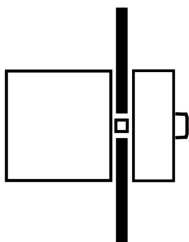




**Non-standard switch, T0, 20 A, flush mounting, 2 contact unit(s),
Emergency switching off function, With red rotary handle and yellow
locking ring**

Part no. T0-2-SOND*/EA/SVB
Catalog No. 907777

Delivery program

Product range			Non-standard switch
Part group reference			T0
Stop Function			Emergency switching off function
			With red rotary handle and yellow locking ring
Notes			customized version according to form
Degree of Protection			Front IP65
Design			flush mounting
			
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	5.5
Rated uninterrupted current	I_u	A	20
Note on rated uninterrupted current I_u			Rated uninterrupted current I_u is specified for max. cross-section.
Number of contact units		contact unit(s)	2

Technical data

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			
Open		°C	-25 - +50
Enclosed		°C	-25 - +40
Overtoltage 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_e	V AC	690
Rated uninterrupted current	I_u	A	20
Note on rated uninterrupted current I_u			Rated uninterrupted current I_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 I_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 I_{cw}			Current for a time of 1 second
Rated conditional short-circuit current	I_q	kA	6
Switching capacity			
$\cos \varphi$ rated making capacity as per IEC 60947-3		A	130
Rated breaking capacity $\cos \varphi$ to IEC 60947-3		A	
230 V		A	100
400/415 V		A	110
500 V		A	80
690 V		A	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	$\times 10^6$	> 0.4
Maximum operating frequency	Operations/h		1200
AC			
AC-3			
Rating, motor load switch	P	kW	
220 V 230 V	P	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	I_e	A	11.5
230 V star-delta	I_e	A	20
400V 415 V	I_e	A	11.5
400 V star-delta	I_e	A	20
500 V	I_e	A	9
500 V star-delta	I_e	A	15.6
690 V	I_e	A	4.9
690 V star-delta	I_e	A	8.5
AC-21A			
Rated operational current switch			
440 V	I_e	A	20
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	P	kW	
230 V	P	kW	3
400 V 415 V	P	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	A	13.3
400 V 415 V	I_e	A	13.3
500 V	I_e	A	13.3
690 V	I_e	A	7.6
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I_e	A	10
Voltage per contact pair in series		V	60
DC-21A	I_e	A	

Rated operational current	I_e	A	1
Contacts		Quantity	1
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	I_e	A	10
Contacts		Quantity	1
48 V			
Rated operational current	I_e	A	10
Contacts		Quantity	2
60 V			
Rated operational current	I_e	A	10
Contacts		Quantity	3
120 V			
Rated operational current	I_e	A	5
Contacts		Quantity	3
240 V			
Rated operational current	I_e	A	5
Contacts		Quantity	5
DC-13, Control switches L/R = 50 ms			
Rated operational current	I_e	A	10
Voltage per contact pair in series		V	32
Control circuit reliability at 24 V DC, 10 mA	Fault probability	H_F	$< 10^{-5}, < 1$ failure in 100,000 switching operations

Terminal capacities

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			B10 _d values as per EN ISO 13849-1, table C1
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Rating data for approved types

Terminal capacity			
Terminal screw			M3.5

Design verification as per IEC/EN 61439

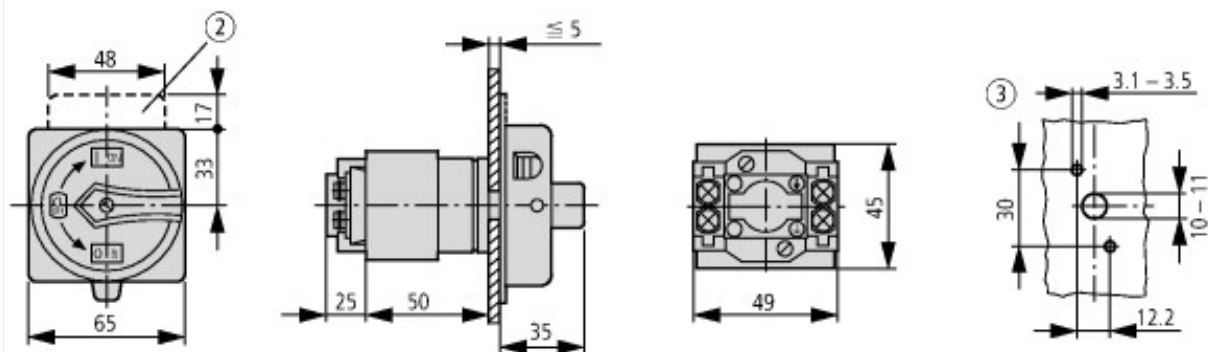
Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	20
Heat dissipation per pole, current-dependent	P_{vid}	W	0.6
Equipment heat dissipation, current-dependent	P_{vid}	W	0
Static heat dissipation, non-current-dependent	P_{vs}	W	0
Heat dissipation capacity	P_{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	50
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			
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

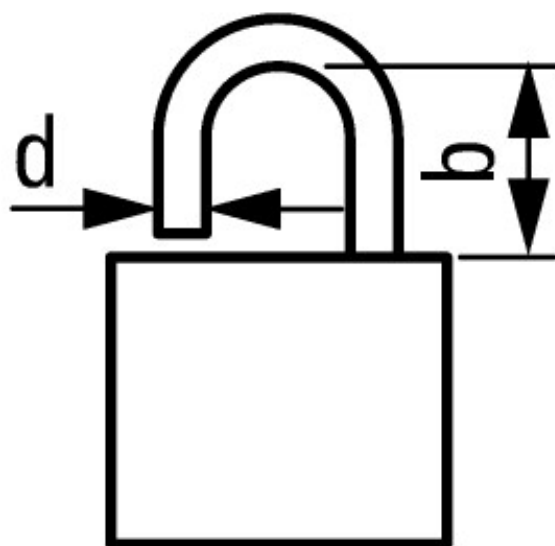
Low-voltage industrial components (EG000017) / Switch disconnecter (EC000216)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ecI@ss10.0.1-27-37-14-03 [AKF060013])			
Version as main switch			Yes
Version as maintenance-/service switch			Yes
Version as safety switch			No
Version as emergency stop installation			No
Version as reversing switch			No
Number of switches			1
Max. rated operation voltage U _e AC		V	690
Rated operating voltage		V	690 - 690
Rated permanent current I _u		A	20
Rated permanent current at AC-23, 400 V		A	13.3
Rated permanent current at AC-21, 400 V		A	20
Rated operation power at AC-3, 400 V		kW	5.5
Rated short-time withstand current I _{cw}		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 I _q		kA	6
Number of poles			0
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			Built-in device fixed built-in technique
Suitable for ground mounting			No
Suitable for front mounting 4-hole			Yes
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



② ZFS-... Label mount not included as standard

③ Drilling dimensions door



$d = 4 - 8 \text{ mm}$

$b + d \leq 47 \text{ mm}$

$d = 0.16 - 0.31''$

$b + d \leq 1.85''$

≤ 3 padlocks

Assets (links)

Instruction Leaflets

IL03801020Z2018_05

Additional product information (links)

IL03801020Z (AWA1150-0586) Cam switch: Mounting

IL03801020Z (AWA1150-0586) Cam switch: Mounting	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801020Z2018_05.pdf
Technical overview cam switch, switch-disconnector	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.2
System overview cam switch T	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.4
System overview switch-disconnector P	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.6
Key to part numbers Cam switch	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8
Key to part numbers Switch-disconnector	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8
Switches for ATEX	http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html
Ordering form for SOND switches and SOND front plates(DE_EN)	ftp://ftp.moeller.net/DOCUMENTATION/PDF/MZ008005ZU_Orderform_Customized_Switch.pdf
Ordering form for SOND switches and SOND front plates(DE_EN)	ftp://ftp.moeller.net/DOCUMENTATION/PDF/MZ008006ZU_Orderform_Customized_Switch.pdf