DATASHEET - T0-4-15682/I1/SVB



Main switch, T0, 20 A, surface mounting, 4 contact unit(s), 6 pole, 1 N/ 0, 1 N/C, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in the 0 (Off) position



T0-4-15682/I1/SVB Part no.

Catalog No. 207161

0001457795 **EL-Nummer**

(Norway)			
Delivery program			
Product range			Main switch maintenance switch Repair switch
Part group reference			ТО
Stop Function			Emergency switching off function
			With red rotary handle and yellow locking ring
Number of poles			6 pole
Auxiliary contacts			
		N/0	1
1		11/0	
7		N/C	1
Locking facility			Lockable in the 0 (Off) position
Degree of Protection			IP65
			totally insulated
Design			surface mounting
Contact sequence			
Switching angle		0	90
Design number			15682
Function			OFF O
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	5.5
Rated uninterrupted current	l _u	Α	20
Note on rated uninterrupted current !u			Rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$ is specified for max. cross-section.
Number of contact units		contact unit(s)	4

Technical data

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IEC/EN 60947, VDE 0660, IEC/EN 60204 Standards 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 Mechanical variables			
Number of poles			6 pole
Auxiliary contacts			Орије
Auxiliary contacts		N/O	1
		N/C	1
Electrical characteristics		14/0	
Rated operational voltage	U _e	V AC	690
Rated uninterrupted current		A	20
	l _u	^	
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			2
AB 25 % DF		x l _e	2
AB 40 % DF		x l _e	1.6
AB 60 % DF		x I _e	1.3
Short-circuit rating			
Fuse		A gG/gL	20
Rated short-time withstand current (1 s current)	I _{cw}	A _{rms}	320
Note on rated short-time withstand current lcw			Current for a time of 1 second
Rated conditional short-circuit current	I_q	kA	6
Switching capacity			
cos φ rated making capacity as per IEC 60947-3		Α	130
Rated breaking capacity cos φ to IEC 60947-3		Α	
230 V		Α	100
400/415 V		A	110
500 V		A	80
690 V		Α	60
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at I _e		W	0.6
Current heat loss per auxiliary circuit at I _e (AC-15/230 V)		CO	0.6
Lifespan, mechanical	Operations	x 10 ⁶	> 0.4
Maximum operating frequency	Operations/h		1200
AC			
AC-3			
Rating, motor load switch	P	kW	
220 V 230 V	Р	kW	3
230 V Star-delta	P	kW	5.5
400 V 415 V	P	kW	5.5
400 V Star-delta	Р	kW	7.5
500 V	Р	kW	5.5
500 V Star-delta	P	kW	7.5
690 V	Р	kW	4
690 V Star-delta	P	kW	5.5
Rated operational current motor load switch			
230 V	I _e	Α	11.5
230 V star-delta	I _e	Α	20
230 V star-delta 400V 415 V	l _e	A A	20 11.5

400 V star-delta	I _e	Α	20
500 V	l _e	Α	9
500 V star-delta	l _e	Α	15.6
690 V	I _e	Α	4.9
690 V star-delta	l _e	Α	8.5
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	P	kW	
230 V	P	kW	3
	P P	kW	
400 V 415 V			5.5
500 V	P	kW	7.5
690 V	Р	kW	5.5
Rated operational current motor load switch			
230 V	le	Α	13.3
400 V 415 V	l _e	Α	13.3
500 V	l _e	Α	13.3
690 V	I _e	Α	7.6
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I _e	Α	10
	-6	V	60
Voltage per contact pair in series DC-21A		V A	uu
	l _e		
Rated operational current	l _e	Α	1
Contacts		Quantity	1
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	l _e	Α	10
Contacts		Quantity	1
48 V			
Rated operational current	I _e	Α	10
Contacts		Quantity	2
60 V			
Rated operational current	l _e	A	10
Contacts	C	Quantity	
120 V		Quantity	
		^	E
Rated operational current	l _e	Α	5
Contacts		Quantity	3
240 V			
Rated operational current	l _e	Α	5
Contacts		Quantity	5
DC-13, Control switches L/R = 50 ms			
Rated operational current	Ie	Α	10
Voltage per contact pair in series		V	32
Control circuit reliability at 24 V DC, 10 mA	Fault	H _F	< 10 ⁻⁵ ,< 1 failure in 100,000 switching operations
	probability		. • • • • • • • • • • • • • • • • • • •
Terminal capacities Solid or stronged		2	1 v /1 25)
Solid or stranded		mm ²	1 x (1 - 2,5) 2 x (1 - 2,5)
Flexible with ferrules to DIN 46228		mm ²	1 x (0.75 - 2.5)
			2 x (0.75 - 2.5)
Terminal screw			M3.5
Tightening torque for terminal screw		Nm	1
Technical safety parameters:			
Notes			$\mathrm{B10_{d}}$ values as per EN ISO 13849-1, table C1
Rating data for approved types			
Terminal capacity			
Terminal screw			M3.5
Terminal capacity			M3.5

Tightening torque Ib-in 8.83	
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Design verification as per IEC/EN 61439

Design Verification as per IEG/EN 61439			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	20
Heat dissipation per pole, current-dependent	P _{vid}	W	0.6
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 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

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])

	Yes
	Yes
	Yes
	Yes
	No
	1
V	690
V	690 - 690
Α	20
Α	13.3
Α	20
kW	5.5
	V A A

Rated operation power at AC-23, 400 V			
Switching power at 400 V Conditioned rated short-circuit current Iq Number of poles Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Nord drive optional Motor drive integrated Nord drive integrated Nord drive integrated Nord Nord drive integrated Nord Suitable for ground mounting Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side	Rated short-time withstand current lcw	kA	0.32
Conditioned rated short-circuit current Iq kA 6 Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Notor drive optional Notor drive integrated Notor driv	Rated operation power at AC-23, 400 V	kW	5.5
Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact No Motor drive optional No Motor drive integrated No No Octor drive integrated No No Suitable for ground mounting Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting 4-hole Suitable for distribution board installation No Suitable for distribution board installation No Suitable for intermediate mounting Colour control element Red Type of control element Ne Type of control element Ves Type of electrical connection of main circuit Degree of protection (IP), front side No	Switching power at 400 V	kW	5.5
Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact No Motor drive optional No No No Outage release optional No Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Type of control element Type of electrical connection of main circuit Degree of protection (IP), front side	Conditioned rated short-circuit current Iq	kA	6
Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Notor drive optional Notor drive integrated Notor drive int	Number of poles		6
Number of auxiliary contacts as change-over contact Motor drive optional Motor drive integrated No No Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre No Suitable for intermediate mounting Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Type of control element Degree of protection (IP), front side No No Screw connection Degree of protection (IP), front side	Number of auxiliary contacts as normally closed contact		1
Motor drive optional Motor drive integrated Motor drive integrated No No Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for firont mounting centre Suitable for distribution board installation No Suitable for intermediate mounting Colour control element Type of control element Type of electrical connection of main circuit Degree of protection (IP), front side No No No No Screw connection No Screw connection No	Number of auxiliary contacts as normally open contact		1
Motor drive integrated No Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for firont mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No No No Screw connection Poor	Number of auxiliary contacts as change-over contact		0
Voltage release optional Device construction Complete device in housing Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No Complete device in housing Complete device in housing Complete device in housing Yes No No No No Complete device in housing Yes No No Suitable for intermediate mounting entre No No Suitable for distribution board installation No Suitable for intermediate mounting No Screw connection Interlockable Fes	Motor drive optional		No
Device construction Complete device in housing Yes Suitable for ground mounting Suitable for front mounting 4-hole No Suitable for front mounting centre No Suitable for distribution board installation Suitable for intermediate mounting Colour control element Red Type of control element Door coupling rotary drive Type of electrical connection of main circuit Cogree of protection (IP), front side Complete device in housing Yes Complete device in housing Yes No Sociew connection Sociew connection Complete device in housing Yes No Screw connection Degree of protection (IP), front side	Motor drive integrated		No
Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre No Suitable for distribution board installation No Suitable for intermediate mounting Colour control element Red Type of control element Door coupling rotary drive Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side Yes Yes	Voltage release optional		No
Suitable for front mounting 4-hole Suitable for front mounting centre No Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No No No No No No Degree of protection (IP), front side No No No Screw connection IP65	Device construction		Complete device in housing
Suitable for front mounting centre Suitable for distribution board installation Suitable for intermediate mounting No Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No No No No Red Type of control element Yes Type of electrical connection of main circuit Degree of protection (IP), front side No No No Red Type of control element Yes Type of electrical connection of main circuit Degree of protection (IP), front side	Suitable for ground mounting		Yes
Suitable for distribution board installation Suitable for intermediate mounting No Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No Red Poor coupling rotary drive Yes Screw connection IP65	Suitable for front mounting 4-hole		No
Suitable for intermediate mounting Colour control element Red Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No Red Door coupling rotary drive Yes Screw connection IP65	Suitable for front mounting centre		No
Colour control element Red Type of control element Door coupling rotary drive Interlockable Yes Type of electrical connection of main circuit Degree of protection (IP), front side IP65	Suitable for distribution board installation		No
Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side Door coupling rotary drive Yes Screw connection IP65	Suitable for intermediate mounting		No
Interlockable Yes Type of electrical connection of main circuit Screw connection Degree of protection (IP), front side IP65	Colour control element		Red
Type of electrical connection of main circuit Degree of protection (IP), front side IP65	Type of control element		Door coupling rotary drive
Degree of protection (IP), front side	Interlockable		Yes
	Type of electrical connection of main circuit		Screw connection
Degree of protection (NEMA) Other	Degree of protection (IP), front side		IP65
	Degree of protection (NEMA)		Other

Dimensions





