DATASHEET - T3-1-102/I2/SVB



Main switch, 2 pole, 32 A, Emergency-Stop function, 90 °, Lockable in the 0 (Off) position, surface mounting



Part no. T3-1-102/I2/SVB

Catalog No. 207198

EL-Nummer 0001417158 (Norway)

Delivery program

Delivery program			
Product range			Main switch maintenance switch Repair switch
Part group reference			T3
Stop Function			Emergency switching off function
			With red rotary handle and yellow locking ring
Number of poles			2 pole
Locking facility			Lockable in the 0 (Off) position
Degree of Protection			IP65
			totally insulated
Design			surface mounting
Contact sequence			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Switching angle		•	90
Design number			102
Function			OFF O
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	15
Rated uninterrupted current	I _u	Α	32
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)	1

Technical data

General

General		
Standards		IEC/EN 60947, VDE 0660, IEC/EN 60204 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
	O _{IMp}		
Mechanical shock resistance		g	12
Mounting position			As required
Contacts Mechanical variables			
Number of poles			2 pole
Electrical characteristics			
Rated operational voltage	U _e	V AC	690
Rated uninterrupted current	I_{u}	Α	32
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 _e	2
AB 40 % DF		x l _e	1.6
AB 60 % DF		x I _e	1.3
Short-circuit rating		X 16	
		4 0/1	AT.
Fuse		A gG/gL	
Rated short-time withstand current (1 s current)	I _{cw}	A _{rms}	650
Note on rated short-time withstand current lcw			Current for a time of 1 second
Rated conditional short-circuit current	I_q	kA	1
Switching capacity			
$\cos \phi$ rated making capacity as per IEC 60947-3		Α	320
Rated breaking capacity cos φ to IEC 60947-3		Α	
230 V		Α	260
400/415 V		Α	260
500 V		Α	240
690 V		Α	170
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at I _e		W	1.1
Current heat loss per auxiliary circuit at I _e (AC-15/230 V)		CO	1.1
	Onorotions		
Lifespan, mechanical	Operations	x 10 ⁶	> 0.5
Maximum operating frequency	Operations/h		1200
AC			
AC-3			
Rating, motor load switch	P	kW	
220 V 230 V	P	kW	5.5
230 V Star-delta	P	kW	7.5
400 V 415 V	P	kW	11
400 V Star-delta	Р	kW	15
500 V	P	kW	15
500 V Star-delta	P	kW	18.5
690 V	P	kW	11
690 V Star-delta	P	kW	22
		KAA	
Rated operational current motor load switch		٨	12.7
230 V	l _e	Α	23.7
230 V star-delta	I _e	Α	32
400V 415 V	I _e	Α	23.7
400 V star-delta	I _e	Α	32
500 V	I _e	Α	23.7
500 V star-delta	I _e	Α	32
690 V		A	14.7
	le		
690 V star-delta	I _e	Α	25.5
AC-21A			

Rated operational current switch			
440 V		Α	32
	l _e	Α	J2
AC-23A	D	134/	
Motor rating AC-23A, 50 - 60 Hz	P P	kW	7.
		kW	7.5
400 V 415 V	P	kW	15
500 V	P	kW	15
690 V	P	kW	15
Rated operational current motor load switch			
230 V	l _e	Α	32
400 V 415 V	I _e	Α	32
500 V	l _e	Α	26.4
690 V	l _e	Α	17
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I _e	Α	25
Voltage per contact pair in series		V	60
DC-21A	l _e	Α	
Rated operational current	I _e	Α	1
Contacts		Quantity	1
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	I _e	Α	25
Contacts		Quantity	1
48 V		,	
Rated operational current	I _e	Α	25
Contacts		Quantity	
60 V		Quantity	-
Rated operational current	l _e	Α	25
Contacts	·e	Quantity	
120 V		Quantity	
Rated operational current	ı	A	12
Contacts	l _e	Quantity	
240 V		Qualitity	3
		Δ.	-
Rated operational current	l _e	Α	5
Contacts		Quantity	5
DC-13, Control switches L/R = 50 ms			
Rated operational current	l _e	Α	20
Voltage per contact pair in series		V	24
Control circuit reliability at 24 V DC, 10 mA	Fault probability	H _F	< 10 ⁻⁵ , < 1 fault in 100000 operations
Terminal capacities	, ,		
Solid or stranded		mm ²	1 x (1 - 6)
			2 x (1 - 6)
Flexible with ferrules to DIN 46228		mm ²	1 x (0.75 - 4) 2 x (0.75 - 4)
Terminal screw			M4
Tightening torque for terminal screw		Nm	1.6
Technical safety parameters:			
Notes			B10 _d values as per EN ISO 13849-1, table C1
Rating data for approved types			
Terminal capacity			
Terminal screw			M4
Tightening torque		lb-in	17.7

Desiuli verilication as per 120/214 01 1 33	D	esia	n verification	as per	IEC/EN	61439
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Technical data for design verification

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Rated operational current for specified heat dissipation	In	Α	32
Heat dissipation per pole, current-dependent	P _{vid}	W	1.1
Equipment heat dissipation, current-dependent	P _{vid}	W	0
Static heat dissipation, non-current-dependent	P _{vs}	W	0
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	40
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
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 heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			UV resistance only in connection with protective shield.
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 switch gear must be observed. $\label{eq:constraint}$
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed. $\label{eq:continuous}$

Technical data ETIM 7.0

Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013])

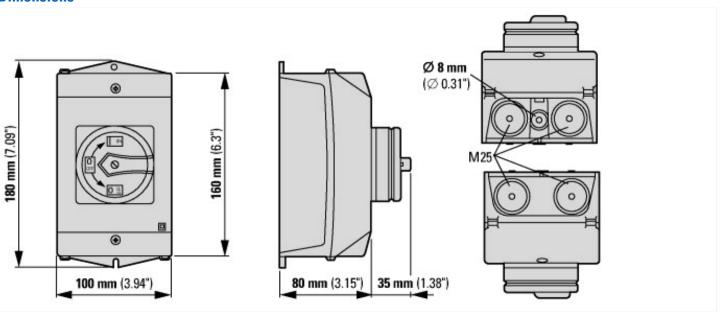
[AKI 000013])			
Version as main switch			Yes
Version as maintenance-/service switch			Yes
Version as safety switch			No
Version as emergency stop installation			Yes
Version as reversing switch			No
Number of switches			1
Max. rated operation voltage Ue AC	٧	V	690
Rated operating voltage	V	V	690 - 690
Rated permanent current lu	A	A	32
Rated permanent current at AC-23, 400 V	A	A	32
Rated permanent current at AC-21, 400 V	A	A	32
Rated operation power at AC-3, 400 V	k	kW	11
Rated short-time withstand current lcw	k	kA	0.65
Rated operation power at AC-23, 400 V	k	kW	15

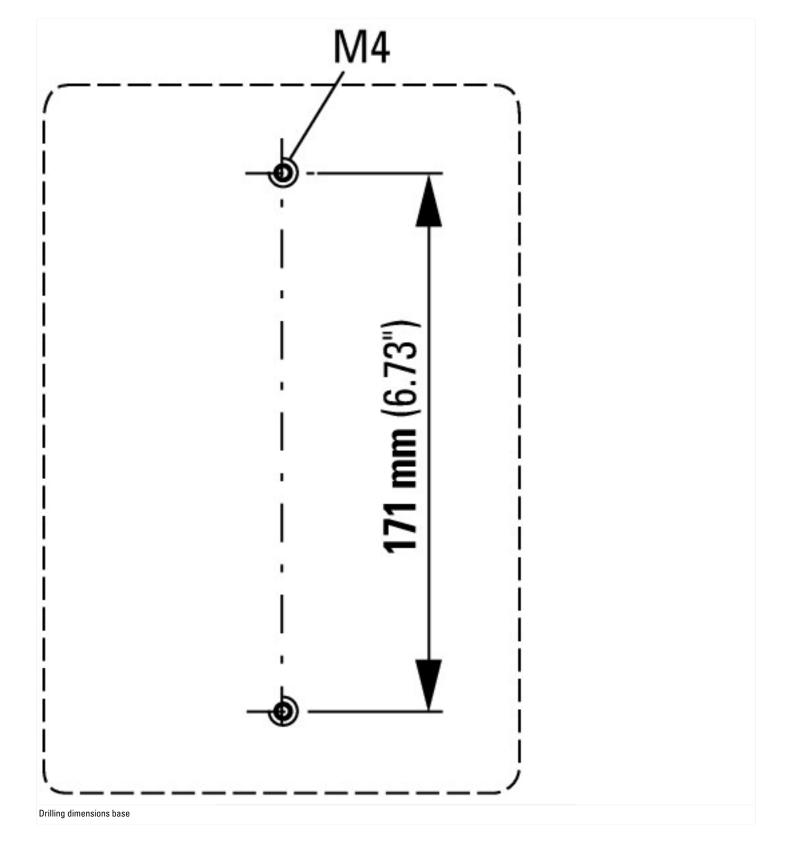
Switching power at 400 V	kW	15
Conditioned rated short-circuit current Iq	kA	1
Number of poles		2
Number of auxiliary contacts as normally closed contact		0
Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as change-over contact		0
Motor drive optional		No
Motor drive integrated		No
Voltage release optional		No
Device construction		Complete device in housing
Suitable for ground mounting		Yes
Suitable for front mounting 4-hole		No
Suitable for front mounting centre		No
Suitable for distribution board installation		No
Suitable for intermediate mounting		No
Colour control element		Red
Type of control element		Door coupling rotary drive
Interlockable		Yes
Type of electrical connection of main circuit		Screw connection
Degree of protection (IP), front side		IP65
Degree of protection (NEMA)		12

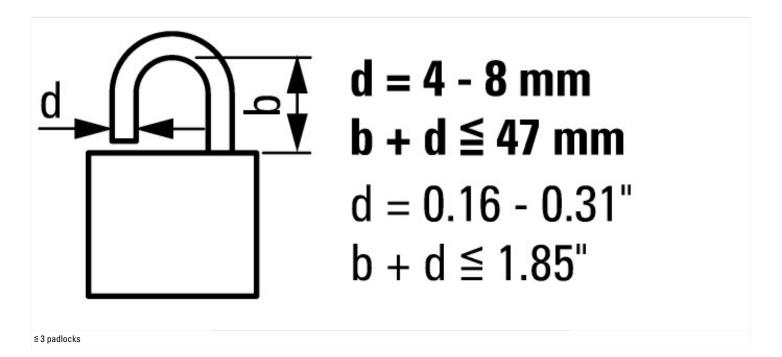
Approvals

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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-I2" (105866)
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

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Instruction Leaflets

IL03801008Z2018_05