#### **DATASHEET - T5B-3-8401/I4**



Reversing switches, Contacts: 5, 63 A, front plate: 1-0-2, 60  $^{\circ}$ , maintained, surface mounting



T5B-3-8401/I4 Part no. Catalog No. 207227

**EL-Nummer** (Norway)

0001456942



Similar to illustration

Delivery program			
Product range			Control switches
Part group reference			T5B
Basic function			Reversing switches
			with black thumb grip and front plate
Contacts			5
Degree of Protection			IP65
			totally insulated
Design			surface mounting
Contact sequence			- X X X X
Switching angle		0	60
Switching performance			maintained With 0 (Off) position
Design number			8401
Front plate no.			FS 684
front plate			1-0-2
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	30
Rated uninterrupted current	I <sub>u</sub>	Α	63
Note on rated uninterrupted current !u			Rated uninterrupted current $I_{\rm u}$ is specified for max. cross-section.
Number of contact units		contact unit(s)	

### **Technical data**

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Standards	IEC/EN 60947, VDE 0660, IEC/EN 60204, CSA, UL Switch-disconnector according to IEC/EN 60947-3
Climatic proofing	Damp heat, constant, to IEC 60068-2-78

			Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			
Enclosed		°C	-25 - +40
Overvoltage category/pollution degree			III/3
Rated impulse withstand voltage	$U_{imp}$	V AC	6000
Mechanical shock resistance		g	15
Mounting position			As required
Contacts			
Electrical characteristics			
Rated operational voltage	U <sub>e</sub>	V AC	690
Rated uninterrupted current	l <sub>u</sub>	Α	63
Note on rated uninterrupted current !u			Rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$ is specified for max. cross-section.
Load rating with intermittent operation, class 12  AB 25 % DF		x I <sub>e</sub>	2
AB 40 % DF		x I <sub>e</sub>	1.6
AB 60 % DF		x I <sub>e</sub>	1.3
Short-circuit rating			
Fuse		A gG/gL	80
Rated short-time withstand current (1 s current)	I <sub>cw</sub>	A <sub>rms</sub>	1300
Note on rated short-time withstand current lcw			Current for a time of 1 second
Rated conditional short-circuit current	Iq	kA	2
Switching capacity			
cos φ rated making capacity as per IEC 60947-3		Α	800
Rated breaking capacity cos φ to IEC 60947-3		Α .	
230 V		A	520
400/415 V 500 V		A	480
690 V		A	340
Safe isolation to EN 61140		^	UTU
between the contacts		V AC	440
Current heat loss per contact at I <sub>e</sub>		W	4.5
Current heat loss per auxiliary circuit at I <sub>e</sub> (AC-15/230 V)		CO	4.5
Lifespan, mechanical	Operations	x 10 <sup>6</sup>	> 0.5
Maximum operating frequency	Operations/h	X 10	1200
AC			
AC-3			
Rating, motor load switch	Р	kW	
220 V 230 V	Р	kW	15
230 V Star-delta	Р	kW	18.5
400 V 415 V	P	kW	22
400 V Star-delta	P	kW	30
500 V	P	kW	22
500 V Star-delta	Р	kW	37
690 V	Р	kW	15
690 V Star-delta	Р	kW	22
Rated operational current motor load switch			
230 V	l <sub>e</sub>	A	51
230 V star-delta	l <sub>e</sub>	Α	63
400V 415 V	I <sub>e</sub>	Α	41
400 V star-delta	I <sub>e</sub>	Α	63
500 V	I <sub>e</sub>	Α	33
500 V star-delta	l <sub>e</sub>	Α	57.2
690 V	l <sub>e</sub>	Α	17
690 V star-delta	I <sub>e</sub>	Α	29.4

### AC 23A  ### AC	AC-21A			
AC   20A   Motor rating AC   20A   50 - 60 No	Rated operational current switch			
Moter rating AC-26A, 10 - 10 Hz	440 V	I <sub>e</sub>	Α	63
Part	AC-23A			
A	Motor rating AC-23A, 50 - 60 Hz	P	kW	
S00 V	230 V	P	kW	18.5
File   March   File   March   File   March   File   March   File   March   File   Fi	400 V 415 V	Р	kW	30
Rated operational current moter load switch  280 V 400 V 15 V 400 V 15 V 400 V 23 D 600 V 600 V 600 V 700 V	500 V	P	kW	22
	690 V	Р	kW	22
	Rated operational current motor load switch			
1	230 V	I <sub>e</sub>	Α	63
Both	400 V 415 V	I <sub>e</sub>	Α	63
DC	500 V	le	Α	33
DC	690 V	I <sub>e</sub>	Α	23.8
Rated operational current   I	DC			
Voltage per contact pair in series   Part	DC-1, Load-break switches L/R = 1 ms			
Voltage per contact pair in series  DC-25A), motor load switch UR = 15 ms  24 V  Rated aperational current  La A 50  Centacts  Rated operational current  La A 50  Centacts  Guanthy  Rated operational current  La A 50  Centacts  Centacts  Guanthy  Rated operational current  La A 25  Centacts  Contacts  Quanthy  Rated operational current  La A 25  Centacts  Quanthy  Rated operational current  La A 20  Centacts  DC-13. Centrol switches L/R = 50 ms  Rated operational current  Voltage per contact pair in series  Centact pair in series  Rated operational current  Terminal screw  Terminal screw  MG  Rated operational current  Nm 4  Tiphtsening torque for terminal screw  MG  Rated operational voltage  Rated ininterrupted current max.  Main conducting paths	Rated operational current	I <sub>e</sub>	Α	63
DC 22A, motor load switch LIR = 15 ms	Voltage per contact pair in series		V	60
Rated operational current				
Contacts	24 V			
Contacts	Rated operational current	l <sub>e</sub>	Α	50
Rated operational current   Be	Contacts		Quantity	1
Contacts 60 V Rated operational current le A 50 Contacts Contacts Contacts 120 V Rated operational current le A 55 Contacts Conta	48 V			
Contacts  60 V Rated operational current  Le A 90 Contacts Contacts  Le A 95 Contacts  Contacts  Rated operational current  Rated operational current  Rated operational current  Rated operational current  Le A 25 Contacts  Rated operational current  Le A 20 Contacts  V 24 Control circuit reliability at 24 V DC, 10 mA  Fault probability  Torminal capacities  Terminal capacities  Terminal capacities  Terminal capacities  Terminal screw  Solid or stranded  Le A 55  Torminal capacities  Terminal screw  Min  Ma  Technical safety parameters:  Notes  Rated operational current max.  Main conducting paths  Main conducting paths	Rated operational current	I <sub>e</sub>	Α	50
Rated operational current   Io   Quantity   3	Contacts		Quantity	2
Contacts  120 V Rated operational current  1	60 V			
Rated operational current    Contacts	Rated operational current	le	Α	50
Rated operational current    Contacts	Contacts		Quantity	3
Contacts  240 V  Rated operational current  Contacts  DC-13, Control switches L/R = 50 ms Rated operational current Voltage per contact pair in series  Control circuit reliability at 24 V DC, 10 mA  Fault probability Proba	120 V			
Rated operational current Rated operational current Contacts  DC-13, Control switches L/R = 50 ms Rated operational current Voltage per contact pair in series Voltage per contact pair pair pair pair pair pair pair pair	Rated operational current	I <sub>e</sub>	Α	25
Rated operational current Rated operational current Contacts  DC-13, Control switches L/R = 50 ms Rated operational current Voltage per contact pair in series Voltage per contact pair pair pair pair pair pair pair pair	Contacts		Quantity	3
Contacts  DC-13, Control switches L/R = 50 ms  Rated operational current  Voltage per contact pair in series  Control circuit reliability at 24 V DC, 10 mA  Fault probability  Terminal capacities  Solid or stranded  mm² 1x (2,5-35) 2x (2,5-16)  Flexible with ferrules to DIN 46228  mm² 1x (1 - 25) 2x (1.5-10)  Terminal screw  M6  Tightening torque for terminal screw  M6  Technical safety parameters:  Notes  Rated operational voltage  Rated operational voltage  Rated operational voltage  Rated uninterrupted current max.  Main conducting paths	240 V			
Contacts  DC-13, Control switches L/R = 50 ms  Rated operational current Voltage per contact pair in series  Control circuit reliability at 24 V DC, 10 mA  Fault probability  Terminal capacities  Solid or stranded  Flexible with ferrules to DIN 46228  Flexible with ferrules to DIN 46228  Terminal screw  Tenninal screw  Tethnical safety parameters:  Notes  Rated operational voltage  Rated operational voltage  Rated operational voltage  Rated uninterrupted current max.  Main conducting paths  Le Quantity 6  A 25  A 25  A 24  A 25  A 25  A 21-5-1 fault in 100000 operations  I x (2,5-35) 2 x (2,5-16)  A 2 x (2,5-35) 2 x (1,5-10)  A 4  B 10,4 values as per EN ISO 13849-1, table C1  Rating data for approved types  Contacts  Rated operational voltage  Rated uninterrupted current max.  Main conducting paths	Rated operational current	I <sub>e</sub>	Α	20
DC-13, Control switches L/R = 50 ms  Rated operational current Voltage per contact pair in series  Control circuit reliability at 24 V DC, 10 mA  Fault probability  Fault probability  Feminal capacities  Solid or stranded  mm² 1 × (1, 25) 35) 2 × (2, 5 - 16)  Flexible with ferrules to DIN 46228  mm² 1 × (1, 25) 2 × (1, 5 - 10)  Terminal screw  M6  Tightening torque for terminal screw  M6  Technical safety parameters:  Notes  Rated operational voltage  Rated operational voltage  Rated uninterrupted current max.  Main conducting paths	Contacts		Quantity	6
Voltage per contact pair in series  Control circuit reliability at 24 V DC, 10 mA  Fault probability Probability Fault p	DC-13, Control switches L/R = 50 ms			
Voltage per contact pair in series  Control circuit reliability at 24 V DC, 10 mA  Fault probability  Fault	Rated operational current	I <sub>e</sub>	Α	25
Control circuit reliability at 24 V DC, 10 mA  Fault probability  Terminal capacities  Solid or stranded  mm² 1 x (2,5 - 35) 2 x (2,5 - 16)  Flexible with ferrules to DIN 46228  mm² 1 x (1 - 25) 2 x (1.5 - 10)  Terminal screw  M6  Tightening torque for terminal screw  Nm 4  Technical safety parameters:  Notes  B10 <sub>d</sub> values as per EN ISO 13849-1, table C1  Rating data for approved types  Contacts  Rated operational voltage  Rated uninterrupted current max.  Main conducting paths	Voltage per contact pair in series		V	24
Terminal capacities  Solid or stranded  mm² 1 x (2,5 - 35) 2 x (2,5 - 16)  Flexible with ferrules to DIN 46228  mm² 1 x (1 - 25) 2 x (1.5 - 10)  Terminal screw  M6  Tightening torque for terminal screw  Technical safety parameters:  Notes  Rating data for approved types  Contacts  Rated operational voltage  Rated uninterrupted current max.  Main conducting paths  Min x (2,5 - 35) 2 x (2,5 - 16)  M6  1 x (1 - 25) 2 x (1.5 - 10)  M6  8  1 x (1 - 25) 2 x (1.5 - 10)  M6  8  6  6  6  6  6  6  6  6  6  6  6  6	Control circuit reliability at 24 V DC, 10 mA	Fault	H <sub>F</sub>	< 10 <sup>-5</sup> < 1 fault in 100000 operations
Solid or stranded mm² 1 x (2,5 - 35) 2 x (2,5 - 16)  Flexible with ferrules to DIN 46228 mm² 1 x (1 - 25) 2 x (1.5 - 10)  Terminal screw M6  Tightening torque for terminal screw M6  Technical safety parameters:  Notes B10 <sub>d</sub> values as per EN ISO 13849-1, table C1  Rating data for approved types  Contacts Rated operational voltage U <sub>e</sub> V AC 600  Rated uninterrupted current max.  Main conducting paths		probability		(10 ) (1) Idakim roosoo operatione
Flexible with ferrules to DIN 46228  Flexible with ferrules to DIN 46228  Terminal screw  Tightening torque for terminal screw  Tightening torque for terminal screw  Technical safety parameters:  Notes  B10 <sub>d</sub> values as per EN ISO 13849-1, table C1  Rating data for approved types  Contacts  Rated operational voltage  Rated uninterrupted current max.  Main conducting paths			2	1 v (2.5 - 25)
Terminal screw  Tightening torque for terminal screw  Nm 4  Technical safety parameters:  Notes  Rating data for approved types  Contacts  Rated operational voltage  Rated uninterrupted current max.  Main conducting paths  M6  Nm 4  End 4  B10 <sub>d</sub> values as per EN ISO 13849-1, table C1  B10 <sub>d</sub> values as per EN ISO 13849-1, table C1  Contacts  Contacts  Rated operational voltage  Ue  V AC  600	Suid of Stranged		mm <sup>*</sup>	$2 \times (2.5 - 16)$
Terminal screw  Tightening torque for terminal screw  Nm 4  Technical safety parameters:  Notes  B10 <sub>d</sub> values as per EN ISO 13849-1, table C1  Rating data for approved types  Contacts  Rated operational voltage  U <sub>e</sub> V AC  600  Rated uninterrupted current max.  Main conducting paths	Flexible with ferrules to DIN 46228		mm <sup>2</sup>	
Tightening torque for terminal screw  Technical safety parameters:  Notes  B10 <sub>d</sub> values as per EN ISO 13849-1, table C1  Rating data for approved types  Contacts  Rated operational voltage  Ue  V AC  Main conducting paths	Terminal corous			
Technical safety parameters:  Notes  B10 <sub>d</sub> values as per EN ISO 13849-1, table C1  Rating data for approved types  Contacts  Rated operational voltage  U <sub>e</sub> V AC  600  Rated uninterrupted current max.  Main conducting paths			Nm	
Notes  Rating data for approved types  Contacts  Rated operational voltage  Rated uninterrupted current max.  Main conducting paths			IVIII	*
Rating data for approved types  Contacts  Rated operational voltage  Ue  V AC  600  Rated uninterrupted current max.  Main conducting paths				B10 <sub>d</sub> values as per EN ISO 13849-1, table C1
Rated uninterrupted current max.  Main conducting paths				
Main conducting paths	Rated operational voltage	U <sub>e</sub>	V AC	600
	Rated uninterrupted current max.			
General use A 63				
	General use		Α	63
Switching capacity	Switching capacity			
Maximum motor rating	Maximum motor rating			

Single-phase		
120 V AC	НР	3
200 V AC	НР	7.5
240 V AC	НР	10
Three-phase		
200 V AC	НР	15
240 V AC	НР	15
480 V AC	НР	40
600 V AC	НР	40
Short Circuit Current Rating	SCCR	
High fault rating	kA	10
max. Fuse	А	100, Class J
Terminal capacity		
Solid or flexible conductor with ferrule	AWG	12 - 4
Terminal screw		M6
Tightening torque	lb-in	35.4

# Design verification as per IEC/EN 61439

Rated porestional current for specified heat dissipation   Pod   W   4.5   Equipment heat dissipation, portine dependent   Pod   W   0   Static heat dissipation, non-current-dependent   Pod   W   0   Static heat dissipation, non-current-dependent   Pod   W   0   Static heat dissipation, non-current-dependent   Pod   W   0   Operating ambient temperature min.   C   2.5   Operating ambient temperature min.   C   2.5   Operating ambient temperature mas.   W   0   Operating ambient temperature mas.   Weets the product standard's requirements.   W   0   Operating ambient temperature mas.   W   W   0   Operating ambient temperature mas.   W   W   0   Operating ambient temperature mas.   W   0   Operating ambient temperature mas.   W   W   W   W   0   Operating ambient temperature mas.   W   W   W   W   W   W   W   W   W	•			
Heat dissipation per pole, current-dependent Pede W 0 Static heat dissipation, current-dependent Pede W 0 Heat dissipation, courrent-dependent Pede W 0 Heat dissipation, courrent-dependent Pede W 0 Departing ambient temperature min. Operating ambient temperature min. Operating ambient temperature min. Operating ambient temperature min.  Operating ambie	Fechnical data for design verification			
Equipment heat dissipation, current-dependent Profit W O C Static heat dissipation, non-current-dependent Profit Meat dissipation capacity Profit W O O O O O O O O O O O O O O O O O O	Rated operational current for specified heat dissipation	In	Α	63
Static heat dissipation, non-current-dependent  Heat dissipation capacity  Operating ambient temperature min.  Operating ambient temperature max.  Operating ambient temperature max.  In 22 Strength of materials and parts  10.22 Corrosion resistance  10.23.1 Verification of thermal stability of enclosures  10.23.2 Verification of resistance of insulating materials to normal heat and fire due to internal electric effects  10.24 Strength of a state and parts  10.25 Strength of a state and parts  10.25 Strength of materials and parts  10.25 Strength of materials and parts  10.25 Strength of materials and parts  10.26 Strength of materials and parts  10.27 Strength of materials and parts  10.28 Strength of materials and parts  10.29 Strength of materials and parts  10.20 Strength of materials and parts  10.20 Strength of materials and parts  10.21 Strength of materials and parts  10.22 Strength of materials and parts  10.23 Strength of materials and parts  10.24 Resistance to ultra-violet (UV) radiation  10.25 Inscriptions  10.25 Electromagnetic electric strength  10.30 Insulation properties  10.31 Operating devices and components  10.32 Insulation properties  10.33 Insulation properties  10.34 Testing of enclosures made of insulating material  10.35 Insulation properties  10.34 Testing of enclosures made of insulating material  10.10 Temperature rise  10.34 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  10.13 Mechanical function  10.14 Mechanical function	Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	4.5
Heat dissipation capacity  Operating ambient temperature min.  Operating ambient temperature max.  CC 25  CC 40  CCFUN 61439 design verification  10.2 Strength of materials and parts  10.2.2 Strength of materials and parts  10.2.3 I Verification of thermal stability of enclosures  10.2.3.1 Verification of resistance of insulating materials to normal heat and fir of ube internal electric effects  10.2.3.2 Verification of resistance of insulating materials to abnormal heat and fir of ube internal electric effects  10.2.4 Resistance to ultra-violet (UV) radiation  10.2.5 Lifting  10.2.5 Inting  10.2.5 Internation of sessitance of insulating materials to abnormal heat and fir of ube internal electric effects  10.2.7 Internation of esistance of insulation  10.2.7 Internation of esistance of insulation and esistance of insulation and esistance of insulation and esistance of insulation materials to abnormal heat and fir of ube internal electric effects  10.2.7 Internation of esistance of insulation and esistance of insulation and esistance of insulation materials to abnormal heat and fire of ube internal electric effects  10.2.7 Internation of esistance of insulation and esistance of insulation and esistance of insulation materials to abnormal heat and fire of unternative esistance only in connection with protective shield.  10.2.5 Lifting  10.2.6 Mechanical impact  10.2.7 Internation of product standard's requirements.  10.2.8 Meets the product standard's requirements to be evaluated.  10.4 Clearances and creapege distances  10.5 Protection against electric shock  10.6 Incorporation of switching devices and components  10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9 Insulation properties  10.9.2 Power-frequency electric strength  10.9.3 Insulation properties  10.9.4 Power-frequency electric strength  10.9.4 Testing denotes and esistance of insulating material  10.1 Temperature rise  10.1 Short-circuit rating  10.1 Short-circuit rating  10.1 Short-circuit rating  10.1	Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Operating ambient temperature min.  Operating ambient temperature max.  CC 40  EVEN R1439 design verification  10.2 Strength of materials and parts  10.2.2 Corrosion resistance  10.2.3 I Verification of resistance of insulating materials to normal heat  10.2.3 Verification of resistance of insulating materials to normal heat  10.2.3 Strength of materials and parts  10.2.3 Strength of materials and parts  10.2.3 Verification of resistance of insulating materials to normal heat  10.2.3 Strength of materials and parts  10.2.3 Strength of materials and insulating materials to normal heat  10.2.3 Strength of materials of insulating materials to normal heat  10.2.3 Strength of materials of insulating materials to abnormal heat  10.2.4 Resistance to ultra-violet (UV) radiation  10.2.5 Lifting  10.2.6 Mechanical impact  10.2.6 Mechanical impact  10.2.7 Inscriptions  10.3 Degree of protection of ASSEMBLIES  10.4 Degree of protection of ASSEMBLIES  10.5 Protection against electric shock  10.6 Incorporation of switching devices and components  10.6 Incorporation of switching devices and components  10.6 Incorporation of switching devices and components  10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9 Power-frequency electric strength  10.9 Power-frequency electric strength  10.9.1 Temperature rise  10.9 Power-frequency electric strength  10.9 A Testing of enclosures made of insulating material  10.11 Short-circuit rating  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  10.13 Mechanical function  10.14 Device meets the requirements for the switchgear must observed.  10.13 Mechanical function  10.14 Device meets the requirements for the switchgear must observed.  10.15 Device the enter switchgear must observed.  10.16 Device meets the requirements for the switchgear must observed.  10.17 Device meets the requirements for the switchgear must observed.	Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0
Poperating ambient temperature max.  **C  #*C  #*C  #*C  #*C  #*C  #*C  #*	Heat dissipation capacity	P <sub>diss</sub>	W	0
### TOP STOREM STATES AND PROVIDED THE PROPRETIES OF THE PROPRETIE	Operating ambient temperature min.		°C	-25
10.2.2 Strength of materials and parts 10.2.2 Corrosion resistance 10.2.3.1 Verification of thermal stability of enclosures 10.2.3.2 Verification of resistance of insulating materials to normal heat 10.2.3.3 Verification of resistance of insulating materials to normal heat 10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects 10.2.4 Resistance to ultra-violet (UV) radiation 10.2.5 Lifting 10.2.6 Mechanical impact 10.2.7 Inscriptions 10.3 Degree of protection of ASSEMBLIES 10.3 Degree of protection of ASSEMBLIES 10.4 Resistances and creepage distances 10.5 Protection against electric shock 10.5 Protection against electric shock 10.6 Incorporation of switching devices and components 10.7 Internal electrical circuits and connections 10.8 Connections for external conductors 10.9 Power-frequency electric strength 10.9 2 Power-frequency electric strength 10.9 1 The panel builder's responsibility. 10	Operating ambient temperature max.		°C	40
10.2.2 Corrosion resistance 10.2.3.1 Verification of thermal stability of enclosures  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  In the panel builder's responsibility.  Does not apply, since the entire switchgear needs to be evaluated.  In the panel builder's responsibility.  In the panel builder's responsibility. The specifications for the switchgear must observed.  In the device meets the requirements, provided the information in the instruction.	EC/EN 61439 design verification			
10.2.3.1 Verification of thermal stability of enclosures 10.2.3.2 Verification of resistance of insulating materials to normal heat 10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects 10.2.4 Resistance to ultra-violet (UV) radiation 10.2.5 Lifting 10.2.6 Mechanical impact 10.2.6 Mechanical impact 10.2.7 Inscriptions 10.2.9 Inscriptions 10.2.9 Inscriptions 10.2.9 Inscriptions 10.2.9 Protection against electric shock 10.2.7 Inscription of ASSEMBLIES 10.3 Protection against electric shock 10.5 Protection against electric shock 10.6 Inscriptions 10.7 Internal electrical circuits and connections 10.8 Connections for external conductors 10.9 Insulation properties 10.9 Power-frequency electric strength 10.9 Insulation properties 10.9.1 Power-frequency electric strength 10.9 Insulation properties 10.9.2 Power-frequency electric strength 10.9.3 Impulse withstand voltage 10.1 Short-circuit rating 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.14 Meets the product standard's requirements. 10.15 Meets the product standard's requirements. 10.16 Meets the product standard's requirements. 10.17 Internal electric allocation of ASSEMBLIES 10.18 and properties 10.2 Power-frequency electric strength 10.3 Impulse withstand voltage 10.4 Testing of enclosures made of insulating material 10.5 Temperature rise 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.13 Mechanical function 10.14 Meets the product standard's requirements. 10.15 Meets the product standard's requirements. 10.16 Meets the product standard's requirements. 10.17 Meets the product standard's requirements. 10.18 Temperature rise 10.19 Temperature rise 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 M	10.2 Strength of materials and parts			
10.2.3.2 Verification of resistance of insulating materials to normal heat 10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects 10.2.4 Resistance to ultra-violet (UV) radiation 10.2.5 Litting 10.2.6 Mechanical impact 10.2.7 Inscriptions 10.3 Degree of protection of ASSEMBLIES 10.4 Clearances and creepage distances 10.5 Protection against electric shock 10.5 Incorporation of switching devices and components 10.7 Internal electrical circuits and connections 10.9 Insulation properties 10.9.2 Power-frequency electric strength 10.9.3 Impulse withstand voltage 10.9.4 Testing of enclosures made of insulating material 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.13 Mechanical function  Meets the product standard's requirements.  Meets the product standard's requirements to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Is the panel builder's responsibility.  In panel builder's responsibility.  In panel builder's responsibility. The specifications for the switchgear must observed.  In the panel builder's responsibility. The specifications for the switchgear must observed.  In the panel builder's responsibility. The specifications for the switchgear must observed.	10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects  10.2.4 Resistance to ultra-violet (UV) radiation  10.2.5 Lifting  Does not apply, since the entire switchgear needs to be evaluated.  10.2.6 Mechanical impact  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.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Meets the product standard's requirements.  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.  10.9 Insulation properties  10.9.2 Power-frequency electric strength  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  The panel builder's responsibility.  10.10 Temperature rise  The panel builder's responsibility. The specifications for the switchgear must observed.  Is the panel builder's responsibility. The specifications for the switchgear must observed.  Is the panel builder's responsibility. The specifications for the switchgear must observed.  In the device meets the requirements, provided the information in the instruction	10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
and fire due to internal electric effects  10.2.4 Resistance to ultra-violet (UV) radiation  10.2.5 Lifting  10.2.6 Mechanical impact  10.2.7 Inscriptions  Meets the product standard's requirements.  10.3 Dees not apply, since the entire switchgear needs to be evaluated.  10.2.7 Inscriptions  Meets the product standard's requirements.  10.3 Dees 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.  10.9 Insulation properties  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  Lis the panel builder's responsibility.  10.11 Short-circuit rating  Lis the panel builder's responsibility. The specifications for the switchgear must observed.  10.13 Mechanical function  The device meets the requirements, provided the information in the instruction	10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
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10.27 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  10.9.3 Impulse withstand voltage  Is the panel builder's responsibility.  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  The panel builder is responsibility.  10.11 Short-circuit rating  Is the panel builder's responsibility. The specifications for the switchgear must observed.  10.12 Electromagnetic compatibility  10.13 Mechanical function  The device meets the requirements, provided the information in the instruction	10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
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10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9 Insulation properties  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  Is the panel builder's responsibility.  Is the panel builder's responsibility.  The panel builder's responsibility.  Is the panel builder's responsibility.  Is the panel builder's responsibility.  The panel builder's responsibility.  Is the panel builder's responsibility. The specifications for the switchgear must observed.  Is the panel builder's responsibility. The specifications for the switchgear must observed.  The device meets the requirements, provided the information in the instruction	10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
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10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  The panel builder is responsibility.  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 observed.  10.12 Electromagnetic compatibility  Is the panel builder's responsibility. The specifications for the switchgear must observed.  10.13 Mechanical function  The device meets the requirements, provided the information in the instruction	10.9.2 Power-frequency electric strength			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 observed.  10.12 Electromagnetic compatibility  Is the panel builder's responsibility. The specifications for the switchgear must observed.  10.13 Mechanical function  The device meets the requirements, provided the information in the instruction	10.9.3 Impulse withstand voltage			Is the panel builder's responsibility.
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observed.  10.13 Mechanical function  The device meets the requirements, provided the information in the instruction	10.11 Short-circuit rating			
	10.12 Electromagnetic compatibility			
	10.13 Mechanical function			

## **Technical data ETIM 7.0**

Low-voltage industrial components (EG000017) / Off-load switch (EC001105)

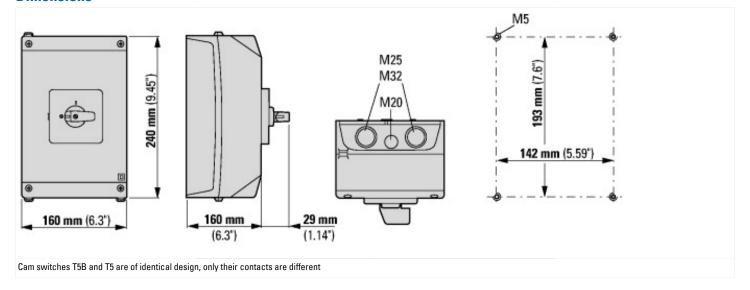
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Changeover switch (ecl@ss10.0.1-27-37-14-05 [AKF062013])

Model		Payaraing awitah
		Reversing switch
Number of poles		3
With 0 (off) position		Yes
With retraction in 0-position		No
Rated permanent current lu	Α	63
Rated operation current le at AC-3, 400 V	А	41
Rated operation power at AC-3, 400 V	kW	22
Degree of protection (IP), front side		IP65
Degree of protection (NEMA), front side		12
Number of auxiliary contacts as normally closed contact		0
Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as change-over contact		0
Suitable for ground mounting		Yes
Suitable for front mounting 4-hole		No
Suitable for distribution board installation		No
Suitable for intermediate mounting		No
Complete device in housing		Yes
Material housing		Plastic
Type of control element		Toggle
Type of electrical connection of main circuit		Screw connection

### **Approvals**

Product Standards	UL 60947-4-1;CSA - C22.2 No. 60947-4-1-14; CSA-C22.2 No. 94; IEC/EN 60947-3; CE marking
UL File No.	E36332
UL Category Control No.	NLRV
CSA File No.	12528
CSA Class No.	3211-05
North America Certification	UL listed, CSA certified
Specially designed for North America	Yes, with an alternative front plate and/or terminal markings to those of the IEC type and with additional labeling according to UL on the enclosure in combination with "+NA-I4" (105868)
Suitable for	Branch circuits, suitable as motor disconnect
Degree of Protection	IEC: IP65; UL/CSA Type 1, 12

#### **Dimensions**



### Assets (links)

**Declaration of CE Conformity** 

00003073

**Instruction Leaflets** 

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