DATASHEET - T0-2-8900/I2H/MBS/SVB



Delivery program

Main switch, 3p+N,20A,Emergency-Stop function,90 °,lockable in the 0 (Off) position,surface mounting,hard knockout version, with mounting plate screen $\,$



Part no. T0-2-8900/I2H/MBS/SVB

Catalog No. 182427

EL-Nummer 0001400407

(Norway)

zomor, 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
Notes	hard knockout version with assembly sheet screen
Number of poles	3 pole + N
Locking facility	Lockable in the 0 (Off) position
Degree of Protection	IP65
	totally insulated
Design	surface mounting
Contact sequence	

Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	5.5
Rated uninterrupted current	I _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)	2

10 20 30 40 50 60 70 80

ON

Technical data

Switching angle Function

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	-20 - +40
Overvoltage category/pollution degree		III/3

Rated impulse withstand voltage	U _{imp}	V AC	6000
Mechanical shock resistance	- IIIIp	g	15
Mounting position		9	As required
Contacts			As required
Mechanical variables			
Number of poles			3 pole + N
Electrical characteristics			
Rated operational voltage	U _e	V AC	690
Rated uninterrupted current	lu	Α	20
Note on rated uninterrupted current !u			Rated uninterrupted current I _u is specified for max. cross-section.
Load rating with intermittent operation, class 12			
AB 25 % DF		x l _e	2
AB 40 % DF		x l _e	1.6
AB 60 % DF			1.3
		x l _e	1.0
Short-circuit rating		A = C/=1	20
Fuse		A gG/gL	
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	Iq	kA	6
Switching capacity		۸	120
cos φ rated making capacity as per IEC 60947-3 Rated breaking capacity cos φ to IEC 60947-3		A	130
230 V		A	100
400/415 V		A	110
500 V			80
690 V		A	
		Α	60
Safe isolation to EN 61140 between the contacts		V AC	440
		W	440
Current heat loss per contact at I _e			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	Р	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	P	kW	7.5
500 V	P	kW	5.5
500 V Star-delta	P	kW	7.5
690 V	P	kW	4
690 V Star-delta	P	kW	5.5
Rated operational current motor load switch			
230 V	l _e	Α	11.5
230 V star-delta	l _e	Α	20
400V 415 V	l _e	Α	11.5
400 V star-delta	I _e	Α	20
500 V	l _e	Α	9
500 V star-delta	I _e	Α	15.6
690 V	I _e	Α	4.9
690 V star-delta	l _e	Α	8.5
AC-21A			
Rated operational current switch			
nateu operauonai current Switch			

440 V	l _e	Α	20
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	Р	kW	
230 V	P	kW	3
400 V 415 V	Р	kW	5.5
500 V	P	kW	7.5
690 V	P	kW	5.5
Rated operational current motor load switch			
230 V	I _e	Α	13.3
400 V 415 V	I _e	A	13.3
500 V		A	13.3
	I _e		
690 V	I _e	Α	7.6
C			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I _e	Α	10
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	10
Contacts		Quantity	1
48 V			
Rated operational current	I _e	Α	10
Contacts		Quantity	2
60 V		,	
Rated operational current	I _e	Α	10
Contacts	·e	Quantity	
120 V		Quantity	
Rated operational current	I _e	A	5
	'e		
Contacts		Quantity	3
240 V		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	10
Voltage per contact pair in series		V	32
ontrol circuit reliability at 24 V DC, 10 mA	Fault probability	H _F	$<$ 10 $^{-5}$, $<$ 1 fault in 100000 operations
erminal capacities	probability		
olid or stranded		mm ²	1 x (1 - 2,5)
			2 x (1 - 2,5)
exible with ferrules to DIN 46228		mm ²	1 x (0.75 - 2.5) 2 x (0.75 - 2.5)
erminal screw			M3.5
ghtening torque for terminal screw		Nm	1
echnical safety parameters:			D40
otes			B10 _d values as per EN ISO 13849-1, table C1
ating data for approved types erminal capacity			
			M2.5
Terminal screw			M3.5

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

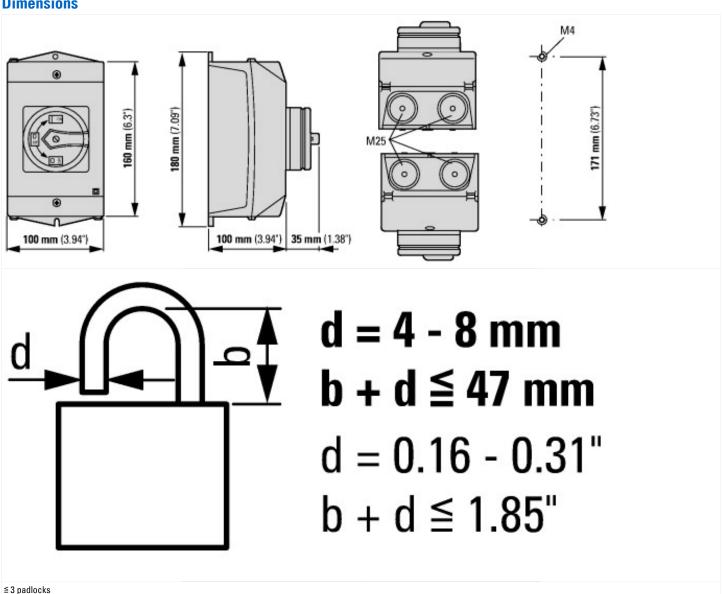
Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

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])

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	V	690
Rated operating voltage	V	690 - 690
Rated permanent current lu	А	20
Rated permanent current at AC-23, 400 V	А	13.3
Rated permanent current at AC-21, 400 V	А	20
Rated operation power at AC-3, 400 V	kW	5.5
Rated short-time withstand current lcw	kA	0.32
Rated operation power at AC-23, 400 V	kW	5.5
Switching power at 400 V	kW	5.5
Conditioned rated short-circuit current Iq	kA	6
Number of poles		4

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)	Other

Dimensions



Assets (links)

Declaration of CE Conformity

00003075

Instruction Leaflets

IL03801008Z2018_05