
				200		XT4XU3200AFF000XXX							
				225		XT4XU3225AFF000XXX							
				250		XT4XU3250AFF000XXX							
				TMA					80		XT4XU3080BFF000XXX	XT4XU4080BFF000XXX	
									90		XT4XU3090BFF000XXX	XT4XU4090BFF000XXX	
									100		XT4XU3100BFF000XXX	XT4XU4100BFF000XXX	
									110	Only available with the Breaking Part + Trip unit solution	XT4XU3110BFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4XU4110BFF000XXX
									125		XT4XU3125BFF000XXX		XT4XU4125BFF000XXX
					150		XT4XU3150BFF000XXX		XT4XU4150BFF000XXX				
					175		XT4XU3175BFF000XXX		XT4XU4175BFF000XXX				
					200		XT4XU3200BFF000XXX		XT4XU4200BFF000XXX				
225	XT4XU3225BFF000XXX	XT4XU4225BFF000XXX											
250	XT4XU3250BFF000XXX	XT4XU4250BFF000XXX											



XT4 - circuit-breaker

**SACE XT4X Ekip Dip LS/I Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	200kA	250	Ekip Dip LS/I	40		XT4XU3040EFF000XXX	XT4XU4040EFF000XXX	
				60	Only available with the Breaking Part + Trip unit solution"	XT4XU3060EFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4XU4060EFF000XXX
				100		XT4XU3100EFF000XXX		XT4XU4100EFF000XXX
				150		XT4XU3150EFF000XXX		XT4XU4150EFF000XXX
				225		XT4XU3225EFF000XXX		XT4XU4225EFF000XXX
				250		XT4XU3250EFF000XXX		XT4XU4250EFF000XXX

**SACE XT4X Ekip Dip LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	200kA	250	Ekip Dip LSI	40		XT4XU30401FF000XXX	XT4XU40401FF000XXX	
				60	Only available with the Breaking Part + Trip unit solution	XT4XU30601FF000XXX	Only available with the Breaking Part + Trip unit solution	XT4XU40601FF000XXX
				100		XT4XU31001FF000XXX		XT4XU41001FF000XXX
				150		XT4XU31501FF000XXX		XT4XU41501FF000XXX
				225		XT4XU32251FF000XXX		XT4XU42251FF000XXX
				250		XT4XU32501FF000XXX		XT4XU42501FF000XXX

**SACE XT4X Ekip Dip LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	200kA	250	Ekip Dip LSIG	40		XT4XU30402FF000XXX	XT4XU40402FF000XXX	
				60	Only available with the Breaking Part + Trip unit solution	XT4XU30602FF000XXX	Only available with the Breaking Part + Trip unit solution	XT4XU40602FF000XXX
				100		XT4XU31002FF000XXX		XT4XU41002FF000XXX
				150		XT4XU31502FF000XXX		XT4XU41502FF000XXX
				225		XT4XU32252FF000XXX		XT4XU42252FF000XXX
				250		XT4XU32502FF000XXX		XT4XU42502FF000XXX

**SACE XT4X Ekip Dip LIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	200kA	250	Ekip Dip LIG	40		XT4XU3040CFF000XXX	XT4XU4040CFF000XXX	
				60	Only available with the Breaking Part + Trip unit solution	XT4XU3060CFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4XU4060CFF000XXX
				100		XT4XU3100CFF000XXX		XT4XU4100CFF000XXX
				150		XT4XU3150CFF000XXX		XT4XU4150CFF000XXX
				225		XT4XU3225CFF000XXX		XT4XU4225CFF000XXX
				250		XT4XU3250CFF000XXX		XT4XU4250CFF000XXX

**SACE XT4X Ekip Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	200kA	250	Ekip Touch LSI	100	Only available with the Breaking Part + Trip unit solution	XT4XU3100PFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4XU4100PFF000XXX
				150		XT4XU3150PFF000XXX		XT4XU4150PFF000XXX
				225		XT4XU3225PFF000XXX		XT4XU4225PFF000XXX
				250		XT4XU3250PFF000XXX		XT4XU4250PFF000XXX

# Ordering codes for XT4

## Automatic circuit-breakers



XT4 - circuit-breaker

### SACE XT4X Ekip Touch LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	200kA	250	Ekip Touch LSI	100	Only available with the Breaking Part + Trip unit solution	XT4XU3100QFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4XU4100QFF000XXX
				150		XT4XU3150QFF000XXX		XT4XU4150QFF000XXX
				225		XT4XU3225QFF000XXX		XT4XU4225QFF000XXX
				250		XT4XU3250QFF000XXX		XT4XU4250QFF000XXX

### SACE XT4X Ekip Touch Measuring LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	200kA	250	Ekip Touch Measuring LSI	100	Only available with the Breaking Part + Trip unit solution	XT4XU3100RFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4XU4100RFF000XXX
				150		XT4XU3150RFF000XXX		XT4XU4150RFF000XXX
				225		XT4XU3225RFF000XXX		XT4XU4225RFF000XXX
				250		XT4XU3250RFF000XXX		XT4XU4250RFF000XXX

### SACE XT4X Ekip Touch Measuring LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	200kA	250	Ekip Touch Measuring LSI	100	Only available with the Breaking Part + Trip unit solution	XT4XU3100SFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4XU4100SFF000XXX
				150		XT4XU3150SFF000XXX		XT4XU4150SFF000XXX
				225		XT4XU3225SFF000XXX		XT4XU4225SFF000XXX
				250		XT4XU3250SFF000XXX		XT4XU4250SFF000XXX

### SACE XT4X Ekip Hi-Touch LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	200kA	250	Ekip Hi-Touch LSI	100	Only available with the Breaking Part + Trip unit solution	XT4XU3100TFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4XU4100TFF000XXX
				150		XT4XU3150TFF000XXX		XT4XU4150TFF000XXX
				225		XT4XU3225TFF000XXX		XT4XU4225TFF000XXX
				250		XT4XU3250TFF000XXX		XT4XU4250TFF000XXX



XT4 - circuit-breaker

**SACE XT4X Ekip Hi-Touch LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT4	200kA	250	Ekip Hi-Touch LSIG	100	Only available with the Breaking Part + Trip unit solution	XT4XU3100UFF000XXX	Only available with the Breaking Part + Trip unit solution	XT4XU4100UFF000XXX
				150		XT4XU3150UFF000XXX		XT4XU4150UFF000XXX
				225		XT4XU3225UFF000XXX		XT4XU4225UFF000XXX
				250		XT4XU3250UFF000XXX		XT4XU4250UFF000XXX

## Motor protection circuit-breaker (MCP)

**SACE XT4X (200kA) Ekip M Dip I Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT4	200kA	250	Ekip M Dip I	40	1SDA107381R1	XT4XU3040JFF000XXX
				60	1SDA107382R1	XT4XU3060JFF000XXX
				100	1SDA107383R1	XT4XU3100JFF000XXX
				150	1SDA107384R1	XT4XU3150JFF000XXX
				225	1SDA107385R1	XT4XU3225JFF000XXX
				250	1SDA107386R1	XT4XU3250JFF000XXX

## Motor protection circuit-breaker (MPCB)

**SACE XT4X Ekip M Dip LIU Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT4	200kA	250	Ekip M Dip LIU	40	1SDA107387R1	XT4XU3040LFF000XXX
				60	1SDA107388R1	XT4XU3060LFF000XXX
				100	1SDA107389R1	XT4XU3100LFF000XXX
				150	1SDA107390R1	XT4XU3150LFF000XXX

**SACE XT4X Ekip M Touch LRIU Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT4	200kA	250	Ekip M Touch LRIU	100	1SDA102298R1	XT4XU3100WFF000XXX
				150	1SDA102299R1	XT4XU3150WFF000XXX
				200	1SDA102300R1	XT4XU3200WFF000XXX

# Ordering codes for XT4

## Automatic circuit-breakers



—  
XT4 - circuit-breaker

Molded case switches

### SACE XT4D - MCS

Size	Iu	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT4	150	1SDA083041R1	XT4NU3150DFF000XXX	1SDA083042R1	XT4NU4150DFF000XXX
		1SDA083043R1	XT4SU3150DFF000XXX	1SDA083044R1	XT4SU4150DFF000XXX
		1SDA083045R1	XT4HU3150DFF000XXX	1SDA083046R1	XT4HU4150DFF000XXX
		1SDA083047R1	XT4LU3150DFF000XXX	1SDA083048R1	XT4LU4150DFF000XXX
		1SDA083049R1	XT4VU3150DFF000XXX	1SDA083050R1	XT4VU4150DFF000XXX
	250	1SDA075620R1	XT4NU3250DFF000XXX	1SDA075621R1	XT4NU4250DFF000XXX
		1SDA075622R1	XT4SU3250DFF000XXX	1SDA075623R1	XT4SU4250DFF000XXX
		1SDA075624R1	XT4HU3250DFF000XXX	1SDA075625R1	XT4HU4250DFF000XXX
		1SDA075626R1	XT4LU3250DFF000XXX	1SDA075627R1	XT4LU4250DFF000XXX
		1SDA075628R1	XT4VU3250DFF000XXX	1SDA075629R1	XT4VU4250DFF000XXX

# Ordering codes for XT4

## Breaking part



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XT4 - breaking part

### SACE XT4 - Breaking part

Size	Iu	Icu (480V)	Type	3 poles	4 poles
				Product ID	Product ID
XT4	250	25	XT4N 250 BREAKING PART	1SDA075640R1	1SDA075645R1
		35	XT4S 250 BREAKING PART	1SDA075641R1	1SDA075646R1
		65	XT4H 250 BREAKING PART	1SDA075642R1	1SDA075647R1
		100	XT4L 250 BREAKING PART	1SDA075643R1	1SDA075648R1
		150	XT4V 250 BREAKING PART	1SDA075644R1	1SDA075649R1
		200	XT4X 250 BREAKING PART	1SDA102347R1	1SDA102349R1

## 100% rated distribution circuit-breakers

### 100% rated version extra code

Size	3 poles	4 poles
	Product ID	Product ID
XT4	1SDA076606R1	1SDA080701R1

Note: to be specified only in addition to the code of the automatic circuit-breaker or of the breaking part

# Ordering codes for XT4

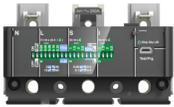
## Trip units



Thermal magnetic trip unit

### Trip units - distribution protection

Size	Type	3 poles	4 poles
		Product ID	Product ID
XT4	TMF 25-400	1SDA075698R1	1SDA075715R1
	TMF 30-400	1SDA075699R1	1SDA075716R1
	TMF 35-400	1SDA075700R1	1SDA075717R1
	TMF 40-400	1SDA075701R1	1SDA075718R1
	TMF 50-500	1SDA075702R1	1SDA075719R1
	TMF 60-600	1SDA075703R1	1SDA075720R1
	TMF 70-700	1SDA075704R1	1SDA075721R1
	TMF 80-800	1SDA080301R1	
	TMF 90-900	1SDA080302R1	
	TMF 100-1000	1SDA080293R1	
	TMF 110-1100	1SDA080294R1	
	TMF 125-1250	1SDA080295R1	
	TMF 150-1500	1SDA080296R1	
	TMF 175-1750	1SDA080297R1	
	TMF 200-2000	1SDA080298R1	
	TMF 225-2250	1SDA080299R1	
	TMF 250-2500	1SDA080300R1	
	TMA 80-800	1SDA075705R1	1SDA075722R1
	TMA 90-900	1SDA075706R1	1SDA075723R1
	TMA 100-1000	1SDA075707R1	1SDA075724R1
	TMA 110-1100	1SDA075708R1	1SDA075725R1
	TMA 125-1250	1SDA075709R1	1SDA075726R1
	TMA 150-1500	1SDA075710R1	1SDA075727R1
	TMA 175-1750	1SDA075711R1	1SDA075728R1
	TMA 200-2000	1SDA075712R1	1SDA075729R1
	TMA 225-2250	1SDA075713R1	1SDA075730R1
	TMA 250-2500	1SDA075714R1	1SDA075731R1
	Ekip Dip LS/I In=40A	1SDA075743R1	1SDA075749R1
	Ekip Dip LS/I In=60A	1SDA075744R1	1SDA075750R1
	Ekip Dip LS/I In=100A	1SDA075745R1	1SDA075751R1
	Ekip Dip LS/I In=150A	1SDA075746R1	1SDA075752R1
	Ekip Dip LS/I In=225A	1SDA075747R1	1SDA075753R1
	Ekip Dip LS/I In=250A	1SDA075748R1	1SDA075754R1
	Ekip C Dip LSI In=40A	1SDA075755R1	1SDA075761R1
	Ekip C Dip LSI In=60A	1SDA075756R1	1SDA075762R1
	Ekip C Dip LSI In=100A	1SDA075757R1	1SDA075763R1
	Ekip C Dip LSI In=150A	1SDA075758R1	1SDA075764R1
	Ekip C Dip LSI In=225A	1SDA075759R1	1SDA075765R1
	Ekip C Dip LSI In=250A	1SDA075760R1	1SDA075766R1
	Ekip C Dip LSIG In=40A	1SDA075767R1	1SDA075773R1
	Ekip C Dip LSIG In=60A	1SDA075768R1	1SDA075774R1
	Ekip C Dip LSIG In=100A	1SDA075769R1	1SDA075775R1
	Ekip C Dip LSIG In=150A	1SDA075770R1	1SDA075776R1
	Ekip C Dip LSIG In=225A	1SDA075771R1	1SDA075777R1
	Ekip C Dip LSIG In=250A	1SDA075772R1	1SDA075778R1



Dip trip unit



Touch trip unit

**Trip units - distribution protection**

Size	Type	3 poles	4 poles
		Product ID	Product ID
XT4	Ekip Dip LSI In=40A	1SDA102350R1	1SDA102398R1
	Ekip Dip LSI In=60A	1SDA102351R1	1SDA102399R1
	Ekip Dip LSI In=100A	1SDA102352R1	1SDA102400R1
	Ekip Dip LSI In=150A	1SDA102353R1	1SDA102401R1
	Ekip Dip LSI In=225A	1SDA102354R1	1SDA102402R1
	Ekip Dip LSI In=250A	1SDA102355R1	1SDA102403R1
	Ekip Dip LSIG In=40A	1SDA102356R1	1SDA102404R1
	Ekip Dip LSIG In=60A	1SDA102357R1	1SDA102405R1
	Ekip Dip LSIG In=100A	1SDA102358R1	1SDA102406R1
	Ekip Dip LSIG In=150A	1SDA102359R1	1SDA102407R1
	Ekip Dip LSIG In=225A	1SDA102360R1	1SDA102408R1
	Ekip Dip LSIG In=250A	1SDA102361R1	1SDA102409R1
	Ekip Dip LIG In=40A	1SDA102389R1	1SDA102434R1
	Ekip Dip LIG In=60A	1SDA102390R1	1SDA102435R1
	Ekip Dip LIG In=100A	1SDA102391R1	1SDA102436R1
	Ekip Dip LIG In=150A	1SDA102392R1	1SDA102437R1
	Ekip Dip LIG In=225A	1SDA102393R1	1SDA102438R1
	Ekip Dip LIG In=250A	1SDA102394R1	1SDA102439R1
	Ekip Touch LSI In=100A	1SDA102364R1	1SDA102412R1
	Ekip Touch LSI In=150A	1SDA102362R1	1SDA102410R1
	Ekip Touch LSI In=225A	1SDA102363R1	1SDA102411R1
	Ekip Touch LSI In=250A	1SDA102365R1	1SDA102413R1
	Ekip Touch LSIG In=100A	1SDA102368R1	1SDA102416R1
	Ekip Touch LSIG In=150A	1SDA102366R1	1SDA102414R1
	Ekip Touch LSIG In=225A	1SDA102367R1	1SDA102415R1
	Ekip Touch LSIG In=250A	1SDA102369R1	1SDA102417R1
	Ekip Touch Measuring LSI In=100	1SDA102372R1	1SDA102420R1
	Ekip Touch Measuring LSI In=150	1SDA102370R1	1SDA102418R1
	Ekip Touch Measuring LSI In=225	1SDA102371R1	1SDA102419R1
	Ekip Touch Measuring LSI In=250	1SDA102373R1	1SDA102421R1
	Ekip Touch Measuring LSIG In=100	1SDA102376R1	1SDA102424R1
	Ekip Touch Measuring LSIG In=150	1SDA102374R1	1SDA102422R1
	Ekip Touch Measuring LSIG In=225	1SDA102375R1	1SDA102423R1
	Ekip Touch Measuring LSIG In=250	1SDA102377R1	1SDA102425R1
	Ekip Hi-Touch LSI In=100	1SDA102380R1	1SDA102428R1
	Ekip Hi-Touch LSI In=150	1SDA102378R1	1SDA102426R1
	Ekip Hi-Touch LSI In=225	1SDA102379R1	1SDA102427R1
	Ekip Hi-Touch LSI In=250	1SDA102381R1	1SDA102429R1
	Ekip Hi-Touch LSIG In=100	1SDA102384R1	1SDA102432R1
	Ekip Hi-Touch LSIG In=150	1SDA102382R1	1SDA102430R1
Ekip Hi-Touch LSIG In=225	1SDA102383R1	1SDA102431R1	
Ekip Hi-Touch LSIG In=250	1SDA102385R1	1SDA102433R1	

# Ordering codes for XT4

## Breaking part + trip unit solution



XT4 Breaking part



Thermal-Magnetic Trip unit



Ekip Dip Trip unit



Ekip Touch Trip unit

Breaking Part	Icu	N (25kA)	S (35kA)	H (65kA)	L (100kA)	V (150kA)	X (200kA)
		Poles					
	3	1SDA075640R1	1SDA075641R1	1SDA075642R1	1SDA075643R1	1SDA075644R1	1SDA102347R1
	4	1SDA075645R1	1SDA075646R1	1SDA075647R1	1SDA075648R1	1SDA075649R1	1SDA102349R1

Trip units	In	25	30	35	40	50	60	70	80
		Poles							
TMF	3	1SDA075698R1	1SDA075699R1	1SDA075700R1	1SDA075701R1	1SDA075702R1	1SDA075703R1	1SDA075704R1	1SDA080301R1
	4	1SDA075715R1	1SDA075716R1	1SDA075717R1	1SDA075718R1	1SDA075719R1	1SDA075720R1	1SDA075721R1	
TMA	3								1SDA075705R1
	4								1SDA075722R1
Ekip Dip LS/I	3				1SDA075743R1		1SDA075744R1		
	4				1SDA075749R1		1SDA075750R1		
Ekip C Dip LSI	3				1SDA075755R1		1SDA075756R1		
	4				1SDA075761R1		1SDA075762R1		
Ekip C Dip LSIG	3				1SDA075767R1		1SDA075768R1		
	4				1SDA075773R1		1SDA075774R1		
Ekip Dip LSI	3				1SDA102350R1		1SDA102351R1		
	4				1SDA102398R1		1SDA102399R1		
Ekip Dip LSIG	3				1SDA102356R1		1SDA102357R1		
	4				1SDA102404R1		1SDA102405R1		
Ekip Dip LIG	3				1SDA102389R1		1SDA102390R1		
	4				1SDA102434R1		1SDA102435R1		
Ekip Touch LSI	3								
	4								
Ekip Touch LSIG	3								
	4								
Ekip Touch Measuring LSI	3								
	4								
Ekip Touch Measuring LSIG	3								
	4								
Ekip Hi-Touch LSI	3								
	4								
Ekip Hi-Touch LSIG	3								
	4								

Note: When a single code for the complete circuit-breaker is not available, please configure the breaking part code with the trip unit code to order a factory-assembled circuit-breaker

90	100	110	125	150	175	200	225	250
1SDA080302R1	1SDA080293R1	1SDA080294R1	1SDA080295R1	1SDA080296R1	1SDA080297R1	1SDA080298R1	1SDA080299R1	1SDA080300R1
1SDA075706R1	1SDA075707R1	1SDA075708R1	1SDA075709R1	1SDA075710R1	1SDA075711R1	1SDA075712R1	1SDA075713R1	1SDA075714R1
1SDA075723R1	1SDA075724R1	1SDA075725R1	1SDA075726R1	1SDA075727R1	1SDA075728R1	1SDA075729R1	1SDA075730R1	1SDA075731R1
	1SDA075745R1			1SDA075746R1			1SDA075747R1	1SDA075748R1
	1SDA075751R1			1SDA075752R1			1SDA075753R1	1SDA075754R1
	1SDA075757R1			1SDA075758R1			1SDA075759R1	1SDA075760R1
	1SDA075763R1			1SDA075764R1			1SDA075765R1	1SDA075766R1
	1SDA075769R1			1SDA075770R1			1SDA075771R1	1SDA075772R1
	1SDA075775R1			1SDA075776R1			1SDA075777R1	1SDA075778R1
	1SDA102352R1			1SDA102353R1			1SDA102354R1	1SDA102355R1
	1SDA102400R1			1SDA102401R1			1SDA102402R1	1SDA102403R1
	1SDA102358R1			1SDA102359R1			1SDA102360R1	1SDA102361R1
	1SDA102406R1			1SDA102407R1			1SDA102408R1	1SDA102409R1
	1SDA102391R1			1SDA102392R1			1SDA102393R1	1SDA102394R1
	1SDA102436R1			1SDA102437R1			1SDA102438R1	1SDA102439R1
	1SDA102364R1			1SDA102362R1			1SDA102363R1	1SDA102365R1
	1SDA102412R1			1SDA102410R1			1SDA102411R1	1SDA102413R1
	1SDA102368R1			1SDA102366R1			1SDA102367R1	1SDA102369R1
	1SDA102416R1			1SDA102414R1			1SDA102415R1	1SDA102417R1
	1SDA102372R1			1SDA102370R1			1SDA102371R1	1SDA102373R1
	1SDA102420R1			1SDA102418R1			1SDA102419R1	1SDA102421R1
	1SDA102376R1			1SDA102374R1			1SDA102375R1	1SDA102377R1
	1SDA102424R1			1SDA102422R1			1SDA102423R1	1SDA102425R1
	1SDA102380R1			1SDA102378R1			1SDA102379R1	1SDA102381R1
	1SDA102428R1			1SDA102426R1			1SDA102427R1	1SDA102429R1
	1SDA102384R1			1SDA102382R1			1SDA102383R1	1SDA102385R1
	1SDA102432R1			1SDA102430R1			1SDA102431R1	1SDA102433R1

# Ordering codes for XT5

## Automatic circuit-breakers



XT5 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT5N TMA- Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT5	35kA	400	TMA	300	1SDA102443R1 XT5NU330ABFF000XXX	1SDA102587R1	XT5NU430ABFF000XXX
				400	1SDA102444R1 XT5NU340ABFF000XXX	1SDA102588R1	XT5NU440ABFF000XXX
	600	TMA	500	1SDA102445R1 XT5NU350BBFF000XXX	1SDA102589R1	XT5NU450BBFF000XXX	
			600	1SDA102446R1 XT5NU360BBFF000XXX	1SDA102590R1	XT5NU460BBFF000XXX	

#### SACE XT5N Ekip Dip LS/I - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT5	35kA	400	Ekip Dip LS/I	250	1SDA102447R1 XT5NU325AEFF000XXX	1SDA102591R1	XT5NU425AEFF000XXX
				300	1SDA102448R1 XT5NU330AEFF000XXX	1SDA102592R1	XT5NU430AEFF000XXX
				400	1SDA102449R1 XT5NU340AEFF000XXX	1SDA102593R1	XT5NU440AEFF000XXX
	600	Ekip Dip LS/I	600	1SDA102450R1 XT5NU360BEFF000XXX	1SDA102594R1	XT5NU460BEFF000XXX	

#### SACE XT5N Ekip Dip LSI - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT5	35kA	400	Ekip Dip LSI	250	1SDA102451R1 XT5NU325AFF000XXX	1SDA102595R1	XT5NU425AFF000XXX
				300	1SDA102452R1 XT5NU330AFF000XXX	1SDA102596R1	XT5NU430AFF000XXX
				400	1SDA102453R1 XT5NU340AFF000XXX	1SDA102597R1	XT5NU440AFF000XXX
	600	Ekip Dip LSI	600	1SDA102454R1 XT5NU360BFFF000XXX	1SDA102598R1	XT5NU460BFFF000XXX	

#### SACE XT5N Ekip Dip LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT5	35kA	400	Ekip Dip LSIG	250	1SDA102455R1 XT5NU325AGFF000XXX	1SDA102599R1	XT5NU425AGFF000XXX
				300	1SDA102456R1 XT5NU330AGFF000XXX	1SDA102600R1	XT5NU430AGFF000XXX
				400	1SDA102457R1 XT5NU340AGFF000XXX	1SDA102601R1	XT5NU440AGFF000XXX
	600	Ekip Dip LSIG	600	1SDA102458R1 XT5NU360BGFF000XXX	1SDA102602R1	XT5NU460BGFF000XXX	

#### SACE XT5N Ekip Dip LIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT5	35kA	400	Ekip Dip LIG	250	1SDA102477R1 XT5NU325ACFF000XXX	1SDA102607R1	XT5NU425ACFF000XXX
				300	1SDA102478R1 XT5NU330ACFF000XXX	1SDA102608R1	XT5NU430ACFF000XXX
				400	1SDA102479R1 XT5NU340ACFF000XXX	1SDA102609R1	XT5NU440ACFF000XXX
	600	Ekip Dip LIG	600	1SDA102480R1 XT5NU360BCFF000XXX	1SDA102610R1	XT5NU460BCFF000XXX	



XT5 - circuit-breaker

**SACE XT5N Ekip Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT5	35kA	400 Ekip Touch LSI	250	Only available with the Breaking Part + Trip unit solution	XT5NU325APFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5NU425APFF000XXX
			300		XT5NU330APFF000XXX		XT5NU430APFF000XXX
			400		XT5NU340APFF000XXX		XT5NU440APFF000XXX
		600 Ekip Touch LSI	600		XT5NU360BPFF000XXX		XT5NU460BPFF000XXX

**SACE XT5N Ekip Touch LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT5	35kA	400 Ekip Touch LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5NU325AQFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5NU425AQFF000XXX
			300		XT5NU330AQFF000XXX		XT5NU430AQFF000XXX
			400		XT5NU340AQFF000XXX		XT5NU440AQFF000XXX
		600 Ekip Touch LSIG	600		XT5NU360BQFF000XXX		XT5NU460BQFF000XXX

**SACE XT5N Ekip Touch Measuring LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT5	35kA	400 Ekip Touch Measuring LSI	250	Only available with the Breaking Part + Trip unit solution	XT5NU325ARFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5NU425ARFF000XXX
			300		XT5NU330ARFF000XXX		XT5NU430ARFF000XXX
			400		XT5NU340ARFF000XXX		XT5NU440ARFF000XXX
		600 Ekip Touch Meas. LSI	600		XT5NU360BRFF000XXX		XT5NU460BRFF000XXX

**SACE XT5N Ekip Touch Measuring LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT5	35kA	400 Ekip Touch Measuring LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5NU325ASFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5NU425ASFF000XXX
			300		XT5NU330ASFF000XXX		XT5NU430ASFF000XXX
			400		XT5NU340ASFF000XXX		XT5NU440ASFF000XXX
		600 Ekip Touch Meas. LSIG	600		XT5NU360BSFF000XXX		XT5NU460BSFF000XXX

**SACE XT5N Ekip Hi-Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT5	35kA	400 Ekip Hi-Touch LSI	250	Only available with the Breaking Part + Trip unit solution	XT5NU325ATFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5NU425ATFF000XXX
			300		XT5NU330ATFF000XXX		XT5NU430ATFF000XXX
			400		XT5NU340ATFF000XXX		XT5NU440ATFF000XXX
		600 Ekip Hi-Touch LSI	600		XT5NU360BTFF000XXX		XT5NU460BTFF000XXX

**SACE XT5N Ekip Hi-Touch LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT5	35kA	400 Ekip Hi-Touch LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5NU325AUFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5NU425AUFF000XXX
			300		XT5NU330AUFF000XXX		XT5NU430AUFF000XXX
			400		XT5NU340AUFF000XXX		XT5NU440AUFF000XXX
		600 Ekip Hi-Touch LSIG	600		XT5NU360BUFF000XXX		XT5NU460BUFF000XXX

# Ordering codes for XT5

## Automatic circuit-breakers



XT5 - circuit-breaker

### Motor protection circuit-breaker (MCP)

#### SACE XT5N MA - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	35kA	400	MA	300	1SDA102459R1	XT5NU330AMFF000XXX
				400	1SDA102460R1	XT5NU340AMFF000XXX
		600	MA	500	1SDA102461R1	XT5NU350BMFF000XXX

#### SACE XT5N Ekip M Dip I - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	35kA	400	Ekip M Dip I	250	1SDA107486R1	XT5NU325AKFF000XXX
				300	1SDA102462R1	XT5NU330AKFF000XXX
				400	1SDA102463R1	XT5NU340AKFF000XXX
		600	Ekip M Dip I	500	1SDA102464R1	XT5NU350BKFF000XXX



XT5 - circuit-breaker

### Motor protection circuit-breaker (MPCP)

#### SACE XT5N Ekip M Dip LIU - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	35kA	400	Ekip M Dip LIU	250	1SDA102465R1	XT5NU325ALFF000XXX
				300	1SDA102466R1	XT5NU330ALFF000XXX
				400	1SDA102467R1	XT5NU340ALFF000XXX
		600	Ekip M Dip LIU	500	1SDA102468R1	XT5NU350BLFF000XXX

**SACE XT5N Ekip M Touch LRIU - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	35kA	400	Ekip M Touch LRIU	250	1SDA102469R1	XT5NU325AWFF000XXX
				300	1SDA102470R1	XT5NU330AWFF000XXX
				400	1SDA102471R1	XT5NU340AWFF000XXX
XT5	35kA	600	Ekip M Touch LRIU	500	1SDA102472R1	XT5NU350BWFF000XXX



XT5 - circuit-breaker

## Generator protection circuit-breaker

**SACE XT5N TMG- Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	35kA	400	TMG	300	1SDA102473R1	XT5NU330ANFF000XXX	1SDA102603R1	XT5NU430ANFF000XXX
				400	1SDA102474R1	XT5NU340ANFF000XXX	1SDA102604R1	XT5NU440ANFF000XXX
		600	TMG	500	1SDA102475R1	XT5NU350BNFF000XXX	1SDA102605R1	XT5NU450BNFF000XXX
				600	1SDA102476R1	XT5NU360BNFF000XXX	1SDA102606R1	XT5NU460BNFF000XXX

**SACE XT5N Ekip G Dip LS/I - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	35kA	400	Ekip G Dip LS/I	250	Only available with the Breaking Part + Trip unit solution	XT5NU325AXFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5NU425AXFF000XXX
				300		XT5NU330AXFF000XXX		XT5NU430AXFF000XXX
				400		XT5NU340AXFF000XXX		XT5NU440AXFF000XXX
		600	Ekip G Dip LS/I	600	XT5NU360BXFF000XXX	XT5NU460BXFF000XXX		

**SACE XT5N (35kA) Ekip G Touch LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	35kA	400	Ekip G Touch LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5NU325AYFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5NU425AYFF000XXX
				300		XT5NU330AYFF000XXX		XT5NU430AYFF000XXX
				400		XT5NU340AYFF000XXX		XT5NU440AYFF000XXX
		600	Ekip G Touch LSIG	600	XT5NU360BYFF000XXX	XT5NU460BYFF000XXX		

**SACE XT5N (35kA) Ekip G Hi-Touch LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	35kA	400	Ekip G Hi-Touch LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5NU325AZFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5NU425AZFF000XXX
				300		XT5NU330AZFF000XXX		XT5NU430AZFF000XXX
				400		XT5NU340AZFF000XXX		XT5NU440AZFF000XXX
		600	Ekip G Hi-Touch LSIG	600	XT5NU360BZFF000XXX	XT5NU460BZFF000XXX		

# Ordering codes for XT5

## Automatic circuit-breakers



XT5 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT5S TMA- Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	50kA	400	TMA	300	1SDA102481R1	XT5SU330ABFF000XXX	1SDA102611R1	XT5SU430ABFF000XXX
				400	1SDA102482R1	XT5SU340ABFF000XXX	1SDA102612R1	XT5SU440ABFF000XXX
	600	TMA	500	1SDA102483R1	XT5SU350BBFF000XXX	1SDA102613R1	XT5SU450BBFF000XXX	
			600	1SDA102484R1	XT5SU360BBFF000XXX	1SDA102614R1	XT5SU460BBFF000XXX	

#### SACE XT5S Ekip Dip LS/I - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	50kA	400	Ekip Dip LS/I	250	1SDA102485R1	XT5SU325AEFF000XXX	1SDA102615R1	XT5SU425AEFF000XXX
				300	1SDA102486R1	XT5SU330AEFF000XXX	1SDA102616R1	XT5SU430AEFF000XXX
				400	1SDA102487R1	XT5SU340AEFF000XXX	1SDA102617R1	XT5SU440AEFF000XXX
			600	Ekip Dip LS/I	600	1SDA102488R1	XT5SU360BEFF000XXX	1SDA102618R1

#### SACE XT5S Ekip Dip LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	50kA	400	Ekip Dip LSI	250	1SDA102489R1	XT5SU325AFF000XXX	1SDA102619R1	XT5SU425AFF000XXX
				300	1SDA102490R1	XT5SU330AFF000XXX	1SDA102620R1	XT5SU430AFF000XXX
				400	1SDA102491R1	XT5SU340AFF000XXX	1SDA102621R1	XT5SU440AFF000XXX
			600	Ekip Dip LSI	600	1SDA102492R1	XT5SU360BFFF000XXX	1SDA102622R1

#### SACE XT5S Ekip Dip LSI G - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	50kA	400	Ekip Dip LSI G	250	1SDA102493R1	XT5SU325AGFF000XXX	1SDA102623R1	XT5SU425AGFF000XXX
				300	1SDA102494R1	XT5SU330AGFF000XXX	1SDA102624R1	XT5SU430AGFF000XXX
				400	1SDA102495R1	XT5SU340AGFF000XXX	1SDA102625R1	XT5SU440AGFF000XXX
			600	Ekip Dip LSI G	600	1SDA102496R1	XT5SU360BGGFF000XXX	1SDA102626R1



XT5 - circuit-breaker

**SACE XT5S Ekip Dip LIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	50kA	400	Ekip Dip LIG	250	1SDA102515R1	XT5SU325ACFF000XXX	1SDA102631R1	XT5SU425ACFF000XXX
				300	1SDA102516R1	XT5SU330ACFF000XXX	1SDA102632R1	XT5SU430ACFF000XXX
				400	1SDA102517R1	XT5SU340ACFF000XXX	1SDA102633R1	XT5SU440ACFF000XXX
		600	Ekip Dip LIG	600	1SDA102518R1	XT5SU360BCFF000XXX	1SDA102634R1	XT5SU460BCFF000XXX

**SACE XT5S Ekip Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	50kA	400	Ekip Touch LSI	250	Only available with the Breaking Part + Trip unit solution	XT5SU325APFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5SU425APFF000XXX
				300		XT5SU330APFF000XXX		XT5SU430APFF000XXX
				400		XT5SU340APFF000XXX		XT5SU440APFF000XXX
		600	Ekip Touch LSI	600		XT5SU360BPFF000XXX		XT5SU460BPFF000XXX

**SACE XT5S Ekip Touch LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	50kA	400	Ekip Touch LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5SU325AQFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5SU425AQFF000XXX
				300		XT5SU330AQFF000XXX		XT5SU430AQFF000XXX
				400		XT5SU340AQFF000XXX		XT5SU440AQFF000XXX
		600	Ekip Touch LSIG	600		XT5SU360BQFF000XXX		XT5SU460BQFF000XXX

**SACE XT5S Ekip Touch Measuring LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	50kA	400	Ekip Touch Measuring LSI	250	Only available with the Breaking Part + Trip unit solution	XT5SU325ARFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5SU425ARFF000XXX
				300		XT5SU330ARFF000XXX		XT5SU430ARFF000XXX
				400		XT5SU340ARFF000XXX		XT5SU440ARFF000XXX
		600	Ekip Touch Meas. LSI	600		XT5SU360BRFF000XXX		XT5SU460BRFF000XXX

**SACE XT5S Ekip Touch Measuring LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	50kA	400	Ekip Touch Measuring LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5SU325ASFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5SU425ASFF000XXX
				300		XT5SU330ASFF000XXX		XT5SU430ASFF000XXX
				400		XT5SU340ASFF000XXX		XT5SU440ASFF000XXX
		600	Ekip Touch Meas. LSIG	600		XT5SU360BSFF000XXX		XT5SU460BSFF000XXX

**SACE XT5S Ekip Hi-Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	50kA	400	Ekip Hi-Touch LSI	250	Only available with the Breaking Part + Trip unit solution	XT5SU325ATFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5SU425ATFF000XXX
				300		XT5SU330ATFF000XXX		XT5SU430ATFF000XXX
				400		XT5SU340ATFF000XXX		XT5SU440ATFF000XXX
		600	Ekip Hi-Touch LSI	600		XT5SU360BTFF000XXX		XT5SU460BTFF000XXX

# Ordering codes for XT5

## Automatic circuit-breakers



XT5 - circuit-breaker

### SACE XT5S Ekip Hi-Touch LSIg - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	50kA	400	Ekip Hi-Touch LSIg	250	Only available with the Breaking Part + Trip unit solution	XT5SU325AUFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5SU425AUFF000XXX
				300		XT5SU330AUFF000XXX		XT5SU430AUFF000XXX
				400		XT5SU340AUFF000XXX		XT5SU440AUFF000XXX
		600	Ekip Hi-Touch LSIg	600		XT5SU360BUFF000XXX		XT5SU460BUFF000XXX

### Motor protection circuit-breaker (MCP)

#### SACE XT5S MA - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	50kA	400	MA	300	1SDA102497R1	XT5SU330AMFF000XXX
				400	1SDA102498R1	XT5SU340AMFF000XXX
				600	MA	500

#### SACE XT5S Ekip M Dip I - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	50kA	400	Ekip M Dip I	250	1SDA107487R1	XT5SU325AKFF000XXX
				300	1SDA102500R1	XT5SU330AKFF000XXX
				400	1SDA102501R1	XT5SU340AKFF000XXX
		600	Ekip M Dip I	500	1SDA102502R1	XT5SU350BKFF000XXX



XT5 - circuit-breaker

### Motor protection circuit-breaker (MPCP)

#### SACE XT5S Ekip M Dip LIU - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	50kA	400	Ekip M Dip LIU	250	1SDA102503R1	XT5SU325ALFF000XXX
				300	1SDA102504R1	XT5SU330ALFF000XXX
				400	1SDA102505R1	XT5SU340ALFF000XXX
		600	Ekip M Dip LIU	500	1SDA102506R1	XT5SU350BLFF000XXX

#### SACE XT5S Ekip M Touch LRIU - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	50kA	400	Ekip M Touch LRIU	250	1SDA102507R1	XT5SU325AWFF000XXX
				300	1SDA102508R1	XT5SU330AWFF000XXX
				400	1SDA102509R1	XT5SU340AWFF000XXX
		600	Ekip M Touch LRIU	500	1SDA102510R1	XT5SU350BWFF000XXX



XT5 - circuit-breaker

### Generator protection circuit-breaker

#### SACE XT5S TMG- Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	50kA	400	TMG	300	1SDA102511R1	XT5SU330ANFF000XXX	1SDA102627R1	XT5SU430ANFF000XXX
				400	1SDA102512R1	XT5SU340ANFF000XXX	1SDA102628R1	XT5SU440ANFF000XXX
		600	TMG	500	1SDA102513R1	XT5SU350BNFF000XXX	1SDA102629R1	XT5SU450BNFF000XXX
				600	1SDA102514R1	XT5SU360BNFF000XXX	1SDA102630R1	XT5SU460BNFF000XXX

#### SACE XT5S Ekip G Dip LS/I - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	50kA	400	Ekip G Dip LS/I	250	Only available with the Breaking Part + Trip unit solution	XT5SU325AXFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5SU425AXFF000XXX
				300	XT5SU330AXFF000XXX	XT5SU430AXFF000XXX		
				400	XT5SU340AXFF000XXX	XT5SU440AXFF000XXX		
		600	Ekip G Dip LS/I	600	XT5SU360BXFF000XXX	XT5SU460BXFF000XXX		

# Ordering codes for XT5

## Automatic circuit-breakers



XT5 - circuit-breaker

### SACE XT5S Ekip G Touch L SIG - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	50kA	400	Ekip G Touch L SIG	250	Only available with the Breaking Part + Trip unit solution	XT5SU325AYFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5SU425AYFF000XXX
				300		XT5SU330AYFF000XXX		XT5SU430AYFF000XXX
				400		XT5SU340AYFF000XXX		XT5SU440AYFF000XXX
		600	Ekip G Touch L SIG	600		XT5SU360BYFF000XXX		XT5SU460BYFF000XXX

### SACE XT5S Ekip G Hi-Touch L SIG - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	50kA	400	Ekip G Hi-Touch L SIG	250	Only available with the Breaking Part + Trip unit solution	XT5SU325AZFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5SU425AZFF000XXX
				300		XT5SU330AZFF000XXX		XT5SU430AZFF000XXX
				400		XT5SU340AZFF000XXX		XT5SU440AZFF000XXX
		600	Ekip G Hi-Touch L SIG	600		XT5SU360BZFF000XXX		XT5SU460BZFF000XXX



XT5 - circuit-breaker

## Distribution circuit-breakers

## SACE XT5H TMA- Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	65kA	400	TMA	300	1SDA102519R1	XT5HU330ABFF000XXX	1SDA102635R1	XT5HU430ABFF000XXX
				400	1SDA102520R1	XT5HU340ABFF000XXX	1SDA102636R1	XT5HU440ABFF000XXX
		600	TMA	500	1SDA102521R1	XT5HU350BFF000XXX	1SDA102637R1	XT5HU450BFF000XXX
				600	1SDA102522R1	XT5HU360BFF000XXX	1SDA102638R1	XT5HU460BFF000XXX

## SACE XT5H Ekip Dip LS/I - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	65kA	400	Ekip Dip LS/I	250	1SDA102523R1	XT5HU325AEFF000XXX	1SDA102639R1	XT5HU425AEFF000XXX
				300	1SDA102524R1	XT5HU330AEFF000XXX	1SDA102640R1	XT5HU430AEFF000XXX
				400	1SDA102525R1	XT5HU340AEFF000XXX	1SDA102641R1	XT5HU440AEFF000XXX
				600	1SDA102526R1	XT5HU360BEFF000XXX	1SDA102642R1	XT5HU460BEFF000XXX

## SACE XT5H Ekip Dip LSI - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	65kA	400	Ekip Dip LSI	250	1SDA102527R1	XT5HU325AFF000XXX	1SDA102643R1	XT5HU425AFF000XXX
				300	1SDA102528R1	XT5HU330AFF000XXX	1SDA102644R1	XT5HU430AFF000XXX
				400	1SDA102529R1	XT5HU340AFF000XXX	1SDA102645R1	XT5HU440AFF000XXX
				600	1SDA102530R1	XT5HU360BFF000XXX	1SDA102646R1	XT5HU460BFF000XXX

## SACE XT5H Ekip Dip LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	65kA	400	Ekip Dip LSIG	250	1SDA102531R1	XT5HU330AGFF000XXX	1SDA102647R1	XT5HU425AGFF000XXX
				300	1SDA102532R1	XT5HU340AGFF000XXX	1SDA102648R1	XT5HU430AGFF000XXX
				400	1SDA102533R1	XT5HU360BFFF000XXX	1SDA102649R1	XT5HU440AGFF000XXX
				600	1SDA102534R1	XT5HU330AMFF000XXX	1SDA102650R1	XT5HU460BFFF000XXX

## SACE XT5H Ekip Dip LIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	65kA	400	Ekip Dip LIG	250	1SDA102553R1	XT5HU325ACFF000XXX	1SDA102655R1	XT5HU425ACFF000XXX
				300	1SDA102554R1	XT5HU330ACFF000XXX	1SDA102656R1	XT5HU430ACFF000XXX
				400	1SDA102555R1	XT5HU340ACFF000XXX	1SDA102657R1	XT5HU440ACFF000XXX
				600	1SDA102556R1	XT5HU360BCFF000XXX	1SDA102658R1	XT5HU460BCFF000XXX

# Ordering codes for XT5

## Automatic circuit-breakers



XT5 - circuit-breaker

### SACE XT5H Ekip Touch LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	65kA	400	Ekip Touch LSI	250	Only available with the Breaking Part + Trip unit solution	XT5HU325APFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5HU425APFF000XXX
				300		XT5HU330APFF000XXX		XT5HU430APFF000XXX
				400		XT5HU340APFF000XXX		XT5HU440APFF000XXX
		600	Ekip Touch LSI	600		XT5HU360BPFF000XXX		XT5HU460BPFF000XXX

### SACE XT5H Ekip Touch LSI G - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	65kA	400	Ekip Touch LSI G	250	Only available with the Breaking Part + Trip unit solution	XT5HU325AQFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5HU425AQFF000XXX
				300		XT5HU330AQFF000XXX		XT5HU430AQFF000XXX
				400		XT5HU340AQFF000XXX		XT5HU440AQFF000XXX
		600	Ekip Touch LSI G	600		XT5HU360BQFF000XXX		XT5HU460BQFF000XXX

### SACE XT5H Ekip Touch Measuring LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	65kA	400	Ekip Touch Measuring LSI	250	Only available with the Breaking Part + Trip unit solution	XT5HU325ARFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5HU425ARFF000XXX
				300		XT5HU330ARFF000XXX		XT5HU430ARFF000XXX
				400		XT5HU340ARFF000XXX		XT5HU440ARFF000XXX
		600	Ekip Touch Meas. LSI	600		XT5HU360BRFF000XXX		XT5HU460BRFF000XXX

### SACE XT5H Ekip Touch Measuring LSI G - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	65kA	400	Ekip Touch Measuring LSI G	250	Only available with the Breaking Part + Trip unit solution	XT5HU325ASFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5HU425ASFF000XXX
				300		XT5HU330ASFF000XXX		XT5HU430ASFF000XXX
				400		XT5HU340ASFF000XXX		XT5HU440ASFF000XXX
		600	Ekip Touch Meas. LSI G	600		XT5HU360BSFF000XXX		XT5HU460BSFF000XXX



XT5 - circuit-breaker

**SACE XT5H Ekip Hi-Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	65kA	400	Ekip Hi-Touch LSI	250	Only available with the Breaking Part + Trip unit solution	XT5HU325ATFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5HU425ATFF000XXX
				300		XT5HU330ATFF000XXX		XT5HU430ATFF000XXX
				400		XT5HU340ATFF000XXX		XT5HU440ATFF000XXX
		600	Ekip Hi-Touch LSI	600		XT5HU360BTFF000XXX		XT5HU460BTFF000XXX

**SACE XT5H Ekip Hi-Touch LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	65kA	400	Ekip Hi-Touch LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5HU325AUFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5HU425AUFF000XXX
				300		XT5HU330AUFF000XXX		XT5HU430AUFF000XXX
				400		XT5HU340AUFF000XXX		XT5HU440AUFF000XXX
		600	Ekip Hi-Touch LSIG	600		XT5HU360BUFF000XXX		XT5HU460BUFF000XXX

**Motor protection circuit-breaker (MCP)****SACE XT5H MA - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	65kA	400	MA	300	1SDA102535R1	XT5HU330AMFF000XXX
				400	1SDA102536R1	XT5HU340AMFF000XXX
		600	MA	500	1SDA102537R1	XT5HU350BMFF000XXX

**SACE XT5H Ekip M Dip I - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	65kA	400	Ekip M Dip I	250	1SDA107488R1	XT5HU325AKFF000XXX
				300	1SDA102538R1	XT5HU330AKFF000XXX
				400	1SDA102539R1	XT5HU340AKFF000XXX
		600	Ekip M Dip I	500	1SDA102540R1	XT5HU350BKFF000XXX

# Ordering codes for XT5

## Automatic circuit-breakers



XT5 - circuit-breaker

### Motor protection circuit-breaker (MPCP)

#### SACE XT5H Ekip M Dip LIU - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	65kA	400	Ekip M Dip LIU	250	1SDA102541R1	XT5HU325ALFF000XXX
				300	1SDA102542R1	XT5HU330ALFF000XXX
				400	1SDA102543R1	XT5HU340ALFF000XXX
		600	Ekip M Dip LIU	500	1SDA102544R1	XT5HU350BLFF000XXX

#### SACE XT5H Ekip M Touch LRIU - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	65kA	400	Ekip M Touch LRIU	250	1SDA102545R1	XT5HU325AWFF000XXX
				300	1SDA102546R1	XT5HU330AWFF000XXX
				400	1SDA102547R1	XT5HU340AWFF000XXX
		600	Ekip M Touch LRIU	500	1SDA102548R1	XT5HU350BWFF000XXX



XT5 - circuit-breaker

## Generator protection circuit-breaker

### SACE XT5H TMG- Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	65kA	400	TMG	300	1SDA102549R1	XT5HU330ANFF000XXX	1SDA102651R1	XT5HU430ANFF000XXX
				400	1SDA102550R1	XT5HU340ANFF000XXX	1SDA102652R1	XT5HU440ANFF000XXX
	600	TMG	500	1SDA102551R1	XT5HU350BNFF000XXX	1SDA102653R1	XT5HU450BNFF000XXX	
			600	1SDA102552R1	XT5HU360BNFF000XXX	1SDA102654R1	XT5HU460BNFF000XXX	

### ACE XT5H Ekip G Dip LS/I - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	65kA	400	Ekip G Dip LS/I	250	Only available with the Breaking Part + Trip unit solution	XT5HU325AXFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5HU425AXFF000XXX
				300		XT5HU330AXFF000XXX		XT5HU430AXFF000XXX
	400	XT5HU340AXFF000XXX	XT5HU440AXFF000XXX					
	600	XT5HU360BXFF000XXX	XT5HU460BXFF000XXX					
		600	Ekip G Dip LS/I	600				

### SACE XT5H Ekip G Touch LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	65kA	400	Ekip G Touch LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5HU325AYFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5HU425AYFF000XXX
				300		XT5HU330AYFF000XXX		XT5HU430AYFF000XXX
	400	XT5HU340AYFF000XXX	XT5HU440AYFF000XXX					
	600	XT5HU360BYFF000XXX	XT5HU460BYFF000XXX					
		600	Ekip G Touch LSIG	600				

### SACE XT5H Ekip G Hi-Touch LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	65kA	400	Ekip G Hi-Touch LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5HU325AZFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5HU425AZFF000XXX
				300		XT5HU330AZFF000XXX		XT5HU430AZFF000XXX
	400	XT5HU340AZFF000XXX	XT5HU440AZFF000XXX					
	600	XT5HU360BZFF000XXX	XT5HU460BZFF000XXX					
		600	Ekip G Hi-Touch LSIG	600				

# Ordering codes for XT5

## Automatic circuit-breakers



XT5 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT5L TMA - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	100kA	400	TMA	300	Only available with the Breaking Part + Trip unit solution	XT5LU330ABFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5LU430ABFF000XXX
				400		XT5LU340ABFF000XXX		XT5LU440ABFF000XXX
				600		XT5LU360BFF000XXX		XT5LU460BFF000XXX

#### SACE XT5L Ekip Dip LS/I - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	100kA	400	Ekip Dip LS/I	250	Only available with the Breaking Part + Trip unit solution	XT5LU325AEFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5LU425AEFF000XXX
				300		XT5LU330AEFF000XXX		XT5LU430AEFF000XXX
				400		XT5LU340AEFF000XXX		XT5LU440AEFF000XXX
				600		XT5LU360BEFF000XXX		XT5LU460BEFF000XXX

#### SACE XT5L Ekip Dip LSI - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	100kA	400	Ekip Dip LSI	250	Only available with the Breaking Part + Trip unit solution	XT5LU325AFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5LU425AFF000XXX
				300		XT5LU330AFF000XXX		XT5LU430AFF000XXX
				400		XT5LU340AFF000XXX		XT5LU440AFF000XXX
				600		XT5LU360BFFF000XXX		XT5LU460BFFF000XXX

#### SACE XT5L Ekip Dip LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	100kA	400	Ekip Dip LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5LU325AGFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5LU425AGFF000XXX
				300		XT5LU330AGFF000XXX		XT5LU430AGFF000XXX
				400		XT5LU340AGFF000XXX		XT5LU440AGFF000XXX
				600		XT5LU360BGFF000XXX		XT5LU460BGFF000XXX



XT5 - circuit-breaker

**SACE XT5L Ekip Dip LIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	100kA	400	Ekip Dip LIG	250	Only available with the Breaking Part + Trip unit solution	XT5LU325ACFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5LU425ACFF000XXX
				300		XT5LU330ACFF000XXX		XT5LU430ACFF000XXX
				400		XT5LU340ACFF000XXX		XT5LU440ACFF000XXX
		600	Ekip Dip LIG	600		XT5LU360BCFF000XXX		XT5LU460BCFF000XXX

**SACE XT5L Ekip Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	100kA	400	Ekip Touch LSI	250	Only available with the Breaking Part + Trip unit solution	XT5LU325APFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5LU425APFF000XXX
				300		XT5LU330APFF000XXX		XT5LU430APFF000XXX
				400		XT5LU340APFF000XXX		XT5LU440APFF000XXX
		600	Ekip Touch LSI	600		XT5LU360BPFF000XXX		XT5LU460BPFF000XXX

**SACE XT5L Ekip Touch LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	100kA	400	Ekip Touch LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5LU325AQFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5LU425AQFF000XXX
				300		XT5LU330AQFF000XXX		XT5LU430AQFF000XXX
				400		XT5LU340AQFF000XXX		XT5LU440AQFF000XXX
		600	Ekip Touch LSIG	600		XT5LU360BQFF000XXX		XT5LU460BQFF000XXX

**SACE XT5L Ekip Touch Measuring LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	100kA	400	Ekip Touch Measuring LSI	250	Only available with the Breaking Part + Trip unit solution	XT5LU325ARFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5LU425ARFF000XXX
				300		XT5LU330ARFF000XXX		XT5LU430ARFF000XXX
				400		XT5LU340ARFF000XXX		XT5LU440ARFF000XXX
		600	Ekip Touch Meas. LSI	600		XT5LU360BRFF000XXX		XT5LU460BRFF000XXX

**SACE XT5L Ekip Touch Measuring LSIG - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	100kA	400	Ekip Touch Measuring LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5LU325ASFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5LU425ASFF000XXX
				300		XT5LU330ASFF000XXX		XT5LU430ASFF000XXX
				400		XT5LU340ASFF000XXX		XT5LU440ASFF000XXX
		600	Ekip Touch Meas. LSIG	600		XT5LU360BSFF000XXX		XT5LU460BSFF000XXX

**SACE XT5L Ekip Hi-Touch LSI - Front terminals (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	100kA	400	Ekip Hi-Touch LSI	250	Only available with the Breaking Part + Trip unit solution	XT5LU325ATFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5LU425ATFF000XXX
				300		XT5LU330ATFF000XXX		XT5LU430ATFF000XXX
				400		XT5LU340ATFF000XXX		XT5LU440ATFF000XXX
		600	Ekip Hi-Touch LSI	600		XT5LU360BTFF000XXX		XT5LU460BTFF000XXX

# Ordering codes for XT5

## Automatic circuit-breakers



XT5 - circuit-breaker

### SACE XT5L Ekip Hi-Touch LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	100kA	400	Ekip Hi-Touch LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5LU325AUFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5LU425AUFF000XXX
				300		XT5LU330AUFF000XXX		XT5LU430AUFF000XXX
				400		XT5LU340AUFF000XXX		XT5LU440AUFF000XXX
		600	Ekip Hi-Touch LSIG	600		XT5LU360BUFF000XXX		XT5LU460BUFF000XXX

### Motor protection circuit-breaker (MCP)

#### SACE XT5L MA - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	100kA	400	MA	300	1SDA102557R1	XT5LU330AMFF000XXX
				400	1SDA102558R1	XT5LU340AMFF000XXX
				600	MA	500

#### SACE XT5L Ekip M Dip I - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	100kA	400	Ekip M Dip I	250	1SDA107489R1	XT5LU325AKFF000XXX
				300	1SDA102560R1	XT5LU330AKFF000XXX
				400	1SDA102561R1	XT5LU340AKFF000XXX
		600	Ekip M Dip I	500	1SDA102562R1	XT5LU350BKFF000XXX



XT5 - circuit-breaker

## Motor protection circuit-breaker (MPCP)

### SACE XT5L Ekip M Dip LIU - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	100kA	400	Ekip M Dip LIU	250	1SDA107368R1	XT5LU325ALFF000XXX
				300	1SDA107369R1	XT5LU330ALFF000XXX
				400	1SDA107371R1	XT5LU340ALFF000XXX
		600	Ekip M Dip LIU	500	1SDA107372R1	XT5LU350BLFF000XXX

### SACE XT5L Ekip M Touch LRIU - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	100kA	400	Ekip M Touch LRIU	250	1SDA102563R1	XT5LU325AWFF000XXX
				300	1SDA102564R1	XT5LU330AWFF000XXX
				400	1SDA102565R1	XT5LU340AWFF000XXX
		600	Ekip M Touch LRIU	500	1SDA102566R1	XT5LU350BWFF000XXX

# Ordering codes for XT5

## Automatic circuit-breakers



XT5 - circuit-breaker

### Generator protection circuit-breaker

#### SACE XT5L TMG- Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	100kA	400	TMG	300	Only available with the Breaking Part + Trip unit solution	XT5LU330ANFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5LU430ANFF000XXX
				400		XT5LU340ANFF000XXX		XT5LU440ANFF000XXX
				600		XT5LU360BNFF000XXX		XT5LU460BNFF000XXX

#### SACE XT5L Ekip G Dip LS/I - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	100kA	400	Ekip G Dip LS/I	250	Only available with the Breaking Part + Trip unit solution	XT5LU325AXFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5LU425AXFF000XXX
				300		XT5LU330AXFF000XXX		XT5LU430AXFF000XXX
				400		XT5LU340AXFF000XXX		XT5LU440AXFF000XXX
				600		XT5LU360BXFF000XXX		XT5LU460BXFF000XXX

#### SACE XT5L Ekip G Touch LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	100kA	400	Ekip G Touch LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5LU325AYFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5LU425AYFF000XXX
				300		XT5LU330AYFF000XXX		XT5LU430AYFF000XXX
				400		XT5LU340AYFF000XXX		XT5LU440AYFF000XXX
				600		XT5LU360BYFF000XXX		XT5LU460BYFF000XXX

#### SACE XT5L Ekip G Hi-Touch LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	100kA	400	Ekip G Hi-Touch LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5LU325AZFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5LU425AZFF000XXX
				300		XT5LU330AZFF000XXX		XT5LU430AZFF000XXX
				400		XT5LU340AZFF000XXX		XT5LU440AZFF000XXX
				600		XT5LU360BZFF000XXX		XT5LU460BZFF000XXX



XT5 - circuit-breaker

## Distribution circuit-breakers

## SACE XT5V TMA- Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	150kA	400	TMA	300	Only available with the Breaking Part + Trip unit solution	XT5VU330ABFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5VU430ABFF000XXX
						XT5VU340ABFF000XXX		XT5VU440ABFF000XXX
		600	TMA	600		XT5VU360BFF000XXX		XT5VU460BFF000XXX

## SACE XT5V Ekip Dip LS/I - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	150kA	400	Ekip Dip LS/I	250	Only available with the Breaking Part + Trip unit solution	XT5VU325AEFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5VU425AEFF000XXX
						XT5VU330AEFF000XXX		XT5VU430AEFF000XXX
						XT5VU340AEFF000XXX		XT5VU440AEFF000XXX
		600	Ekip Dip LS/I	600		XT5VU360BEFF000XXX		XT5VU460BEFF000XXX

## SACE XT5V Ekip Dip LSI - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	150kA	400	Ekip Dip LSI	250	Only available with the Breaking Part + Trip unit solution	XT5VU325AFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5VU425AFF000XXX
						XT5VU330AFF000XXX		XT5VU430AFF000XXX
						XT5VU340AFF000XXX		XT5VU440AFF000XXX
		600	Ekip Dip LSI	600		XT5VU360BFF000XXX		XT5VU460BFF000XXX

## SACE XT5V Ekip Dip LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	150kA	400	Ekip Dip LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5VU325AGFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5VU425AGFF000XXX
						XT5VU330AGFF000XXX		XT5VU430AGFF000XXX
						XT5VU340AGFF000XXX		XT5VU440AGFF000XXX
		600	Ekip Dip LSIG	600		XT5VU360BGF000XXX		XT5VU460BGF000XXX

## SACE XT5V Ekip Dip LIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	150kA	400	Ekip Dip LIG	250	Only available with the Breaking Part + Trip unit solution	XT5VU325ACFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5VU425ACFF000XXX
						XT5VU330ACFF000XXX		XT5VU430ACFF000XXX
						XT5VU340ACFF000XXX		XT5VU440ACFF000XXX
		600	Ekip Dip LIG	600		XT5VU360BCFF000XXX		XT5VU460BCFF000XXX

## SACE XT5V Ekip Touch LSI - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	150kA	400	Ekip Touch LSI	250	Only available with the Breaking Part + Trip unit solution	XT5VU325APFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5VU425APFF000XXX
						XT5VU330APFF000XXX		XT5VU430APFF000XXX
						XT5VU340APFF000XXX		XT5VU440APFF000XXX
		600	Ekip Touch LSI	600		XT5VU360BPFF000XXX		XT5VU460BPFF000XXX

# Ordering codes for XT5

## Automatic circuit-breakers



XT5 - circuit-breaker

### SACE XT5V Ekip Touch LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	150kA	400	Ekip Touch LSI	250	Only available with the Breaking Part + Trip unit solution	XT5VU325AQFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5VU425AQFF000XXX
				300		XT5VU330AQFF000XXX		XT5VU430AQFF000XXX
				400		XT5VU340AQFF000XXX		XT5VU440AQFF000XXX
		600	Ekip Touch LSI	600	XT5VU360BQFF000XXX	XT5VU460BQFF000XXX		

### SACE XT5V Ekip Touch Measuring LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	150kA	400	Ekip Touch Measuring LSI	250	"Only available with the Breaking Part + Trip unit solution"	XT5VU325ARFF000XXX	"Only available with the Breaking Part + Trip unit solution"	XT5VU425ARFF000XXX
				300		XT5VU330ARFF000XXX		XT5VU430ARFF000XXX
				400		XT5VU340ARFF000XXX		XT5VU440ARFF000XXX
		600	Ekip Touch Meas. LSI	600	XT5VU360BRFF000XXX	XT5VU460BRFF000XXX		

### SACE XT5V Ekip Touch Measuring LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	150kA	400	Ekip Touch Measuring LSI	250	Only available with the Breaking Part + Trip unit solution	XT5VU325ASFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5VU425ASFF000XXX
				300		XT5VU330ASFF000XXX		XT5VU430ASFF000XXX
				400		XT5VU340ASFF000XXX		XT5VU440ASFF000XXX
		600	Ekip Touch Meas. LSI	600	XT5VU360BSFF000XXX	XT5VU460BSFF000XXX		

### SACE XT5V Ekip Hi-Touch LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	150kA	400	Ekip Hi-Touch LSI	250	Only available with the Breaking Part + Trip unit solution	XT5VU325ATFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5VU425ATFF000XXX
				300		XT5VU330ATFF000XXX		XT5VU430ATFF000XXX
				400		XT5VU340ATFF000XXX		XT5VU440ATFF000XXX
		600	Ekip Hi-Touch LSI	600	XT5VU360BTFF000XXX	XT5VU460BTFF000XXX		

### SACE XT5V Ekip Hi-Touch LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	150kA	400	Ekip Hi-Touch LSI	250	Only available with the Breaking Part + Trip unit solution	XT5VU325AUFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5VU425AUFF000XXX
				300		XT5VU330AUFF000XXX		XT5VU430AUFF000XXX
				400		XT5VU340AUFF000XXX		XT5VU440AUFF000XXX
		600	Ekip Hi-Touch LSI	600	XT5VU360BUFF000XXX	XT5VU460BUFF000XXX		



XT5 - circuit-breaker

## Motor protection circuit-breaker (MCP)

### SACE XT5V MA - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	150kA	400	MA	300	1SDA102567R1	XT5VU330AMFF000XXX
				400	1SDA102568R1	XT5VU340AMFF000XXX
				500	1SDA102569R1	XT5VU350BMFF000XXX
		600	MA	500	1SDA102569R1	XT5VU350BMFF000XXX

### SACE XT5V Ekip M Dip I - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	150kA	400	Ekip M Dip I	250	1SDA107490R1	XT5VU325AKFF000XXX
				300	1SDA102570R1	XT5VU330AKFF000XXX
				400	1SDA102571R1	XT5VU340AKFF000XXX
				500	1SDA102572R1	XT5VU350BKFF000XXX
		600	Ekip M Dip I	500	1SDA102572R1	XT5VU350BKFF000XXX



XT5 - circuit-breaker

## Motor protection circuit-breaker (MPCP)

### SACE XT5V Ekip M Dip LIU - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	150kA	400	Ekip M Dip LIU	250	1SDA107373R1	XT5VU325ALFF000XXX
				300	1SDA107374R1	XT5VU330ALFF000XXX
				400	1SDA107375R1	XT5VU340ALFF000XXX
				500	1SDA107376R1	XT5VU350BLFF000XXX
		600	Ekip M Dip LIU	500	1SDA107376R1	XT5VU350BLFF000XXX

### SACE XT5V Ekip M Touch LRIU - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	150kA	400	Ekip M Touch LRIU	250	1SDA102573R1	XT5VU325AWFF000XXX
				300	1SDA102574R1	XT5VU330AWFF000XXX
				400	1SDA102575R1	XT5VU340AWFF000XXX
				500	1SDA102576R1	XT5VU350BWFF000XXX
		600	Ekip M Touch LRIU	500	1SDA102576R1	XT5VU350BWFF000XXX

# Ordering codes for XT5

## Automatic circuit-breakers



XT5 - circuit-breaker

### Generator protection circuit-breaker

#### SACE XT5V TMG- Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles				
				Product ID	US/CA PN	Product ID	US/CA PN			
XT5	150kA	400	TMG	300	Only available with the Breaking Part + Trip unit solution	XT5VU330ANFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5VU430ANFF000XXX		
				400					XT5VU340ANFF000XXX	XT5VU440ANFF000XXX
				600					XT5VU360BNFF000XXX	XT5VU460BNFF000XXX

#### SACE XT5V Ekip G Dip LS/I - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles				
				Product ID	US/CA PN	Product ID	US/CA PN			
XT5	150kA	400	Ekip G Dip LS/I	250	Only available with the Breaking Part + Trip unit solution	XT5VU325AXFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5VU425AXFF000XXX		
				300					XT5VU330AXFF000XXX	XT5VU430AXFF000XXX
				400					XT5VU340AXFF000XXX	XT5VU440AXFF000XXX
				600					XT5VU360BXFF000XXX	XT5VU460BXFF000XXX

#### SACE XT5V Ekip G Touch LSIG - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles				
				Product ID	US/CA PN	Product ID	US/CA PN			
XT5	150kA	400	Ekip G Touch LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5VU325AYFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5VU425AYFF000XXX		
				300					XT5VU330AYFF000XXX	XT5VU430AYFF000XXX
				400					XT5VU340AYFF000XXX	XT5VU440AYFF000XXX
				600					XT5VU360BYFF000XXX	XT5VU460BYFF000XXX

#### SACE XT5V Ekip G Hi-Touch LSIG - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles				
				Product ID	US/CA PN	Product ID	US/CA PN			
XT5	150kA	400	Ekip G Hi-Touch LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5VU325AZFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5VU425AZFF000XXX		
				300					XT5VU330AZFF000XXX	XT5VU430AZFF000XXX
				400					XT5VU340AZFF000XXX	XT5VU440AZFF000XXX
				600					XT5VU360BZFF000XXX	XT5VU460BZFF000XXX



XT5 - circuit-breaker

## Distribution circuit-breakers

## SACE XT5X TMA - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	200kA	400	TMA	300	Only available with the Breaking Part + Trip unit solution	XT5XU330ABFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5XU430ABFF000XXX
						XT5XU340ABFF000XXX		XT5XU440ABFF000XXX
		600	TMA	600		XT5XU360BFF000XXX		XT5XU460BFF000XXX

## SACE XT5X Ekip Dip LS/I - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	200kA	400	Ekip Dip LS/I	250	Only available with the Breaking Part + Trip unit solution	XT5XU325AEFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5XU425AEFF000XXX
						XT5XU330AEFF000XXX		XT5XU430AEFF000XXX
						XT5XU340AEFF000XXX		XT5XU440AEFF000XXX
		600	Ekip Dip LS/I	600		XT5XU360BEFF000XXX		XT5XU460BEFF000XXX

## SACE XT5X Ekip Dip LSI - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	200kA	400	Ekip Dip LSI	250	Only available with the Breaking Part + Trip unit solution	XT5XU325AFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5XU425AFF000XXX
						XT5XU330AFF000XXX		XT5XU430AFF000XXX
						XT5XU340AFF000XXX		XT5XU440AFF000XXX
		600	Ekip Dip LSI	600		XT5XU360BFF000XXX		XT5XU460BFF000XXX

## SACE XT5X Ekip Dip LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	200kA	400	Ekip Dip LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5XU325AGFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5XU425AGFF000XXX
						XT5XU330AGFF000XXX		XT5XU430AGFF000XXX
						XT5XU340AGFF000XXX		XT5XU440AGFF000XXX
		600	Ekip Dip LSIG	600		XT5XU360BGGFF000XXX		XT5XU460BGGFF000XXX

## SACE XT5X Ekip Dip LIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	200kA	400	Ekip Dip LIG	250	Only available with the Breaking Part + Trip unit solution	XT5XU325ACFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5XU425ACFF000XXX
						XT5XU330ACFF000XXX		XT5XU430ACFF000XXX
						XT5XU340ACFF000XXX		XT5XU440ACFF000XXX
		600	Ekip Dip LIG	600		XT5XU360BCFF000XXX		XT5XU460BCFF000XXX

## SACE XT5X Ekip Touch LSI - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	200kA	400	Ekip Touch LSI	250	Only available with the Breaking Part + Trip unit solution	XT5XU325APFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5XU425APFF000XXX
						XT5XU330APFF000XXX		XT5XU430APFF000XXX
						XT5XU340APFF000XXX		XT5XU440APFF000XXX
		600	Ekip Touch LSI	600		XT5XU360BPFF000XXX		XT5XU460BPFF000XXX

# Ordering codes for XT5

## Automatic circuit-breakers



XT5 - circuit-breaker

### SACE XT5X Ekip Touch LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	200kA	400	Ekip Touch LSI	250	Only available with the Breaking Part + Trip unit solution	XT5XU325AQFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5XU425AQFF000XXX
				300		XT5XU330AQFF000XXX		XT5XU430AQFF000XXX
				400		XT5XU340AQFF000XXX		XT5XU440AQFF000XXX
		600	Ekip Touch LSI	600	XT5XU360BQFF000XXX	XT5XU460BQFF000XXX		

### SACE XT5X Ekip Touch Measuring LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	200kA	400	Ekip Touch Measuring LSI	250	Only available with the Breaking Part + Trip unit solution	XT5XU325ARFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5XU425ARFF000XXX
				300		XT5XU330ARFF000XXX		XT5XU430ARFF000XXX
				400		XT5XU340ARFF000XXX		XT5XU440ARFF000XXX
		600	Ekip Touch Meas. LSI	600	XT5XU360BRFF000XXX	XT5XU460BRFF000XXX		

### SACE XT5X Ekip Touch Measuring LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	200kA	400	Ekip Touch Measuring LSI	250	Only available with the Breaking Part + Trip unit solution	XT5XU325ASFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5XU425ASFF000XXX
				300		XT5XU330ASFF000XXX		XT5XU430ASFF000XXX
				400		XT5XU340ASFF000XXX		XT5XU440ASFF000XXX
		600	Ekip Touch Meas. LSI	600	XT5XU360BSFF000XXX	XT5XU460BSFF000XXX		

### SACE XT5X Ekip Hi-Touch LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	200kA	400	Ekip Hi-Touch LSI	250	Only available with the Breaking Part + Trip unit solution	XT5XU325ATFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5XU425ATFF000XXX
				300		XT5XU330ATFF000XXX		XT5XU430ATFF000XXX
				400		XT5XU340ATFF000XXX		XT5XU440ATFF000XXX
		600	Ekip Hi-Touch LSI	600	XT5XU360BTFF000XXX	XT5XU460BTFF000XXX		

### SACE XT5X Ekip Hi-Touch LSI - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT5	200kA	400	Ekip Hi-Touch LSI	250	Only available with the Breaking Part + Trip unit solution	XT5XU325AUFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5XU425AUFF000XXX
				300		XT5XU330AUFF000XXX		XT5XU430AUFF000XXX
				400		XT5XU340AUFF000XXX		XT5XU440AUFF000XXX
		600	Ekip Hi-Touch LSI	600	XT5XU360BUFF000XXX	XT5XU460BUFF000XXX		



XT5 - circuit-breaker

## Motor protection circuit-breaker (MCP)

### SACE XT5X MA - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	200kA	400	MA	300	1SDA102577R1	XT5XU330AMFF000XXX
				400	1SDA102578R1	XT5XU340AMFF000XXX
				500	1SDA102579R1	XT5XU350BMFF000XXX
		600	MA	500	1SDA102579R1	XT5XU350BMFF000XXX

### SACE XT5X Ekip M Dip I - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	200kA	400	Ekip M Dip I	250	1SDA107491R1	XT5XU325AKFF000XXX
				300	1SDA102580R1	XT5XU330AKFF000XXX
				400	1SDA102581R1	XT5XU340AKFF000XXX
				500	1SDA102582R1	XT5XU350BKFF000XXX
		600	Ekip M Dip I	500	1SDA102582R1	XT5XU350BKFF000XXX



XT5 - circuit-breaker

## Motor protection circuit-breaker (MPCP)

### SACE XT5X Ekip M Dip LIU - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	200kA	400	Ekip M Dip LIU	250	1SDA107377R1	XT5XU325ALFF000XXX
				300	1SDA107378R1	XT5XU330ALFF000XXX
				400	1SDA107379R1	XT5XU340ALFF000XXX
				500	1SDA107380R1	XT5XU350BLFF000XXX
		600	Ekip M Dip LIU	500	1SDA107380R1	XT5XU350BLFF000XXX

### SACE XT5X Ekip M Touch LRIU - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT5	200kA	400	Ekip M Touch LRIU	250	1SDA102583R1	XT5XU325AWFF000XXX
				300	1SDA102584R1	XT5XU330AWFF000XXX
				400	1SDA102585R1	XT5XU340AWFF000XXX
				500	1SDA102586R1	XT5XU350BWFF000XXX
						600

# Ordering codes for XT5

## Automatic circuit-breakers



XT5 - circuit-breaker

### Generator protection circuit-breaker

#### SACE XT5V TMG- Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles				
				Product ID	US/CA PN	Product ID	US/CA PN			
XT5	200kA	400	TMG	300	Only available with the Breaking Part + Trip unit solution	XT5XU330ANFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5XU430ANFF000XXX		
				400					XT5XU340ANFF000XXX	XT5XU440ANFF000XXX
				600					XT5XU360BNFF000XXX	XT5XU460BNFF000XXX

#### SACE XT5V Ekip G Dip LS/I - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles				
				Product ID	US/CA PN	Product ID	US/CA PN			
XT5	200kA	400	Ekip G Dip LS/I	250	Only available with the Breaking Part + Trip unit solution	XT5XU325AXFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5XU425AXFF000XXX		
				300					XT5XU330AXFF000XXX	XT5XU430AXFF000XXX
				400					XT5XU340AXFF000XXX	XT5XU440AXFF000XXX
				600					XT5XU360BXFF000XXX	XT5XU460BXFF000XXX

#### SACE XT5V Ekip G Touch LSIG - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles				
				Product ID	US/CA PN	Product ID	US/CA PN			
XT5	200kA	400	Ekip G Touch LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5XU325AYFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5XU425AYFF000XXX		
				300					XT5XU330AYFF000XXX	XT5XU430AYFF000XXX
				400					XT5XU340AYFF000XXX	XT5XU440AYFF000XXX
				600					XT5XU360BYFF000XXX	XT5XU460BYFF000XXX

#### SACE XT5V Ekip G Hi-Touch LSIG - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles				
				Product ID	US/CA PN	Product ID	US/CA PN			
XT5	200kA	400	Ekip G Hi-Touch LSIG	250	Only available with the Breaking Part + Trip unit solution	XT5XU325AZFF000XXX	Only available with the Breaking Part + Trip unit solution	XT5XU425AZFF000XXX		
				300					XT5XU330AZFF000XXX	XT5XU430AZFF000XXX
				400					XT5XU340AZFF000XXX	XT5XU440AZFF000XXX
				600					XT5XU360BZFF000XXX	XT5XU460BZFF000XXX



XT5 - circuit-breaker

## Molded case switches

### SACE XT5D - MCS

Size	lu	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT5	400	1SDA102659R1	XT5NU340ADFF000XXX	1SDA102669R1	XT5NU440ADFF000XXX
		1SDA102661R1	XT5SU340ADFF000XXX	1SDA102671R1	XT5SU440ADFF000XXX
		1SDA102663R1	XT5HU340ADFF000XXX	1SDA102673R1	XT5HU440ADFF000XXX
		1SDA102665R1	XT5LU340ADFF000XXX	1SDA102675R1	XT5LU440ADFF000XXX
		1SDA102667R1	XT5VU340ADFF000XXX	1SDA102677R1	XT5VU440ADFF000XXX
	600	1SDA102660R1	XT5NU360BDFF000XXX	1SDA102670R1	XT5NU460BDFF000XXX
		1SDA102662R1	XT5SU360BDFF000XXX	1SDA102672R1	XT5SU460BDFF000XXX
		1SDA102664R1	XT5HU360BDFF000XXX	1SDA102674R1	XT5HU460BDFF000XXX
		1SDA102666R1	XT5LU360BDFF000XXX	1SDA102676R1	XT5LU460BDFF000XXX
		1SDA102668R1	XT5VU360BDFF000XXX	1SDA102678R1	XT5VU460BDFF000XXX

# Ordering codes for XT5

## Breaking part



XT5 - breaking part

### SACE XT5 - Breaking part

Size	Iu	Icu (480V)	Type	3 poles	4 poles
				Product ID	Product ID
XT5	400	35	XT5N 400 breaking part	1SDA102679R1	1SDA102691R1
	600	35	XT5N 600 breaking part	1SDA102680R1	1SDA102692R1
	400	50	XT5S 400 breaking part	1SDA102681R1	1SDA102693R1
	600	50	XT5S 600 breaking part	1SDA102682R1	1SDA102694R1
	400	65	XT5H 400 breaking part	1SDA102683R1	1SDA102695R1
	600	65	XT5H 600 breaking part	1SDA102684R1	1SDA102696R1
	400	100	XT5L 400 breaking part	1SDA102685R1	1SDA102697R1
	600	100	XT5L 600 breaking part	1SDA102686R1	1SDA102698R1
	400	150	XT5V 400 breaking part	1SDA102687R1	1SDA102699R1
	600	150	XT5V 600 breaking part	1SDA102688R1	1SDA102700R1
	400	200	XT5X 400 breaking part	1SDA102689R1	1SDA102701R1
	600	200	XT5X 600 breaking part	1SDA102690R1	1SDA102702R1

## 100% rated distribution circuit-breakers

### 100% rated version extra code

Size	3 poles	4 poles
	Product ID	Product ID
XT5	1SDA112973R1	1SDA112974R1

Note: to be specified only in addition to the code of the automatic circuit-breaker or of the breaking part

# Ordering codes for XT5

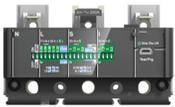
## Trip units

### Trip units - distribution protection

Size	Type	3 poles	4 poles
		Product ID	Product ID
XT5	TMA 300-3000	1SDA102703R1	1SDA102780R1
	TMA 400-4000	1SDA102704R1	1SDA102781R1
	TMA 500-5000	1SDA102705R1	1SDA102782R1
	TMA 600-6000	1SDA102706R1	1SDA102783R1
	Ekip Dip LS/I In=250A	1SDA102707R1	1SDA102784R1
	Ekip Dip LS/I In=300A	1SDA102708R1	1SDA102785R1
	Ekip Dip LS/I In=400A	1SDA102709R1	1SDA102786R1
	Ekip Dip LS/I In=600A	1SDA102710R1	1SDA102787R1
	Ekip Dip LSI In=250A	1SDA102711R1	1SDA102788R1
	Ekip Dip LSI In=300A	1SDA102712R1	1SDA102789R1
	Ekip Dip LSI In=400A	1SDA102713R1	1SDA102790R1
	Ekip Dip LSI In=600A	1SDA102714R1	1SDA102791R1
	Ekip Dip LSIG In=250A	1SDA102715R1	1SDA102792R1
	Ekip Dip LSIG In=300A	1SDA102716R1	1SDA102793R1
	Ekip Dip LSIG In=400A	1SDA102717R1	1SDA102794R1
	Ekip Dip LSIG In=600A	1SDA102718R1	1SDA102795R1
	Ekip Dip LIG In=250A	1SDA102773R1	1SDA102832R1
	Ekip Dip LIG In=300A	1SDA102774R1	1SDA102833R1
	Ekip Dip LIG In=400A	1SDA102775R1	1SDA102834R1
	Ekip Dip LIG In=600A	1SDA102776R1	1SDA102835R1
	Ekip Touch LSI In=250A	1SDA102719R1	1SDA102796R1
	Ekip Touch LSI In=300A	1SDA102720R1	1SDA102797R1
	Ekip Touch LSI In=400A	1SDA102721R1	1SDA102798R1
	Ekip Touch LSI In=600A	1SDA102722R1	1SDA102799R1
	Ekip Touch LSIG In=250A	1SDA102723R1	1SDA102800R1
	Ekip Touch LSIG In=300A	1SDA102724R1	1SDA102801R1
	Ekip Touch LSIG In=400A	1SDA102725R1	1SDA102802R1
	Ekip Touch LSIG In=600A	1SDA102726R1	1SDA102803R1
	Ekip Touch Measuring LSI In=250	1SDA102727R1	1SDA102804R1
	Ekip Touch Measuring LSI In=300	1SDA102728R1	1SDA102805R1
	Ekip Touch Measuring LSI In=400	1SDA102729R1	1SDA102806R1
	Ekip Touch Measuring LSI In=600	1SDA102730R1	1SDA102807R1
	Ekip Touch Measuring LSIG In=250	1SDA102731R1	1SDA102808R1
	Ekip Touch Measuring LSIG In=300	1SDA102732R1	1SDA102809R1
	Ekip Touch Measuring LSIG In=400	1SDA102733R1	1SDA102810R1
	Ekip Touch Measuring LSIG In=600	1SDA102734R1	1SDA102811R1
	Ekip Hi-Touch LSI In=250	1SDA102735R1	1SDA102812R1
	Ekip Hi-Touch LSI In=300	1SDA102736R1	1SDA102813R1
	Ekip Hi-Touch LSI In=400	1SDA102737R1	1SDA102814R1
	Ekip Hi-Touch LSI In=600	1SDA102738R1	1SDA102815R1
Ekip Hi-Touch LSIG In=250	1SDA102739R1	1SDA102816R1	
Ekip Hi-Touch LSIG In=300	1SDA102740R1	1SDA102817R1	
Ekip Hi-Touch LSIG In=400	1SDA102741R1	1SDA102818R1	
Ekip Hi-Touch LSIG In=600	1SDA102742R1	1SDA102819R1	



Thermal magnetic trip unit



Dip trip unit



Touch trip unit

# Ordering codes for XT5

## Trip units

### Trip units - Generator protection

Size	Type	3 poles	4 poles
		Product ID	Product ID
XT5	TMG 300-1500	1SDA102757R1	1SDA107795R1
	TMG 400-2000	1SDA102758R1	1SDA107796R1
	TMG 500-2500	1SDA102759R1	1SDA114030R1
	TMG 600-3000	1SDA102760R1	1SDA107797R1
	Ekip G Dip LS/I In=250	1SDA102761R1	1SDA102820R1
	Ekip G Dip LS/I In=300	1SDA102762R1	1SDA102821R1
	Ekip G Dip LS/I In=400	1SDA102763R1	1SDA102822R1
	Ekip G Dip LS/I In=600	1SDA102764R1	1SDA102823R1
	Ekip G Touch LSIG In=250	1SDA102765R1	1SDA102824R1
	Ekip G Touch LSIG In=300	1SDA102766R1	1SDA102825R1
	Ekip G Touch LSIG In=400	1SDA102767R1	1SDA102826R1
	Ekip G Touch LSIG In=600	1SDA102768R1	1SDA102827R1
	Ekip G Hi-Touch LSIG In=250	1SDA102769R1	1SDA102828R1
	Ekip G Hi-Touch LSIG In=300	1SDA102770R1	1SDA102829R1
	Ekip G Hi-Touch LSIG In=400	1SDA102771R1	1SDA102830R1
	Ekip G Hi-Touch LSIG In=600	1SDA102772R1	1SDA102831R1

# Ordering codes for XT5

## Breaking part + trip unit solution



XT5 Breaking part



Thermal-Magnetic Trip unit



Ekip Dip Trip Unit



Thermal-Magnetic Trip unit

Breaking Part	Iu Poles	Icu	N (35kA)	S (50kA)	H (65kA)	L (100kA)	V (150kA)	X (200kA)
	400	3	1SDA102679R1	1SDA102681R1	1SDA102683R1	1SDA102685R1	1SDA102687R1	1SDA102689R1
		4	1SDA102691R1	1SDA102693R1	1SDA102695R1	1SDA102697R1	1SDA102699R1	1SDA102701R1
	600	3	1SDA102680R1	1SDA102682R1	1SDA102684R1	1SDA102686R1	1SDA102688R1	1SDA102690R1
		4	1SDA102692R1	1SDA102694R1	1SDA102696R1	1SDA102698R1	1SDA102700R1	1SDA102702R1

Trip units	In Poles	250	300	400	500	600
TMA	3		1SDA102703R1	1SDA102704R1	1SDA102705R1	1SDA102706R1
	4		1SDA102780R1	1SDA102781R1	1SDA102782R1	1SDA102783R1
Ekip Dip LS/I	3	1SDA102707R1	1SDA102708R1	1SDA102709R1		1SDA102710R1
	4	1SDA102784R1	1SDA102785R1	1SDA102786R1		1SDA102787R1
Ekip Dip LSI	3	1SDA102711R1	1SDA102712R1	1SDA102713R1		1SDA102714R1
	4	1SDA102788R1	1SDA102789R1	1SDA102790R1		1SDA102791R1
Ekip Dip LSIG	3	1SDA102715R1	1SDA102716R1	1SDA102717R1		1SDA102718R1
	4	1SDA102792R1	1SDA102793R1	1SDA102794R1		1SDA102795R1
Ekip Dip LIG	3	1SDA102773R1	1SDA102774R1	1SDA102775R1		1SDA102776R1
	4	1SDA102832R1	1SDA102833R1	1SDA102834R1		1SDA102835R1
Ekip Touch LS	3	1SDA102719R1	1SDA102720R1	1SDA102721R1		1SDA102722R1
	4	1SDA102796R1	1SDA102797R1	1SDA102798R1		1SDA102799R1
Ekip Touch LSIG	3	1SDA102723R1	1SDA102724R1	1SDA102725R1		1SDA102726R1
	4	1SDA102800R1	1SDA102801R1	1SDA102802R1		1SDA102803R1
Ekip Touch Measuring LSI	3	1SDA102727R1	1SDA102728R1	1SDA102729R1		1SDA102730R1
	4	1SDA102804R1	1SDA102805R1	1SDA102806R1		1SDA102807R1
Ekip Touch Measuring LSIG	3	1SDA102731R1	1SDA102732R1	1SDA102733R1		1SDA102734R1
	4	1SDA102808R1	1SDA102809R1	1SDA102810R1		1SDA102811R1
Ekip Hi-Touch LSI		1SDA102735R1	1SDA102736R1	1SDA102737R1		1SDA102738R1
	3	1SDA102812R1	1SDA102813R1	1SDA102814R1		1SDA102815R1
Ekip Hi-Touch LSIG	4	1SDA102739R1	1SDA102740R1	1SDA102741R1		1SDA102742R1
		1SDA102816R1	1SDA102817R1	1SDA102818R1		1SDA102819R1
TMG	3		1SDA102757R1	1SDA102758R1	1SDA102759R1	1SDA102760R1
	4		1SDA107795R1	1SDA107796R1	1SDA114030R1	1SDA107797R1
Ekip G Dip LS/I	3	1SDA102761R1	1SDA102762R1	1SDA102763R1		1SDA102764R1
	4	1SDA102820R1	1SDA102821R1	1SDA102822R1		1SDA102823R1
Ekip G Touch LSIG	3	1SDA102765R1	1SDA102766R1	1SDA102767R1		1SDA102768R1
	4	1SDA102824R1	1SDA102825R1	1SDA102826R1		1SDA102827R1
Ekip G Hi-Touch LSIG	3	1SDA102769R1	1SDA102770R1	1SDA102771R1		1SDA102772R1
	4	1SDA102828R1	1SDA102829R1	1SDA102830R1		1SDA102831R1

Note: When a single code for the complete circuit-breaker is not available, please configure the breaking part code with the trip unit code to order a factory-assembled circuit-breaker

# Ordering codes for XT6

## Automatic circuit-breakers



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XT6 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT6N TMA- Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT6	35kA	800	TMA	600	1SDA107625R1 XT6NU3600BFF000XXX	1SDA107646R1	XT6NU4600BFF000XXX
				800	1SDA102839R1 XT6NU3800BFF000XXX	1SDA102860R1	XT6NU4800BFF000XXX

#### SACE XT6N Ekip Dip LS/I - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT6	35kA	800	Ekip Dip LS/I	600	1SDA107626R1 XT6NU3600EFF000XXX	1SDA107647R1	XT6NU4600EFF000XXX
				800	1SDA102840R1 XT6NU3800EFF000XXX	1SDA102861R1	XT6NU4800EFF000XXX

#### SACE XT6N Ekip Dip LSI - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT6	35kA	800	Ekip Dip LSI	600	1SDA107627R1 XT6NU3600FFF000XXX	1SDA107648R1	XT6NU4600FFF000XXX
				800	1SDA102841R1 XT6NU3800FFF000XXX	1SDA102862R1	XT6NU4800FFF000XXX

#### SACE XT6N Ekip Dip LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT6	35kA	800	Ekip Dip LSIG	600	1SDA107628R1 XT6NU3600GFF000XXX	1SDA107649R1	XT6NU4600GFF000XXX
				800	1SDA102842R1 XT6NU3800GFF000XXX	1SDA102863R1	XT6NU4800GFF000XXX

#### SACE XT6N Ekip Dip LIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT6	35kA	800	Ekip Dip LIG	600	1SDA107631R1 XT6NU3600CFF000XXX	1SDA107650R1	XT6NU4600CFF000XXX
				800	1SDA102845R1 XT6NU3800CFF000XXX	1SDA102864R1	XT6NU4800CFF000XXX



XT6 - circuit-breaker

### Motor protection circuit-breaker (MCP)

#### SACE XT6N Ekip M Dip I - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles	
				Product ID	US/CA PN
XT6	35kA	800	Ekip M Dip I	600	1SDA107629R1 XT6NU3600KFF000XXX
				800	1SDA102843R1 XT6NU3800KFF000XXX

### Motor protection circuit-breaker (MPCB)

#### SACE XT6N Ekip M Dip LIU - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles	
				Product ID	US/CA PN
XT6	35kA	800	Ekip M Dip LIU	600	1SDA107630R1 XT6NU3600LFF000XXX
				800	1SDA102844R1 XT6NU3800LFF000XXX

### Generator protection circuit-breaker

#### SACE XT6N Ekip G Dip LS/I - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT5	35kA	800	Ekip G Dip LS/I	600	Only available with the Breaking Part + Trip unit solution XT6NU3600XFF000XXX	Only available with the Breaking Part + Trip unit solution XT6NU4600XFF000XXX	XT6NU4600XFF000XXX
				800			

# Ordering codes for XT6

## Automatic circuit-breakers



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XT6 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT6S TMA- Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT6	50kA	800	TMA	600	1SDA107632R1	XT6SU3600BFF000XXX	1SDA107651R1	XT6SU4600BFF000XXX
				800	1SDA102846R1	XT6SU3800BFF000XXX	1SDA102865R1	XT6SU4800BFF000XXX

#### SACE XT6S Ekip Dip LS/I - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT6	50kA	800	Ekip Dip LS/I	600	1SDA107633R1	XT6SU3600EFF000XXX	1SDA107652R1	XT6SU4600EFF000XXX
				800	1SDA102847R1	XT6SU3800EFF000XXX	1SDA102866R1	XT6SU4800EFF000XXX

#### SACE XT6S Ekip Dip LSI - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT6	50kA	800	Ekip Dip LSI	600	1SDA107634R1	XT6SU3600FFF000XXX	1SDA107653R1	XT6SU4600FFF000XXX
				800	1SDA102848R1	XT6SU3800FFF000XXX	1SDA102867R1	XT6SU4800FFF000XXX

#### SACE XT6S Ekip Dip LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT6	50kA	800	Ekip Dip LSIG	600	1SDA107635R1	XT6SU3600GFF000XXX	1SDA107654R1	XT6SU4600GFF000XXX
				800	1SDA102849R1	XT6SU3800GFF000XXX	1SDA102868R1	XT6SU4800GFF000XXX

#### SACE XT6S Ekip Dip LIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT6	50kA	800	Ekip Dip LIG	600	1SDA107638R1	XT6SU3600CFF000XXX	1SDA107655R1	XT6SU4600CFF000XXX
				800	1SDA102852R1	XT6SU3800CFF000XXX	1SDA102869R1	XT6SU4800CFF000XXX



XT6 - circuit-breaker

### Motor protection circuit-breaker (MCP)

#### SACE XT6S Ekip M Dip I - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles	
				Product ID	US/CA PN
XT6	50kA	800	Ekip M Dip I	600	1SDA107636R1 XT6SU3600KFF000XXX
				800	1SDA102850R1 XT6SU3800KFF000XXX

### Motor protection circuit-breaker (MPCB)

#### SACE XT6S Ekip M Dip LIU - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles	
				Product ID	US/CA PN
XT6	50kA	800	Ekip M Dip LIU	600	1SDA107637R1 XT6SU3600LFF000XXX
				800	1SDA102851R1 XT6SU3800LFF000XXX

### Generator protection circuit-breaker

#### SACE XT6S Ekip G Dip LS/I - Front terminals (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT5	50kA	800	Ekip G Dip LS/I	600	Only available with the Breaking Part + Trip unit solution XT6SU3600XFF000XXX	Only available with the Breaking Part + Trip unit solution	XT6SU4600XFF000XXX
				800			XT6SU3800XFF000XXX

# Ordering codes for XT6

## Automatic circuit-breakers



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XT6 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT6H TMA- Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT6	65kA	800	TMA	600	1SDA107639R1	XT6HU3600BFF000XXX	1SDA107656R1	XT6HU4600BFF000XXX
				800	1SDA102853R1	XT6HU3800BFF000XXX	1SDA102870R1	XT6HU4800BFF000XXX

#### SACE XT6H Ekip Dip LS/I - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT6	65kA	800	Ekip Dip LS/I	600	1SDA107640R1	XT6HU3600EFF000XXX	1SDA107657R1	XT6HU4600EFF000XXX
				800	1SDA102854R1	XT6HU3800EFF000XXX	1SDA102871R1	XT6HU4800EFF000XXX

#### SACE XT6H Ekip Dip LSI - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT6	65kA	800	Ekip Dip LSI	600	1SDA107641R1	XT6HU3600FFF000XXX	1SDA107658R1	XT6HU4600FFF000XXX
				800	1SDA102855R1	XT6HU3800FFF000XXX	1SDA102872R1	XT6HU4800FFF000XXX

#### SACE XT6H Ekip Dip LSIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT6	65kA	800	Ekip Dip LSIG	600	1SDA107642R1	XT6HU3600GFF000XXX	1SDA107659R1	XT6HU4600GFF000XXX
				800	1SDA102856R1	XT6HU3800GFF000XXX	1SDA102873R1	XT6HU4800GFF000XXX

#### SACE XT6H Ekip Dip LIG - Front terminals (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT6	65kA	800	Ekip Dip LIG	600	1SDA107645R1	XT6HU3600CFF000XXX	1SDA107660R1	XT6HU4600CFF000XXX
				800	1SDA102859R1	XT6HU3800CFF000XXX	1SDA102874R1	XT6HU4800CFF000XXX



XT6 - circuit-breaker

Motor protection circuit-breaker (MCP)

**SACE XT6H Ekip M Dip I - Front terminals (F)**

Size	Int. Rating Iu (480V)	Trip units	In	3 poles	
				Product ID	US/CA PN
XT6	65kA	800	Ekip M Dip I	600	1SDA107643R1 XT6HU3600KFF000XXX
				800	1SDA102857R1 XT6HU3800KFF000XXX

Motor protection circuit-breaker (MPCB)

**SACE XT6H Ekip M Dip LIU - Front terminals (F)**

Size	Int. Rating Iu (480V)	Trip units	In	3 poles	
				Product ID	US/CA PN
XT6	65kA	800	Ekip M Dip LIU	600	1SDA107644R1 XT6HU3600LFF000XXX
				800	1SDA102858R1 XT6HU3800LFF000XXX

Generator protection circuit-breaker

**SACE XT6H Ekip G Dip LS/I - Front terminals (F)**

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT5	65kA	800	Ekip G Dip LS/I	600	Only available with the Breaking Part + Trip unit solution XT6HU3600XFF000XXX	Only available with the Breaking Part + Trip unit solution XT6HU4600XFF000XXX	XT6HU4600XFF000XXX
				800			



XT6 - circuit-breaker

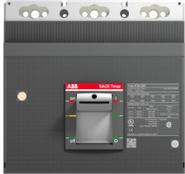
Molded case switches

**SACE XT6D - MCS**

Size	Iu	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT6	800	1SDA102875R1	XT6NU3800DFF000XXX	1SDA102878R1	XT6NU4800DFF000XXX
		1SDA102876R1	XT6SU3800DFF000XXX	1SDA102879R1	XT6SU4800DFF000XXX
		1SDA102877R1	XT6HU3800DFF000XXX	1SDA102880R1	XT6HU4800DFF000XXX

# Ordering codes for XT6

## Breaking part



XT6 - breaking part

### SACE XT6 - Breaking part

Size	Iu	Icu (480V)	Type	3 poles	4 poles
				Product ID	Product ID
XT6	800	35	XT6N 800 Breaking part	1SDA102881R1	1SDA102884R1
		50	XT6S 800 Breaking part	1SDA102882R1	1SDA102885R1
		65	XT6H 800 Breaking part	1SDA102883R1	1SDA102886R1

## 100% rated distribution circuit-breakers

### 100% rated version extra code

Size	3 poles	4 poles
	Product ID	Product ID
XT6	1SDA112975R1	1SDA112976R1

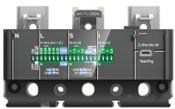
Note: to be specified only in addition to the code of the automatic circuit-breaker or of the breaking part  
 XT6 100% rated available only for electronic trip units

# Ordering codes for XT6

## Trip units



Thermal magnetic trip unit



Dip trip unit

### Trip units - distribution protection

Size	Type	3 poles	4 poles
		Product ID	Product ID
XT6	TMA 600-6000	1SDA107661R1	1SDA107666R1
	TMA 800-8000	1SDA102887R1	1SDA102894R1
	Ekip Dip LS/I In=600A	1SDA107662R1	1SDA107667R1
	Ekip Dip LS/I In=800A	1SDA102888R1	1SDA102895R1
	Ekip Dip LSI In=600A	1SDA107663R1	1SDA107668R1
	Ekip Dip LSI In=800A	1SDA102889R1	1SDA102896R1
	Ekip Dip LSIG In=600A	1SDA107664R1	1SDA107669R1
	Ekip Dip LSIG In=800A	1SDA102890R1	1SDA102897R1
	Ekip Dip LIG In=600A	1SDA107665R1	1SDA107670R1
	Ekip Dip LIG In=800A	1SDA102893R1	1SDA102898R1

### Trip units - Generator protection

Size	Type	3 poles	4 poles
		Product ID	Product ID
XT6	Ekip G Dip LS/I In=600	1SDA107673R1	1SDA107674R1
	Ekip G Dip LS/I In=800	1SDA107484R1	1SDA107485R1

# Ordering codes for XT6

## Breaking part + trip unit solution



XT6 Breaking part



Thermal-Magnetic Trip unit



Ekip Dip Trip Unit



Thermal-Magnetic Trip unit

Breaking Part	Iu	Icu Poles	N (25kA)	S (35kA)	H (65kA)
			800	3	1SDA102881R1
		4	1SDA102884R1	1SDA102885R1	1SDA102886R1

Trip units	In Poles	600	800
		TMA	3
	4	1SDA107666R1	1SDA102894R1
Ekip Dip LS/I	3	1SDA107662R1	1SDA102888R1
	4	1SDA107667R1	1SDA102895R1
Ekip Dip LSI	3	1SDA107663R1	1SDA102889R1
	4	1SDA107668R1	1SDA102896R1
Ekip Dip LSIG	3	1SDA107664R1	1SDA102890R1
	4	1SDA107669R1	1SDA102897R1
Ekip Dip LIG	3	1SDA107665R1	1SDA102893R1
	4	1SDA107670R1	1SDA102898R1
Ekip G Dip LS/I	3	1SDA107673R1	1SDA107484R1
	4	1SDA107674R1	1SDA107485R1

Note: When a single code for the complete circuit-breaker is not available, please configure the breaking part code with the trip unit code to order a factory-assembled circuit-breaker

# Ordering codes for XT7/XT7 M

## Automatic circuit-breakers – XT7



XT7 - circuit-breaker

### Distribution circuit-breakers

#### SACE XT7S Ekip Dip LS/I - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Dip LS/I	800	1SDA102899R1	XT7SU380CEFF000XXX	1SDA103139R1	XT7SU480CEFF000XXX
		1000	Ekip Dip LS/I	1000	1SDA102900R1	XT7SU310DEFF000XXX	1SDA103140R1	XT7SU410DEFF000XXX
		1200	Ekip Dip LS/I	1200	1SDA102901R1	XT7SU312EEFF000XXX	1SDA103141R1	XT7SU412EEFF000XXX

#### SACE XT7S Ekip Dip LSI - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Dip LSI	800	1SDA102902R1	XT7SU380CFFF000XXX	1SDA103142R1	XT7SU480CFFF000XXX
		1000	Ekip Dip LSI	1000	1SDA102903R1	XT7SU310DFFF000XXX	1SDA103143R1	XT7SU410DFFF000XXX
		1200	Ekip Dip LSI	1200	1SDA102904R1	XT7SU312EFFF000XXX	1SDA103144R1	XT7SU412EFFF000XXX

#### SACE XT7S Ekip Dip LSIG - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Dip LSIG	800	1SDA102905R1	XT7SU380CGFF000XXX	1SDA103145R1	XT7SU480CGFF000XXX
		1000	Ekip Dip LSIG	1000	1SDA102906R1	XT7SU310DGGFF000XXX	1SDA103146R1	XT7SU410DGGFF000XXX
		1200	Ekip Dip LSIG	1200	1SDA102907R1	XT7SU312EGFF000XXX	1SDA103147R1	XT7SU412EGFF000XXX

#### SACE XT7S Ekip Dip LIG - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Dip LIG	800	1SDA102944R1	XT7SU380CCFF000XXX	1SDA103178R1	XT7SU480CCFF000XXX
		1000	Ekip Dip LIG	1000	1SDA102945R1	XT7SU310DCFF000XXX	1SDA103179R1	XT7SU410DCFF000XXX
		1200	Ekip Dip LIG	1200	1SDA102946R1	XT7SU312ECFF000XXX	1SDA103180R1	XT7SU412ECFF000XXX

#### SACE XT7S Ekip Touch LSI - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Touch LSI	800	1SDA102908R1	XT7SU380CPFF000XXX	1SDA103148R1	XT7SU480CPFF000XXX
		1000	Ekip Touch LSI	1000	1SDA102909R1	XT7SU310DPFF000XXX	1SDA103149R1	XT7SU410DPFF000XXX
		1200	Ekip Touch LSI	1200	1SDA102910R1	XT7SU312EPFF000XXX	1SDA103150R1	XT7SU412EPFF000XXX

# Ordering codes for XT7/XT7 M

## Automatic circuit-breakers – XT7



XT7 - circuit-breaker

### SACE XT7S Ekip Touch LSI - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Touch LSI	800	1SDA102911R1	XT7SU380CQFF000XXX	1SDA103151R1	XT7SU480CQFF000XXX
		1000	Ekip Touch LSI	1000	1SDA102912R1	XT7SU310DQFF000XXX	1SDA103152R1	XT7SU410DQFF000XXX
		1200	Ekip Touch LSI	1200	1SDA102913R1	XT7SU312EQFF000XXX	1SDA103153R1	XT7SU412EQFF000XXX

### SACE XT7S Ekip Touch Measuring LSI - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Touch Meas. LSI	800	1SDA102914R1	XT7SU380CRFF000XXX	1SDA103154R1	XT7SU480CRFF000XXX
		1000	Ekip Touch Meas. LSI	1000	1SDA102915R1	XT7SU310DRFF000XXX	1SDA103155R1	XT7SU410DRFF000XXX
		1200	Ekip Touch Meas. LSI	1200	1SDA102916R1	XT7SU312ERFF000XXX	1SDA103156R1	XT7SU412ERFF000XXX

### SACE XT7S Ekip Touch Measuring LSI - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Touch Meas. LSI	800	1SDA102917R1	XT7SU380CSFF000XXX	1SDA103157R1	XT7SU480CSFF000XXX
		1000	Ekip Touch Meas. LSI	1000	1SDA102918R1	XT7SU310DSFF000XXX	1SDA103158R1	XT7SU410DSFF000XXX
		1200	Ekip Touch Meas. LSI	1200	1SDA102919R1	XT7SU312ESFF000XXX	1SDA103159R1	XT7SU412ESFF000XXX

### SACE XT7S Ekip Hi-Touch LSI - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Hi-Touch LSI	800	1SDA102920R1	XT7SU380CTFF000XXX	1SDA103160R1	XT7SU480CTFF000XXX
		1000	Ekip Hi-Touch LSI	1000	1SDA102921R1	XT7SU310DTFF000XXX	1SDA103161R1	XT7SU410DTFF000XXX
		1200	Ekip Hi-Touch LSI	1200	1SDA102922R1	XT7SU312ETFF000XXX	1SDA103162R1	XT7SU412ETFF000XXX

### SACE XT7S Ekip Hi-Touch LSI - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Hi-Touch LSI	800	1SDA102923R1	XT7SU380CUFF000XXX	1SDA103163R1	XT7SU480CUFF000XXX
		1000	Ekip Hi-Touch LSI	1000	1SDA102924R1	XT7SU310DUFF000XXX	1SDA103164R1	XT7SU410DUFF000XXX
		1200	Ekip Hi-Touch LSI	1200	1SDA102925R1	XT7SU312EUFF000XXX	1SDA103165R1	XT7SU412EUFF000XXX



XT7 - circuit-breaker

## Motor protection circuit-breaker (MCP)

### SACE XT7S Ekip M Dip I - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT7	50kA	800	Ekip M Dip I	800	1SDA102926R1	XT7SU380CKFF000XXX
		1000	Ekip M Dip I	1000	1SDA102927R1	XT7SU310DKFF000XXX
		1200	Ekip M Dip I	1200	1SDA102928R1	XT7SU312EKFF000XXX

## Motor protection circuit-breaker (MPCB)

### SACE XT7S Ekip M Touch LRIU - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT7	50kA	800	Ekip M Touch LRIU	800	1SDA102929R1	XT7SU380CWFF000XXX
		1000	Ekip M Touch LRIU	1000	1SDA102930R1	XT7SU310DWFF000XXX
		1200	Ekip M Touch LRIU	1200	1SDA102931R1	XT7SU312EWFF000XXX



XT7 - circuit-breaker

## Generator protection circuit-breaker

### SACE XT7S Ekip G Dip LS/I - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip G Dip LS/I	800	1SDA102932R1	XT7SU380CXFF000XXX	1SDA103166R1	XT7SU480CXFF000XXX
		1000	Ekip G Dip LS/I	1000	1SDA102933R1	XT7SU310DXFF000XXX	1SDA103167R1	XT7SU410DXFF000XXX
		1200	Ekip G Dip LS/I	1200	1SDA102934R1	XT7SU312EXFF000XXX	1SDA103168R1	XT7SU412EXFF000XXX

### SACE XT7S Ekip G Touch LSIG - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip G Touch LSIG	800	1SDA102935R1	XT7SU380CYFF000XXX	1SDA103169R1	XT7SU480CYFF000XXX
		1000	Ekip G Touch LSIG	1000	1SDA102936R1	XT7SU310DYFF000XXX	1SDA103170R1	XT7SU410DYFF000XXX
		1200	Ekip G Touch LSIG	1200	1SDA102937R1	XT7SU312EYFF000XXX	1SDA103171R1	XT7SU412EYFF000XXX

### SACE XT7S Ekip G Hi-Touch LSIG - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip G Hi-Touch LSIG	800	1SDA102938R1	XT7SU380CZFF000XXX	1SDA103172R1	XT7SU480CZFF000XXX
		1000	Ekip G Hi-Touch LSIG	1000	1SDA102939R1	XT7SU310DZFF000XXX	1SDA103173R1	XT7SU410DZFF000XXX
		1200	Ekip G Hi-Touch LSIG	1200	1SDA102940R1	XT7SU312EZFF000XXX	1SDA103174R1	XT7SU412EZFF000XXX

# Ordering codes for XT7/XT7 M

## Automatic circuit-breakers – XT7



XT7 - circuit-breaker

### Distribution circuit-breaker

#### SACE XT7H Ekip Dip LS/I - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	65kA	800	Ekip Dip LS/I	800	1SDA102947R1	XT7HU380CEFF000XXX	1SDA103181R1	XT7HU480CEFF000XXX
		1000	Ekip Dip LS/I	1000	1SDA102948R1	XT7HU310DEFF000XXX	1SDA103182R1	XT7HU410DEFF000XXX
		1200	Ekip Dip LS/I	1200	1SDA102949R1	XT7HU312EEFF000XXX	1SDA103183R1	XT7HU412EEFF000XXX

#### SACE XT7H Ekip Dip LSI - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	65kA	800	Ekip Dip LSI	800	1SDA102950R1	XT7HU380CFFF000XXX	1SDA103184R1	XT7HU480CFFF000XXX
		1000	Ekip Dip LSI	1000	1SDA102951R1	XT7HU310DFFF000XXX	1SDA103185R1	XT7HU410DFFF000XXX
		1200	Ekip Dip LSI	1200	1SDA102952R1	XT7HU312EFFF000XXX	1SDA103186R1	XT7HU412EFFF000XXX

#### SACE XT7H Ekip Dip LSIG - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	65kA	800	Ekip Dip LSIG	800	1SDA102953R1	XT7HU380CGFF000XXX	1SDA103187R1	XT7HU480CGFF000XXX
		1000	Ekip Dip LSIG	1000	1SDA102954R1	XT7HU310DGFF000XXX	1SDA103188R1	XT7HU410DGFF000XXX
		1200	Ekip Dip LSIG	1200	1SDA102955R1	XT7HU312EGFF000XXX	1SDA103189R1	XT7HU412EGFF000XXX

#### SACE XT7H Ekip Dip LIG - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	65kA	800	Ekip Dip LIG	800	1SDA102992R1	XT7HU380CCFF000XXX	1SDA103220R1	XT7HU480CCFF000XXX
		1000	Ekip Dip LIG	1000	1SDA102993R1	XT7HU310DCFF000XXX	1SDA103221R1	XT7HU410DCFF000XXX
		1200	Ekip Dip LIG	1200	1SDA102994R1	XT7HU312ECFF000XXX	1SDA103222R1	XT7HU412ECFF000XXX

#### SACE XT7H Ekip Touch LSI - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	65kA	800	Ekip Touch LSI	800	1SDA102956R1	XT7HU380CPFF000XXX	1SDA103190R1	XT7HU480CPFF000XXX
		1000	Ekip Touch LSI	1000	1SDA102957R1	XT7HU310DPFF000XXX	1SDA103191R1	XT7HU410DPFF000XXX
		1200	Ekip Touch LSI	1200	1SDA102958R1	XT7HU312EPFF000XXX	1SDA103192R1	XT7HU412EPFF000XXX



XT7 - circuit-breaker

**SACE XT7H Ekip Touch LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	65kA	800 Ekip Touch LSI	800	1SDA102959R1	XT7HU380CQFF000XXX	1SDA103193R1	XT7HU480CQFF000XXX
		1000 Ekip Touch LSI	1000	1SDA102960R1	XT7HU310DQFF000XXX	1SDA103194R1	XT7HU410DQFF000XXX
		1200 Ekip Touch LSI	1200	1SDA102961R1	XT7HU312EQFF000XXX	1SDA103195R1	XT7HU412EQFF000XXX

**SACE XT7H Ekip Touch Measuring LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	65kA	800 Ekip Touch Meas. LSI	800	1SDA102962R1	XT7HU380CRFF000XXX	1SDA103196R1	XT7HU480CRFF000XXX
		1000 Ekip Touch Meas. LSI	1000	1SDA102963R1	XT7HU310DRFF000XXX	1SDA103197R1	XT7HU410DRFF000XXX
		1200 Ekip Touch Meas. LSI	1200	1SDA102964R1	XT7HU312ERFF000XXX	1SDA103198R1	XT7HU412ERFF000XXX

**SACE XT7H Ekip Touch Measuring LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	65kA	800 Ekip Touch Meas. LSI	800	1SDA102965R1	XT7HU380CSFF000XXX	1SDA103199R1	XT7HU480CSFF000XXX
		1000 Ekip Touch Meas. LSI	1000	1SDA102966R1	XT7HU310DSFF000XXX	1SDA103200R1	XT7HU410DSFF000XXX
		1200 Ekip Touch Meas. LSI	1200	1SDA102967R1	XT7HU312ESFF000XXX	1SDA103201R1	XT7HU412ESFF000XXX

**SACE XT7H Ekip Hi-Touch LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	65kA	800 Ekip Hi-Touch LSI	800	1SDA102968R1	XT7HU380CTFF000XXX	1SDA103202R1	XT7HU480CTFF000XXX
		1000 Ekip Hi-Touch LSI	1000	1SDA102969R1	XT7HU310DTFF000XXX	1SDA103203R1	XT7HU410DTFF000XXX
		1200 Ekip Hi-Touch LSI	1200	1SDA102970R1	XT7HU312ETFF000XXX	1SDA103204R1	XT7HU412ETFF000XXX

**SACE XT7H Ekip Hi-Touch LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	65kA	800 Ekip Hi-Touch LSI	800	1SDA102971R1	XT7HU380CUFF000XXX	1SDA103205R1	XT7HU480CUFF000XXX
		1000 Ekip Hi-Touch LSI	1000	1SDA102972R1	XT7HU310DUFF000XXX	1SDA103206R1	XT7HU410DUFF000XXX
		1200 Ekip Hi-Touch LSI	1200	1SDA102973R1	XT7HU312EUFF000XXX	1SDA103207R1	XT7HU412EUFF000XXX

# Ordering codes for XT7/XT7 M

## Automatic circuit-breakers – XT7



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XT7 - circuit-breaker

Motor protection circuit-breaker (MCP)

### SACE XT7H Ekip M Dip I - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT7	65kA	800	Ekip M Dip I	800	1SDA102974R1	XT7HU380CKFF000XXX
		1000	Ekip M Dip I	1000	1SDA102975R1	XT7HU310DKFF000XXX
		1200	Ekip M Dip I	1200	1SDA102976R1	XT7HU312EKFF000XXX

Motor protection circuit-breaker (MPCB)

### SACE XT7H Ekip M Touch LRIU - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT7	65kA	800	Ekip M Touch LRIU	800	1SDA102977R1	XT7HU380CWFF000XXX
		1000	Ekip M Touch LRIU	1000	1SDA102978R1	XT7HU310DWFF000XXX
		1200	Ekip M Touch LRIU	1200	1SDA102979R1	XT7HU312EWFF000XXX



XT7 - circuit-breaker

## Generator protection circuit-breaker

**SACE XT7H Ekip G Dip LS/I - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	65kA	800 Ekip G Dip LS/I	800	1SDA102980R1	XT7HU380CFFF000XXX	1SDA103208R1	XT7HU480CFFF000XXX
		1000 Ekip G Dip LS/I	1000	1SDA102981R1	XT7HU310DXFF000XXX	1SDA103209R1	XT7HU410DXFF000XXX
		1200 Ekip G Dip LS/I	1200	1SDA102982R1	XT7HU312EXFF000XXX	1SDA103210R1	XT7HU412EXFF000XXX

**SACE XT7H Ekip G Touch LSIG - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	65kA	800 Ekip G Touch LSIG	800	1SDA102983R1	XT7HU380CYFF000XXX	1SDA103211R1	XT7HU480CYFF000XXX
		1000 Ekip G Touch LSIG	1000	1SDA102984R1	XT7HU310DYFF000XXX	1SDA103212R1	XT7HU410DYFF000XXX
		1200 Ekip G Touch LSIG	1200	1SDA102985R1	XT7HU312EYFF000XXX	1SDA103213R1	XT7HU412EYFF000XXX

**SACE XT7H Ekip G Hi-Touch LSIG - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	65kA	800 Ekip G Hi-Touch LSIG	800	1SDA102986R1	XT7HU380CZFF000XXX	1SDA103214R1	XT7HU480CZFF000XXX
		1000 Ekip G Hi-Touch LSIG	1000	1SDA102987R1	XT7HU310DZFF000XXX	1SDA103215R1	XT7HU410DZFF000XXX
		1200 Ekip G Hi-Touch LSIG	1200	1SDA102988R1	XT7HU312EZFF000XXX	1SDA103216R1	XT7HU412EZFF000XXX

# Ordering codes for XT7/XT7 M

## Automatic circuit-breakers – XT7



XT7 - circuit-breaker

### Distribution circuit-breaker

#### SACE XT7L Ekip Dip LS/I - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	100kA	800	Ekip Dip LS/I	800	1SDA102995R1	XT7LU380CEFF000XXX	1SDA103223R1	XT7LU480CEFF000XXX
		1000	Ekip Dip LS/I	1000	1SDA102996R1	XT7LU310DEFF000XXX	1SDA103224R1	XT7LU410DEFF000XXX
		1200	Ekip Dip LS/I	1200	1SDA102997R1	XT7LU312EEFF000XXX	1SDA103225R1	XT7LU412EEFF000XXX

#### SACE XT7L Ekip Dip LSI - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	100kA	800	Ekip Dip LSI	800	1SDA102998R1	XT7LU380CFFF000XXX	1SDA103226R1	XT7LU480CFFF000XXX
		1000	Ekip Dip LSI	1000	1SDA102999R1	XT7LU310DFFF000XXX	1SDA103227R1	XT7LU410DFFF000XXX
		1200	Ekip Dip LSI	1200	1SDA103000R1	XT7LU312EFFF000XXX	1SDA103228R1	XT7LU412EFFF000XXX

#### SACE XT7L Ekip Dip LSIG - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	100kA	800	Ekip Dip LSIG	800	1SDA103001R1	XT7LU380CGFF000XXX	1SDA103229R1	XT7LU480CGFF000XXX
		1000	Ekip Dip LSIG	1000	1SDA103002R1	XT7LU310DGGFF000XXX	1SDA103230R1	XT7LU410DGGFF000XXX
		1200	Ekip Dip LSIG	1200	1SDA103003R1	XT7LU312EGFF000XXX	1SDA103231R1	XT7LU412EGFF000XXX

#### SACE XT7L Ekip Dip LIG - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	100kA	800	Ekip Dip LIG	800	1SDA103040R1	XT7LU380CCFF000XXX	1SDA103262R1	XT7LU480CCFF000XXX
		1000	Ekip Dip LIG	1000	1SDA103041R1	XT7LU310DCFF000XXX	1SDA103263R1	XT7LU410DCFF000XXX
		1200	Ekip Dip LIG	1200	1SDA103042R1	XT7LU312ECFF000XXX	1SDA103264R1	XT7LU412ECFF000XXX

#### SACE XT7L Ekip Touch LSI - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	100kA	800	Ekip Touch LSI	800	1SDA103004R1	XT7LU380CPFF000XXX	1SDA103232R1	XT7LU480CPFF000XXX
		1000	Ekip Touch LSI	1000	1SDA103005R1	XT7LU310DPFF000XXX	1SDA103233R1	XT7LU410DPFF000XXX
		1200	Ekip Touch LSI	1200	1SDA103006R1	XT7LU312EPFF000XXX	1SDA103234R1	XT7LU412EPFF000XXX



XT7 - circuit-breaker

**SACE XT7L Ekip Touch LSIG - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	100kA	800	Ekip Touch LSIG	800	1SDA103007R1	XT7LU380CQFF000XXX	1SDA103235R1	XT7LU480CQFF000XXX
		1000	Ekip Touch LSIG	1000	1SDA103008R1	XT7LU310DQFF000XXX	1SDA103236R1	XT7LU410DQFF000XXX
		1200	Ekip Touch LSIG	1200	1SDA103009R1	XT7LU312EQFF000XXX	1SDA103237R1	XT7LU412EQFF000XXX

**SACE XT7L Ekip Touch Measuring LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	100kA	800	Ekip Touch Meas. LSI	800	1SDA103010R1	XT7LU380CRFF000XXX	1SDA103238R1	XT7LU480CRFF000XXX
		1000	Ekip Touch Meas. LSI	1000	1SDA103011R1	XT7LU310DRFF000XXX	1SDA103239R1	XT7LU410DRFF000XXX
		1200	Ekip Touch Meas. LSI	1200	1SDA103012R1	XT7LU312ERFF000XXX	1SDA103240R1	XT7LU412ERFF000XXX

**SACE XT7L Ekip Touch Measuring LSIG - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	100kA	800	Ekip Touch Meas. LSIG	800	1SDA103013R1	XT7LU380CSFF000XXX	1SDA103241R1	XT7LU480CSFF000XXX
		1000	Ekip Touch Meas. LSIG	1000	1SDA103014R1	XT7LU310DSFF000XXX	1SDA103242R1	XT7LU410DSFF000XXX
		1200	Ekip Touch Meas. LSIG	1200	1SDA103015R1	XT7LU312ESFF000XXX	1SDA103243R1	XT7LU412ESFF000XXX

**SACE XT7L Ekip Hi-Touch LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	100kA	800	Ekip Hi-Touch LSI	800	1SDA103016R1	XT7LU380CTFF000XXX	1SDA103244R1	XT7LU480CTFF000XXX
		1000	Ekip Hi-Touch LSI	1000	1SDA103017R1	XT7LU310DTFF000XXX	1SDA103245R1	XT7LU410DTFF000XXX
		1200	Ekip Hi-Touch LSI	1200	1SDA103018R1	XT7LU312ETFF000XXX	1SDA103246R1	XT7LU412ETFF000XXX

**SACE XT7L Ekip Hi-Touch LSIG - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	100kA	800	Ekip Hi-Touch LSIG	800	1SDA103019R1	XT7LU380CUFF000XXX	1SDA103247R1	XT7LU480CUFF000XXX
		1000	Ekip Hi-Touch LSIG	1000	1SDA103020R1	XT7LU310DUFF000XXX	1SDA103248R1	XT7LU410DUFF000XXX
		1200	Ekip Hi-Touch LSIG	1200	1SDA103021R1	XT7LU312EUFF000XXX	1SDA103249R1	XT7LU412EUFF000XXX

# Ordering codes for XT7/XT7 M

## Automatic circuit-breakers – XT7



XT7 - circuit-breaker

Motor protection circuit-breaker (MCP)

### SACE XT7L Ekip M Dip I - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT7	100kA	800	Ekip M Dip I	800	1SDA103022R1	XT7LU380CKFF000XXX
		1000	Ekip M Dip I	1000	1SDA103023R1	XT7LU310DKFF000XXX
		1200	Ekip M Dip I	1200	1SDA103024R1	XT7LU312EKFF000XXX

Motor protection circuit-breaker (MPCB)

### SACE XT7L Ekip M Touch LRIU - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT7	100kA	800	Ekip M Touch LRIU	800	1SDA103025R1	XT7LU380CWFF000XXX
		1000	Ekip M Touch LRIU	1000	1SDA103026R1	XT7LU310DWFF000XXX
		1200	Ekip M Touch LRIU	1200	1SDA103027R1	XT7LU312EWFF000XXX



XT7 - circuit-breaker

## Generator protection circuit-breaker

**SACE XT7L Ekip G Dip LS/I - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	100kA	800	Ekip G Dip LS/I	800	1SDA103028R1	XT7LU380CXFF000XXX	1SDA103250R1	XT7LU480CXFF000XXX
		1000	Ekip G Dip LS/I	1000	1SDA103029R1	XT7LU310DXFF000XXX	1SDA103251R1	XT7LU410DXFF000XXX
		1200	Ekip G Dip LS/I	1200	1SDA103030R1	XT7LU312EXFF000XXX	1SDA103252R1	XT7LU412EXFF000XXX

**SACE XT7L Ekip G Touch LSIG - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	100kA	800	Ekip G Touch LSIG	800	1SDA103031R1	XT7LU380CYFF000XXX	1SDA103253R1	XT7LU480CYFF000XXX
		1000	Ekip G Touch LSIG	1000	1SDA103032R1	XT7LU310DYFF000XXX	1SDA103254R1	XT7LU410DYFF000XXX
		1200	Ekip G Touch LSIG	1200	1SDA103033R1	XT7LU312EYFF000XXX	1SDA103255R1	XT7LU412EYFF000XXX

**SACE XT7L Ekip G Hi-Touch LSIG - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	100kA	800	Ekip G Hi-Touch LSIG	800	1SDA103034R1	XT7LU380CZFF000XXX	1SDA103256R1	XT7LU480CZFF000XXX
		1000	Ekip G Hi-Touch LSIG	1000	1SDA103035R1	XT7LU310DZFF000XXX	1SDA103257R1	XT7LU410DZFF000XXX
		1200	Ekip G Hi-Touch LSIG	1200	1SDA103036R1	XT7LU312EZFF000XXX	1SDA103258R1	XT7LU412EZFF000XXX

# Ordering codes for XT7/XT7 M

## Automatic circuit-breakers – XT7 M



XT7 - circuit-breaker

### Distribution circuit-breaker

#### SACE XT7S M Ekip Dip LS/I - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Dip LS/I	800	1SDA103349R1	XSUCAFAZZAAAA00000	1SDA103581R1	XSUDAFAZZAAAA00000
		1000	Ekip Dip LS/I	1000	1SDA103350R1	XSUEAFAZZAAAA00000	1SDA103582R1	XSUFAFAZZAAAA00000
		1200	Ekip Dip LS/I	1200	1SDA103351R1	XSUGAFAZZAAAA00000	1SDA103583R1	XSUHFAZZAAAA00000

#### SACE XT7S M Ekip Dip LSI - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Dip LSI	800	1SDA103352R1	XSUCCFAZZAAAA00000	1SDA103584R1	XSUDCFAZZAAAA00000
		1000	Ekip Dip LSI	1000	1SDA103353R1	XSUECFAZZAAAA00000	1SDA103585R1	XSUFCFAZZAAAA00000
		1200	Ekip Dip LSI	1200	1SDA103354R1	XSUGCFAZZAAAA00000	1SDA103586R1	XSUHCFAZZAAAA00000

#### SACE XT7S M Ekip Dip LSIG - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Dip LSIG	800	1SDA103355R1	XSUCDFAZZAAAA00000	1SDA103587R1	XSUDDFAZZAAAA00000
		1000	Ekip Dip LSIG	1000	1SDA103356R1	XSUEDFAZZAAAA00000	1SDA103588R1	XSUFDFAZZAAAA00000
		1200	Ekip Dip LSIG	1200	1SDA103357R1	XSUGDFAZZAAAA00000	1SDA103589R1	XSUHDFAZZAAAA00000

#### SACE XT7S M Ekip Dip LIG - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Dip LIG	800	1SDA103391R1	XSUCBFAZZAAAA00000	1SDA103620R1	XSUDBFAZZAAAA00000
		1000	Ekip Dip LIG	1000	1SDA103392R1	XSUEBFAZZAAAA00000	1SDA103621R1	XSUFBFAZZAAAA00000
		1200	Ekip Dip LIG	1200	1SDA103393R1	XSUGBFAZZAAAA00000	1SDA103622R1	XSUHBFAZZAAAA00000

#### SACE XT7S M Ekip Touch LSI - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Touch LSI	800	1SDA103358R1	XSUCEFAZZAAAA00000	1SDA103590R1	XSUDEFAZZAAAA00000
		1000	Ekip Touch LSI	1000	1SDA103359R1	XSUEEFAZZAAAA00000	1SDA103591R1	XSUFEFAZZAAAA00000
		1200	Ekip Touch LSI	1200	1SDA103360R1	XSUGEFAZZAAAA00000	1SDA103592R1	XSUHEFAZZAAAA00000



XT7 M - circuit-breaker

**SACE XT7S M Ekip Touch LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Touch LSI	800	1SDA103361R1	XSUCFFAZZAAAA00000	1SDA103593R1	XSUDFFAZZAAAA00000
		1000	Ekip Touch LSI	1000	1SDA103362R1	XSUEFFAZZAAAA00000	1SDA103594R1	XSUFFFAZZAAAA00000
		1200	Ekip Touch LSI	1200	1SDA103363R1	XSUGFFAZZAAAA00000	1SDA103595R1	XSUHFFAZZAAAA00000

**SACE XT7S M Ekip Touch Measuring LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Touch Meas. LSI	800	1SDA103364R1	XSUCGFAZZAAAA00000	1SDA103596R1	XSUDGFAZZAAAA00000
		1000	Ekip Touch Meas. LSI	1000	1SDA103365R1	XSUEGFAZZAAAA00000	1SDA103597R1	XSUFGFAZZAAAA00000
		1200	Ekip Touch Meas. LSI	1200	1SDA103366R1	XSUGGFAZZAAAA00000	1SDA103598R1	XSUHGFAZZAAAA00000

**SACE XT7S M Ekip Touch Measuring LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Touch Meas. LSI	800	1SDA103367R1	XSUCHFAZZAAAA00000	1SDA103599R1	XSUDHFAZZAAAA00000
		1000	Ekip Touch Meas. LSI	1000	1SDA103368R1	XSUEHFAZZAAAA00000	1SDA103600R1	XSUHFHFAZZAAAA00000
		1200	Ekip Touch Meas. LSI	1200	1SDA103369R1	XSUGHFAZZAAAA00000	1SDA103601R1	XSUHHFAZZAAAA00000

**SACE XT7S M Ekip Hi-Touch LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Hi-Touch LSI	800	1SDA103370R1	XSUCJFAZZAAAA00000	1SDA103602R1	XSUDJFAZZAAAA00000
		1000	Ekip Hi-Touch LSI	1000	1SDA103371R1	XSUEJFAZZAAAA00000	1SDA103603R1	XSUJFAZZAAAA00000
		1200	Ekip Hi-Touch LSI	1200	1SDA103372R1	XSUGJFAZZAAAA00000	1SDA103604R1	XSUHJFAZZAAAA00000

**SACE XT7S M Ekip Hi-Touch LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	50kA	800	Ekip Hi-Touch LSI	800	1SDA103373R1	XSUCLFAZZAAAA00000	1SDA103605R1	XSUDLFAZZAAAA00000
		1000	Ekip Hi-Touch LSI	1000	1SDA103374R1	XSUELFAZZAAAA00000	1SDA103606R1	XSUFLFAZZAAAA00000
		1200	Ekip Hi-Touch LSI	1200	1SDA103375R1	XSUGLFAZZAAAA00000	1SDA103607R1	XSUHLFAZZAAAA00000

# Ordering codes for XT7/XT7 M

## Automatic circuit-breakers – XT7 M



XT7 M - circuit-breaker

Motor protection circuit-breaker (MCP)

### SACE XT7S M Ekip M Dip I - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT7	50kA	800	Ekip M Dip I	800	1SDA103376R1	XSUCMFAZZAAAA00000
		1000	Ekip M Dip I	1000	1SDA103377R1	XSUEMFAZZAAAA00000
		1200	Ekip M Dip I	1200	1SDA103378R1	XSUGMFAZZAAAA00000

Motor protection circuit-breaker (MPCB)

### SACE XT7S M Ekip M Touch LRIU - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT7	50kA	800	Ekip M Touch LRIU	800	1SDA103379R1	XSUCNFAZZAAAA00000
		1000	Ekip M Touch LRIU	1000	1SDA103380R1	XSUENFAZZAAAA00000
		1200	Ekip M Touch LRIU	1200	1SDA103381R1	XSUGNFAZZAAAA00000



XT7 M - circuit-breaker

## Generator protection circuit-breaker

### SACE XT7S M Ekip G Dip LS/I - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	50kA	800 Ekip G Dip LS/I	800	1SDA103382R1	XSUCPFAZZAAAA00000	1SDA103608R1	XSUDPFAZZAAAA00000
		1000 Ekip G Dip LS/I	1000	1SDA103383R1	XSUEPFAZZAAAA00000	1SDA103609R1	XSUFPPFAZZAAAA00000
		1200 Ekip G Dip LS/I	1200	1SDA103384R1	XSUGPFAZZAAAA00000	1SDA103610R1	XSUHPFAZZAAAA00000

### SACE XT7S M Ekip G Touch LSIG - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	50kA	800 Ekip G Touch LSIG	800	1SDA101958R1	XSUCQFAZZAAAA00000	1SDA103611R1	XSUDQFAZZAAAA00000
		1000 Ekip G Touch LSIG	1000	1SDA101959R1	XSUEQFAZZAAAA00000	1SDA103612R1	XSUFQFAZZAAAA00000
		1200 Ekip G Touch LSIG	1200	1SDA101960R1	XSUGQFAZZAAAA00000	1SDA103613R1	XSUHQFAZZAAAA00000

### SACE XT7S M Ekip G Hi-Touch LSIG - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	50kA	800 Ekip G Hi-Touch LSIG	800	1SDA103385R1	XSUCRFAZZAAAA00000	1SDA103614R1	XSUDRFAZZAAAA00000
		1000 Ekip G Hi-Touch LSIG	1000	1SDA103386R1	XSUERFAZZAAAA00000	1SDA103615R1	XSUFRFAZZAAAA00000
		1200 Ekip G Hi-Touch LSIG	1200	1SDA103387R1	XSUGRFAZZAAAA00000	1SDA103616R1	XSUHRFAZZAAAA00000

# Ordering codes for XT7/XT7 M

## Automatic circuit-breakers – XT7 M



XT7 M - circuit-breaker

### Distribution circuit-breaker

#### SACE XT7H M Ekip Dip LS/I - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	65kA	800 Ekip Dip LS/I	800	1SDA103394R1	XHUCAFAZZAAAA00000	1SDA103623R1	XHUDAFAZZAAAA00000
		1000 Ekip Dip LS/I	1000	1SDA103395R1	XHUEFAZZAAAA00000	1SDA103624R1	XHUF AFAZZAAAA00000
		1200 Ekip Dip LS/I	1200	1SDA103396R1	XHUGAFAZZAAAA00000	1SDA103625R1	XHUH AFAZZAAAA00000

#### SACE XT7H M Ekip Dip LSI - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	65kA	800 Ekip Dip LSI	800	1SDA103397R1	XHUCCFAZZAAAA00000	1SDA103626R1	XHUCFAZZAAAA00000
		1000 Ekip Dip LSI	1000	1SDA103398R1	XHUECF AZZAAAA00000	1SDA103627R1	XHUF CFAZZAAAA00000
		1200 Ekip Dip LSI	1200	1SDA103399R1	XHUGCFAZZAAAA00000	1SDA103628R1	XHUHCFAZZAAAA00000

#### SACE XT7H M Ekip Dip LSIG - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	65kA	800 Ekip Dip LSIG	800	1SDA103400R1	XHUCDFAZZAAAA00000	1SDA103629R1	XHUDDFAZZAAAA00000
		1000 Ekip Dip LSIG	1000	1SDA103401R1	XHUEDFAZZAAAA00000	1SDA103630R1	XHUF DFAZZAAAA00000
		1200 Ekip Dip LSIG	1200	1SDA103402R1	XHUGDFAZZAAAA00000	1SDA103631R1	XHUH DFAZZAAAA00000

#### SACE XT7H M Ekip Dip LIG - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	65kA	800 Ekip Dip LIG	800	1SDA103436R1	XHUCBFAZZAAAA00000	1SDA103662R1	XHUBBFAZZAAAA00000
		1000 Ekip Dip LIG	1000	1SDA103437R1	XHUEBFAZZAAAA00000	1SDA103663R1	XHUF BFAZZAAAA00000
		1200 Ekip Dip LIG	1200	1SDA103438R1	XHUGBFAZZAAAA00000	1SDA103664R1	XHUH BFAZZAAAA00000

#### SACE XT7H M Ekip Touch LSI - Front terminal (F)

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	65kA	800 Ekip Touch LSI	800	1SDA103403R1	XHUCEFAZZAAAA00000	1SDA103632R1	XHUDEFAZZAAAA00000
		1000 Ekip Touch LSI	1000	1SDA103404R1	XHUEEFAZZAAAA00000	1SDA103633R1	XHUF EFAZZAAAA00000
		1200 Ekip Touch LSI	1200	1SDA103405R1	XHUGEFAZZAAAA00000	1SDA103634R1	XHUHEFAZZAAAA00000



XT7 M - circuit-breaker

**SACE XT7H M Ekip Touch LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	65kA	800	Ekip Touch LSI	800	1SDA103406R1	XHUCFFAZZAAAA00000	1SDA103635R1	XHUFFFAZZAAAA00000
		1000	Ekip Touch LSI	1000	1SDA103407R1	XHUEFFAZZAAAA00000	1SDA103636R1	XHUFFFAZZAAAA00000
		1200	Ekip Touch LSI	1200	1SDA103408R1	XHUGFFAZZAAAA00000	1SDA103637R1	XHUHFFAZZAAAA00000

**SACE XT7H M Ekip Touch Measuring LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	65kA	800	Ekip Touch Meas. LSI	800	1SDA103409R1	XHUCGFAZZAAAA00000	1SDA103638R1	XHUGDFAZZAAAA00000
		1000	Ekip Touch Meas. LSI	1000	1SDA103410R1	XHUEGFAZZAAAA00000	1SDA103639R1	XHUGGFAZZAAAA00000
		1200	Ekip Touch Meas. LSI	1200	1SDA103411R1	XHUGGFAZZAAAA00000	1SDA103640R1	XHUHGFAZZAAAA00000

**SACE XT7H M Ekip Touch Measuring LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	65kA	800	Ekip Touch Meas. LSI	800	1SDA103412R1	XHUCHFAZZAAAA00000	1SDA103641R1	XHUDHFAZZAAAA00000
		1000	Ekip Touch Meas. LSI	1000	1SDA103413R1	XHUEHFAZZAAAA00000	1SDA103642R1	XHUFHFAZZAAAA00000
		1200	Ekip Touch Meas. LSI	1200	1SDA103414R1	XHUGHFAZZAAAA00000	1SDA103643R1	XHUHFAZZAAAA00000

**SACE XT7H M Ekip Hi-Touch LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	65kA	800	Ekip Hi-Touch LSI	800	1SDA103415R1	XHUCJFAZZAAAA00000	1SDA103644R1	XHUDJFAZZAAAA00000
		1000	Ekip Hi-Touch LSI	1000	1SDA103416R1	XHUEJFAZZAAAA00000	1SDA103645R1	XHUFJFAZZAAAA00000
		1200	Ekip Hi-Touch LSI	1200	1SDA103417R1	XHUGJFAZZAAAA00000	1SDA103646R1	XHUHJFAZZAAAA00000

**SACE XT7H M Ekip Hi-Touch LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	65kA	800	Ekip Hi-Touch LSI	800	1SDA103418R1	XHUCLFAZZAAAA00000	1SDA103647R1	XHUDLFAZZAAAA00000
		1000	Ekip Hi-Touch LSI	1000	1SDA103419R1	XHUELFAZZAAAA00000	1SDA103648R1	XHUFLFAZZAAAA00000
		1200	Ekip Hi-Touch LSI	1200	1SDA103420R1	XHUGLFAZZAAAA00000	1SDA103649R1	XHUHLFAZZAAAA00000

# Ordering codes for XT7/XT7 M

## Automatic circuit-breakers – XT7 M



XT7 M - circuit-breaker

Motor protection circuit-breaker (MCP)

### SACE XT7H M Ekip M Dip I - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT7	65kA	800	Ekip M Dip I	800	1SDA103421R1	XHUCMFAZZAAAA00000
		1000	Ekip M Dip I	1000	1SDA103422R1	XHUEMFAZZAAAA00000
		1200	Ekip M Dip I	1200	1SDA103423R1	XHUGMFAZZAAAA00000

Motor protection circuit-breaker (MPCB)

### SACE XT7H M Ekip M Touch LRIU - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT7	65kA	800	Ekip M Touch LRIU	800	1SDA103424R1	XHUCNFAZZAAAA00000
		1000	Ekip M Touch LRIU	1000	1SDA103425R1	XHUENFAZZAAAA00000
		1200	Ekip M Touch LRIU	1200	1SDA103426R1	XHUGNFAZZAAAA00000



XT7 M - circuit-breaker

## Generator protection circuit-breaker

**SACE XT7H M Ekip G Dip LS/I - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	65kA	800 Ekip G Dip LS/I	800	1SDA103427R1	XHUCPFAZZAAAA00000	1SDA103650R1	XHUDPFAZZAAAA00000
		1000 Ekip G Dip LS/I	1000	1SDA103428R1	XHUEPFAZZAAAA00000	1SDA103651R1	XHUFPPFAZZAAAA00000
		1200 Ekip G Dip LS/I	1200	1SDA103429R1	XHUGPFAZZAAAA00000	1SDA103652R1	XHUHPFAZZAAAA00000

**SACE XT7H M Ekip G Touch LSIG - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	65kA	800 Ekip G Touch LSIG	800	1SDA101961R1	XHUCQFAZZAAAA00000	1SDA103653R1	XHUDQFAZZAAAA00000
		1000 Ekip G Touch LSIG	1000	1SDA101962R1	XHUEQFAZZAAAA00000	1SDA103654R1	XHUFQFAZZAAAA00000
		1200 Ekip G Touch LSIG	1200	1SDA101963R1	XHUGQFAZZAAAA00000	1SDA103655R1	XHUHQFAZZAAAA00000

**SACE XT7H M Ekip G Hi-Touch LSIG - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	65kA	800 Ekip G Hi-Touch LSIG	800	1SDA103430R1	XHUCRFAZZAAAA00000	1SDA103656R1	XHUDRFAZZAAAA00000
		1000 Ekip G Hi-Touch LSIG	1000	1SDA103431R1	XHUERFAZZAAAA00000	1SDA103657R1	XHUFRAZZAAAA00000
		1200 Ekip G Hi-Touch LSIG	1200	1SDA103432R1	XHUGRFAZZAAAA00000	1SDA103658R1	XHUHRFAZZAAAA00000

# Ordering codes for XT7/XT7 M

## Automatic circuit-breakers – XT7 M



XT7 M - circuit-breaker

### Distribution circuit-breaker

#### SACE XT7L M Ekip Dip LS/I - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	100kA	800 Ekip Dip LS/I	800	1SDA103439R1	XLUCFAZZAAAA00000	1SDA103665R1	XLUDFAZZAAAA00000
		1000 Ekip Dip LS/I	1000	1SDA103440R1	XLUEFAZZAAAA00000	1SDA103666R1	XLUFFAZZAAAA00000
		1200 Ekip Dip LS/I	1200	1SDA103441R1	XLUGFAZZAAAA00000	1SDA103667R1	XLUHFAZZAAAA00000

#### SACE XT7L M Ekip Dip LSI - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	100kA	800 Ekip Dip LSI	800	1SDA103442R1	XLUCCFAZZAAAA00000	1SDA103668R1	XLUDCFZZAAAA00000
		1000 Ekip Dip LSI	1000	1SDA103443R1	XLUECFZZAAAA00000	1SDA103669R1	XLUF CFZZAAAA00000
		1200 Ekip Dip LSI	1200	1SDA103444R1	XLUGCFZZAAAA00000	1SDA103670R1	XLUHCFAZZAAAA00000

#### SACE XT7L M Ekip Dip LSIG - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	100kA	800 Ekip Dip LSIG	800	1SDA103445R1	XLUCDFZZAAAA00000	1SDA103671R1	XLUDDFAZZAAAA00000
		1000 Ekip Dip LSIG	1000	1SDA103446R1	XLUEDFAZZAAAA00000	1SDA103672R1	XLUFDFZZAAAA00000
		1200 Ekip Dip LSIG	1200	1SDA103447R1	XLUGDFZZAAAA00000	1SDA103673R1	XLUHDFZZAAAA00000

#### SACE XT7L M Ekip Dip LIG - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	100kA	800 Ekip Dip LIG	800	1SDA103484R1	XLUCBFAZZAAAA00000	1SDA103704R1	XLUDBFAZZAAAA00000
		1000 Ekip Dip LIG	1000	1SDA103485R1	XLUEBFAZZAAAA00000	1SDA103705R1	XLUFBFAZZAAAA00000
		1200 Ekip Dip LIG	1200	1SDA103486R1	XLUGBFAZZAAAA00000	1SDA103706R1	XLUHBFAZZAAAA00000

#### SACE XT7L M Ekip Touch LSI - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	100kA	800 Ekip Touch LSI	800	1SDA103448R1	XLUCEFAZZAAAA00000	1SDA103674R1	XLUDEFAZZAAAA00000
		1000 Ekip Touch LSI	1000	1SDA103449R1	XLUEEFAZZAAAA00000	1SDA103675R1	XLUF EFAZZAAAA00000
		1200 Ekip Touch LSI	1200	1SDA103450R1	XLUGEFAZZAAAA00000	1SDA103676R1	XLUHEFAZZAAAA00000



XT7 M - circuit-breaker

**SACE XT7L M Ekip Touch LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	100kA	800	Ekip Touch LSI	800	1SDA103451R1	XLUCFFAZZAAAA00000	1SDA103677R1	XLUDFFAZZAAAA00000
		1000	Ekip Touch LSI	1000	1SDA103452R1	XLUEFFAZZAAAA00000	1SDA103678R1	XLUFFFAZZAAAA00000
		1200	Ekip Touch LSI	1200	1SDA103453R1	XLUGFFAZZAAAA00000	1SDA103679R1	XLUHFFAZZAAAA00000

**SACE XT7L M Ekip Touch Measuring LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	100kA	800	Ekip Touch Meas. LSI	800	1SDA103454R1	XLUCGFAZZAAAA00000	1SDA103680R1	XLUDGFAZZAAAA00000
		1000	Ekip Touch Meas. LSI	1000	1SDA103455R1	XLUEGFAZZAAAA00000	1SDA103681R1	XLUGFAZZAAAA00000
		1200	Ekip Touch Meas. LSI	1200	1SDA103456R1	XLUGGFAZZAAAA00000	1SDA103682R1	XLUHGFAZZAAAA00000

**SACE XT7L M Ekip Touch Measuring LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	100kA	800	Ekip Touch Meas. LSI	800	1SDA103457R1	XLUCHFAZZAAAA00000	1SDA103683R1	XLUDHFAZZAAAA00000
		1000	Ekip Touch Meas. LSI	1000	1SDA103458R1	XLUEHFAZZAAAA00000	1SDA103684R1	XLUFHFAZZAAAA00000
		1200	Ekip Touch Meas. LSI	1200	1SDA103459R1	XLUGHFAZZAAAA00000	1SDA103685R1	XLUHHFAZZAAAA00000

**SACE XT7L M Ekip Hi-Touch LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	100kA	800	Ekip Hi-Touch LSI	800	1SDA103460R1	XLUCJFAZZAAAA00000	1SDA103686R1	XLUDJFAZZAAAA00000
		1000	Ekip Hi-Touch LSI	1000	1SDA103461R1	XLUEJFAZZAAAA00000	1SDA103687R1	XLUFJFAZZAAAA00000
		1200	Ekip Hi-Touch LSI	1200	1SDA103462R1	XLUGJFAZZAAAA00000	1SDA103688R1	XLUHJFAZZAAAA00000

**SACE XT7L M Ekip Hi-Touch LSI - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles		
				Product ID	US/CA PN	Product ID	US/CA PN	
XT7	100kA	800	Ekip Hi-Touch LSI	800	1SDA103463R1	XLUCLFAZZAAAA00000	1SDA103689R1	XLUDLFAZZAAAA00000
		1000	Ekip Hi-Touch LSI	1000	1SDA103464R1	XLUELFAZZAAAA00000	1SDA103690R1	XLUFLFAZZAAAA00000
		1200	Ekip Hi-Touch LSI	1200	1SDA103465R1	XLUGLFAZZAAAA00000	1SDA103691R1	XLUHLFAZZAAAA00000

# Ordering codes for XT7/XT7 M

## Automatic circuit-breakers – XT7 M



XT7 M - circuit-breaker

Motor protection circuit-breaker (MCP)

### SACE XT7L M Ekip M Dip I - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT7	100kA	800	Ekip M Dip I	800	1SDA103466R1	XLUCMFAZZAAAA00000
		1000	Ekip M Dip I	1000	1SDA103467R1	XLUEMFAZZAAAA00000
		1200	Ekip M Dip I	1200	1SDA103468R1	XLUGMFAZZAAAA00000

Motor protection circuit-breaker (MPCB)

### SACE XT7L M Ekip M Touch LRIU - Front terminal (F)

Size	Int. Rating Iu (480V)	Trip units	In	3 poles		
				Product ID	US/CA PN	
XT7	100kA	800	Ekip M Touch LRIU	800	1SDA103469R1	XLUCNFAZZAAAA00000
		1000	Ekip M Touch LRIU	1000	1SDA103470R1	XLUENFAZZAAAA00000
		1200	Ekip M Touch LRIU	1200	1SDA103471R1	XLUGNFAZZAAAA00000



XT7 M - circuit-breaker

## Generator protection circuit-breaker

**SACE XT7L M Ekip G Dip LS/I - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	100kA	800 Ekip G Dip LS/I	800	1SDA103472R1	XLUCPFAZZAAAA00000	1SDA103692R1	XLUDPFAZZAAAA00000
		1000 Ekip G Dip LS/I	1000	1SDA103473R1	XLUEPFAZZAAAA00000	1SDA103693R1	XLUFPFAZZAAAA00000
		1200 Ekip G Dip LS/I	1200	1SDA103474R1	XLUGPFAZZAAAA00000	1SDA103694R1	XLUHPFAZZAAAA00000

**SACE XT7L M Ekip G Touch LSIG - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	100kA	800 Ekip G Touch LSIG	800	1SDA103475R1	XLUCQFAZZAAAA00000	1SDA103695R1	XLUDQFAZZAAAA00000
		1000 Ekip G Touch LSIG	1000	1SDA103476R1	XLUEQFAZZAAAA00000	1SDA103696R1	XLUFQFAZZAAAA00000
		1200 Ekip G Touch LSIG	1200	1SDA103477R1	XLUGQFAZZAAAA00000	1SDA103697R1	XLUHQFAZZAAAA00000

**SACE XT7L M Ekip G Hi-Touch LSIG - Front terminal (F)**

Size	Int. Rating lu (480V)	Trip units	In	3 poles		4 poles	
				Product ID	US/CA PN	Product ID	US/CA PN
XT7	100kA	800 Ekip G Hi-Touch LSIG	800	1SDA103478R1	XLUCRFAZZAAAA00000	1SDA103698R1	XLUDRFAZZAAAA00000
		1000 Ekip G Hi-Touch LSIG	1000	1SDA103479R1	XLUERFAZZAAAA00000	1SDA103699R1	XLUFRFAZZAAAA00000
		1200 Ekip G Hi-Touch LSIG	1200	1SDA103480R1	XLUGRFAZZAAAA00000	1SDA103700R1	XLUHRFAZZAAAA00000

# Ordering codes for XT7/XT7 M

## Automatic circuit-breakers

Molded case switches

### SACE XT7D/XT7D M - MCS

Size	lu	Type	3 poles		4 poles	
			Product ID	US/CA PN	Product ID	US/CA PN
XT7	1000	XT7S-D 1000	1SDA103791R1	XT7SU310DDFF000XXX	1SDA103797R1	XT7SU410DDFF000XXX
		XT7H-D 1000	1SDA103793R1	XT7HU310DDFF000XXX	1SDA103799R1	XT7HU410DDFF000XXX
		XT7L-D 1000	1SDA103795R1	XT7LU310DDFF000XXX	1SDA103801R1	XT7LU410DDFF000XXX
	1200	XT7S-D 1200	1SDA103792R1	XT7SU312EDFF000XXX	1SDA103798R1	XT7SU412EDFF000XXX
		XT7H-D 1200	1SDA103794R1	XT7HU312EDFF000XXX	1SDA103800R1	XT7HU412EDFF000XXX
		XT7L-D 1200	1SDA103796R1	XT7LU312EDFF000XXX	1SDA103802R1	XT7LU412EDFF000XXX
XT7 M	1000	XT7S-D M 1000	1SDA103803R1	XSUESFAZZAAAA00000	1SDA103809R1	XSUFSFAZZAAAA00000
		XT7H-D M 1000	1SDA103805R1	XHUESFAZZAAAA00000	1SDA103811R1	XHUFSAZZAAAA00000
		XT7L-D M 1000	1SDA103807R1	XLUESFAZZAAAA00000	1SDA103813R1	XLUFSFAZZAAAA00000
	1200	XT7S-D M 1200	1SDA103804R1	XSUGSFAZZAAAA00000	1SDA103810R1	XSUHSFAZZAAAA00000
		XT7H-D M 1200	1SDA103806R1	XHUGSFAZZAAAA00000	1SDA103812R1	XHUHSFAZZAAAA00000
		XT7L-D M 1200	1SDA103808R1	XLUGSFAZZAAAA00000	1SDA103814R1	XLUHSFAZZAAAA00000

100% rated distribution circuit-breakers

### 100% rated version extra code

Size	3 poles	4 poles
	Product ID	Product ID
XT7	1SDA107723R1	1SDA107724R1
XT7 M	1SDA107725R1	1SDA107726R1

Note: to be specified only in addition to the code of the automatic circuit-breaker

# Ordering codes for XT7/XT7 M

## Trip units – XT7/XT7 M

### Loose trip units

#### Trip units - Distribution protection

Size	Type	3/4 poles
		Product ID
XT7/XT7 M	Ekip Dip LSI	1SDA101919R1
	Ekip Dip LSIG	1SDA101920R1
	Ekip Touch LSI	1SDA101921R1
	Ekip Touch LSIG	1SDA101922R1
	Ekip Touch Measuring LSI	1SDA101923R1
	Ekip Touch Measuring LSIG	1SDA101924R1
	Ekip Hi-Touch LSI	1SDA101925R1
	Ekip Hi-Touch LSIG	1SDA101926R1

#### Trip units - Generator protection

Size	Type	3/4 poles
		Product ID
XT7/XTM	Ekip G Touch LSIG	1SDA101930R1
	Ekip G Hi-Touch LSIG	1SDA101931R1

\* The loose trip units cannot be installed if the circuit-breaker has one of the following trip unit already installed: Ekip Dip LS/I; Ekip Dip LIG; Ekip M Dip I; Ekip G Dip LS/I



Ekip Dip Trip unit



Ekip Touch Trip unit

# Ordering codes for accessories

## Execution and installation

### Fixed parts

#### Fixed part of plug-in (P) circuit-breaker



Fixed part of plug-in circuit-breaker

Size	Type	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT1	P FP EF	1SDA068183R1	KXT1PFPEF-3	1SDA068185R1	KXT1PFPEF-4
XT1	P FP HR/VR <sup>(1)</sup>	1SDA068184R1	KXT1EPFPHR-3	1SDA068186R1	KXT1EPFPHR-4
XT2	P FP EF	1SDA068187R1	KXT2PFPEF-3	1SDA068190R1	KXT2PFPEF-4
XT2	P FP HR/VR <sup>(1)(2)</sup>	1SDA068189R1	KXT2EPFPHR-3	1SDA068191R1	KXT2EPFPHR-4
XT3	P FP EF	1SDA068192R1	KXT3PFPEF-3	1SDA068194R1	KXT3PFPEF-4
XT3	P FP HR/VR <sup>(1)</sup>	1SDA068193R1	KXT3EPFPHR-3	1SDA068195R1	KXT3EPFPHR-4
XT4	P FP EF	1SDA068196R1	KXT4PFPEF-3	1SDA068198R1	KXT4PFPEF-4
XT4	P FP HR/VR <sup>(1)</sup>	1SDA068197R1	KXT4EPFPHR-3	1SDA068199R1	KXT4EPFPHR-4
XT5	P FP 400A EF	1SDA104669R1	KXT5UPFPEF4-3	1SDA104673R1	KXT5UPFPEF4-4
XT5	P FP 400A HR/HR	1SDA104671R1	KXT5UPFPHR4-3	1SDA104675R1	KXT5UPFPHR4-4
XT5	P FP 400A VR/VR	1SDA112962R1	KXT5UPFPVR4-3	1SDA112964R1	KXT5UPFPVR4-4
XT5	P FP 630A EF	1SDA104676R1	KXT5DPFPEF6-3	1SDA104679R1	KXT5DPFPEF6-4
XT5	P FP 630A HR	1SDA104677R1	KXT5DPFPHR6-3	1SDA104680R1	KXT5DPFPHR6-4
XT5	P FP 630A VR	1SDA104678R1	KXT5DPFPVR6-3	1SDA104681R1	KXT5DPFPVR6-4

(1) The terminals are factory-mounted in the horizontal position (HR)

(2) Not UL listed

#### Fixed part of plug-in (P) frame configurable

Size	Type	3 poles		4 poles	
		Product ID	Product ID	Product ID	Product ID
XT5	P FP 400A frame configurable	1SDA112953R1		1SDA112954R1	
XT5	P FP 630A frame configurable	1SDA112955R1		1SDA112956R1	

#### Fixed part of withdrawable (W) circuit-breaker



Fixed part of withdrawable circuit-breaker

Size	Type	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT2	W FP EF	1SDA068200R1	KXT2WFPEF-3	1SDA068202R1	KXT2WFPEF-4
XT2	W FP HR/VR <sup>(1)(2)</sup>	1SDA068201R1	KXT2EWFPHR-3	1SDA068203R1	KXT2EWFPHR-4
XT4	W FP EF	1SDA068204R1	KXT4WFPEF-3	1SDA068206R1	KXT4WFPEF-4
XT4	W FP HR/VR <sup>(1)(2)</sup>	1SDA068205R1	KXT4EWFPHR-3	1SDA068207R1	KXT4EWFPHR-4
XT5	W FP 400A EF	1SDA104683R1	KXT5UWFPEF4-3	1SDA104687R1	KXT5UWFPEF4-4
XT5	W FP 400A HR/HR	1SDA104685R1	KXT5UWFPHR4-3	1SDA104689R1	KXT5UWFPHR4-4
XT5	W FP 400A VR/VR	1SDA112966R1	KXT5UWFVVR4-3	1SDA112968R1	KXT5UWFVVR4-4
XT5	W FP 630A EF	1SDA104690R1	KXT5DWFPEF6-3	1SDA104693R1	KXT5DWFPEF6-4
XT5	W FP 630A HR	1SDA104691R1	KXT5DWFPHR6-3	1SDA104694R1	KXT5DWFPHR6-4
XT5	W FP 630A VR	1SDA104692R1	KXT5DWFVVR6-3	1SDA104695R1	KXT5DWFVVR6-4
XT6	W FP EF	1SDA104696R1	KXT6DWFPEFF-3	1SDA104699R1	KXT6DWFPEFF-4
XT6	W FP HR	1SDA104697R1	KXT6DWFPHRF-3	1SDA104700R1	KXT6DWFPHRF-4
XT6	W FP VR	1SDA104698R1	KXT6DWFVRF-3	1SDA104701R1	KXT6DWFVRF-4
XT7-XT7 M	W FP EF	1SDA104702R1	KXT7DWFPEFF-3	1SDA104704R1	KXT7DWFPEFF-4
XT7-XT7 M	W FP HR	1SDA104703R1	KXT7DWFPHRF-3	1SDA104705R1	KXT7DWFPHRF-4

(1) The terminals are factory-mounted in the horizontal position (HR)

(2) Not UL listed



Fixed part of withdrawable XT7-XT7 M

**Fixed part of withdrawable (W) frame configurable**

Size	Type	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT5	W FP 400A frame configurable	1SDA112957R1		1SDA112958R1	
XT5	W FP 630A frame configurable	1SDA112959R1		1SDA112960R1	
XT6	W FP XT6 frame configurable	1SDA112969R1		1SDA112970R1	

**Conversion kits**

**Conversion kit to convert circuit-breaker from fixed to moving part of a plug-in unit**



Conversion kit for turning a fixed circuit-breaker into the moving part of a plug-in circuit-breaker

Size	Type	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT1	P MP Kit	1SDA066276R1	KXT1PMP-3	1SDA066277R1	KXT1PMP-4
XT2	P MP Kit	1SDA066278R1	KXT2PMP-3	1SDA066279R1	KXT2PMP-4
XT3	P MP Kit	1SDA066280R1	KXT3PMP-3	1SDA066281R1	KXT3PMP-4
XT4	P MP Kit	1SDA066282R1	KXT4PMP-3	1SDA066283R1	KXT4PMP-4
XT5	P MP Kit 400A	1SDA104707R1	KXT5PMP400-3	1SDA104708R1	KXT5PMP400-4
XT5	P MP Kit 630A	1SDA104709R1	KXT5PMP600-3	1SDA104710R1	KXT5PMP600-4

**Conversion kit to convert circuit-breaker from fixed to moving part of a withdrawable unit**



Conversion kit for turning a fixed circuit-breaker into the moving part of a withdrawable circuit-breaker

Size	Type	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT2	W MP Kit	1SDA066284R1	KXT2WMP-3	1SDA066285R1	KXT2WMP-4
XT4	W MP Kit	1SDA066286R1	KXT4WMP-3	1SDA066287R1	KXT4WMP-4
XT5	W MP Kit 400A	1SDA104711R1	KXT5WMP400-3	1SDA104712R1	KXT5WMP400-4
XT5	W MP Kit 630A	1SDA104713R1	KXT5WMP600-3	1SDA104714R1	KXT5WMP600-4
XT6	W MP Kit	1SDA104715R1	KXT6WMP-3	1SDA104716R1	KXT6WMP-4
XT7-XT7 M	W MP Kit	1SDA104717R1	KXT7WMP-3	1SDA104718R1	KXT7WMP-4

**Conversion kit to convert circuit-breaker fixed part from plug-in to a withdrawable unit**



Conversion kit for turning a fixed part of plug-in version into a fixed part of withdrawable version circuit-breaker

Size	Type	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT2	XT2 FP P>W Kit	1SDA066288R1	KXT2FPPTOFFPW		
XT4	XT4 FP P>W Kit	1SDA066289R1	KXT4FPPTOFFPW		
XT5	XT5 FP P>W Kit	1SDA104706R1	KXT5FPPTOFFPW		

**Conversion kit to convert an RC from fixed to a plug-in unit**

Size	Type	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT2	XT2 P MP RC Sel 4p Kit	1SDA066290R1	KXT2EPMPRC-4		
XT4	XT4 P MP RC Sel 4p Kit	1SDA066291R1	KXT4EPMPRC-4		
XT5	XT5 400A P MP RC Sel 4p Kit	1SDA104719R1	KXT5PMPRC400-4		
XT5	XT5 630A P MP RC Sel 4p Kit	1SDA104720R1	KXT5PMPRC600-4		

**Conversion kit to convert an RC from a plug-in into a withdrawable unit**

Size	Type	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT2	XT2 W MP RC Sel 4p Kit	1SDA066292R1	KXT2EWMPRC-4		
XT4	XT4 W MP RC Sel 4p Kit	1SDA067115R1	KXT4EWMPRC-4		
XT5	XT5 400A W MP RC Sel 4p Kit	1SDA104721R1	KXT5WMPRC400-4		
XT5	XT5 630A W MP RC Sel 4p Kit	1SDA104722R1	KXT5WMPRC600-4		

# Ordering codes for accessories

## Execution and installation

### Plug and socket adapters

#### Socket plug connector on rear of the panel



Socket-plug panel connector

Size	Type	Product ID	US/CA PN
XT1...XT5	Socket-plug panel connector with 3PINS	1SDA066409R1	KXTAE3PINCON
XT1...XT5	Socket-plug panel connector with 6PINS	1SDA066410R1	KXTAE6PINCON
XT1...XT5	Socket-plug panel connector with 9PINS	1SDA066411R1	KXTAE9PINCON
XT1...XT5	Socket-plug panel connector with 15PINS	1SDA066412R1	KXTAE15PINCON

#### Fixed part socket-plug connector



Fixed part socket-plug connector

Size	Type	Product ID	US/CA PN
XT2-XT4-XT5	Socket-plug connector for Moving Part 12PINS	1SDA066413R1	KXTCE12PINMPCON
XT2-XT4-XT5	Socket-plug connector for Fixed Part 12PINS	1SDA066414R1	KXTCE12PINFPCON
XT2-XT4-XT5	Socket-plug connector for Moving Part 12PINS enumerated	1SDA124701R1	
XT2-XT4-XT5	Socket-plug connector for Fixed Part 12PINS enumerated	1SDA124702R1	

### Bracket for fixing on DIN-rail

#### Bracket for fixing onto DIN-rail



DIN guide

Size	Type	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT1	KIT DIN50022	1SDA066652R1	KXT1EDIN-3	1SDA066419R1	KXT1EDIN-4
XT1	KIT DIN50022 + RC Low 200mm			1SDA067134R1	KXT1EDINRCSELPL
XT1	KIT DIN50022 + RC Sel/RC Inst	1SDA067135R1	KXT1EDINRCPL	1SDA067135R1	KXT1EDINRCPL
XT2	KIT DIN50022	1SDA080704R1	KXT2DIN-3	1SDA080325R1	KXT2DIN-4
XT3	KIT DIN50022	1SDA066420R1	KXT3EDIN-3	1SDA066421R1	KXT3EDIN-4
XT3	KIT DIN50022 + RC Inst / RC Sel	1SDA067139R1	KXT3EDINRCPL	1SDA067139R1	1SDA067139R1
XT4	KIT DIN50022	1SDA080326R1	KXT4DIN-3	1SDA080327R1	KXT4DIN-4

### Floor fixing plate

#### Floor fixing plate

Size	Type	Product ID	US/CA PN
XT7-XT7 M	Floor fixing plate for fixed unit	1SDA076020R1	ZE1FFPF

### Cable rack

#### Cable rack

Size	Type	Product ID	US/CA PN
XT5-XT6	Cable rack for fixed and plug-in circuit breaker	1SDA104729R1	KXTFACCRCCK

# Ordering codes for accessories

## Power connection



Front extended terminal - EF



Front extended spread terminal - ES



FCCu terminal



FCCuAl external terminal



FCCuAl internal terminal

## Terminals for circuit-breaker

### Terminals for circuit-breaker

Size	Type	2 pcs (1/2 kit for 3p)		3 pcs (1/2 kit for 3p)		4 pcs (1/2 kit for 4p)	
		Product ID	US/CA PN	Product ID	US/CA PN	Product ID	US/CA PN
XT1	F Front terminals			1SDA066849R1	KXT1F-3PC	1SDA066850R1	KXT1F-4PC
XT1	EF Extended front terminals			1SDA066865R1	KXT1EF-3PC	1SDA066866R1	KXT1EF-4PC
XT1	ES Extended spread front terminals			1SDA066889R1	KXT1ES-3PC	1SDA066890R1	KXT1ES-4PC
XT1	FC Cu terminal for Cu cables 14-1/0 AWG <sup>(1)</sup>			1SDA075869R1	KXT1CU-3PC	1SDA075870R1	KXT1CU-4PC
XT1	FC Cu terminal for Cu cables 14-1/0 AWG			1SDA075873R1	KXT1CUMCP-3PC		
XT1	FC CuAl terminals for CuAl cables 10-2/0 AWG	1SDA114851R1	KXT1CUAL1-2PC	1SDA075837R1	KXT1CUAL1-3PC	1SDA075838R1	KXT1CUAL1-4PC
XT1	FC CuAl terminals AuxV for CuAl cables 10-2/0 AWG			1SDA085583R1	KXT1CUAL1C-3PC	1SDA085584R1	KXT1CUAL1C-4PC
XT1	MC Cu multi-cable terminal for Cu cables 6x14-2 AWG			1SDA075897R1	KXT1MC-3PC	1SDA075898R1	KXT1MC-4PC
XT1	R rear Adjustable terminal <sup>(1)</sup>			1SDA066937R1	KXT1ER-3PC	1SDA066938R1	KXT1ER-4PC
XT1	R-RC Rear terminals for residual current					1SDA066953R1	KXT1ERRC-4PC
XT1	FB Flexible busbar terminals			1SDA066957R1	KXT1EFB-3PC	1SDA066958R1	KXT1EFB-4PC
XT2	F Front terminals			1SDA066853R1	KXT2F-PC	1SDA066854R1	KXT2F4PC
XT2	EF Extended front terminals			1SDA066869R1	KXT2EF-3PC	1SDA066870R1	KXT2EF-4PC
XT2	ES Extended spread front terminals			1SDA066893R1	KXT2ES-3PC	1SDA066894R1	KXT2ES-4PC
XT2	FC CuAl terminals for CuAl cables 14-1/0 AWG			1SDA075841R1	KXT2CUAL1-3PC	1SDA075842R1	KXT2CUAL1-4PC
XT2	FC CuAl terminals for CuAl cables 10-2/0 AWG	1SDA114852R1	KXT2CUAL2-2PC	1SDA085585R1	KXT2CUAL2-3PC	1SDA085586R1	KXT2CUAL2-4PC
XT2	FC CuAl terminals AuxV for CuAl cables 10-2/0 AWG			1SDA085589R1	KXT2CUAL2C-3PC	1SDA085590R1	KXT2CUAL2C-4PC
XT2	FC Cu terminals for Cu cables 14-1/0 AWG			1SDA075881R1	KXT2CU-3PC	1SDA075882R1	KXT2CU-4PC
XT2	MC Cu multi-cable terminals for Cu cables 6x14-2 AWG			1SDA075901R1	KXT2MC-3PC	1SDA075902R1	KXT2MC-4PC
XT2	R Rear adjustable terminals			1SDA066941R1	KXT2ER-PC	1SDA066942R1	KXT2ER-4PC
XT2	FB Flexible busbar terminals			1SDA066961R1	KXT2EFB-3PC	1SDA066962R1	KXT2EFB-4PC

(1) Not suitable for MA trip units

# Ordering codes for accessories

## Power connection



Multi-cable terminal (MC)



Rear horizontal terminals (R)

### Terminals for circuit-breaker

Size	Type	2 pcs (1/2 kit for 3p)		3 pcs (1/2 kit for 3p)		4 pcs (1/2 kit for 4p)	
		Product ID	US/CA PN	Product ID	US/CA PN	Product ID	US/CA PN
XT3	F Front terminals			1SDA066857R1	KXT3F-3PC	1SDA066858R1	KXT3F-4PC
XT3	EF Extended front terminals			1SDA066873R1	KXT3EF-3PC	1SDA066874R1	KXT3EF-4PC
XT3	ES Extended spread front terminals			1SDA066897R1	KXT3ES-3PC	1SDA066898R1	KXT3ES-4PC
XT3	FC CuAl terminals AuxV for CuAl cables 14-1/0 AWG			1SDA081990R1	KXT3CUAL1C-3PC	1SDA081991R1	KXT3CUAL1C-4PC
XT3	FC CuAl terminals for CuAl cables 14-1/0 AWG	1SDA120016R1		1SDA075849R1	KXT3CUAL1-3PC	1SDA075850R1	KXT3CUAL1-4PC
XT3	FC CuAl terminals AuxV for CuAl cables 4 AWG-300 Kcmil			1SDA081988R1	KXT3CUAL2C-3PC	1SDA081989R1	KXT3CUAL2C-4PC
XT3	FC CuAl terminals for CuAl cables 4 AWG-300 Kcmil	1SDA120017R1		1SDA075853R1	KXT3CUAL2-3PC	1SDA075854R1	KXT3CUAL2-4PC
XT3	FC Cu terminals for Cu cables 10-250 AWG	1SDA114853R1	KXT3CU-2PC	1SDA075885R1	KXT3CU-3PC	1SDA075886R1	KXT3CU-4PC
XT3	MC Cu multi-cable terminals for Cu cables 6x12-2 AWG			1SDA075905R1	KXT3MC-3PC	1SDA075906R1	KXT3MC-4PC
XT3	R Rear adjustable terminals			1SDA066945R1	KXT3ER-3PC	1SDA066946R1	KXT3ER-4PC
XT3	FB Flexible busbar terminals			1SDA066965R1	KXT3EFB-3PC	1SDA066966R1	KXT3EFB-4PC
XT3	R-RC Rear terminal for RC Inst-Sel					1SDA066954R1	KXT3ERRC-4PC
XT4	F Front terminals			1SDA066861R1	KXT4F-3PC	1SDA066862R1	KXT4F-4PC
XT4	EF Extended front terminals			1SDA066877R1	KXT4EF-3PC	1SDA066878R1	KXT4EF-4PC
XT4	ES Extended spread front terminals			1SDA066901R1	KXT4ES-3PC	1SDA066902R1	KXT4ES-4PC
XT4	FC CuAl terminals for CuAl cables 14-1/0 AWG	1SDA120018R1		1SDA075857R1	KXT4CUAL1-3PC	1SDA075858R1	KXT4CUAL1-4PC
XT4	FC CuAl terminals AuxV for CuAl cables 14-1/0 AWG			1SDA081994R1	KXT4CUAL1C-3PC	1SDA081995R1	KXT4CUAL1C-4PC
XT4	FC CuAl terminals for CuAl cables 4 AWG-300 Kcmil	1SDA114855R1	KXT4CUAL2-2PC	1SDA075861R1	KXT4CUAL2-3PC	1SDA075862R1	KXT4CUAL2-4PC
XT4	FC CuAl terminals AuxV for CuAl cables 4 AWG-300 Kcmil			1SDA081992R1	KXT4CUAL2C-3PC	1SDA081993R1	KXT4CUAL2C-4PC
XT4	FC CuAl terminals for CuAl cables 3/0 AWG-350 Kcmil	1SDA114854R1	KXT4CUAL4-2PC	1SDA114847R1	KXT4CUAL4-3PC	1SDA114848R1	KXT4CUAL4-4PC
XT4	FC CuAl terminals AuxV for CuAl cables 3/0 AWG-350 Kcmil			1SDA114849R1	KXT4CUAL4C-3PC	1SDA114850R1	KXT4CUAL4C-4PC
XT4	FC CuAl terminals for CuAl cables 3/0 AWG-350 Kcmil <sup>(1)</sup>			1SDA075865R1	KXT4CUAL3-3PC	1SDA075866R1	KXT4CUAL3-4PC
XT4	FC CuAl terminals AuxV for CuAl cables 3/0 AWG-350 Kcmil <sup>(1)</sup>			1SDA085581R1	KXT4CUAL3C-3PC	1SDA085582R1	KXT4CUAL3C-4PC
XT4	FC Cu terminals for Cu cables 10-250 AWG			1SDA075893R1	KXT4CU-3PC	1SDA075894R1	KXT4CU-4PC
XT4	MC Cu multi-cable terminals for Cu cables 6x12-2 AWG			1SDA075909R1	KXT4MC-3PC	1SDA075910R1	KXT4MC-4PC
XT4	R Rear adjustable terminals	1SDA066949R1		1SDA066949R1	KXT4ER-3PC	1SDA066950R1	KXT4ER-4PC
XT4	FB Flexible busbar terminals	1SDA066969R1		1SDA066969R1	KXT4EFB-3PC	1SDA066970R1	KXT4EFB-4PC

(1) External solution: lugs to be mounted on EF terminals supplied in the kit

## Terminals for circuit-breaker

Size	Type	2 pcs (1/2 kit for 3p)		3 pcs (1/2 kit for 3p)		4 pcs (1/2 kit for 4p)	
		Product ID	US/CA PN	Product ID	US/CA PN	Product ID	US/CA PN
XT5	F Front Terminals			1SDA104730R1	KXT5F-3PC	1SDA104731R1	KXT5F-4PC
XT5	EF Extended front terminals			1SDA104734R1	KXT5EF-3PC	1SDA104735R1	KXT5EF-4PC
XT5	ES Extended spread front terminals			1SDA104738R1	KXT5ES-3PC	1SDA104739R1	KXT5ES-4PC
XT5	FC CuAl 1x4AWG-350kcmil			1SDA113064R1	KXT5CUAL350K-3PC	1SDA113065R1	KXT5CUAL350K-4PC
XT5	FC CuAl 1x4/0-500kcmil			1SDA113062R1	KXT5CUAL500K-3PC	1SDA113063R1	KXT5CUAL500K-4PC
XT5	FC CuAl 2x2/0AWG-500kcmil	1SDA114856R1	KXT5CUAL2X500K-2PC	1SDA113066R1	KXT5CUAL2X500K-3PC	1SDA113067R1	KXT5CUAL2X500K-4PC
XT5	FC CuAl 1x350-750kcmil <sup>(1)</sup>	1SDA115944R1	KXT5CUAL1X750KC-2	1SDA115945R1	KXT5CUAL1X750KC-3	1SDA115946R1	KXT5CUAL1X750KC-4
XT5	FC CuAl 2x500-750kcmil <sup>(1)</sup>	1SDA115947R1	KXT5CUAL2X750KC-2	1SDA115948R1	KXT5CUAL2X750KC-3	1SDA115949R1	KXT5CUAL2X750KC-4
XT5	FC CuAl 1x500kcmil AuxV			1SDA113087R1	KXT5CUAL500KC-3PC	1SDA113088R1	KXT5CUAL500KC-4PC
XT5	FC CuAl 1x350kcmil AuxV			1SDA113089R1	KXT5CUAL350KC-3PC	1SDA113090R1	KXT5CUAL350KC-4PC
XT5	FC CuAl 2x500kcmil AuxV			1SDA113091R1	KXT5CUAL2X500KC-3	1SDA113092R1	KXT5CUAL2X500KC-4
XT5	FC CuAl 1x750kcmil AuxV <sup>(1)</sup>			1SDA115950R1	KXT5CUAL1X750KCC-3	1SDA115951R1	KXT5CUAL1X750KCC-4
XT5	FC CuAl 2x750kcmil AuxV <sup>(1)</sup>			1SDA115952R1	KXT5CUAL2X750KCC-3	1SDA115953R1	KXT5CUAL2X750KCC-4
XT5	MC CuAl 6x14-1/0 AWG			1SDA123049R1	KXT5MC-3PC	1SDA123050R1	KXT5MC-4PC
XT5	R Rear adjustable Terminals			1SDA104760R1	KXT5R-3PC	1SDA104761R1	KXT5R-4PC
XT6	F Front Terminals			1SDA104732R1	KXT6F-3PC	1SDA104733R1	KXT6F-4PC
XT6	EF Extended front terminals			1SDA104736R1	KXT6EF-3PC	1SDA104737R1	KXT6EF-4PC
XT6	ES Extended spread front terminals Upper			1SDA104740R1	KXT6ESUP-3PC	1SDA104741R1	KXT6ES-4PC
XT6	ES Extended spread front terminals Lower			1SDA113127R1	KXT6ESLOW-3PC	1SDA104741R1	KXT6ES-4PC
XT6	FC CuAl 2x250-500kcmil			1SDA113068R1	KXT6CUAL2X500K-3PC	1SDA113069R1	KXT6CUAL2X500K-4PC
XT6	FC CuAl 3x2/0AWG-400kcmil	1SDA114857R1	KXT6CUAL3X400K-2PC	1SDA113070R1	KXT6CUAL3X400K-3PC	1SDA113071R1	KXT6CUAL3X400K-4PC
XT6	FC CuAl 2x500kcmil AuxV			1SDA113093R1	KXT6CUAL2X500KC-3	1SDA113094R1	KXT6CUAL2X500KC-4
XT6	FC CuAl 3x400kcmil AuxV			1SDA113095R1	KXT6CUAL3X400KC-3	1SDA113096R1	KXT6CUAL3X400KC-4
XT6	FC CuAl 2x750kcmil AuxV	1SDA122934R1		1SDA115968R1	KXT6CUAL2X750KCC-3	1SDA115969R1	KXT6CUAL2X750KCC-4
XT6	R Rear adjustable Terminals			1SDA104762R1	KXT6R-3PC	1SDA104763R1	KXT6R-4PC

(1) Limited to L breaking capacity level

# Ordering codes for accessories

## Power connection

### Terminals loose supply for fixed circuit-breaker

Size	Type	2 pcs (1/2 kit for 3p)		3 pcs (1/2 kit for 3p)		4 pcs (1/2 kit for 4p)	
		Product ID	US/CA PN	Product ID	US/CA PN	Product ID	US/CA PN
XT7-XT7 M	F Front terminals			1SDA073973R1	ZE1FF	1SDA073974R1	ZE1FF-4
XT7-XT7 M	EF Extended front terminals			1SDA073967R1	ZE1EFF	1SDA073968R1	ZE1EFF-4
XT7-XT7 M	ES Extended spread front terminals Upper			1SDA073979R1	ZE1ESF	1SDA073980R1	ZE1ESF-4
XT7-XT7 M	ES Extended spread front terminals Lower			1SDA076076R1		1SDA073980R1	ZE1ESF-4
XT7-XT7 M	FC CuAl 4x4/0 AWG - 500 kcmil	1SDA118038R1		1SDA104758R1	KXT7CUAL4X500K-3PC	1SDA104759R1	KXT7CUAL4X500K-4PC
XT7-XT7 M	FC CuAl 4x4/0 AWG - 500 kcmil AuxV			1SDA118330R1	KXT7CUAL4X500KC3PC	1SDA118331R1	KXT7CUAL4X500KC4PC
XT7-XT7 M	FC CuAl 3x500-750kcmil AuxV	1SDA118040R1		1SDA113119R1	KXT7CUAL3X750KC-3	1SDA113120R1	KXT7CUAL3X750KC-4
XT7-XT7 M	HR/VR Adjustable rear terminals			1SDA079844R1	ZE1HRVRF	1SDA079845R1	ZE2HRVRF-4
XT7-XT7 M	HR Horizontal rear terminals			1SDA063120R1	KT7XHR-3	1SDA063121R1	
XT7-XT7 M	VR Vertical rear terminals			1SDA063124R1	KT7XVR-3	1SDA063125R1	

### Terminals for fixed circuit-breaker

Size	Type	2 pcs (1/2 kit for 3p)		3 pcs (1/2 kit for 3p)		4 pcs (1/2 kit for 4p)	
		Product ID	US/CA PN	Product ID	US/CA PN	Product ID	US/CA PN
XT7-XT7 M	EF Extended front terminals Upper			1SDA073963R1		1SDA073964R1	
XT7-XT7 M	EF Extended front terminals Lower			1SDA073965R1		1SDA073966R1	
XT7-XT7 M	ES Extended spread front terminals Upper			1SDA073975R1		1SDA073976R1	
XT7-XT7 M	ES Extended spread front terminals Lower			1SDA073977R1		1SDA073978R1	
XT7-XT7 M	HR-Adjustable rear horizontal terminals Upper			1SDA073981R1		1SDA073982R1	
XT7-XT7 M	HR-Adjustable rear horizontal terminals Lower			1SDA073983R1		1SDA073984R1	
XT7-XT7 M	VR-Adjustable rear vertical terminals Upper			1SDA073985R1		1SDA073986R1	
XT7-XT7 M	VR-Adjustable rear vertical terminals Lower			1SDA073987R1		1SDA073988R1	
XT7-XT7 M	HR Horizontal rear terminals Upper			1SDA117035R1		1SDA117036R1	
XT7-XT7 M	HR Horizontal rear terminals Lower			1SDA117037R1		1SDA117038R1	
XT7-XT7 M	VR Vertical rear terminals Upper			1SDA117039R1		1SDA117040R1	
XT7-XT7 M	VR Vertical rear terminals Lower			1SDA117041R1		1SDA117042R1	
XT7-XT7 M	FC CuAl 4x4/0 AWG - 500kcmil Upper			1SDA073997R1		1SDA073998R1	
XT7-XT7 M	FC CuAl 4x4/0 AWG - 500kcmil Lower		1SDA117227R1	1SDA073999R1		1SDA074000R1	
XT7-XT7 M	FC CuAl 4x4/0 AWG - 500kcmil AuxV Upper			1SDA118326R1		1SDA118327R1	
XT7-XT7 M	FC CuAl 4x4/0 AWG - 500kcmil AuxV Lower			1SDA118328R1		1SDA118329R1	
XT7-XT7 M	FC CuAl 3x500-750kcmil AuxV Upper			1SDA113121R1		1SDA113122R1	
XT7-XT7 M	FC CuAl 3x500-750kcmil AuxV Lower		1SDA117228R1	1SDA113123R1		1SDA113124R1	

Terminals are provided within the circuit-breakers package as loose parts.

## Terminals for fixed parts

## Terminals for the fixed parts



EF terminal for fixed part

Size	Type	3 pcs (1/2 kit for 3p)		4 pcs (1/2 kit for 4p)	
		Product ID	US/CA PN	Product ID	US/CA PN
XT1	EF – Front extended terminals	1SDA066260R1	KXT1EEFFP-3	1SDA066261R1	KXT1EEFFP-4
XT1	HR/VR – Rear terminals	1SDA066268R1	KXT1ERFP-3	1SDA066269R1	KXT1ERFP-4
XT2	EF – Front extended terminals	1SDA066262R1	KXT2EEFFP-3	1SDA066263R1	KXT2EEFFP-4
XT2	HR/VR – Rear terminals	1SDA066270R1	KXT2ERFP-3	1SDA066271R1	KXT2ERFP-4
XT3	EF – Front extended terminals	1SDA066264R1	KXT3EEFFP-3	1SDA066265R1	KXT3EEFFP-4
XT3	HR/VR – Rear terminals	1SDA066272R1	KXTEERFP-3	1SDA066273R1	KXTEERFP-4
XT4	EF – Front extended terminals	1SDA066266R1	KXT4EEFFP-3	1SDA066267R1	KXT4EEFFP-4
XT4	HR/VR – Rear terminals	1SDA066272R1	KXT3ECUAL2-3PC	1SDA066273R1	KXT3ECUAL2-4PC
XT5	EF – Front Extended Term. 400A	1SDA107798R1	KXT5EFFPUL4-3PC	1SDA107799R1	KXT5EFFPUL4-4PC
XT5	HR/VR – Rear Terminals UL 400A	1SDA104776R1	KXT5HRVRFUL4-3PC	1SDA104779R1	KXT5HRVRFUL4-4PC
XT5	HR/VR – Rear Terminals (same length) 400A	1SDA104774R1	KXT5HRVRFPSL4-3PC	1SDA104777R1	KXT5HRVRFPSL4-4PC
XT5	EF – Front Extended Term. 630A	1SDA104766R1	KXT5EFFP-3PC	1SDA104767R1	KXT5EFFP-4PC
XT5	HR – Rear Horizontal Term. 630A	1SDA104770R1	KXT5HRFP-3PC	1SDA104771R1	KXT5HRFP-4PC
XT5	VR – Rear Vertical Term. 630A	1SDA104780R1	KXT5VRFP6-3PC	1SDA104781R1	KXT5VRFP6-4PC
XT6	EF – Front Extended Terminals	1SDA104768R1	KXT6EFFP-3PC	1SDA104769R1	KXT6EFFP-4PC
XT6	HR – Rear Horizontal Terminals	1SDA104772R1	KXT6HRFP-3PC	1SDA104773R1	KXT6HRFP-4PC
XT6	VR – Rear Vertical Terminals	1SDA104782R1	KXT6VRFP-3PC	1SDA104783R1	KXT6VRFP-4PC

## Terminals loose supply for fixed parts



HR terminals for fixed part

Size	Type	3 pcs (1/2 kit for 3p)		4 pcs (1/2 kit for 4p)	
		Product ID	US/CA PN	Product ID	US/CA PN
XT7-XT7 M	EF – Front extended terminals	1SDA073943R1	ZE1EFW	1SDA073944R1	ZE1EFW-4
XT7-XT7 M	ES – Front extended spread terminals	1SDA073955R1	ZE1ESW	1SDA073956R1	ZE1ESW-4
XT7-XT7 M	HR/VR – Rear terminals	1SDA107715R1	KXT7HRVRW-3PC	1SDA107716R1	KXT7HRVRW-4PC
XT7-XT7 M	SHR – Rear spread horizontal terminals	1SDA073961R1	ZE1SHRWE	1SDA073962R1	ZE1SHRWE-4
XT7-XT7 M	FC CuAl 4x4/0 AWG - 500 kcmil	1SDA073995R1	ZE1LUGW	1SDA073996R1	ZE1LUGW-4

# Ordering codes for accessories

## Power connection

### Terminals installed for fixed parts

Size	Type	3 pcs (1/2 kit for 3p)		4 pcs (1/2 kit for 4p)	
		Product ID	US/CA PN	Product ID	US/CA PN
XT7-XT7 M	EF Extended front terminals Upper	1SDA073939R1		1SDA073940R1	
XT7-XT7 M	EF Extended front terminals Lower	1SDA073941R1		1SDA073942R1	
XT7-XT7 M	ES Extended spread front terminals Upper	1SDA073951R1		1SDA073952R1	
XT7-XT7 M	ES Extended spread front terminals Lower	1SDA073953R1		1SDA073954R1	
XT7-XT7 M	SHR-Rear spread horizontal terminals Upper	1SDA073957R1		1SDA073958R1	
XT7-XT7 M	SHR-Rear spread horizontal terminals Lower	1SDA073959R1		1SDA073960R1	
XT7-XT7 M	FC CuAl 4x4/0 AWG - 500kcmil Upper	1SDA073991R1		1SDA073993R1	
XT7-XT7 M	FC CuAl 4x4/0 AWG - 500kcmil Lower	1SDA073992R1		1SDA073994R1	

### Fixed part adapters



Fixed part adapter

#### Adapter for mounting the terminals of the fixed circuit-breaker on the fixed part

Size	Type	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT1	XT1 ADP adapter fixed part (2 pieces)	1SDA066305R1	KXT1ADP-3	1SDA066306R1	KXT1ADP-4
XT2	XT2 ADP adapter fixed part (2 pieces)	1SDA066307R1	KXT2ADP-3	1SDA066308R1	KXT2ADP-4
XT3	XT3 ADP adapter fixed part (2 pieces)	1SDA066309R1	KXT3EADP-3	1SDA066310R1	KXT3EADP-4
XT4	XT4 ADP adapter fixed part (2 pieces)	1SDA066311R1	KXT4ADP-3	1SDA066312R1	KXT4ADP-4
XT5	XT5 400A ADP adapter fixed part (2 pcs)	1SDA104723R1	KXT5ADP400-3	1SDA104724R1	KXT5ADP400-4
XT5	XT5 630A ADP adapter fixed part (2 pcs)	1SDA104725R1	KXT5ADP600-3	1SDA104726R1	KXT5ADP600-4
XT6	XT6 ADP adapter fixed part (2 pieces)	1SDA104727R1	KXT6ADP-3	1SDA104728R1	KXT6ADP-4

Note: in order to install fixed version terminals on the ADP, the "Kit F - Front terminals" is needed.

#### Adapter for the configurable fixed part (1 pc - mounted only)

Size	Type	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT5	XT5 400A ADP adapter fixed part (1 pc)	1SDA116189R1		1SDA116190R1	
XT5	XT5 630A ADP adapter fixed part (1 pc)	1SDA116191R1		1SDA116192R1	
XT6	XT6 ADP adapter fixed part (1 piece)	1SDA116193R1		1SDA116194R1	

# Ordering codes for accessories

## Signaling

### Auxiliary contacts - AUX

#### Auxiliary contacts - AUX



AUX uncabled

Size	Type	Fixed/Plug-in	
		Product ID	US/CA PN
<b>Uncabled version</b>			
XT1-XT3	AUX 250V AC/DC	1SDA066422R1	KXTAAUX
XT1-XT3	AUX 24V DC	1SDA066423R1	KXTAAUXD
<b>Cabled version</b>			
XT1	AUX-C 3Q 250V AC/DC Left	1SDA066426R1	KXT1AXC3QL
XT1-XT3	AUX-C 1Q+1SY 250V AC/DC	1SDA066431R1	KXTAAXCQSYFP
XT1-XT3	AUX-C 2Q+1SY 250V AC/DC	1SDA066433R1	KXTAAXC2QSYFP
XT1-XT3	AUX-C 1Q+1SY 24V DC	1SDA066446R1	KXTAAXCDQSYFP
XT3	AUX-C 3Q+1SY 250V AC/DC	1SDA066434R1	KXTDAXC3QSYFP
XT3	AUX-C 3Q+1SY 24V DC	1SDA066448R1	KXTDAXCD3QSYFP
XT3	AUX-C 3Q 250V AC/DC Left	1SDA066428R1	KXT3AXC3QL



AUX cabled

#### Auxiliary contacts - AUX

Size	Type	Fixed/Plug-in		Withdrawable	
		Product ID	US/CA PN	Product ID	US/CA PN
<b>Uncabled version</b>					
XT2-XT4	AUX 250V AC/DC	1SDA066422R1	KXTAAUX		
XT2-XT4	AUX-S51 250V AC/DC	1SDA066424R1	KXTCAXS51		
XT2-XT4	AUX 24V DC	1SDA066423R1	KXTAAUXD		
XT2-XT4	AUX-S51 24V DC	1SDA066425R1	KXTCAXDS51		
<b>Cabled version</b>					
XT2-XT4	AUX-C 3Q 250V AC/DC Left	1SDA066427R1	KXTCAXC3QL		
XT2-XT4	AUX-C 1Q+1SY 250V AC/DC	1SDA066431R1	KXTAAXCQSYFP	1SDA066432R1	KXTCAXCQSYW
XT2-XT4	AUX-C 2Q+1SY 250V AC/DC	1SDA066433R1	KXTAAXC2QSYFP		
XT2-XT4	AUX-C 2Q+2SY+S51 250V AC/DC	1SDA066438R1	KXTCAXC2Q2SYS51FP	1SDA066439R1	KXTCAXC2Q2SYS51W
XT2-XT4	AUX-C 3Q+1SY 250V AC/DC	1SDA066434R1	KXTDAXC3QSYFP	1SDA066435R1	KXTCAXC3QSYW
XT2-XT4	AUX-C 3Q+2SY 250V AC/DC	1SDA066436R1	KXTCAXC3Q2SYFP	1SDA066437R1	KXTCAXC3Q2SYW
XT2-XT4	AUX-S51-C 250V AC/DC	1SDA066429R1	KXTCAXCS51FP	1SDA066430R1	KXTCAXCS51W
XT2-XT4	AUX-C 1Q+1SY 24V DC	1SDA066446R1	KXTAAXCDQSYFP	1SDA066447R1	KXTCAXCDQSYW
XT2-XT4	AUX-C 3Q+1SY 24V DC	1SDA066448R1	KXTDAXCD3QSYFP	1SDA066449R1	KXTCAXCD3QSYW
XT2-XT4	AUX-S51-C 24V DC	1SDA067116R1	KXTCAXDS51FP	1SDA067117R1	KXTCAXDS51W
XT2-XT4	AUX-C 1Q+1SY 400V AC	1SDA066444R1	KXTCAXC4QSYFP	1SDA066445R1	KXTCAXC4QSYW
XT2-XT4	AUX-C 2Q 400V AC	1SDA066440R1	KXTCAXC42QFP	1SDA066443R1	KXTCAXC42QW

# Ordering codes for accessories

## Signaling



AUX for withdrawable

### Auxiliary contacts - AUX

Size	Type	Fixed/Plug-in		Withdrawable	
		Product ID	US/CA PN	Product ID	US/CA PN
<b>Uncabled version</b>					
XT5	AUX 250V AC/DC	1SDA066422R1	KXTAAUX		
XT5	AUX 24V DC	1SDA066423R1	KXTAAUXD		
<b>Cabled version</b>					
XT5	AUX-C 1Q+1SY 250V AC/DC left	1SDA104787R1	KXT5AUXC2QYFP		
XT5	AUX-C 1Q+1SY 250V AC/DC	1SDA066431R1	KXTAAXCQSYFP	1SDA104789R1	KXT5AUXC2QYW
XT5	AUX-C 2Q+1SY 250V AC/DC	1SDA066433R1	KXTAAXC2QSYFP	1SDA104796R1	KXT5AUXC2Q2YW
XT5	AUX-C 3Q+1SY 250V AC/DC	1SDA066434R1	KXTDAXC3QSYFP	1SDA104798R1	KXT5AUXC2Q3YW
XT5	AUX-S51-C 250V AC/DC	1SDA066429R1	KXTCAXCS51FP	1SDA104791R1	KXT5AUXC2S51W
XT5	AUX-S52-C 250V AC/DC	1SDA104800R1	KXTFAUXC2S52FP	1SDA104793R1	KXT5AUXC2S52W
XT5	AUX-C 1Q+1SY 24V DC left	1SDA104786R1	KXT5AUXCDQYFP		
XT5	AUX-C 1Q+1SY 24V DC	1SDA066446R1	KXTAAXCDQSYFP	1SDA104788R1	KXT5AUXCDQYW
XT5	AUX-C 3Q+1SY 24V DC	1SDA066448R1	KXTDAXCD3QSYFP	1SDA104797R1	KXT5AUXCDQ3YW
XT5	AUX-S51-C 24V DC	1SDA067116R1	KXTCAXDS51FP	1SDA104790R1	KXT5AUXCDS51W
XT5	AUX-S52-C 24V DC	1SDA104799R1	KXTFAUXCD52FP	1SDA104792R1	KXT5AUXCDS52W
XT5	AUX-C 1Q+1SY 400V AC	1SDA104784R1	KXT5AUXC4QYFP	1SDA104785R1	KXT5AUXC4QYW
XT5	AUX-C 2Q 400V AC	1SDA104795R1	KXT5AUXC4Q2FP	1SDA104794R1	KXT5AUXC4Q2W

### Auxiliary contacts - AUX

Size	Type	Fixed/Plug-in		Withdrawable	
		Product ID	US/CA PN	Product ID	US/CA PN
<b>Uncabled version</b>					
XT6	AUX 250V AC/DC	1SDA066422R1	KXTAAUX		
XT6	AUX 24V DC	1SDA066423R1	KXTAAUXD		
<b>Cabled version</b>					
XT6	AUX-C 1Q+1SY 250V AC/DC	1SDA066431R1	KXTAAXCQSYFP	1SDA104802R1	KXT6AUXC2QYW
XT6	AUX-C 2Q+1SY 250V AC/DC	1SDA066433R1	KXTAAXC2QSYFP	1SDA104807R1	KXT6AUXC2Q2YW
XT6	AUX-C 3Q+1SY 250V AC/DC	1SDA066434R1	KXTDAXC3QSYFP	1SDA104809R1	KXT6AUXC2Q3YW
XT6	AUX-S51-C 250V AC/DC	1SDA066429R1	KXTCAXCS51FP	1SDA104804R1	KXT6AUXC2S51W
XT6	AUX-S52-C 250V AC/DC	1SDA104800R1	KXTFAUXC2S52FP	1SDA104806R1	KXT6AUXC2S52W
XT6	AUX-C 1Q+1SY 24V DC	1SDA066446R1	KXTAAXCDQSYFP	1SDA104801R1	KXT6AUXCDQYW
XT6	AUX-C 3Q+1SY 24V DC	1SDA066448R1	KXTDAXCD3QSYFP	1SDA104808R1	KXT6AUXCDQ3YW
XT6	AUX-S51-C 24V DC	1SDA067116R1	KXTCAXDS51FP	1SDA104803R1	KXT6AUXCDS51W
XT6	AUX-S52-C 24V DC	1SDA104799R1	KXTFAUXCD52FP	1SDA104805R1	KXT6AUXCDS52W



Open/close auxiliary contacts - AUX

### Auxiliary contacts - AUX

Size	Type	Withdrawable	
		Product ID	US/CA PN
XT7-XT7 M	AUX 4Q 400V	1SDA073750R1	ZE1AUX4
XT7-XT7 M	AUX 4Q 24Vdc	1SDA073751R1	ZE1AUX4D
XT7-XT7 M	AUX 2Q 400VAC + 2Q 24VDC	1SDA073752R1	ZE1AUX2-2D
XT7-XT7 M	AUX S51 250V	1SDA073776R1	ZE1BA
XT7-XT7 M	AUX S51 24V	1SDA073777R1	ZE1BAD
XT7	AUX 1SY 400V	1SDA104813R1	KXT7AUX4Y
XT7	AUX 1SY 24V	1SDA104812R1	KXT7AUXDY
XT7 <sup>(2)</sup>	AUX 1S52 250V	1SDA104811R1	KXT7AUX2S52
XT7 <sup>(2)</sup>	AUX 1S52 24V	1SDA104810R1	KXT7AUXDS52
XT7-XT7 M <sup>(1)</sup>	AUX 15Q 400V	1SDA073758R1	ZE1AUX15
XT7-XT7 M <sup>(1)</sup>	AUX 15Q 24V	1SDA073759R1	ZE1AUX15D
XT7 M	RTC 250V	1SDA073770R1	ZE1RTC
XT7 M	RTC 24V	1SDA073771R1	ZE1RTCD
XT7 M	AUX S33 M/2 250V	1SDA104825R1	KXT7 MAUX2S33M2
XT7 M	AUX S33 M/2 24V	1SDA104824R1	KXTMAUXDS33M2

(1) Not compatible with mechanical locks on compartment doors or mechanical interlocks.

For XT7 M you need to order also one of the following items:

- Plate for fixed - floor mounted code 1SDA079783R1
- Plate for fixed - wall mounted code 1SDA079782R1
- Plate for withdrawable code 1SDA079784R1

For XT7 M withdrawable, the AUX 15Q works only in racked-in position.

2) Tripping signal is available only on YU/YO2 coils installed in the dedicated slot.

### Terminals for auxiliary connection

Size	Type	Product ID	US/CA PN
XT7-XT7 M	Terminals 10 pcs	1SDA073906R1	ZEATB10



Terminal for auxiliary connection

# Ordering codes for accessories

## Signaling

### Auxiliary position contacts - AUP

#### Auxiliary position contacts -AUP



—  
Auxiliary position  
contact - AUP

Size	Type	Product ID	US/CA PN
XT1-XT3	AUP-I – Four racked-in contacts 250V AC	1SDA066450R1	KXTAAUP250IN
XT1-XT3	AUP-I – Four racked-in contacts 24V DC	1SDA066451R1	KXTAAUP24IN
XT2-XT4	AUP-I – Four racked-in contacts 250V AC	1SDA066450R1	KXTAAUP250IN
XT2-XT4	AUP-I – Four racked-in contacts 24V DC	1SDA066451R1	KXTAAUP24IN
XT2-XT4	AUP-R – Two racked-out contacts 250V AC	1SDA066452R1	KXTCAUP250W
XT2-XT4	AUP-R – Two racked-out contacts 24V DC	1SDA066453R1	KXTCAUP24W
XT5	AUP-I Kit Three Racked-in contacts 250V AC	1SDA124687R1	
XT5	AUP-I Kit Three Racked-in contacts 24V DC	1SDA124688R1	
XT5	AUP-T Kit One Test contact 250V AC	1SDA124689R1	
XT5	AUP-T Kit One Test contact 24V DC	1SDA124690R1	
XT5	AUP-R Kit One Racked-out contact 250V AC	1SDA124691R1	
XT5	AUP-R Kit One Racked-out contact 24V DC	1SDA124692R1	
XT6	AUP-I Kit Three Racked-in contacts 250V AC	1SDA124693R1	
XT6	AUP-I Kit Three Racked-in contacts 24V DC	1SDA124694R1	
XT6	AUP-T Kit One Test contact 250V AC	1SDA124695R1	
XT6	AUP-T Kit One Test contact 24V DC	1SDA124696R1	
XT6	AUP-R Kit One Racked-out contact 250V AC	1SDA124697R1	
XT6	AUP-R Kit One Racked-out contact 24V DC	1SDA124698R1	
XT7-XT7 M	AUP 6 contacts 24V	1SDA073763R1	ZE1AUPD
XT7-XT7 M	AUP 6 contacts 400V	1SDA073762R1	ZE1AUP

### Early auxiliary contacts - AUE

#### Auxiliary contacts - AUX



—  
Early auxiliary contacts  
in the handle - AUE

Size	Type	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT1-XT3	AUE - Two contacts in rotary handle RHx (closed)	1SDA066454R1	KXTAAUECLFP		
XT1-XT3	AUE - Two contacts in rotary handle RHx (open)	1SDA067118R1	KXTDAUEOPFP		
XT2-XT4	AUE - Two contacts in rotary handle RHx (closed)	1SDA066454R1	KXTAAUECLFP	1SDA066455R1	KXTCAUECLW
XT2-XT4	AUE - Two contacts in rotary handle RHx (open)	1SDA067118R1	KXTDAUEOPFP	1SDA067119R1	KXTCAUEOPW
XT5-XT6	AUE - Two contacts in rotary handle RHx (closed)	1SDA104821R1	KXTFAUECLFP	1SDA104822R1	KXTFAUECLW
XT7	AUE - Two contacts in circuit-breaker (closed)	1SDA104823R1	KXT7AUECL	1SDA104823R1	KXT7AUECL

# Ordering codes for accessories

## Operating mechanism

### Rotary and flange handle operating mechanism



—  
Direct rotary  
handle - RHD



—  
Transmitted rotary  
handle - RHE

#### Rotary handles XT1-XT3

Size	Type	3 poles	
		Product ID	US/CA PN
XT1-XT3	RHD Normal direct handle	1SDA066475R1	KXTBRHDSTFP
XT1-XT3	RHD Direct emergency handle	1SDA066477R1	KXTBRHDEMFP
XT1-XT3	RHE Normal transmitted handle	1SDA066479R1	KXTBRHESTFP
XT1-XT3	RHE Emergency transmitted handle	1SDA066481R1	KXTBRHEEMFP
XT1-XT3	RHE-PL Normal extended handle +2PLL	1SDA080261R1	KXTBRHESTFPPLK
XT1-XT3	RHE-PL Emergency extended handle +2PLL	1SDA080314R1	KXTBRHEEMFPPLK
XT1-XT3	RHE_MB Metallic base for transmitted handle	1SDA115117R1	KXTMRHESTFP
XT1-XT3	RHS-L Normal left lateral handle	1SDA066579R1	KXTBRHSLSTFP
XT1-XT3	RHS-L Emergency left lateral handle	1SDA066580R1	KXTBRHSLEMFP
XT1-XT3	RHS-R Normal right lateral handle	1SDA066581R1	KXTBRHSRSTFP
XT1-XT3	RHS-R Emergency right lateral handle	1SDA066582R1	KXTBRHSREMFP
<b>Spare parts for transmitted handle</b>			
XT1-XT3	RHE_B Base for transmitted handle	1SDA066483R1	KXTBRHEBFP
XT1-XT3	RHE-B base for extended handle +2PLL	1SDA080317R1	KXTBRHEBFPPLK
XT1-XT3	RHE_S Rod of 500mm	1SDA066576R1	KXTARHES500
XT1-XT3	RHE_SS Rod support for RHE_MB	1SDA115118R1	KXTMRHESS
XT1-XT3	RHE_H Normal transmitted handle	1SDA066577R1	KXTARHEHST
XT1-XT3	RHE_H Emergency transmitted handle	1SDA066578R1	KXTARHEHEM
XT1-XT3	LH Normal large handle	1SDA066583R1	KXTALHNDLST
XT1-XT3	LH Large emergency handle	1SDA066585R1	KXTALHNDLEM

# Ordering codes for accessories

## Operating mechanism



Large handle - LH



Lateral handle - RHS

### Rotary handles XT2-XT4

Size	Type	3 poles		Withdrawable	
		Product ID	US/CA PN	Product ID	US/CA PN
XT2-XT4	RHD Normal direct handle	1SDA069053R1	KXTCRHDSTFP	1SDA066476R1	KXTCRHDSTW
XT2-XT4	RHD Direct emergency handle	1SDA069054R1	KXTCRHDEMFP	1SDA066478R1	KXTCRHDEMW
XT2-XT4	RHE Normal transmitted handle	1SDA069055R1	KXTCRHESTFP	1SDA066480R1	KXTCRHESTW
XT2-XT4	RHE Emergency transmitted handle	1SDA069056R1	KXTCRHEEMFP	1SDA066482R1	KXTCRHEEMW
XT2-XT4	RHE-PL Normal extended handle +2PLL	1SDA080260R1	KXTCRHESTFPPLK	1SDA080262R1	KXTCRHESTWPLK
XT2-XT4	RHE-PL Emergency extended handle +2PLL	1SDA080263R1	KXTCRHEEMFPPLK	1SDA080315R1	KXTCRHEEMWPLK
XT2-XT4	RHE_MB Metallic base for transmitted handle	1SDA115117R1	KXTMRHESTFP		
XT2-XT4	RHS-L Normal left lateral handle	1SDA069058R1	KXTCRHSLSTFP		
XT2-XT4	RHS-L Emergency left lateral handle	1SDA069059R1	KXTCRHSLEMFP		
XT2-XT4	RHS-R Normal right lateral handle	1SDA069060R1	KXTCRHSRSTFP		
XT2-XT4	RHS-R Emergency right lateral handle	1SDA069061R1	KXTCRHSREMFP		
<b>Spare parts for transmitted handle</b>					
XT2-XT4	RHE_B Base for transmitted handle	1SDA069057R1	KXTCRHEBFP	1SDA066484R1	KXTCRHEBW
XT2-XT4	RHE-B base for extended handle +2PLL	1SDA080316R1	KXTCRHEBFPPLK	1SDA080318R1	KXTCRHEBWPLK
XT2-XT4	RHE_S Rod of 500mm	1SDA066576R1	KXTARHES500		
XT2-XT4	RHE_SS Rod support for RHE_MB	1SDA115118R1	KXTMRHESS		
XT2-XT4	Telescopic Rod kit	1SDA104869R1	KXTHRHETR		
XT2-XT4	RHE_H Normal transmitted handle	1SDA066577R1	KXTARHEHST		
XT2-XT4	RHE_H Emergency transmitted handle	1SDA066578R1	KXTARHEHEM		
XT2-XT4	LH Normal large handle	1SDA066583R1	KXTALHNDLST		
XT2-XT4	LH Large emergency handle	1SDA066585R1	KXTALHNDLEM		

**Shafts and NEMA Rated Handles for RHE\_MB**

Size	Type	Product ID
XT1...XT4	Standard Pistol handle with reset function, 65mm, NEMA, 3R,12	OHB65J10B
XT1...XT4	Emergency Pistol handle with reset function, 65mm, NEMA, 3R,12	OHY65J10B
XT1...XT4	Standard Pistol handle with reset function, 65mm, NEMA, 4,4X	OHB65L10B
XT1...XT4	Emergency Pistol handle with reset function, 65mm, NEMA, 4,4X	OHY65L10B
XT1...XT7	Standard Pistol handle with reset function, 125mm, NEMA, 3R,12	OHB125J10B
XT1...XT7	Emergency Pistol handle with reset function, 125mm, NEMA, 3R,12	OHY125J10B
XT1...XT7	Standard Pistol handle with reset function, 125mm, NEMA, 4,4X	OHB125L10B
XT1...XT7	Emergency Pistol handle with reset function, 125mm, NEMA, 4,4X	OHY125L10B
XT1...XT7	148mm Pistol handle shaft	EXP10X148
XT1...XT7	225mm Pistol handle shaft	EXP10X225
XT1...XT7	500mm Pistol handle shaft	EXP10X500

Compatible with RHE\_MB

**Rotary handle XT5**

Size	Type	Fixed/Plug-in		Withdrawable	
		Product ID	US/CA PN	Product ID	US/CA PN
XT5	RHD Normal Direct Handle	1SDA104826R1	KXT5RHDSTFP	1SDA104828R1	KXT5RHDSTW
XT5	RHD Normal Direct Handle + 2PLL	1SDA104827R1	KXT5RHDSTFP2PL	1SDA104829R1	KXT5RHDSTW2PL
XT5	RHD Direct Emergency Handle	1SDA104830R1	KXT5RHDEMFP	1SDA104831R1	KXT5RHDEMW
XT5	RHE Normal Transmitted Handle	1SDA104843R1	KXT5RHESTFP	1SDA104844R1	KXT5RHESTW
XT5	RHE Emergency Transmitted Handle	1SDA104849R1	KXT5RHEEMF	1SDA104850R1	KXT5RHEEMW
<b>Spare parts for transmitted handle</b>					
XT5	RHE_B Base for Transmitted Handle	1SDA104845R1	KXT5RHEBFP	1SDA104847R1	KXT5RHEBW
XT5	RHE_B Base for Transmitted Handle + 2PLL	1SDA104846R1	KXT5RHEBFP2PL	1SDA104848R1	KXT5RHEBW2PL
XT5	RHE_MB Metallic base for transmitted handle	1SDA117351R1	KXT5MRHESTFP		
XT5	RHE_S Rod of 500mm	1SDA113118R1	KXTJRHESFW500MM		
XT5	Telescopic rod kit	1SDA104869R1	KXTHRHETR		
XT5	RHE_H Normal Transmitted Handle	1SDA104851R1	KXT5RHESTH	1SDA104851R1	KXT5RHESTH
XT5	RHE_H Emergency Transmitted Handle	1SDA104852R1	KXT5RHEEMH	1SDA104852R1	KXT5RHEEMH
XT5	Conversion kit RHE->RHS	1SDA104870R1	KXT5RHE2RHS		



(RHD) direct rotary handle + 2PII

# Ordering codes for accessories

## Operating mechanism



—  
(RHE) extended rotary handle

### Rotary handles XT6

Size	Type	Fixed		Withdrawable	
		Product ID	US/CA PN	Product ID	US/CA PN
XT6	RHD Normal Direct Handle	1SDA104832R1	KXT6RHDSTFP	1SDA104834R1	KXT6RHDSTW
XT6	RHD Normal Direct Handle + 2PLL	1SDA104833R1	KXT6RHDSTFP2PL	1SDA104835R1	KXT6RHDSTW2PL
XT6	RHD Direct Emergency Handle	1SDA104836R1	KXT6RHDEMFP	1SDA104837R1	KXT6RHDEMW
XT6	RHE Normal Transmitted Handle	1SDA104853R1	KXT6RHESTFP	1SDA104854R1	KXT6RHESTW
XT6	RHE Emergency Transmitted Handle	1SDA104859R1	KXT6RHEEMF	1SDA104860R1	KXT6RHEEMW
<b>Spare parts for flange handle</b>					
XT6	RHE_B Base for Transmitted Handle	1SDA104855R1	KXT6RHEBFP	1SDA104857R1	KXT6RHEBW
XT6	RHE_B Base for Transmitted Handle + 2PLL	1SDA104856R1	KXT6RHEBFP2PL	1SDA104858R1	KXT6RHEBW2PL
XT6	RHE_MB Metallic base for transmitted handle	1SDA117352R1	KXT6MRHESTFP		
XT6	RHE_S Rod of 500mm	1SDA113118R1	KXTJRHESFW500MM		
XT6	Telescopic rod kit	1SDA104869R1	KXTHRHETR		
XT6	RHE_H Normal Transmitted Handle	1SDA104867R1	KXT7RHESTH		
XT6	RHE_H Emergency Transmitted Handle	1SDA104868R1	KXT7RHEEMH		



—  
Flange handle XT5

### Flange Handle XT1...XT6

Size	Type	Fixed <sup>(1)</sup>	
		Product ID	US/CA PN
<b>Circuit breaker mechanism</b>			
XT1...XT4 <sup>(1)</sup>	FH_M Breaker mechanism	1SDA117873R1	KXTAFLHDLMECH
XT5 <sup>(2)</sup>	FH_M Breaker mechanism	1SDA115551R1	KXT5FLHDLMECH
XT6 <sup>(2)</sup>	FH_M Breaker mechanism	1SDA117872R1	KXT6FLHDLMECH
<b>Handle</b>			
XT1...XT6	FH_H Handle L=6in NEMA 1, 3, 12, 13	1SDA115552R1	KXTAFLHDL6IN
XT1...XT6	FH_H Handle L=10in NEMA 1, 3, 12, 13	1SDA115553R1	KXTAFLHDL10IN
XT1...XT6	FH_H Handle L=6in NEMA 4/4X	1SDA115554R1	KXTAFLHDL6IN4X
XT1...XT6	FH_H Handle L=10in NEMA 4/4X	1SDA115555R1	KXTAFLHDL10IN4X
<b>Cable</b>			
XT1...XT6	FH_C Cable L=3ft	1SDA115556R1	SC3L
XT1...XT6	FH_C Cable L=4ft	1SDA115557R1	SC4L
XT1...XT6	FH_C Cable L=5ft	1SDA115558R1	SC5L
XT1...XT6	FH_C Cable L=6ft	1SDA115559R1	SC6L
XT1...XT6	FH_C Cable L=8ft	1SDA115560R1	SC8L
XT1...XT6	FH_C Cable L=10ft	1SDA115561R1	SC10L

The flange handle kit is complete by ordering 3 codes (circuit-breaker mechanism, handle and cable).

(1) Suitable to 3 and 4-pole circuit breaker in fixed and plug-in version.

(2) Only for 3-pole, fixed version circuit-breakers.

### RHE NFPA handle

Size	Type	Product ID	US/CA PN
XT1...XT6	RHE NFPA handle	1SDA085244R1	KXTANFPAHDL



—  
NFPA handle



Direct rotary handle + 2PLL XT7 - RHD



Transmitted rotary handle + 2PLL XT7 - RHE



Flange handle XT7

**Rotary handles XT7**

Size	Type	Fixed		Withdrawable	
		Product ID	US/CA PN	Product ID	US/CA PN
XT7	RHD Normal direct handle	1SDA104838R1	KXT7RHDSTFW	1SDA104838R1	KXT7RHDSTFW
XT7	RHD Normal direct handle + 2PLL	1SDA104839R1	KXT7RHDSTFW2PL	1SDA104839R1	KXT7RHDSTFW2PL
XT7	RHD Direct emergency handle	1SDA104840R1	KXT7RHDEMFW	1SDA104840R1	KXT7RHDEMFW
XT7	RHE Normal transmitted handle	1SDA104863R1	KXT7RHEST	1SDA104863R1	KXT7RHEST
XT7	RHE Emergency transmitted handle	1SDA104866R1	KXT7RHEEM	1SDA104866R1	KXT7RHEEM
<b>Spare parts for transmitted handle</b>					
XT7	RHE_B Base for transmitted handle	1SDA104864R1	KXT7RHEB	1SDA104864R1	KXT7RHEB
XT7	RHE_B Base for transmitted handle + 2PLL	1SDA104865R1	KXT7RHEB2PL	1SDA104865R1	KXT7RHEB2PL
XT7	RHE_MB Metallic base for transmitted handle	1SDA117353R1	KXT7 MRHEST		
XT7	RHE_S Rod of 500mm	1SDA113118R1	KXTJRHEFW500MM		
XT7	Telescopic Rod kit	1SDA104869R1	KXTHRHETR		
XT7	RHE_H Normal transmitted handle	1SDA104867R1	KXT7RHESTH		
XT7	RHE_H Emergency transmitted handle	1SDA104868R1	KXT7RHEEMH		

**Flange handle XT7**

Size	Type	Fixed <sup>(1)</sup>	
		Product ID	US/CA PN
<b>Circuit breaker mechanism</b>			
XT7	FH_M Breaker mechanism	1SDA115941R1	KXT7FLHDLMECH
<b>Handle</b>			
XT7	FH_H Handle L=10in NEMA 1, 3, 12, 13	1SDA115942R1	KXTBFLHDL10IN
XT7	FH_H Handle L=10in NEMA 4, 4X	1SDA115943R1	KXTBFLHDL10IN4X
<b>Cable</b>			
XT7	FH_C Cable L=3ft	1SDA115562R1	SC3H
XT7	FH_C Cable L=4ft	1SDA115563R1	SC4H
XT7	FH_C Cable L=5ft	1SDA115564R1	SC5H
XT7	FH_C Cable L=6ft	1SDA115565R1	SC6H
XT7	FH_C Cable L=8ft	1SDA115566R1	SC8H
XT7	FH_C Cable L=10ft	1SDA115567R1	SC10H

The flange handle kit is complete by ordering 3 codes (circuit-breaker mechanism, handle and cable).  
 (1) Only for 3-pole circuit-breakers.

# Ordering codes for accessories

## Operating mechanism



Front for operating lever mechanism - FLD

### Front for operating lever mechanism - FLD

#### Front for operating lever mechanism - FLD

Size	Type	Fixed		Withdrawable	
		Product ID	US/CA PN	Product ID	US/CA PN
XT2-XT4	Front for locks - FLD	1SDA066635R1	KXTCFLDFP	1SDA066636R1	KXTCFLDW
XT5	Front for FLD locks	1SDA104871R1	KXT5FLDFP	1SDA104872R1	KXT5FLDW
XT6	Front for FLD locks	1SDA104873R1	KXT6FLDFP	1SDA104874R1	KXT6FLDW

### Toggle Extension

#### Front operating toggle adapter

Size	Type	Fixed		Withdrawable	
		Product ID	US/CA PN	Product ID	US/CA PN
XT5-XT6	Toggle extension	1SDA104875R1	KXTJTGLEXT		
XT7	Foldable toggle for XT7	1SDA113872R1		1SDA113872R1	

# Ordering codes for accessories

## Remote control

### Shunt Opening Release / Shunt Trip

#### Shunt opening release / Shunt Trip - SOR



SOR uncabled



SOR cabled



SOR for withdrawable version



YO - shunt opening release

Size	Type	Fixed/Plug-in		Withdrawable	
		Product ID	US/CA PN	Product ID	US/CA PN
<b>Uncabled version</b>					
XT1...XT4	SOR 12V DC	1SDA066313R1	KXTASORA		
XT1...XT4	SOR 24-30V AC/DC	1SDA066314R1	KXTASORB		
XT1...XT4	SOR 48-60V AC/DC	1SDA066315R1	KXTASORC		
XT1...XT4	SOR 110...127V AC / 110...125V DC	1SDA066316R1	KXTASORD		
XT1...XT4	SOR 220...240V AC / 220...250V DC	1SDA066317R1	KXTASORE		
XT1...XT4	SOR 380-440V AC	1SDA066318R1	KXTASORF		
XT1...XT4	SOR 480-525V AC	1SDA066319R1	KXTASORG		
<b>Cabled version</b>					
XT1-XT3	SOR-C 12V DC	1SDA066321R1	KXTASORCFPA		
XT1-XT3	SOR-C 24-30V AC/DC	1SDA066322R1	KXTASORCFPB		
XT1-XT3	SOR-C 48-60V AC/DC	1SDA066323R1	KXTASORCFPC		
XT1-XT3	SOR-C 110-127V AC / 110-125V DC	1SDA066324R1	KXTASORCFPD		
XT1-XT3	SOR-C 220-240V AC / 220-250V DC	1SDA066325R1	KXTASORCFPE		
XT1-XT3	SOR-C 380-440V AC	1SDA066326R1	KXTASORCFPF		
XT1-XT3	SOR-C 480-525V AC	1SDA066327R1	KXTASORCFPG		
XT2-XT4	SOR-C 12V DC	1SDA066321R1	KXTASORCFPA	1SDA066328R1	KXTCSORCWA
XT2-XT4	SOR-C 24-30V AC/DC	1SDA066322R1	KXTASORCFPB	1SDA066329R1	KXTCSORCWB
XT2-XT4	SOR-C 48-60V AC/DC	1SDA066323R1	KXTASORCFPC	1SDA066330R1	KXTCSORCWC
XT2-XT4	SOR-C 110-127V AC / 110-125V DC	1SDA066324R1	KXTASORCFPD	1SDA066331R1	KXTCSORCWD
XT2-XT4	SOR-C 220-240V AC / 220-250V DC	1SDA066325R1	KXTASORCFPE	1SDA066332R1	KXTCSORCWE
XT2-XT4	SOR-C 380-440V AC	1SDA066326R1	KXTASORCFPF	1SDA066333R1	KXTCSORCWF
XT2-XT4	SOR-C 480-525V AC	1SDA066327R1	KXTASORCFPG	1SDA066334R1	KXTCSORCWG

#### Shunt opening release / Shunt Trip - YO

Size	Type	Fixed/Plug-in		Withdrawable	
		Product ID	US/CA PN	Product ID	US/CA PN
<b>Uncabled version</b>					
XT5-XT6	YO 12V DC	1SDA104924R1	KXTFYOA		
XT5-XT6	YO 24...60V AC/DC	1SDA104925R1	KXTFYOB		
XT5-XT6	YO 110..240 V AC - 110..250V DC	1SDA104926R1	KXTFYOD		
XT5-XT6	YO 380...440V AC	1SDA104927R1	KXTFYOG		
XT5-XT6	YO 480...525V AC	1SDA114081R1			
<b>Cabled version</b>					
XT5	YO 12V DC	1SDA104932R1	KXTFYOCFPA	1SDA104928R1	KXT5YOCWA
XT5	YO 24...60V AC/DC	1SDA104933R1	KXTFYOCFPB	1SDA104929R1	KXT5YOCWB
XT5	YO 110..240V AC - 110..250V DC	1SDA104934R1	KXTFYOCFPD	1SDA104930R1	KXT5YOCWD
XT5	YO 380...440V AC	1SDA104935R1	KXTFYOCFPG	1SDA104931R1	KXT5YOCWG
XT5	YO 480...525V AC	1SDA114083R1		1SDA114082R1	
XT6	YO 12V DC	1SDA104932R1	KXTFYOCFPA	1SDA104936R1	KXT6YOCWA
XT6	YO 24...60V AC/DC	1SDA104933R1	KXTFYOCFPB	1SDA104937R1	KXT6YOCWB
XT6	YO 110..240V AC - 110..250V DC	1SDA104934R1	KXTFYOCFPD	1SDA104938R1	KXT6YOCWD
XT6	YO 380...440V AC	1SDA104935R1	KXTFYOCFPG	1SDA104939R1	KXT6YOCWG
XT6	YO 480...525V AC	1SDA114083R1		1SDA114084R1	

# Ordering codes for accessories

## Remote control



—  
Shunt opening  
release - YO

### Shunt opening release / Shunt Trip -YO

Size	Type	Product ID	US/CA PN
XT7-XT7 M	YO 24V AC/DC	1SDA073668R1	ZEASA
XT7-XT7 M	YO 30V AC/DC	1SDA073669R1	ZEASB
XT7-XT7 M	YO 48V AC/DC	1SDA073670R1	ZEASC
XT7-XT7 M	YO 60V AC/DC	1SDA073671R1	ZEASD
XT7-XT7 M	YO 110-120V AC/DC	1SDA073672R1	ZEASE
XT7-XT7 M	YO 120-127V AC/DC	1SDA073673R1	ZEASF
XT7-XT7 M	YO 220-240V AC/DC	1SDA073674R1	ZEASG
XT7-XT7 M	YO 240-250V AC/DC	1SDA073675R1	ZEASH
XT7-XT7 M	YO 380-400V AC	1SDA073677R1	ZEASK
XT7-XT7 M	YO 415-440V AC	1SDA073678R1	ZEASL
XT7-XT7 M	YO 480-500V AC	1SDA073679R1	ZEASM

## Undervoltage release

### Undervoltage release - UVR

Size	Type	Fixed/Plug-in		Withdrawable	
		Product ID	US/CA PN	Product ID	US/CA PN
<b>Uncabled version</b>					
XT1...XT4	UVR 24-30V AC/DC	1SDA066389R1	KXTAUVR1		
XT1...XT4	UVR 48V AC/DC	1SDA069064R1	KXTAUVR2		
XT1...XT4	UVR 60V AC/DC	1SDA066390R1	KXTAUVR3		
XT1...XT4	UVR 110...127V AC / 110...125V DC	1SDA066391R1	KXTAUVR4		
XT1...XT4	UVR 220...240V AC / 220...250V DC	1SDA066392R1	KXTAUVR5		
XT1...XT4	UVR 380-440V AC	1SDA066393R1	KXTAUVR6		
XT1...XT4	UVR 480-525V AC	1SDA066394R1	KXTAUVR7		
<b>Cabled version</b>					
XT1-XT3	UVR-C 24-30V AC/DC	1SDA066396R1	KXTAUVRFCP1		
XT1-XT3	UVR 48V AC/DC	1SDA069065R1	KXTAUVRFCP2		
XT1-XT3	UVR 60V AC/DC	1SDA066397R1	KXTAUVRFCP3		
XT1-XT3	UVR 110...127V AC / 110...125V DC	1SDA066398R1	KXTAUVRFCP4		
XT1-XT3	UVR 220...240V AC / 220...250V DC	1SDA066399R1	KXTAUVRFCP5		
XT1-XT3	UVR 380-440V AC	1SDA066400R1	KXTAUVRFCP6		
XT1-XT3	UVR 480-525V AC	1SDA066401R1	KXTAUVRFCP7		
XT2-XT4	UVR-C 24-30V AC/DC	1SDA066396R1	KXTAUVRFCP1	1SDA066403R1	KXTCUVRWC1
XT2-XT4	UVR 48V AC/DC	1SDA069065R1	KXTAUVRFCP2	1SDA069066R1	KXTCUVRWC2
XT2-XT4	UVR 60V AC/DC	1SDA066397R1	KXTAUVRFCP3	1SDA066404R1	KXTCUVRWC3
XT2-XT4	UVR 110...127V AC / 110...125V DC	1SDA066398R1	KXTAUVRFCP4	1SDA066405R1	KXTCUVRWC4
XT2-XT4	UVR 220...240V AC / 220...250V DC	1SDA066399R1	KXTAUVRFCP5	1SDA066406R1	KXTCUVRWC5
XT2-XT4	UVR 380-440V AC	1SDA066400R1	KXTAUVRFCP6	1SDA066407R1	KXTCUVRWC6
XT2-XT4	UVR 480-525V AC	1SDA066401R1	KXTAUVRFCP7	1SDA066408R1	KXTCUVRWC7



—  
UVR uncabled



—  
UVR cabled



—  
UVR for withdrawable



YU - undervoltage release

### Undervoltage release - YU

Size	Type	Fixed/Plug-in		Withdrawable	
		Product ID	US/CA PN	Product ID	US/CA PN
<b>Uncabled version</b>					
XT5-XT6	YU 12 Vdc	1SDA104940R1	KXTFYU0		
XT5-XT6	YU 24...30 Vac/dc	1SDA104941R1	KXTFYU1		
XT5-XT6	YU 48...60 Vac/dc	1SDA104942R1	KXTFYU2		
XT5-XT6	YU 110..127 Vac - 110..125 Vdc	1SDA104943R1	KXTFYU4		
XT5-XT6	YU 220..240 Vac - 220..250 Vdc	1SDA104944R1	KXTFYU5		
XT5-XT6	YU 380...440 Vac	1SDA104945R1	KXTFYU6		
XT5-XT6	YU 480...525 Vac	1SDA104946R1	KXTFYU7		
<b>Cabled version</b>					
XT5	YU-C 12 Vdc	1SDA104954R1	KXTFYUC0	1SDA104947R1	KXT5YUCW0
XT5	YU-C 24...30 Vac/dc	1SDA104955R1	KXTFYUC1	1SDA104948R1	KXT5YUCW1
XT5	YU-C 48...60 Vac/dc	1SDA104956R1	KXTFYUC2	1SDA104949R1	KXT5YUCW2
XT5	YU-C 110..127 Vac - 110..125 Vdc	1SDA104957R1	KXTFYUC4	1SDA104950R1	KXT5YUCW4
XT5	YU-C 220..240 Vac - 220..250 Vdc	1SDA104958R1	KXTFYUC5	1SDA104951R1	KXT5YUCW5
XT5	YU-C 380...440 Vac	1SDA104959R1	KXTFYUC6	1SDA104952R1	KXT5YUCW6
XT5	YU-C 480...525 Vac	1SDA104960R1	KXTFYUC7	1SDA104953R1	KXT5YUCW7
XT6	YU-C 12 Vdc	1SDA104954R1	KXTFYUC0	1SDA104961R1	KXT6YUCW0
XT6	YU-C 24...30 Vac/dc	1SDA104955R1	KXTFYUC1	1SDA104962R1	KXT6YUCW1
XT6	YU-C 48...60 Vac/dc	1SDA104956R1	KXTFYUC2	1SDA104963R1	KXT6YUCW2
XT6	YU-C 110..127 Vac - 110..125 Vdc	1SDA104957R1	KXTFYUC4	1SDA104964R1	KXT6YUCW4
XT6	YU-C 220..240 Vac - 220..250 Vdc	1SDA104958R1	KXTFYUC5	1SDA104965R1	KXT6YUCW5
XT6	YU-C 380...440 Vac	1SDA104959R1	KXTFYUC6	1SDA104966R1	KXT6YUCW6
XT6	YU-C 480...525 Vac	1SDA104960R1	KXTFYUC7	1SDA104967R1	KXT6YUCW7

### Undervoltage release -YU

Size	Type	Product ID	US/CA PN
XT7-XT7 M	YU 24V AC/DC	1SDA073694R1	ZEUAU
XT7-XT7 M	YU 30V AC/DC	1SDA073695R1	ZEUAU
XT7-XT7 M	YU 48V AC/DC	1SDA073696R1	ZEUAU
XT7-XT7 M	YU 60V AC/DC	1SDA073697R1	ZEUAU
XT7-XT7 M	YU 110-120V AC/DC	1SDA073698R1	ZEUAU
XT7-XT7 M	YU 120-127V AC/DC	1SDA073699R1	ZEUAU
XT7-XT7 M	YU 220-240V AC/DC	1SDA073700R1	ZEUAU
XT7-XT7 M	YU 240-250V AC/DC	1SDA073701R1	ZEUAU
XT7-XT7 M	YU 380-400V AC	1SDA073703R1	ZEUAU
XT7-XT7 M	YU 415-440V AC	1SDA073704R1	ZEUAU
XT7-XT7 M	YU 480-500V AC	1SDA073705R1	ZEUAU



Undervoltage release - YU

# Ordering codes for accessories

## Remote control



Closing release - YC

### Closing release -YC

Size	Type	Product ID	US/CA PN
XT7 M	YC 24V AC/DC	1SDA073681R1	ZEACA
XT7 M	YC 30V AC/DC	1SDA073682R1	ZEACB
XT7 M	YC 48V AC/DC	1SDA073683R1	ZEACC
XT7 M	YC 60V AC/DC	1SDA073684R1	ZEACD
XT7 M	YC 110-120V AC/DC	1SDA073685R1	ZEACE
XT7 M	YC 120-127V AC/DC	1SDA073686R1	ZEACF
XT7 M	YC 220-240V AC/DC	1SDA073687R1	ZEACG
XT7 M	YC 240-250V AC/DC	1SDA073688R1	ZEACH
XT7 M	YC 380-400V AC	1SDA073690R1	ZEACK
XT7 M	YC 415-440V AC	1SDA073691R1	ZEACL
XT7 M	YC 480-500V AC	1SDA073692R1	ZEACM

## Shunt opening test unit

### SOR/YO Test unit

Size	Type	Product ID	US/CA PN
XT1...XT7 M	YO/YC test unit	1SDA082751R1	ZEAYOYCT

## Delay device for undervoltage release - UVD

### Delay device for undervoltage release -UVD



Time delay device for undervoltage release - UVD

Size	Type	Product ID	US/CA PN
XT1...XT4	UVD 24...30V AC/DC	1SDA051357R1	KT3UVD8
XT1...XT4	UVD 48...60V AC/DC	1SDA051358R1	KT3UVD7
XT1...XT4	UVD 110...125V AC/DC	1SDA051360R1	KT3UVD4
XT1...XT4	UVD 220...250V AC/DC	1SDA051361R1	KT3UVD2
XT5-XT6	UVD 24...30V AC/DC	1SDA101983R1	KXTFUVD24
XT5-XT6	UVD 48...60V AC/DC	1SDA101984R1	KXTFUVD48
XT5-XT6	UVD 110...125V AC/DC	1SDA101981R1	KXTFUVD120
XT5-XT6	UVD 220...250V AC/DC	1SDA101982R1	KXTFUVD240
XT7 -XT7 M	UVD 24/30V	1SDA038316R1	KE6TL9
XT7 -XT7 M	UVD 48V	1SDA038317R1	KE6TL8
XT7 -XT7 M	UVD 60V	1SDA038318R1	KE6TL7
XT7 -XT7 M	UVD 110/127V	1SDA038319R1	KE6TL5
XT7 -XT7 M	UVD 220/250V	1SDA038320R1	KE6TL3

## Connectors for shunt opening and undervoltage release for withdrawable version



Fixed/Moving part connector for withdrawable

### Connectors for shunt opening and undervoltage release for withdrawable version

Size	Type	Product ID	US/CA PN
<b>Connector of 4th pole for withdrawable version</b>			
XT2-XT4	Connector 4th pole SOR	1SDA066415R1	KXTCE3PINCONSOR
XT2-XT4	Connector 4th pole UVR	1SDA066418R1	KXTCE3PINCONUVR
<b>Connector of 3rd pole for withdrawable version</b>			
XT5	Connector 3rd pole YO	1SDA104968R1	KXT5CONYOL
XT5	Connector 3rd pole YU	1SDA104970R1	KXT5CONYUL
XT5	Connector 3rd pole YO Ekip Touch	1SDA118165R1	
XT5	Connector 3rd pole YU Ekip Touch	1SDA118164R1	

## Remote reset - YR



Remote reset - YR

### Remote reset - YR

Size	Type	Product ID	US/CA PN
XT7 M	YR 24V DC	1SDA073744R1	ZE1YRA
XT7 M <sup>(1)</sup>	YR 110V AC/DC	1SDA073745R1	ZE1YRB
XT7 M <sup>(1)</sup>	YR 220V AC/DC	1SDA073746R1	ZE1YRC

1) When YR is used in DC, the activation of YR must be carried out with a maximum impulse time of 50ms.  
The YR cannot be powered permanently.

## Motor operator



Motor operator - MOD

### Direct action motor operator - MOD

Size	Type	Product ID	US/CA PN
XT1-XT3	MOD 24V DC	1SDA066457R1	KXTBMOD24
XT1-XT3	MOD 48...60V DC	1SDA066458R1	KXTBMOD48-60
XT1-XT3	MOD 110...125V AC/DC	1SDA066459R1	KXTBMOD110-125
XT1-XT3	MOD 220...250V AC/DC	1SDA066460R1	KXTBMOD220-250
XT1-XT3	MOD 380...440V AC	1SDA066461R1	KXTBMOD280-240
XT1-XT3	MOD 480...525V AC	1SDA066462R1	KXTBMOD480-525

# Ordering codes for accessories

## Remote control



Motor operator - MOE

### Stored energy motor operator - MOE

Size	Type	Product ID	US/CA PN
XT2-XT4	XT2-XT4 MOE 24V DC	1SDA066463R1	KXTCMOE24
XT2-XT4	XT2-XT4 MOE 48...60V DC	1SDA066464R1	KXTCMOE48-60
XT2-XT4	XT2-XT4 MOE 110...125V AC/DC	1SDA066465R1	KXTCMOE110-125
XT2-XT4	XT2-XT4 MOE 220...250V AC/DC	1SDA066466R1	KXTCMOE220-250
XT2-XT4	XT2-XT4 MOE 380...440V AC	1SDA066467R1	KXTCMOE380-440
XT2-XT4	XT2-XT4 MOE 480...525V AC	1SDA066468R1	KXTCMOE480-525
XT5	XT5 MOE 24V DC Auto-Reset	1SDA104879R1	KXT5MOE24
XT5	XT5 MOE 48...60V DC Auto-Reset	1SDA104881R1	KXT5MOE48-60
XT5	XT5 MOE 110...125V AC/DC Auto-Reset	1SDA104883R1	KXT5MOE110-125
XT5	XT5 MOE 220...250V AC/DC Auto-Reset	1SDA104885R1	KXT5MOE220-250
XT5	XT5 MOE 380V AC Auto-Reset	1SDA104887R1	KXT5MOE380
XT5	XT5 MOE 24V DC	1SDA104877R1	
XT5	XT5 MOE 48...60V DC	1SDA104878R1	
XT5	XT5 MOE 110...125V AC/DC	1SDA104879R1	
XT5	XT5 MOE 220...250V AC/DC	1SDA104880R1	
XT5	XT5 MOE 380V AC	1SDA104881R1	
XT6	XT6 MOE 24V DC	1SDA104889R1	KXT6MOE24
XT6	XT6 MOE 48...60V DC	1SDA104891R1	KXT6MOE48-60
XT6	XT6 MOE 110...125V AC/DC	1SDA104893R1	KXT6MOE110-125
XT6	XT6 MOE 220...250V AC/DC	1SDA104895R1	KXT6MOE220-250
XT6	XT6 MOE 380V AC	1SDA104897R1	KXT6MOE380

### Electronic stored energy motor operator - MOE-E

Size	Type	Product ID	US/CA PN
XT2-XT4	XT2-XT4 MOE-E 24V DC	1SDA066469R1	KXTCMOEE24
XT2-XT4	XT2-XT4 MOE-E 48...60V DC	1SDA066470R1	KXTCMOEE48-60
XT2-XT4	XT2-XT4 MOE-E 110...125V AC/DC	1SDA066471R1	KXTCMOEE110-125
XT2-XT4	XT2-XT4 MOE-E 220...250V AC/DC	1SDA066472R1	KXTCMOEE220-250
XT2-XT4	XT2-XT4 MOE-E 380...440V AC	1SDA066473R1	KXTCMOEE380-440
XT2-XT4	XT2-XT4 MOE-E 480...525V AC	1SDA066474R1	KXTCMOEE480-525
XT5	XT5 MOE-E 24V DC	1SDA104899R1	KXT5MOEE24
XT5	XT5 MOE-E 48...60V DC	1SDA104901R1	KXT5MOEE48-60
XT5	XT5 MOE-E 110...125V AC/DC	1SDA104903R1	KXT5MOEE110-125
XT5	XT5 MOE-E 220...250V AC/DC	1SDA104905R1	KXT5MOEE220-250
XT5	XT5 MOE-E 380V AC	1SDA104907R1	KXT5MOEE380



Motor operator - MOE

### Spring charging motor - M

Size	Type	Product ID	US/CA PN
XT7 M	M 24-30 V AC/DC	1SDA104919R1	KXTMSCM24-30
XT7 M	M 48-60 V AC/DC	1SDA104920R1	KXTMSCM48-60
XT7 M	M 100-130 V AC/DC	1SDA104921R1	KXTMSCM100-130
XT7 M <sup>(1)</sup>	M 220-250 V AC/DC	1SDA104922R1	KXTMSCM220-250
XT7 M <sup>(1)</sup>	M 380-415 V AC/DC	1SDA104923R1	KXTMSCM380-415



Spring charging motor - M

1) when YR is used in DC, the activation of YR must be done with a maximum impulse time of 50ms. The YR cannot be powered permanently.

# Ordering codes for accessories

## Safety and protection

### Terminals covers and phase separators



Terminal cover

#### Insulating terminal covers

Size	Type	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT1	LTC Low terminal covers	1SDA066655R1	KXT1LTC-3	1SDA066656R1	KXT1LTC-4
XT1	HTC High terminal covers	1SDA066664R1	KXT1HTC-3	1SDA066665R1	KXT1HTC-4
XT2	LTC Low terminal covers	1SDA066657R1	KXT2LTC-3	1SDA066659R1	KXT2LTC-4
XT2	HTC High terminal covers	1SDA066666R1	KXT2HTC-3	1SDA066667R1	KXT2HTC-4
XT3	LTC Low terminal covers	1SDA066660R1	KXT3LTC-3	1SDA066661R1	KXT3LTC-4
XT3	HTC High terminal covers	1SDA066668R1	KXT3HTC-3	1SDA066669R1	KXT3HTC-4
XT3	HTC High terminal covers for RC223 Type B			1SDA074445R1	
XT4	LTC Low terminal covers	1SDA066662R1	KXT4LTC-3	1SDA066663R1	KXT4LTC-4
XT4	HTC High terminal covers	1SDA066670R1	KXT4HTC-3	1SDA066671R1	KXT4HTC-4
XT5	LTC Low terminal covers	1SDA105018R1	KXT5LTC-3	1SDA105019R1	KXT5LTC-4
XT5	HTC High terminal covers	1SDA105025R1	KXT5HTC-3	1SDA105026R1	KXT5HTC-4
XT5	HTC_BS High terminal covers with back shield for EF	1SDA105043R1	KXT5HTCBS-3	1SDA105044R1	KXT5HTCBS-4
XT5	HTC_ES High terminal covers for ES	1SDA105031R1	KXT5HTCES-3	1SDA105032R1	KXT5HTCES-4
XT5	HTC_ES_BS High terminal covers for ES with back shield	1SDA105037R1	KXT5HTCESBS-3	1SDA105038R1	KXT5HTCESBS-4
XT5	HTC - XT5 FP RC 4p			1SDA105024R1	KXT5HTCRC-4
XT6	LTC Low terminal covers	1SDA105020R1	KXT6LTC-3	1SDA105021R1	KXT6LTC-4
XT6	HTC High terminal covers	1SDA105027R1	KXT6HTC-3	1SDA105028R1	KXT6HTC-4
XT7-XT7 M	LTC Low terminal covers	1SDA107475R1	KXT7LTC-3	1SDA107476R1	KXT7LTC-4
XT7-XT7 M	LTC Low terminal covers for W	1SDA105022R1	KXT7LTCW-3	1SDA105023R1	KXT7LTCW-4
XT7-XT7 M	HTC High terminal covers	1SDA105029R1	KXT7HTC2PCS-3	1SDA105030R1	KXT7HTC2PCS-4

Insulating terminal covers must be considered as 2pcs each

#### Terminals back shield

Size	Type	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT5	Back shield XT5 fixed EF	1SDA112971R1		1SDA112972R1	
XT5	Back shield XT5 fixed FCCuAl	1SDA117045R1		1SDA117046R1	
XT5	Back shield XT5 fixed ES	1SDA117047R1		1SDA117048R1	
XT5	Back shield XT5 fixed low 25mm	1SDA122718R1		1SDA122719R1	

Note: Back shield XT5 fixed EF is compatible with F terminals and FCCuAl internal lugs, when back panel insulation is required.

# Ordering codes for accessories

## Safety and protection



Sealable screw



Phase separators

### Sealable screws for terminal covers

Size	Type	Product ID	US/CA PN
XT1...XT6	Kit with two sealable screws	1SDA066672R1	KXTAESSEAL

### Phase separators for circuit-breaker

Size	Type	4 pcs		6 pcs	
		Product ID	US/CA PN	Product ID	US/CA PN
XT1-XT3	PB height 0.98in/25mm	1SDA075913R1	KXTBPB25-3	1SDA075919R1	KXTBPB25-4
XT1-XT3	PB height 3.94in/100mm	1SDA075916R1	KXTBPB100-3	1SDA075922R1	KXTBPB100-4
XT1-XT3	PB height 7.87in/200mm	1SDA075918R1	KXTBPB200-3	1SDA075924R1	KXTBPB200-4
XT2-XT4	PB height 0.98in/25mm	1SDA075914R1	KXTCPB25-3	1SDA075920R1	KXTCPB25-4
XT2-XT4	PB height 3.94in/100mm	1SDA075915R1	KXTCPB100-3	1SDA075921R1	KXTCPB100-4
XT2-XT4	PB height 7.87in/200mm	1SDA075917R1	KXTCPB200-3	1SDA075923R1	KXTCPB200-4
XT5	PB Height 25mm	1SDA107805R1	KXT5PB25UL-3	1SDA107806R1	KXT5PB25UL-4
XT5	PB Height 100mm	1SDA107801R1	KXT5PB100UL-3	1SDA107802R1	KXT5PB100UL-4
XT5	PB Height 200mm	1SDA107803R1	KXT5PB200UL-3	1SDA107804R1	KXT5PB200UL-4
XT6	PB Height 100mm	1SDA107807R1	KXT6PB100UL-3	1SDA107808R1	KXT6PB100UL-4
XT6	PB Height 200mm	1SDA107809R1	KXT6PB200UL-3	1SDA107810R1	KXT6PB200UL-4
XT7-XT7 M	PB Height 100mm	1SDA073877R1	ZE1PBF100	1SDA073878R1	ZE1PBF100-4
XT7-XT7 M	PB Height 200mm	1SDA073879R1	ZE1PBF200	1SDA073880R1	ZE1PBF200-4

### Phase separators for fixed parts

Size	Type	4 pcs		6 pcs	
		Product ID	US/CA PN	Product ID	US/CA PN
XT1	PS - Rear phase separators for FP	1SDA068953R1	KXTAEPB90-3	1SDA068954R1	KXTAEPB90-4
XT2	PS - Rear phase separators for FP	1SDA068953R1	KXTAEPB90-3	1SDA068954R1	KXTAEPB90-4
XT3	PS - Rear phase separators for FP	1SDA068953R1	KXTAEPB90-3	1SDA068954R1	KXTAEPB90-4
XT4	PS - Rear phase separators for FP	1SDA068953R1	KXTAEPB90-3	1SDA068954R1	KXTAEPB90-4
XT5 <sup>(1)</sup>	PS - Rear phase separators for FP	1SDA105008R1	KXT5PBF3	1SDA105009R1	KXT5PBF4
Size	Type	2 pcs		3 pcs	
XT7-XT7 M	PS - Phase separators for FP W	1SDA076164R1	ZE1PBW	1SDA076165R1	ZE1PBW-4

(1) Not compatible with the 600A Fixed Part

## IP Protection

### IP Protection for rotary handles



IP54 protection for RHE

Size	Type	Product ID	US/CA PN
XT1...XT4	IP54 protection for RHE	1SDA129682R1	KXTAERHEIP54
XT5	IP54 protection for RHD	1SDA104876R1	KXT5IP54RH
XT6	IP54 protection for RHD	1SDA104877R1	KXT6IP54RH
XT7	IP54 protection for RHD	1SDA104878R1	KXT7IP54RH

### IP Protection for motor operators



IP54 protection for XT7 M

Size	Type	Product ID	US/CA PN
XT5	IP54 Flange different keys for MOE	1SDA105105R1	KXT5IP54FLMOE-D
XT5	IP54 Flange same keys for MOE	1SDA105106R1	KXT5IP54FLMOE-S
XT6	IP54 Flange different keys for MOE	1SDA105107R1	KXT6IP54FLMOE-D
XT6	IP54 Flange same keys for MOE	1SDA105108R1	KXT6IP54FLMOE-S
XT7 M	IP54 Flange with different keys	1SDA073866R1	ZE1FLG54DK
XT7 M	IP54 Flange with the same keys	1SDA073868R1	ZE1FLG54SK

## MOC

### Mechanical operation counter - MOC



Mechanical operation counter - MOC

Size	Type	Product ID	US/CA PN
XT7 M	Mechanical operation counter	1SDA101969R1	KXT7 MOC

## Anti tampering

### Transparent sealable cover for 3P Touch/Hi-Touch trip units

Size	Type	Product ID	US/CA PN
XT2	Transparent sealable cover	1SDA118432R1	
XT4	Transparent sealable cover	1SDA118433R1	
XT5	Transparent sealable cover	1SDA118434R1	
XT7	Transparent sealable cover	1SDA118435R1	

# Ordering codes for accessories

## Safety and protection

### Keylocks and padlocks

#### Keylock/padlock for fixed part of withdrawable



Keylock/padlock for fixed part



Key lock in racked-in/test/racked-out position - KLP



Padlock in racked-in/test/racked-out position - PLP

Size	Type	Product ID	US/CA PN
XT2-XT4	KL-D Keylock FP, Giussani different keys	1SDA066293R1	KXTCEKLDLDFPW
XT2-XT4	KL-S Keylock FP, Giussani same keys N.20005	1SDA066294R1	KXTCEKLSFPW
XT2-XT4	KL-D Keylock FP, Ronis 1228 different keys	1SDA066298R1	KXTCEKLDRONFPW
XT2-XT4	KL-S Keylock FP, Ronis 1228 same keys Type A keys	1SDA066300R1	KXTCEKLSRONFPW
XT5-XT6	KL-D Keylock FP, Giussani different keys	1SDA105112R1	KXTFKLDFPWGDIF
XT5-XT6	KL-S Keylock FP, Giussani same keys N.20005	1SDA105113R1	KXTFKLSFPWG20005
XT5-XT6	KL-D Keylock FP, Ronis 1228 different keys	1SDA105109R1	KXTFKLDFPWRDIF
XT5-XT6	KL-S Keylock FP, Ronis 1228 same keys Type A keys	1SDA105114R1	KXTFKLSFPWRA
XT5-XT6	KL_A Ronis Arrangement 1104B FP	1SDA105110R1	KXTFKLAFPWR1104
XT5-XT6	KL_A STI Arrangement FP	1SDA105111R1	KXTFKLAFPWSTI
XT7-XT7 M	KLP-A Bl. Racked in/out RonProf Kirk XT7-XT7 M 1st key	1SDA073834R1	ZE1KLPR
XT7-XT7 M	KLP-A Bl. Racked in/out RonProf Kirk XT7-XT7 M 2nd key	1SDA073835R1	ZE1KLPR-2
XT7-XT7 M	KLP-A Pos.lock Ronis-STI 1key	1SDA085737R1	
XT7-XT7 M	KLP-A Pos.lock Ronis-STI 2key	1SDA085738R1	
XT7-XT7 M	KLP-D Bl. Racked in/out XT7-XT7 M 1st key	1SDA073822R1	ZE1KLPD
XT7-XT7 M	KLP-D Bl. Racked in/out XT7-XT7 M 2nd key	1SDA073828R1	ZE1KLPD-2
XT7-XT7 M	KLP-S Bl. Racked in/out N.20005 XT7-XT7 M 1st key	1SDA073823R1	ZE1KLPS5
XT7-XT7 M	KLP-S Bl. Racked in/out N.20005 XT7-XT7 M 2nd key	1SDA073829R1	ZE1KLPS5-2
XT7-XT7 M	KLP-S Bl. Racked in/out N.20006 XT7-XT7 M 1st key	1SDA073824R1	ZE1KLPS6
XT7-XT7 M	KLP-S Bl. Racked in/out N.20006 XT7-XT7 M 2nd key	1SDA073830R1	ZE1KLPS6-2
XT7-XT7 M	KLP-S Bl. Racked in/out N.20007 XT7-XT7 M 1st key	1SDA073825R1	ZE1KLPS7
XT7-XT7 M	KLP-S Bl. Racked in/out N.20007 XT7-XT7 M 2nd key	1SDA073831R1	ZE1KLPS7-2
XT7-XT7 M	KLP-S Bl. Racked in/out N.20008 XT7-XT7 M 1st key	1SDA073826R1	ZE1KLPS8
XT7-XT7 M	KLP-S Bl. Racked in/out N.20008 XT7-XT7 M 2nd key	1SDA073832R1	ZE1KLPS8-2
XT7-XT7 M	KLP-S Bl. Racked in/out N.20009 XT7-XT7 M 1st key	1SDA073827R1	ZE1KLPS9
XT7-XT7 M	KLP-S Bl. Racked in/out N.20009 XT7-XT7 M 2nd key	1SDA073833R1	ZE1KLPS9-2
XT7-XT7 M	Suppl. locks in racked-out XT7-XT7 M	1SDA073838R1	ZE1SUP
XT7-XT7 M	PLP Bl. padlocks Racked in/out D=4/6/8mm	1SDA073840R1	ZE1PLP



Fixed padlock in the open position - PLL



Padlock in the open position - PLC



Removable padlock in the open position



Key lock on the circuit-breaker

**Circuit-breaker padlock**

Size	Type	Product ID	US/CA PN
XT1-XT3	PLL Removable lock with padlocks in open position	1SDA066588R1	KXTBPLLREM
XT1-XT3	PLL Fixed lock with padlocks in open position	1SDA066589R1	KXTBPLLOP
XT1-XT3	PLL Fixed lock with padlocks in open/closed position	1SDA066591R1	KXTBPLLOPCL
XT2-XT4	PLL Fixed lock with padlocks in open position	1SDA066590R1	KXTCPLLOP
XT2-XT4	PLL Fixed lock with padlocks in open/closed position	1SDA066592R1	KXTCPLLOPCL
XT5	PLL Removable lock with padlocks in open position	1SDA105100R1	KXT5PLLREM
XT5	PLL Fixed lock with padlocks in open position	1SDA105099R1	KXT5PLLOP
XT5	PLL Fixed lock with padlocks in open/closed position	1SDA105098R1	KXT5PLLOPCL
XT6	PLL Removable lock with padlocks in open position	1SDA105103R1	KXT6PLLREM
XT6	PLL Fixed lock with padlocks in open position	1SDA105102R1	KXT6PLLOP
XT6	PLL Fixed lock with padlocks in open/closed position	1SDA105101R1	KXT6PLLOPCL
XT7	PLL Fixed lock with padlocks in open position	1SDA105104R1	KXT7PLLOP
XT7 M	PLC Padlocks in open position D=4mm	1SDA073800R1	ZE1PLC4
XT7 M	PLC Padlocks in open position D=7mm	1SDA073801R1	ZE1PLC7
XT7 M	PLC Padlocks in open position D=8mm	1SDA073802R1	ZE1PLC8

**Keylock for circuit-breaker - KLC**

Size	Type	Product ID	US/CA PN
XT1	KLC Ronis key lock open, different keys, removable in open position	1SDA066593R1	KXT1KLCCBDIF
XT1	KLC Ronis key lock open, same Type A keys, removable in open position	1SDA066594R1	KXT1KLCCBA
XT1	KLC Ronis key lock open, same Type B keys, removable in open position	1SDA066595R1	KXT1KLCCBB
XT1	KLC Ronis key lock open, same Type C keys, removable in open position	1SDA066596R1	KXT1KLCCBC
XT1	KLC Ronis key lock open, same Type D keys, removable in open position	1SDA066597R1	KXT1KLCCBD
XT1	KLC Ronis key lock open, same keys, removable in both position	1SDA066598R1	KXT1KLCCBOPCL
XT3	KLC Ronis key lock open, different keys, removable in open position	1SDA066605R1	KXT3KLCCBDIF
XT3	KLC Ronis key lock open, same Type A keys, removable in open position	1SDA066606R1	KXT3KLCCBA
XT3	KLC Ronis key lock open, same Type B keys, removable in open position	1SDA066607R1	KXT3KLCCBB
XT3	KLC Ronis key lock open, same Type C keys, removable in open position	1SDA066608R1	KXT3KLCCBC
XT3	KLC Ronis key lock open, same Type D keys, removable in open position	1SDA066609R1	KXT3KLCCBD
XT3	KLC Ronis key lock open, same keys, removable in both position	1SDA066610R1	KXT3KLCCBOPCL
XT2-XT4	KLC Ronis key lock open, different keys, removable in open position	1SDA066599R1	KXTCKLCCBDIF
XT2-XT4	KLC Ronis key lock open, same Type A keys, removable in open position	1SDA066600R1	KXTCKLCCBA
XT2-XT4	KLC Ronis key lock open, same Type B keys, removable in open position	1SDA066601R1	KXTCKLCCBB
XT2-XT4	KLC Ronis key lock open, same Type C keys, removable in open position	1SDA066602R1	KXTCKLCCBC
XT2-XT4	KLC Ronis key lock open, same Type D keys, removable in open position	1SDA066603R1	KXTCKLCCBD
XT2-XT4	KLC Ronis key lock open, same keys, removable in both position	1SDA066604R1	KXTCKLCCBOPCL

# Ordering codes for accessories

## Safety and protection



—  
Keylock on the  
circuit-breaker

### Keylock for circuit-breaker - KLC

Size	Type	Product ID	US/CA PN
XT5-XT6	KLC Ronis key lock open, different keys, removable in open position	1SDA105066R1	KXTFKLCCBDIF
XT5-XT6	KLC Ronis key lock open, same Type A keys, removable in open position	1SDA105062R1	KXTFKLCCBA
XT5-XT6	KLC Ronis key lock open, same Type B keys, removable in open position	1SDA105063R1	KXTFKLCCBB
XT5-XT6	KLC Ronis key lock open, same Type C keys, removable in open position	1SDA105064R1	KXTFKLCCBC
XT5-XT6	KLC Ronis key lock open, same Type D keys, removable in open position	1SDA105065R1	KXTFKLCCBD
XT5-XT6	KLC Ronis key lock open, same keys, removable in both position	1SDA105061R1	KXTFKLCCBOPCL
XT5-XT6	KLC-A Kirk key lock	1SDA105067R1	KXTFKLCAKIRK
XT5-XT6	KLC-A Ronis 1104 key lock	1SDA105068R1	KXTFKLCA1104
XT5-XT6	KLC-A STI key lock	1SDA105069R1	KXTFKLCASTI
XT7	KLC Ronis key lock open, different keys, removable in open position	1SDA105075R1	KXT7KLCCBDIF
XT7	KLC Ronis key lock open, same Type A keys, removable in open position	1SDA105071R1	KXT7KLCCBA
XT7	KLC Ronis key lock open, same Type B keys, removable in open position	1SDA105072R1	KXT7KLCCBB
XT7	KLC Ronis key lock open, same Type C keys, removable in open position	1SDA105073R1	KXT7KLCCBC
XT7	KLC Ronis key lock open, same Type D keys, removable in open position	1SDA105074R1	KXT7KLCCBD
XT7	KLC Ronis key lock open, same keys, removable in both position	1SDA105070R1	KXT7KLCCBOPCL
XT7	KLC-A Kirk key lock	1SDA105076R1	KXT7KLCAKIRK
XT7	KLC-A Ronis 1104 key lock	1SDA105077R1	KXT7KLCA1104
XT7	KLC-A STI key lock	1SDA105078R1	KXT7KLCASTI
XT7	KLC-A Castell key lock	1SDA105149R1	KXT7KLCACASTL
XT7 M	KLC-D Key lock open	1SDA107494R1	KXTMKLCDOPEN
XT7 M	KLC-S Key lock open N.20005	1SDA107495R1	KXTMKLCS5
XT7 M	KLC-S Key lock open N.20006	1SDA107496R1	KXTMKLCS6
XT7 M	KLC-S Key lock open N.20007	1SDA107497R1	KXTMKLCS7
XT7 M	KLC-S Key lock open N.20008	1SDA107498R1	KXTMKLCS8
XT7 M	KLC-S Key lock open N.20009	1SDA107499R1	KXTMKLCS9
XT7 M	KLC-A Castell key lock open <sup>(1)</sup>	1SDA107500R1	KXTMKLCACASTL
XT7 M	KLC-A Kirk key lock open	1SDA101967R1	KXTMKLCAKIRK
XT7 M	KLC-A Ronis 1104 - STI key lock open	1SDA101968R1	KXTMKLCA1104STI

(1) Arrangement factory mounted only



—  
Key lock in open  
position - KLC



Key lock on the handle

**Keylock for the RH / FLD**

Size	Type	Product ID	US/CA PN
XT1...XT4	RHL Ronis key lock open, different keys – RHx/FLD	1SDA066617R1	KXTARHLDIF
XT1...XT4	RHL Ronis key lock open, same Type A keys – RHx/FLD	1SDA066618R1	KXTARHLA
XT1...XT4	RHL Ronis key lock open, same Type B keys - RHx/FLD	1SDA066619R1	KXTARHLB
XT1...XT4	RHL Ronis key lock open, same Type C keys - RHx/FLD	1SDA066620R1	KXTARHLC
XT1...XT4	RHL Ronis key lock open, same Type D keys - RHx/FLD	1SDA066621R1	KXTARHLD
XT1...XT4	RHL Ronis key lock open/closed, different keys - RHD	1SDA066622R1	KXTARHLOPCL
XT1...XT4	RHL Ronis key lock open/closed, different keys - FLD	1SDA069182R1	KXTCRHLFLD
XT5	RHL Ronis key lock open, different keys – RHx/FLD	1SDA105081R1	KXTFRHLDIF
XT5	RHL Ronis key lock open, same Type A keys – RHx/FLD	1SDA105082R1	KXTFRHLA
XT5	RHL Ronis key lock open, same Type B keys - RHx/FLD	1SDA105083R1	KXTFRHLB
XT5	RHL Ronis key lock open, same Type C keys - RHx/FLD	1SDA105084R1	KXTFRHLC
XT5	RHL Ronis key lock open, same Type D keys - RHx/FLD	1SDA105085R1	KXTRHLD
XT5	RHL Ronis key lock open/closed, different keys – RHD/FLD	1SDA105080R1	KXTFRHLLOPCL
XT6	RHL Ronis key lock open, different keys – FLD	1SDA105091R1	KXT7RHLDIF
XT6	RHL Ronis key lock open, same Type A keys – FLD	1SDA105086R1	KXT7RHLA
XT6	RHL Ronis key lock open, same Type B keys - FLD	1SDA105087R1	KXT7RHLB
XT6	RHL Ronis key lock open, same Type C keys - FLD	1SDA105088R1	KXT7RHLC
XT6	RHL Ronis key lock open, same Type D keys - FLD	1SDA105089R1	KXT7RHLD
XT6 - XT7	RHL Ronis key lock open, different keys – RHx	1SDA105091R1	KXT7RHLDIF
XT6 - XT7	RHL Ronis key lock open, same Type A keys – RHx	1SDA105086R1	KXT7RHLA
XT6 - XT7	RHL Ronis key lock open, same Type B keys - RHx	1SDA105087R1	KXT7RHLB
XT6 - XT7	RHL Ronis key lock open, same Type C keys - RHx	1SDA105088R1	KXT7RHLC
XT6 - XT7	RHL Ronis key lock open, same Type D keys - RHx	1SDA105089R1	KXT7RHLD

**Keylock on the panel door with RHE**

Size	Type	Product ID	US/CA PN
XT5...XT7	RHL Ronis key lock open/closed, different keys on the panel door	1SDA105079R1	KXTKLPNLDR

# Ordering codes for accessories

## Safety and protection



Key lock on the motor

### Keylock on the motor

Size	Type	Product ID	US/CA PN
XT1-XT3	MOL-D Ronis key lock open, different keys	1SDA066623R1	KXTBEMOLDIF
XT1-XT3	MOL-S Ronis key lock open, same Type A keys	1SDA066624R1	KXTBEMOLA
XT1-XT3	MOL-S Ronis key lock open, same Type B keys	1SDA066625R1	KXTBEMOLB
XT1-XT3	MOL-S Ronis key lock open, same Type C keys	1SDA066626R1	KXTBEMOLC
XT1-XT3	MOL-S Ronis key lock open, same Type D keys	1SDA066627R1	KXTBEMOLD
XT2-XT4	MOL-D Ronis key lock open, different keys	1SDA066629R1	KXTCEMOLDIF
XT2-XT4	MOL-S Ronis key lock open, same Type A keys	1SDA066630R1	KXTCEMOLA
XT2-XT4	MOL-S Ronis key lock open, same Type B keys	1SDA066631R1	KXTCEMOLB
XT2-XT4	MOL-S Ronis key lock open, same Type C keys	1SDA066632R1	KXTCEMOLC
XT2-XT4	MOL-S Ronis key lock open, same Type D keys	1SDA066633R1	KXTCEMOLD
XT2-XT4	MOL-M Key lock against manual operation	1SDA066634R1	KXTCEMOLMO
XT5-XT6	MOL-D Ronis key lock open, different keys	1SDA105092R1	KXTFMOLDIF
XT5-XT6	MOL-S Ronis key lock open, same Type A keys	1SDA105094R1	KXTFMOLA
XT5-XT6	MOL-S Ronis key lock open, same Type B keys	1SDA105095R1	KXTFMOLB
XT5-XT6	MOL-S Ronis key lock open, same Type C keys	1SDA105096R1	KXTFMOLC
XT5-XT6	MOL-S Ronis key lock open, same Type D keys	1SDA105097R1	KXTFMOLD
XT5-XT6	MOL-M Key lock against manual operation	1SDA105093R1	KXTFMOLMOP

### Sealable lock on thermal setting

Size	Type	Product ID	US/CA PN
XT1-XT3	Lock on thermal setting for TMD trip unit	1SDA066651R1	KXTAEAAASEALREL

### Protection device for opening and closing pushbuttons - PBC

Size	Type	Product ID	US/CA PN
XT7 M	PBC Prot. Pushbuttons AP/CH	1SDA073854R1	ZE1PBC
XT7 M	PBC Prot. Pushbuttons AP/CH D=4mm	1SDA073857R1	ZE1PBC8
XT7 M	PBC Prot. Pushbuttons AP/CH D=7mm	1SDA073856R1	ZE1PBC7
XT7 M	PBC Prot. Pushbuttons AP/CH D=8mm	1SDA073855R1	ZE1PBC4



Protection device for opening and closing pushbuttons - PBC

### Lock to prevent door opening when the circuit-breaker is in the closed position - DLC

Size	Type	Product ID	US/CA PN
XT7-XT7 M	DLC interlock direct door for fixed to wall	1SDA079779R1	ZE1DLCCDFW
XT7-XT7 M	DLC interlock direct door for fixed part withdrawable	1SDA079781R1	ZE1DLCCDFP
XT7-XT7 M	DLC interlock cable door for fixed part withdrawable	1SDA081034R1	ZE1DLCCDFP



Lock to prevent door opening when the circuit-breaker is in the closed position - DLC

## Flanges

### Flanges for circuit-breakers and frontal accessories



— Flange for circuit-breaker



— Flange for circuit-breaker for the withdrawable version



— Flange for circuit-breaker

Size	Type	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT1	Small flange for circuit-breaker	1SDA068657R1	KXTAEFLASMFP	1SDA068657R1	KXTAEFLASMFP
XT1	Large flange for circuit-breaker	1SDA068639R1	KXT1EFLAFP-3	1SDA068640R1	KXT1EFLAFP-4
XT1	Flange MOD	1SDA068648R1	KXTBEFLAMOD	1SDA068648R1	KXTBEFLAMOD
XT1	Flange for direct handle RHD	1SDA068651R1	KXTAEFLARHDFP	1SDA068651R1	KXTAEFLARHDFP
XT1	Flange for residual current RC Sel / Inst	1SDA068653R1	KXT1EFLARCFP-3	1SDA068654R1	KXT1EFLARCFP-4
XT2	Small flange for circuit-breaker	1SDA068657R1	KXTAEFLASMFP	1SDA068657R1	KXTAEFLASMFP
XT2	Large flange for circuit-breaker	1SDA068641R1	KXT2EFLAFP-3	1SDA068642R1	KXT2EFLAFP-4
XT2	Flange for MOE/MOE-E/FLD	1SDA068649R1	KXTCEFLAMOEFP	1SDA068649R1	KXTCEFLAMOEFP
XT2	Flange for MOE/MOE-E/FLD W	1SDA068650R1	KXTCEFLAMOEW	1SDA068650R1	KXTCEFLAMOEW
XT2	Flange for direct handle RHD	1SDA068651R1	KXTAEFLARHDFP	1SDA068651R1	KXTAEFLARHDFP
XT2	Flange for direct handle RHD W	1SDA068652R1	KXTCEFLARHDW	1SDA068652R1	KXTCEFLARHDW
XT2	Flange for residual current RC Sel			1SDA066647R1	KXT2EFLARCFP-4
XT2	Flange for residual current RC Sel W			1SDA066648R1	KXT2EFLARCW-4
XT3	Small flange for circuit-breaker	1SDA068657R1	KXTAEFLASMFP	1SDA068657R1	KXTAEFLASMFP
XT3	Large flange for circuit-breaker	1SDA068644R1	KXT3EFLAFP-3	1SDA068645R1	KXT3EFLAFP-4
XT3	Flange for MOD	1SDA068648R1	KXTBEFLAMOD	1SDA068648R1	KXTBEFLAMOD
XT3	Flange for direct handle RHD	1SDA068651R1	KXTAEFLARHDFP	1SDA068651R1	KXTAEFLARHDFP
XT3	Flange for residual current RC Sel/RC Inst	1SDA068655R1	KXT3EFLARCFP-3	1SDA068656R1	KXT3EFLARCFP-4
XT4	Small flange for circuit-breaker	1SDA068657R1	KXTAEFLASMFP	1SDA068657R1	KXTAEFLASMFP
XT4	Large flange for circuit-breaker	1SDA068646R1	KXT4EFLAFP-3	1SDA068647R1	KXT4EFLAFP-4
XT4	Flange for MOE/MOE-E/FLD	1SDA068649R1	KXTCEFLAMOEFP	1SDA068649R1	KXTCEFLAMOEFP
XT4	Flange for MOE/MOE-E/FLD W	1SDA068650R1	KXTCEFLAMOEW	1SDA068650R1	KXTCEFLAMOEW
XT4	Flange for direct handle RHD	1SDA068651R1	KXTAEFLARHDFP	1SDA068651R1	KXTAEFLARHDFP
XT4	Flange for direct handle RHD W	1SDA068652R1	KXTCEFLARHDW	1SDA068652R1	KXTCEFLARHDW
XT4	Flange for residual current RC Sel			1SDA066649R1	KXT4EFLARCFP-4
XT4	Flange for residual current RC Sel W			1SDA066650R1	KXT4EFLARCW-4
XT5	Flange for circuit-breaker	1SDA105139R1	KXT5FLASMFP	1SDA105139R1	KXT5FLASMFP
XT5	Flange for MOE/MOE-E/FLD/RHD	1SDA105137R1	KXT5FLALGFP	1SDA105137R1	KXT5FLALGFP
XT5	Flange for MOE/MOE-E/FLD/RHD W	1SDA105138R1	KXT5FLALGW	1SDA105138R1	KXT5FLALGW
XT5	Flange for residual current RC Sel			1SDA105135R1	KXT5FLARCFP-4
XT5	Flange for residual current RC Sel W			1SDA105136R1	KXT5FLARCW-4
XT6	Flange for circuit-breaker	1SDA105142R1	KXT6FLASMFP	1SDA105142R1	KXT6FLASMFP
XT6	Flange for MOE/FLD/RHD	1SDA105140R1	KXT6FLALGFP	1SDA105140R1	KXT6FLALGFP
XT6	Flange for MOE/FLD/RHD W	1SDA105141R1	KXT6FLALGW	1SDA105141R1	KXT6FLALGW
XT7	Flange for RHD	1SDA105143R1	KXT7FLAFP	1SDA105143R1	KXT7FLAFP
XT7-XT7 M	IP30 Flange XT7-XT7 M	1SDA073862R1	ZE1FLG30F	1SDA073862R1	ZE1FLG30F
XT7-XT7 M	IP30 Flange XT7-XT7 M W	1SDA073863R1	ZE1FLG30D	1SDA073863R1	ZE1FLG30D

# Ordering codes for accessories

## Interlocks and switching devices

### Automatic transfer devices

#### Rear mechanical interlock



Rear mechanical interlock - MIR-H



Plate for rear mechanical interlock

Size	Type	Product ID	US/CA PN
<b>XT1-XT2-XT3-XT4 chassis</b>			
XT1...XT4	MIR-H	1SDA066637R1	KXTAMIRHR
XT1...XT4	MIR-V	1SDA066638R1	KXTAMIRVR
XT1	Plate XT1 F	1SDA066639R1	KXT1MIRPLF
XT1	Plate XT1 P	1SDA066640R1	KXT1MIRPLP
XT2	Plate XT2 F	1SDA066641R1	KXT2MIRPLF
XT2	Plate XT2 P/W	1SDA066642R1	KXT2MIRPLPW
XT3	Plate XT3 F	1SDA066643R1	KXT3MIRPLF
XT3	Plate XT3 P	1SDA066644R1	KXT3MIRPLP
XT4	Plate XT4 F	1SDA066645R1	KXT4MIRPLF
XT4	Plate XT4 P/W	1SDA066646R1	KXT4MIRPLPW
XT4	Plate for XT4 F with XT5 MIR	1SDA105121R1	KXT4MIRFXT5
XT4	Plate for XT4 W/P with XT5 MIR	1SDA105125R1	KXT4MIRPWX5
<b>XT5 chassis</b>			
XT5	MIR-H	1SDA105117R1	KXT5MIRH
XT5	MIR-V	1SDA105119R1	KXT5MIRV
XT5	Plate XT5 F	1SDA105122R1	KXT5MIRF
XT5	Plate XT5 P/W 400A	1SDA105123R1	KXT5MIR400PW
XT5	Plate XT5 P/W 630A	1SDA105124R1	KXT5MIR600PW
XT5	Plate XT5 F for XT6 interlock	1SDA101988R1	KXT5MIRFXT6
XT5	Plate XT5 W/P 400 for XT6 interlock	1SDA101989R1	KXT5MIR400XT6
XT5	Plate XT5 W/P 630 for XT6 interlock	1SDA101990R1	KXT5MIR600XT6
<b>XT6 chassis</b>			
XT6	MIR-H	1SDA105118R1	KXT6MIRH
XT6	MIR-V	1SDA105120R1	KXT6MIRV
XT6	Plate XT6 F	1SDA105126R1	KXT6MIRF
XT6	Plate XT6 W	1SDA105127R1	KXT6MIRPW

Note: If the CB interlocked has a stored energy motor operator (MOE/MOE-E) a MOL-M key lock is mandatory

**Cable interlock**

Size	Type	Product ID	US/CA PN
XT7-XT7 M	Type A horizontal	1SDA073881R1	ZEACBLAHR
XT7-XT7 M	Type A vertical	1SDA073885R1	ZEACBLAVR
XT7-XT7 M	Support for mechanical interlock FP Type A	1SDA073896R1	ZE1SPCRDA
XT7-XT7 M	Support for mechanical interlock for fixed CB Type A - floor mounted	1SDA073893R1	ZE1SPA
XT7-XT7 M	Support for mechanical interlock for fixed CB Type A - wall mounted	1SDA073894R1	ZE1SPAFM
XT7-XT7 M	Type B, C, D horizontal	1SDA073882R1	ZEACBLBHR
XT7-XT7 M	Type B, C, D vertical	1SDA073886R1	ZE6CBLBVR
XT7-XT7 M	Support for mechanical interlock FP Type C	1SDA101985R1	KXT7INTCSUPF
XT7-XT7 M	Support for mechanical interlock for fixed CB Type C - floor mounted	1SDA101986R1	KXT7INTCSUPFLR
XT7-XT7 M	Support for mechanical interlock for fixed CB Type C - wall mounted	1SDA101987R1	KXT7INTCSUPWAL
XT7-XT7 M	Support for mechanical interlock FP Type B-D	1SDA105128R1	KXT7INTBDF
XT7-XT7 M	Support for mechanical interlock for fixed CB Type B-D - floor mounted	1SDA105129R1	KXT7INTBDFLR
XT7-XT7 M	Support for mechanical interlock for fixed CB Type B-D - wall mounted	1SDA105130R1	KXT7INTBDWAL

# Ordering codes for accessories

## Residual current devices

### Residual current devices

#### Residual current devices

Size	Type	3 poles		4 poles	
		Product ID	US/CA PN	Product ID	US/CA PN
XT1	RC Sel Low 200mm			1SDA067121R1	KXT1ERCSEL200-4
XT1	XT1 RC Inst	1SDA067122R1	KXT1ERCINST-3	1SDA067124R1	KXT1ERCINST-4
XT1	XT1 RC Sel	1SDA067123R1	KXT1ERCSEL-3	1SDA067125R1	KXT1ERCSEL-4
XT2	XT2 RC Sel			1SDA067126R1	KXT2ERCSEL-4
XT3	XT3 RC Inst	1SDA067127R1	KXT3ERCINST-3	1SDA067129R1	KXT3ERCINST-4
XT3	XT3 RC Sel	1SDA067128R1	KXT3ERCSEL-3	1SDA067130R1	KXT3ERCSEL-4
XT3	XT3 RC B-Type			1SDA067132R1	KXT3ERCB-4
XT4	XT4 RC Sel			1SDA067131R1	KXT4ERCSEL-4
XT5	XT5 RC Sel			1SDA105131R1	KXT5RCSEL-4
XT5	XT5 RC B-Type			1SDA118008R1	



RC Inst / RC Sel



RC Sel

#### Panel type residual current delay

Size	Type	Product ID	US/CA PN
XT1...XT7 M	RCQ020/A 115-230V AC	1SDA065979R1	KXTAERCQ230
XT1...XT7 M	RCQ020/A 415V AC	1SDA065980R1	KXTAERCQ415
XT1...XT7 M	RCQ020/P 110-690 V AC	1SDA069390R1	
XT1...XT7 M	Toroid closed Ø 60mm	1SDA037394R1	KXTTETOR60
XT1...XT7 M	Toroid closed Ø 110mm	1SDA037395R1	KXTTETOR110
XT1...XT7 M	Toroid closed Ø 185mm	1SDA050543R1	KXTTETOR185

Note: Opening coil and undervoltage coil to be ordered separately



Panel type residual current delay - RCQ020/A



Toroid

# Ordering codes for accessories

## Accessories for Ekip Dip trip units

### Connectivity

#### Internal module for Ekip C Dip LSI and Ekip C Dip LSI G

Size	Type	Fixed/Plug-in		Withdrawable	
		Product ID	US/CA PN	Product ID	US/CA PN
XT2-XT4	Ekip Com Modbus RTU Dip	1SDA122799R1	KXTCECOMFP	1SDA122800R1	KXTCECOMW

### Other modules

#### Connection kits

Size	Type	Fixed/Plug-in		Withdrawable	
		Product ID	US/CA PN	Product ID	US/CA PN
XT2-XT4	Kit of 24V DC auxiliary voltage for electronic trip units	1SDA066980R1	KXTCECAUXFP	1SDA066981R1	KXTCECAUXW
XT2-XT4	Kit for external neutral connection	1SDA066984R1	KXTCECNEFP	1SDA066985R1	KXTCECNEW
XT4	Kit for external neutral voltage connection for Ekip Dip Measuring	1SDA069651R1	KXT4ECNEFP	1SDA069652R1	KXT4ECNEW



Current sensor

### Current Sensor

#### Connection kits

Size	Type	Product ID	US/CA PN
XT2	CT External neutral 10A Ekip Dip	1SDA067211R1	KXT2ECT10
XT2	CT External neutral 25A Ekip Dip	1SDA067212R1	KXT2ECT25
XT2	CT External neutral 60A Ekip Dip	1SDA081983R1	KXT2CT60
XT2	CT External neutral 100A Ekip Dip	1SDA069143R1	KXT2ECT100
XT2	CT External neutral 125A Ekip Dip	1SDA081984R1	KXT2CT125
XT4	CT External neutral 40A Ekip Dip	1SDA066975R1	KXT4ECT40
XT4	CT External neutral 60A Ekip Dip	1SDA081985R1	KXT4CT60
XT4	CT External neutral 100A Ekip Dip	1SDA066977R1	KXT4ECT100
XT4	CT External neutral 150A Ekip Dip	1SDA081986R1	KXT4CT150
XT4	CT External neutral 225A Ekip Dip	1SDA081987R1	KXT4CT225
XT4	CT External neutral 250A Ekip Dip	1SDA066979R1	KXT4ECT250
XT5	CT External neutral 250A Ekip Dip	1SDA101966R1	KXT5CTUDIPA250
XT5	CT External neutral 300A Ekip Dip	1SDA105152R1	KXT5CTUDIPA300
XT5	CT External neutral 400A Ekip Dip	1SDA105154R1	KXT5CTUDIPA400
XT5	CT External neutral 600A Ekip Dip	1SDA105155R1	KXT5CTUDIPA600
XT6	CT External neutral 600A Ekip Dip	1SDA107671R1	KXT6CTUDIPA600
XT6	CT External neutral 800A Ekip Dip	1SDA105158R1	KXT6CTUDIPA800
XT6	CT External neutral 1000A Ekip Dip	1SDA105159R1	KXT6CTUDIPA1000
XT7-XT7 M	CS External neutral up to 1200A	1SDA082134R1	ZE1NCT

For XT2 and XT4 external neutral Dip version the connection cable must be ordered:  
 1SDA066984R1 for fixed/plug-in  
 1SDA066985R1 for withdrawable

# Ordering codes for accessories

## Accessories for Ekip Dip trip units

### Rating plug



Rating plug

Size	Type	Loose supply		Installed	
		Product ID	US/CA PN	Product ID	US/CA PN
<b>For trip units: Ekip Dip LS/I, Ekip Dip LIG, Ekip M Dip I, Ekip G Dip LS/I</b>					
XT7-XT7 M	Rating plug In=600 A XT7-XT7 M	1SDA107618R1	LXT7RP600ULB	1SDA107624R1	
XT7-XT7 M	Rating plug In=800 A XT7-XT7 M	1SDA102012R1	KXT7RP800ULB	1SDA102013R1	
XT7-XT7 M	Rating plug In=1000 A XT7-XT7 M	1SDA102015R1	KXT7RP1000ULB	1SDA102016R1	
XT7-XT7 M	Rating plug In=1200 A XT7-XT7 M	1SDA102017R1	KXT7RP1200ULB		
<b>For trip units: Ekip Dip LSI, Ekip Dip LSIG</b>					
XT7-XT7 M	Rating plug In=600 A XT7-XT7 M	1SDA107620R1	LXT7RP600ULA	1SDA107622R1	
XT7-XT7 M	Rating plug In=800 A XT7-XT7 M	1SDA102002R1	KXT7RP800ULA	1SDA102003R1	
XT7-XT7 M	Rating plug In=1000 A XT7-XT7 M	1SDA102005R1	KXT7RP1000ULA	1SDA102006R1	
XT7-XT7 M	Rating plug In=1200 A XT7-XT7 M	1SDA102007R1	KXT7RP1200ULA		

# Ordering codes for accessories

## Accessories for Ekip Touch trip units

### Ekip Cartridge



Ekip Cartridge

Size	Type	Product ID	US/CA PN
XT2-XT4-XT5	Ekip Cartridge 2 slots XT2-XT4-XT5	1SDA105203R1	KXTGCART2
XT2-XT4-XT5	Ekip Cartridge 4 slots XT2-XT4-XT5	1SDA105204R1	KXTGCART4

### Power Supply modules



Ekip Supply

Size	Type	Product ID	US/CA PN
XT2-XT4-XT5- XT7-XT7 M	Ekip Supply 110-240V AC/DC	1SDA074172R1	ZEAPWRS
XT2-XT4-XT5- XT7-XT7 M	Ekip Supply 24-48V DC	1SDA074173R1	ZEAPWRS D

### Connectivity Modules

#### Internal modules



Ekip COM

Size	Type	Fixed/Plug-in		Withdrawable	
		Product ID	US/CA PN	Product ID	US/CA PN
XT2-XT4	Ekip Com Ethernet	1SDA105173R1	KXTCCOMIENETIP	1SDA105173R1	KXTCCOMIENETIP
XT2-XT4	Ekip Com Hub	1SDA105160R1	KXTCCOMIHUB	1SDA105160R1	KXTCCOMIHUB
XT2-XT4	Ekip Com IEC61850	1SDA105174R1	KXTCCOMIIEC61850	1SDA105174R1	KXTCCOMIIEC61850
XT2-XT4	Slim Ekip Com RS-485	1SDA105175R1	KXTCCOMIMBRS	1SDA105176R1	KXTCCOMIMBRS
XT2-XT4	Ekip Com Modbus TCP	1SDA105177R1	KXTCCOMIMBTCP	1SDA105177R1	KXTCCOMIMBTCP
XT2-XT4	Ekip Com Profinet	1SDA105180R1	KXTCCOMIPFNET	1SDA105180R1	KXTCCOMIPFNET
XT2-XT4	Ekip Link	1SDA105197R1	KXTCCOMILINK	1SDA105197R1	KXTCCOMILINK
XT2-XT4	Ekip Com STA Modbus TCP	1SDA105183R1	KXTCCOMIMBTCP-STA	1SDA105184R1	KXTCCOMWMBTCP-STA
XT2-XT4	Ekip Com STA Modbus RTU	1SDA105181R1	KXTCCOMIMBRS-STA	1SDA105182R1	KXTCCOMWMBRS-STA
XT5	Ekip Com Ethernet	1SDA105185R1	KXT5COMIENETIP	1SDA105185R1	KXT5COMIENETIP
XT5	Ekip Com Hub	1SDA105161R1	KXT5COMIHUB	1SDA105161R1	KXT5COMIHUB
XT5	Ekip Com IEC61850	1SDA105186R1	KXT5COMIIEC61850	1SDA105186R1	KXT5COMIIEC61850
XT5	Ekip Com Modbus RTU	1SDA105187R1	KXT5COMIMBRS	1SDA105188R1	KXT5COMIMBRS
XT5	Ekip Com Modbus TCP	1SDA105189R1	KXT5COMIMBTCP	1SDA105189R1	KXT5COMIMBTCP
XT5	Ekip Com Profinet	1SDA105192R1	KXT5COMIPFNET	1SDA105192R1	KXT5COMIPFNET
XT5	Ekip Link	1SDA105198R1	KXT5COMILINK	1SDA105198R1	KXT5COMILINK
XT5	Ekip Com STA Modbus TCP	1SDA105195R1	KXT5COMIMBTCP-STA	1SDA105196R1	KXT5COMWMBTCP-STA
XT5	Ekip Com STA Modbus RTU	1SDA105193R1	KXT5COMIMBRS-STA	1SDA105194R1	KXT5COMWMBRS-STA

# Ordering codes for accessories

## Accessories for Ekip Touch trip units



Ekip Link

### Ekip Cartridge (XT2-XT4-XT5) and terminal box (XT7-XT7 M) modules

Size	Type	Product ID	US/CA PN
XT2-XT4-XT5-XT7-XT7 M	Ekip Com Modbus RS-485 Tmax XT	1SDA105166R1	KXTTCOMEMBRS
XT2-XT4-XT5-XT7-XT7 M	Ekip Com Modbus TCP Tmax XT	1SDA105167R1	KXTTCOMEMBTCP
XT2-XT4-XT5-XT7-XT7 M	Ekip Com Profibus Tmax XT	1SDA105170R1	KXTTCOMEMBRS
XT2-XT4-XT5-XT7-XT7 M	Ekip Com Profinet Tmax XT	1SDA105171R1	KXTTCOMEMBTCP
XT2-XT4-XT5-XT7-XT7 M	Ekip Com Devicenet Tmax XT	1SDA105162R1	KXTTCOMEDNET
XT2-XT4-XT5-XT7-XT7 M	Ekip Com Ethernet/IP Tmax XT	1SDA105163R1	KXTTCOMEENETIP
XT2-XT4-XT5-XT7-XT7 M	Ekip Com IEC61850 Tmax XT	1SDA105165R1	KXTTCOMEIEC61850
XT2-XT4-XT5-XT7-XT7 M	Ekip Link Tmax XT	1SDA105172R1	KXTTCOMELINK
XT2-XT4-XT5-XT7-XT7 M	Ekip Com Hub Tmax XT	1SDA105164R1	KXTTCOMEHUB
XT2-XT4-XT5-XT7-XT7 M	Ekip Com R Modbus RS-485 Tmax XT	1SDA074157R1	ZEAMOD485R
XT2-XT4-XT5-XT7-XT7 M	Ekip Com R Modbus TCP	1SDA107402R1	KXTTCOMEMBTCP-R
XT2-XT4-XT5-XT7-XT7 M	Ekip Com R Profibus	1SDA074159R1	ZEAPROFIBUSR
XT2-XT4-XT5-XT7-XT7 M	Ekip Com R Profinet	1SDA107403R1	KXTTCOMEPPNET-R
XT2-XT4-XT5-XT7-XT7 M	Ekip Com R DeviceNet™	1SDA074161R1	ZEADEVICENETR
XT2-XT4-XT5-XT7-XT7 M	Ekip Com R EtherNet/IP™	1SDA107404R1	KXTTCOMEENETIP-R
XT2-XT4-XT5-XT7-XT7 M	Ekip Com R IEC61850	1SDA107405R1	KXTTCOMEIEC61850-R
XT7 - XT7 M <sup>(1)</sup>	Ekip Com Actuator	1SDA074166R1	ZEACACT

(1) For XT7 toggle version Ekip Com Actuator can be used for opening only.

## Signaling Modules



Ekip 2K Signalling



Ekip 10K Signalling



Ekip Measuring



Ekip Signalling 1K-1 XT5

### Internal modules

Size	Type	Product ID	US/CA PN	Product ID	US/CA PN
XT5	Ekip Signalling 1K-1 XT5 INT	1SDA105201R1	KXT5EKIP1KFP	1SDA105202R1	KXT5EKIP1KW

### External modules

Size	Type	Product ID	US/CA PN
XT2-XT4-XT5-XT7-XT7 M	Ekip Signalling 10K	1SDA074171R1	ZEA10K
XT2-XT4-XT5-XT7-XT7 M	Ekip Signalling 10K Modbus TCP	1SDA082485R1	ZEASIGMBTCP

### Cartridge and XT7 modules

Size	Type	Product ID	US/CA PN
XT2-XT4-XT5-XT7-XT7 M	Ekip Signalling 2K-1	1SDA074167R1	ZEA2K1
XT2-XT4-XT5-XT7-XT7 M	Ekip Signalling 2K-2	1SDA074168R1	ZEA2K2
XT2-XT4-XT5-XT7-XT7 M	RELT- Ekip 2k-3	1SDA074169R1	ZEB2K3
XT2-XT4-XT5-XT7-XT7 M	Ekip Signalling 3T-1 AI - Temp PT1000	1SDA085693R1	ZEA3T1
XT2-XT4-XT5-XT7-XT7 M	Ekip Signalling 3T-2 AI - Temp PT1000	1SDA085694R1	ZEA3T2

## Other modules

### Measuring modules

Size	Type	Product ID	US/CA PN
XT7-XT7 M	Ekip Measuring module	1SDA105210R1	KXT7EKIPM
XT7-XT7 M	Voltage socket for neutral on right side L1 L2 L3 N	1SDA076244R1	ZE1VSNRT

### Synchrocheck module

Size	Type	Product ID	US/CA PN
XT2-XT4-XT5-XT7-XT7 M	Ekip Synchrocheck	1SDA074183R1	ZEASYNCHK

### Contacteur interface module for Ekip M Touch LRIU trip unit

Size	Type	Product ID	US/CA PN
XT2-XT4-XT5-XT7-XT7 M	Ekip CI	1SDA105205R1	KXTTEKIPCI

# Ordering codes for accessories

## Accessories for Ekip Touch trip units

### External 3T signaling probe module

Size	Type	Product ID	US/CA PN
XT2-XT4-XT5- XT7-XT7 M	External probe PT1000 3mt	1SDA085695R1	ZEAA3TPR

### Slim Micro I/O Modules

Size	Type	Fixed/ Plug-in	Withdrawable
		Product ID	Product ID
XT2-XT4	Slim Micro I/O	1SDA115512R1	1SDA115513R1
XT2-XT4	Cable 24V/IntBus for withdrawable Slim Micro I/O		1SDA117917R1*

\*1SDA117917R1 already included in 1SDA115513R1.

In case of orders of loose trip units for withdrawable applications, 1SDA117917R1 is needed for connection through the module with the 24V/IntBus.

### Options for Ekip electrical trip units

Size	Type	Product ID	US/CA PN
XT7-XT7 M	Upper internal installed voltage outlets	1SDA074216R1	
XT7-XT7 M	External installed voltage outlets	1SDA074217R1	
XT7-XT7 M	Arrangement for cables with lower internal voltage outlets	1SDA074213R1	
XT7-XT7 M	Arrangement for cables with upper internal voltage outlets	1SDA074214R1	
XT7-XT7 M	Arrangement for cables with external voltage outlets	1SDA074215R1	
XT7-XT7 M	RTC Ekip 24V	1SDA073772R1	ZE1RTCDE
XT7-XT7 M	AUP Ekip auxiliary position contact	1SDA073768R1	ZEAAUPE
XT2-XT4-XT5- XT7-XT7 M	No Bluetooth connectivity	1SDA114808R1	

### Battery

Size	Type	Product ID	US/CA PN
XT2-XT4-XT5- XT7-XT7 M	Spare battery for Ekip Touch/Hi-Touch trip units	1SDA074193R1	ZEAEKIPBAT



Ekip RTC contacts

### Connection kits

Size	Type	Fixed		Plug-in		Withdrawable	
		Product ID	US/CA PN	Product ID	US/CA PN	Product ID	US/CA PN
XT2-XT4	Side connector 24V DC & internal bus cable	1SDA115573R1		1SDA115573R1			
XT2-XT4	Side connector 24V DC & internal bus cable, selectivity cable, external neutral cable	1SDA115574R1		1SDA115574R1		1SDA115575R1	
XT2-XT4	Kit Ext NE C+V cables for Ekip Touch <sup>(1)</sup>	1SDA115577R1		1SDA115577R1			
XT2-XT4	Kit zone selectivity for Ekip Touch <sup>(1)</sup>	1SDA115578R1		1SDA115578R1			
XT5	Connection kit 24Vdc and Internal Bus					1SDA105207R1	KXT5TRIPCON24W
XT5	Kit Ext NE V sensor for Ekip Touch: external neutral voltage only connection	1SDA107391R1	KXT5EXTN	1SDA107395R1	KXT5EXTNTV	1SDA107395R1	
XT5	Kit Ext NE C+V sensor for Ekip Touch: external neutral current and voltage connection			1SDA107393R1	KXT5EXTNTVC	1SDA107393R1	KXT5EXTNTVC
XT5	Kit Ext NE C sensor for Ekip Dip: external neutral current only connection			1SDA107396R1	KXT5EXTNDIP	1SDA107396R1	KXT5EXTNDIP
XT5	Kit zone selectivity for Ekip Touch	1SDA113125R1	KXT5ZSITF	1SDA107397R1	KXT5ZSITPW	1SDA107397R1	KXT5ZSITPW
XT6	Kit Ext NE C sensor for Ekip Dip: external neutral current only connection			1SDA118145R1		1SDA118145R1	
XT2-XT4-XT5	Terminal block DIN-RAIL with 5 positions	1SDA101976R1	KXTGTB5	1SDA101976R1	KXTGTB5	1SDA101976R1	KXTGTB5
XT2-XT4-XT5	Terminal block DIN-RAIL with 10 positions	1SDA101977R1	KXTGTB10	1SDA101977R1	KXTGTB10	1SDA101977R1	KXTGTB10

(1) If the withdrawable version is needed, just place the order using code 1SDA115575R1.

## Advanced functionality

### Packages

Size	Type	Product ID
XT2-XT4	Measuring package	1SDA105208R1
XT2-XT4	Frequency Protection	1SDA105215R1
XT2-XT4	Voltages Protection	1SDA105211R1
XT2-XT4	Advanced Voltages Protection	1SDA105213R1
XT2-XT4	Frequency Protection	1SDA105215R1
XT2-XT4	Power Protection	1SDA105217R1
XT2-XT4	ROCOF Protection	1SDA105219R1
XT2-XT4	Adaptive Protection	1SDA105221R1
XT2-XT4	Datalogger	1SDA105223R1
XT2-XT4	Network Analyzer	1SDA105225R1
XT5- XT7-XT7 M	Measuring package	1SDA105209R1
XT5- XT7-XT7 M	Frequency Protection	1SDA105216R1
XT5- XT7-XT7 M	Voltages Protection	1SDA105212R1
XT5- XT7-XT7 M	Advanced Voltages Protection	1SDA105214R1
XT5- XT7-XT7 M	Power Protection	1SDA105218R1
XT5- XT7-XT7 M	ROCOF Protection	1SDA105220R1
XT5- XT7-XT7 M	Adaptive Protection	1SDA105222R1
XT5- XT7-XT7 M	Datalogger	1SDA105224R1
XT5- XT7-XT7 M	Network Analyzer	1SDA105226R1

### Solutions

Size	Type	Product ID
XT2-XT4	Power Controller	1SDA116196R1
XT2-XT4	Adaptive Load Shedding	1SDA116195R1
XT2-XT4	Embedded ATS Main-Gen <sup>(1)</sup>	1SDA116200R1
XT2-XT4	Embedded ATS Main-Tie-Main <sup>(1)</sup>	1SDA116199R1
XT5	Embedded ATS Main-Tie-Main <sup>(1)</sup>	1SDA116201R1
XT5- XT7-XT7 M	Power Controller	1SDA116198R1
XT5- XT7-XT7 M	Adaptive Load Shedding	1SDA116197R1
XT5-XT7 M	Embedded ATS Main-Gen <sup>(1)</sup>	1SDA116202R1

(1) Embedded ATS can be ordered only via ABB Ability Marketplace™

# Ordering codes for accessories

## Accessories for Ekip Touch trip units

### Metering functionality

Size	Type	Product ID
XT2-XT4	Class 1 Power & Energy Metering <sup>(1)</sup>	1SDA107492R1
XT5-XT7	Class 1 Power & Energy Metering <sup>(1)</sup>	1SDA107493R1

(1) Not field installable.

### Display and supervision systems

#### Display and supervision systems

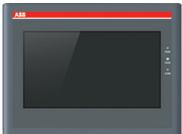
Size	Type	Product ID	US/CA PN
XT2-XT4-XT5-XT7-XT7 M	Ekip Multimeter display on front of switchboard	1SDA074192R1	ZEAMM



Ekip Multimeter Display

#### Lite Panel

Size	Type	Product ID
XT2-XT4-XT5-XT7-XT7 M	Lite Panel	1SDA114809R1



Lite Panel



Current sensor

## Current Sensor

### Current sensor for neutral conductor outside the circuit-breaker

Size	Type	Product ID	US/CA PN
XT2	CS External neutral $I_n \leq 60A$ Ekip Touch with voltage	1SDA107406R1	KXT2CTUTCHV60
XT2	CS External neutral $I_n \geq 100A$ Ekip Touch with voltage	1SDA107407R1	KXT2CTUTCHV100
XT4	CS External neutral Ekip Touch with voltage	1SDA107408R1	KXT4CTUTCHV
XT5	CS External neutral Ekip Touch with voltage	1SDA107409R1	KXT5CTUTCHV
XT7-XT7 M	CS External neutral up to 1200A	1SDA082134R1	ZE1NCT



Differential toroid

### Homopolar toroid for the earthing conductor of the main power supply

Size	Type	Product ID	US/CA PN
XT7-XT7 M	Homoplar toroid 100A	1SDA073743R1	ZEHT100
XT7-XT7 M	Homoplar toroid 250A	1SDA076248R1	ZEHT250
XT7-XT7 M	Homoplar toroid 400A	1SDA076249R1	ZEHT400
XT7-XT7 M	Homoplar toroid 800A	1SDA076250R1	ZEHT800
XT7-XT7 M	Toroid RC 3p	1SDA073741R1	ZE12RCT1

### Modified differential ground fault terminal

Size	Type	Product ID	US/CA PN
XT7-XT7 M	MDGF terminal for fixed circuit-breaker *	1SDA073743R1	ZEHT100
XT7-XT7 M	MDGF terminal for withdrawable circuit-breaker *	1SDA073741R1	ZE12RCT1

\* External phase current sensor and external summing current transformer must be order separately

## Rating plug



Rating plug

Size	Type	Loose supply		Installed	
		Product ID	US/CA PN	Product ID	US/CA PN
XT5	Rating plug $I_n=250A$	1SDA101992R1	KXT5RP250UL		
XT5	Rating plug $I_n=300A$	1SDA101993R1	KXT5RP300UL		
XT5	Rating plug $I_n=400A$	1SDA101996R1	KXT5RP400UL		
XT5	Rating plug $I_n=500A$	1SDA101998R1	KXT5RP500UL		
XT5	Rating plug $I_n=600A$	1SDA101999R1	KXT5RP600UL		
XT7-XT7 M	Rating plug $I_n=600A$ XT7-XT7 M	1SDA107620R1	LXT7RP600ULA	1SDA107622R1	
XT7-XT7 M	Rating plug $I_n=800A$ XT7-XT7 M	1SDA102002R1	KXT7RP800ULA	1SDA102003R1	
XT7-XT7 M	Rating plug $I_n=1000A$ XT7-XT7 M	1SDA102005R1	KXT7RP1000ULA	1SDA102006R1	
XT7-XT7 M	Rating plug $I_n=1200A$ XT7-XT7 M	1SDA102007R1	KXT7RP1200ULA		

# Ordering codes for accessories

## Other accessories for trip units

### Test and configuration

#### Test and configuration

Size	Type	Product ID	US/CA PN
XT2-XT4-XT5- XT6-XT7-XT7 M	Ekip TT - Trip test unit	1SDA066988R1	ZEAEKPTT
XT2-XT4-XT5- XT7-XT7 M	Ekip Programming	1SDA076154R1	ZEAEKPPGM
XT2-XT4-XT5- XT6-XT7-XT7 M	Ekip T&P - Programming and test unit	1SDA066989R1	ZEAEKPTP

# Further documentation

## SACE Tmax XT – Break new ground

Landing page The SACE Tmax XT series of Moulded Case Circuit Breakers (MCCBs) are designed to maximize ease of use, integration and connectivity while reliably delivering safety and quality. Rather than just offering standalone protection, they are seen as key elements of the system that give you complete flexibility, extreme breaking capabilities, and reliable performance under pressure. With seven different sizes and protection features of up to 1600A there's a solution for every purpose.

<https://new.abb.com/low-voltage/products/circuit-breakers/xt>

## ABB e-Configure

Product and application configuration tool that gives the integration and availability of a range of processes that make configuring and ordering solutions simpler and quicker. Saving valuable time on the configuration.

<https://econfigure.xe.abb.com/global/#/selector/9AAC167301>  
<https://lowvoltage-configurator.tnb.com/configurator/#/selector>

## SOC - Selected Optimized Coordination

The tool to find information about:

- Motor protection: coordination tables for motor starting and protection selection according to IEC standard or UL Combination Motor Controller (CMC)
- Selectivity: coordination tables between short-circuit protection devices
- Back-up: coordination tables between short-circuit protection devices

- Other devices protection: coordination tables for the protection of switch-disconnector and other devices by short-circuit protection devices
- UL Component rating: short-circuit current rating of UL listed components

<https://www.lowvoltage-tools.abb.com/soc/>

## Drawings Selector

Thanks to this selector it becomes easy to find and download the desired 2D and 3D for SACE Tmax XT circuit-breakers.

<https://new.abb.com/low-voltage/products/circuit-breakers/xt/drawings-selector---tmax-xt>

## Operation and maintenance manual for Ekip Touch Trip Units

This manual describes the technical characteristics of the Ekip Touch Trip units installed on SACE Tmax XT circuit-breakers, among which: general overview; management operations: putting into service, maintenance, troubleshooting; protection and parameters settings; accessories

- XT7 – XT7 M : <https://search.abb.com/library/Download.aspx?DocumentID=1S-DH001821A1002&LanguageCode=en&DocumentPartId=&Action=Launch>
- XT5 : <https://search.abb.com/library/Download.aspx?DocumentID=1SDH002039A1002&LanguageCode=en&DocumentPartId=&Action=Launch>
- XT2 – XT4 : <https://search.abb.com/library/Download.aspx?DocumentID=1S-DH002031A1002&LanguageCode=en&DocumentPartId=&Action=Launch>

# Further documentation

## Communication system interfaces

The documents refer to the communication interface available with Tmax XT circuit breaker.

The aim of this document is to indicate the registers addresses of all measures, parameters, and in-

formation available on Tmax XT with external and internal communication modules, connected to Ekip Touch trip unit, or with Stand Alone modules, available to take some CB information without a connection to a trip unit.

Circuit Breaker	Trip unit Type	Module	Protocol	System Interface
XT2-XT4	Switch disconnecter	Ekip Com STA	Modbus RTU	<a href="#">1SDH002313A1101</a>
	Thermomag		Modbus TCP	<a href="#">1SDH002031A1101</a>
	Ekip Dip	Ekip Com Dip	Modbus RTU	<a href="#">1SDH002313A1101</a>
	Ekip C Dip		Modbus RTU	<a href="#">1SDH002313A1101</a>
	Ekip Dip Measuring			
XT5	Ekip Touch / Hi-Touch	Ekip Com	Modbus RTU Modbus TCP Profinet Ethernet/IP IEC61850 DeviceNet Profibus-DP	<a href="#">1SDH002031A1101</a>
	Switch disconnecter	Ekip Com STA	Modbus RTU	<a href="#">1SDH002031A1101</a>
Thermomag	Modbus TCP		<a href="#">1SDH002031A1101</a>	
	Ekip Dip			
XT7-XT7 M	Ekip Touch / Hi-Touch	Ekip Com	Modbus RTU Modbus TCP Profinet Ethernet/IP IEC61850 DeviceNet Profibus-DP	<a href="#">1SDH002031A1101</a>
	Switch disconnecter	-	-	-
	Ekip Dip			

## Trip Unit Simulator

This simulator will allow you to explore the interface, make a configuration, display the signals, and conduct an operating simulation. You can select the required protection trip unit either directly or by pre-selecting the circuit-breaker in question.

<https://new.abb.com/low-voltage/products/circuit-breakers/trip-unit-simulator>

## Connect Partner Hub

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<https://partnerhub.connect.abb.com/>





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[new.abb.com/low-voltage/products/circuit-breakers/xt](https://new.abb.com/low-voltage/products/circuit-breakers/xt)



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