DATASHEET - FAZ-B10/2



Miniature circuit breaker (MCB), 10A, 2p, B-Char, AC

Powering Business Worldwide*

Part no. FAZ-B10/2
Catalog No. 278730
Eaton Catalog No. FAZ-B10/2
EL-Nummer 0001695111
(Norway)

Similar to illustration

Technical data

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Rated operational voltage Part	Electrical			
	Standards			
Same by College according to UL V DC 800 (per pole) Stated working according to UL Un V AC 800/7277 Stated switching capacity according to UL DECEN 80987-2 kA 10 (UL0777) Stated switching capacity according to IEC/EN 80987-2 (max operational voltage according to IEC/EN 80987-2 (max operational voltage) I _{CC} KA 10 Stated switching capacity according to IEC/EN 80988-1 Un VAC 415 Stated sonvice short-circuit breaking capacity according to IEC/EN 80988-1 I _{CC} KA 10 Stated sonvice short-circuit breaking capacity according to IEC/EN 80988-1 I _{CC} KA 10 Stated sonvice short-circuit breaking capacity according to IEC/EN 80988-1 I _{CC} KA 10 Stated sonvice short-circuit breaking capacity according to IEC/EN 80988-1 I _{CC} KA 10 Stated sonvice short-circuit breaking capacity according to IEC/EN 80988-1 I _{CC} KA 25 Stated sonvice short-circuit breaking capacity according to IEC/EN 80988-1 I _{CC} X 25 State sonvice short-circuit breaking capacity according to IEC/EN 80988-1 I _{CC} X 25 State sonvice short-circui	Rated operational voltage	U _e	V	
Rated voltage according to UL V. AC 4807/277 Rated switching capacity acc. to IEC/EN 60947-2 Jeu A.A 15 Area king capacity according to UL V. AC 40 40 Max operational voltage according to IEC/EN 60947-2 V. AC 40 Rated switching capacity according to IEC/EN 60947-2 (max operational voltage) I. Bu V. AC 41 Rated services short-circuit breaking capacity according to IEC/EN 60987-1 Un V.AC 415 Rated voltage according to IEC/EN 60988-1 I. Bu V. AC 415 Rated services short-circuit breaking capacity according to IEC/EN 60988-1 I. Bu V. AC 415 Rated services short-circuit breaking capacity according to IEC/EN 60988-1 I. Bu 7.5 K. A. Rated services short-circuit breaking capacity according to IEC/EN 60988-1 I. Bu 7.5 K. A. Rated services short-circuit breaking capacity according to IEC/EN 60988-1 I. Bu 7.5 K. A. 1. Bu		U _e	V AC	240/415
Asted switching capacity according to IEC/EN 60947-2 About Spraking Capacity according to IEC/EN 60947-2 About Spraking Capacity according to IEC/EN 60948-1			V DC	60 (per pole)
Streaking capacity according to UE. Max operational voltage according to IEC/EN 60947-2 Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage) Rated voltage according to IEC/EN 60987-2 (max operational voltage) Rated voltage according to IEC/EN 60987-2 (max operational voltage) Rated voltage according to IEC/EN 60988-1 Rated service short-circuit breaking capacity according to IEC/EN 60988-1 Rated service short-circuit breaking capacity according to IEC/EN 60988-1 Rated service short-circuit breaking capacity according to IEC/EN 60988-1 Rated service short-circuit breaking capacity according to IEC/EN 60988-1 Rated service short-circuit breaking capacity according to IEC/EN 60988-1 Rated service short-circuit breaking capacity according to IEC/EN 60988-1 Rated service short-circuit breaking capacity according to IEC/EN 60988-1 Rated service short-circuit breaking capacity according to IEC/EN 60988-1 Rated service short-circuit breaking capacity according to IEC/EN 60988-1 Rated service short-circuit breaking capacity according to IEC/EN 60988-1 Rated service short-circuit breaking capacity according to IEC/EN 60988-1 Rated service short-circuit breaking capacity according to IEC/EN 60988-1 Rated services short-circuit breaking capacity according to IEC/EN 60988-1 Rated services short-circuit breaking capacity according to IEC/EN 60988-1 Rated services short-circuit breaking capacity according to IEC/EN 60988-1 Rated services short-circuit breaking capacity according to IEC/EN 60988-1 Rated services short-circuit breaking capacity according to IEC/EN 60988-1 Rated services short-circuit breaking capacity according to IEC/EN 60988-1 Rated services short-circuit breaking capacity according to IEC/EN 60988-1 Rated services short-circuit breaking capacity according to IEC/EN 60988-1 Rated services short-circuit breaking capacity according to IEC/EN 60988-1 Rated services short-circuit breaking capacity according to IEC/EN 60988-1 Rated services	Rated voltage according to UL	Un	V AC	480Y/277
Nax operational voltage a coording to IEC/EN 60947-2 Rated switching capacity according to IEC/EN 60947-2 (max operational voltage) Poperational voltage) Rated switching capacity according to IEC/EN 60947-2 (max operational voltage) Poperational voltage) Rated switching capacity according to IEC/EN 6098-1 Rated switching capacit	Rated switching capacity acc. to IEC/EN 60947-2	I _{cu}	kA	15
Sated switching capacity according to IEC/EN 60947-2 (max operational voltage) Related switching capacity according to IEC/EN 60947-2 (max operational voltage) Rated switching capacity according to IEC/EN 60898-1 Rated switching capacity accord	Breaking capacity according to UL		kA	10 (UL1077)
Asted service short-circuit breaking capacity according to IEC/EN 6098-1 Asted voltage according to IEC/EN 60898-1 Asted switching capacity according to IEC/EN 60915 top-hat rail Asted switching capacity according to IEC/EN 60915 top-hat rail Asted switching capacity according to IEC/EN 60915 top-hat rail Asted switching capacity according to IEC/EN 60915 top-hat rail Asted Switching capacity according to IEC/EN 60915 top-hat rail Asted Switching capacity according to IEC/EN 60915 top-hat rail Asted Switching capacity according to IEC/EN 60915 top-hat rail Asted Switching capacity according to IEC/EN 60915 top-hat rail Asted Switching capacity according to IEC/EN 60915 top-hat rail Asted Switching capacity according to IEC/EN 60915 top-hat rail Asted Switching capacity according to IEC/EN 60915 top-hat rail Asted Switching capacity according to IEC/EN 60915 top-hat rail Asted Switching capacity according to IEC/EN 60915 top-hat rail Asted Switching capacity according to IEC/EN 60915 top-hat rail Asted Switching capacity acc	Max operational voltage according to IEC/EN 60947-2		V AC	440
Seared voltage according to IEC/EN 60988-1 Alated switching capacity according to IEC/EN 60988-1 Is a Co. D. K. S. Z. A gl/GS A g	Rated switching capacity according to IEC/EN 60947-2 (max operational voltage)	I _{cu}	kA	10
Asted switching capacity according to IEC/EN 60898-1 los 7.5 kA Apperational switching capacity according to IEC/EN 60898-1 los 7.5 kA Apperational switching capacity according to IEC/EN 60898-1 los 7.5 kA Apperational switching capacity according to IEC/EN 60898-1 los 7.5 kA Apperational switching capacity according to IEC/EN 60898-1 los 7.5 kA Apperational switching capacity according to IEC/EN 60898-1 los 7.5 kA Apperational switching capacity according to IEC/EN 60898-1 los 7.5 kA Apperational switching capacity according to IEC/EN 60898-1 los 7.5 kA Apperational formation according to IEC/EN 60898-1 los 7.5 kA Apperational switching capacity according to IEC/EN 60898-1 los 7.5 kA Apperational formation according to IEC/EN 60898-1 los 7.5 kA Apperational formation according to IEC/EN 60898-1 los 7.5 kA Apperational formation according to IEC/EN 60898-1 los 7.5 kA Apperational formation according to IEC/EN 60898-1 los 7.5 kA Apperational formation according to IEC/EN 60898-1 los 7.5 kB Apperational formation according to IEC/EN 60898-1 los 7.5 kB Apperational formation according to IEC/EN 60898-1 los 7.5 kB Apperational formation according to IEC/EN 60898-1 los 7.5 kB Apperational formation according to IEC/EN 60898-1 los 7.5 kB Apperational formation according to IEC/EN 60898-1 los 7.5 kB Apperational formation according to IEC/EN 60898-1 los 7.5 kB Apperational formation according to IEC/EN 60898-1 los 7.5 kB Apperational formation according to IEC/EN 60898-1 los 7.5 kB Apperational formation according to IEC/EN 60898-1 los 7.5 kB Apperational formation according to IEC/EN 60898-1 los 7.5 kB Apperational formation according to IEC/EN 60898-1 los 7.5 kB Apperational formation according to IEC/EN 6089-1 los 7.5 kB Apperational formation according to IEC/EN 6089-1 los 7.5 kB Apperational formation according to IEC/EN 6089-1 los 7.5 kB Apperational formation according to IEC/EN 6089-1 los 7.5 kB Apperational formation according to IEC/EN 6089-1 los 7.5 kB Apperational formation a	Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage)	I _{cs}		7,5 kA
Asted service short-circuit breaking capacity according to IEC/EN 60898-1 Ics 7.5 kA Department switching capacity 1.5 km, 2.5	Rated voltage according to IEC/EN 60898-1	U_{n}	V AC	415
Aperational switching capacity Characteristic Max. back-up fuse Selectivity Class Se	Rated switching capacity according to IEC/EN 60898-1	I _{cn}	kA	10
Aguing Selectivity Class Selec	Rated service short-circuit breaking capacity according to IEC/EN 60898-1	I _{cs}		7,5 kA
As back-up fuse Selectivity Class Selectivity Class Selectivity Class Selectivity Class It if span Operations Operations Operations It if span Operations It if span Operations It is span I	Operational switching capacity		kA	7.5
Selectivity Class ifespan Lifespan Depeations Depations Depation	Characteristic			B, C, D, K, S, Z
Lifespan Operations > 10000 Lifespan Operations > 10000 Alechanical Standard front dimension mm 80 Alouting width per pole mm 17.5 Mounting Oberection of Protection ferminals top and bottom ferminal protection ferminal capacities mm² 2 x 10 Indicates of busbar material mm² 0.8 2	Max. back-up fuse		A gL/gG	125
Lifespan Operations > 10000 Direction of incoming supply as required Acchanical Standard front dimension	Selectivity Class			3
Acchanical Standard front dimension Enclosure height Mounting width per pole Mounting Degree of Protection Ferminals top and bottom Ferminal protection Ferminal capacities mm mm mm mm mm mm mm mm mm	lifespan			
Mechanical Standard front dimension Enclosure height Mounting width per pole Mounting Degree of Protection Ferminals top and bottom Ferminal capacities mm2 mm2 mm2 mm2 mm2 mm2 mm2 m	Lifespan	Operations		> 10000
Standard front dimension Enclosure height Mounting width per pole Mounting Degree of Protection Ferminals top and bottom Ferminal capacities Firminal capacities Firmi	Direction of incoming supply			as required
mm 80 Mounting width per pole mm 17.5 Mounting Width per pole mm 17.5 Mounting Degree of Protection Iterminals top and bottom Ferminal protection Terminal capacities mm² 1x.25 Imm² 1x.25 Imm² 1x.25 Imm² 1x.25 Imm² 1x.25 Imm² 1x.25 Imm² 0.8 2	Mechanical			
Mounting width per pole Mounting M	Standard front dimension		mm	45
Mounting IEC/EN 60715 top-hat rail Degree of Protection IP20, IP40 (when fitted) Terminals top and bottom Terminal protection Finger and back-of-hand proof to BGV A2 Terminal capacities mm² 1 x 25 Thickness of busbar material mm 0.8 2	Enclosure height		mm	80
Degree of Protection Ferminals top and bottom Ferminal protection Ferminal capacities Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-purpose terminals Finger and back-of-hand proof to BGV A2 Twin-p	Mounting width per pole		mm	17.5
Terminals top and bottom Terminal protection Terminal capacities Terminal capacities Tinger and back-of-hand proof to BGV A2 Tinger and back-of-hand proof	Mounting			IEC/EN 60715 top-hat rail
Finger and back-of-hand proof to BGV A2 Finger and back-of-hand proof to BGV A2 mm² 1 x 25 mm² 2 x 10 Thickness of busbar material mm 0.8 2	Degree of Protection			IP20, IP40 (when fitted)
Ferminal capacities mm ² 1 x 25 mm ² 2 x 10 Thickness of busbar material mm 0.8 2	Terminals top and bottom			Twin-purpose terminals
mm ² 1 x 25 mm ² 2 x 10 mm 0.8 2 mm mm mm mm mm mm	Terminal protection			Finger and back-of-hand proof to BGV A2
mm ² 2 x 10 Thickness of busbar material mm 0.8 2	Terminal capacities		mm^2	
Thickness of busbar material mm 0.8 2			mm ²	1 x 25
			mm ²	2 x 10
Mounting position As required			mm	
	Mounting position			As required

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	10
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	3.9
Static heat dissipation, non-current-dependent	P_{vs}	W	0

Operating ambient temperature min. Operating ambient temperature max. EC/EN 61439 design verification 10.2 Strength of materials and parts	°C	-40 75 linear, per +1 °C, results in a 0.5% reduction of current carrying capacity
EC/EN 61439 design verification	°C	
•		linear, per +1 °C, results in a 0.5% reduction of current carrying capacity
•		
10.2 Strength of materials and parts		
3		
10.2.2 Corrosion resistance		Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures		Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat		Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal hea and fire due to internal electric effects $ \frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left($		Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation		Meets the product standard's requirements.
10.2.5 Lifting		Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact		Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions		Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES		Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances		Meets the product standard's requirements.
10.5 Protection against electric shock		Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components		Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections		Is the panel builder's responsibility.
10.8 Connections for external conductors		Is the panel builder's responsibility.
10.9 Insulation properties		
10.9.2 Power-frequency electric strength		Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage		Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material		Is the panel builder's responsibility.
10.10 Temperature rise		The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating		Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility		Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function		The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 7.0

Width in number of modular spacings

Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)

Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014]) В Release characteristic Number of poles (total) 2 Number of protected poles 2 Rated current 10 Rated voltage 400 Rated insulation voltage Ui 440 kV Rated impulse withstand voltage Uimp 4 kA Rated short-circuit breaking capacity Icn EN 60898 at 230 $\rm V$ 10 Rated short-circuit breaking capacity Icn EN 60898 at 400 $\rm V$ kA 10 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 $\rm V$ kΑ 15 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 $\rm V$ kΑ 15 Voltage type AC Frequency Hz 50 - 60 **Current limiting class** 3 Suitable for flush-mounted installation No No Concurrently switching N-neutral Over voltage category 3 Pollution degree 2 Additional equipment possible Yes

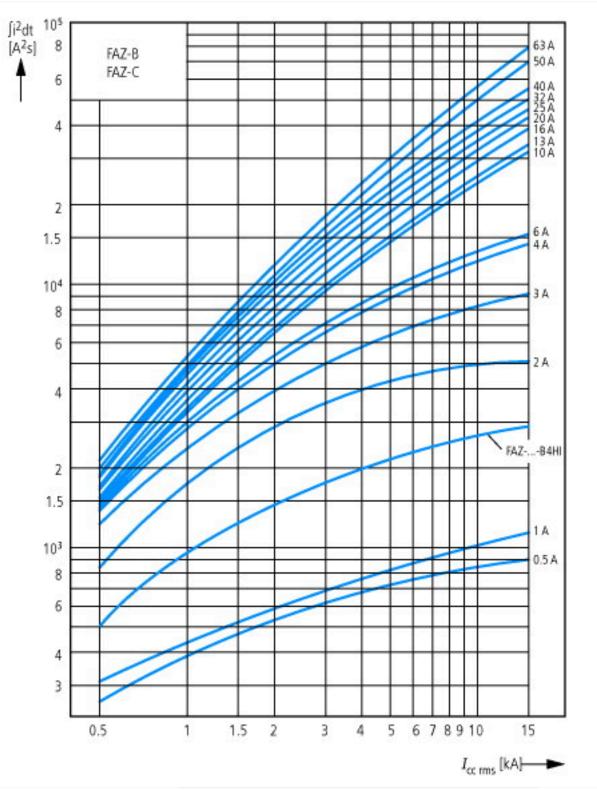
2

Built-in depth	mm	70.5
Degree of protection (IP)		IP20
Ambient temperature during operating	°C	-25 - 75
Connectable conductor cross section multi-wired	mm²	1 - 25
Connectable conductor cross section solid-core	mm²	1 - 25

Approvals

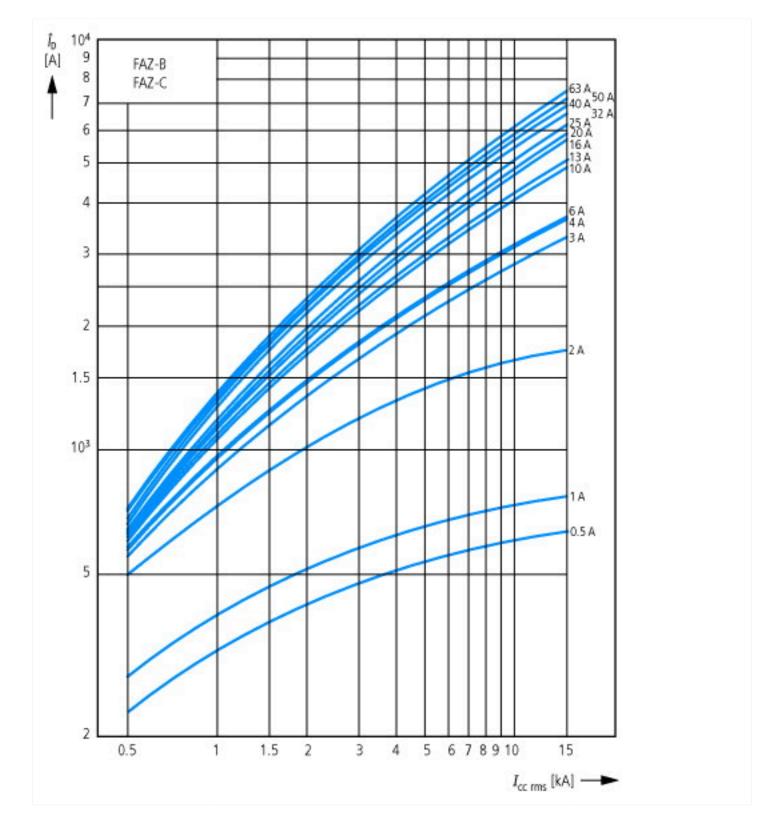
Product Standards	IEC/EN 60947-2; IEC/EN 60898; UL 1077; CSA-C22.2 No. 235; CE marking
UL File No.	E177451
UL Category Control No.	QVNU2, QVNU8
CSA File No.	204453
CSA Class No.	3215-30
North America Certification	UL recognized, CSA certified
Conditions of Acceptability	Supplementary Protector only
Suitable for	Branch Circuits; not as BCPD
Current Limiting Circuit-Breaker	No
Max. Voltage Rating	480Y/277 VAC; 96 VDC
Degree of Protection	IEC: IP20; UL/CSA Type: -

Characteristics

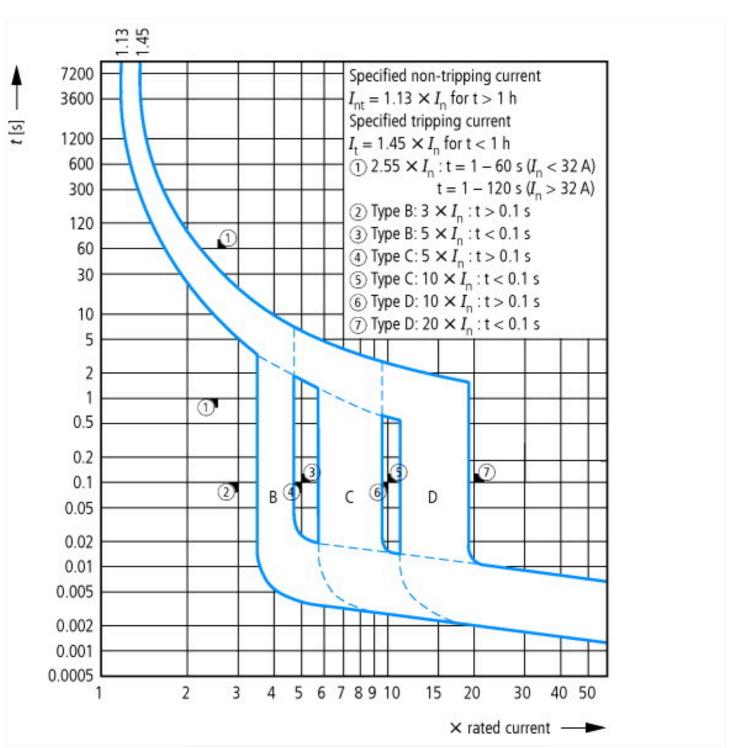


Let-through energy I²t According to IEC/EN 60898









Tripping characteristic at 30 °C: B, C, D to IEC/EN 60898

Dimensions

