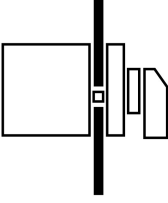




Non-standard switch, TM, 10 A, flush mounting, 1 contact unit(s)

Part no. TM-1-SOND*/E
Article no. 907749

Delivery program

Product range			Non-standard switch
Part group reference			TM
Notes			customized version according to form
Non-standard order			mini rotary switch TM, SOND reorder
Degree of Protection			Front IP65
Design			flush mounting
			
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	3
Rated uninterrupted current	I _u	A	10
Number of contact units		contact unit(s)	1

Technical data

General

Standards			IEC/EN 60947, VDE 0660 Control switch as per IEC/EN 60947-5-1 Auxiliary switch as per IEC/EN 60947-5-1
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			
Open		°C	-25 - +50
Overtoltage category/pollution degree			III/3
Rated impulse withstand voltage	U _{imp}	V AC	4000
Mounting position			As required
Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof

Contacts

Electrical characteristics			
Rated operational voltage	U _e	V AC	500
Rated uninterrupted current	I _u	A	10
Note on rated uninterrupted current I _u			Rated uninterrupted current I _u is specified for max. cross-section.

Switching capacity

Safe isolation to EN 61140			
Current heat loss per contact at I _e		W	0.15
Current heat loss per auxiliary circuit at I _e (AC-15/230 V)		CO	0.15
Lifespan, mechanical	Operations	x 10 ⁶	> 1
Maximum operating frequency	Operations/h		1200
AC			
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	P	kW	
400 V 415 V	P	kW	3
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 1,5
-------------------	--	-----------------	---------

Flexible	mm ²	2 x 1,5 1 x 1.5 2 x 1.5
Terminal screw		M2.5
Max. tightening torque	Nm	0.35

Rating data for approved types

Terminal capacity		
Terminal screw		M2.5

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	A	10
Heat dissipation per pole, current-dependent	P _{vid}	W	0.15
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			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			Please enquire
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 6.0

Low-voltage industrial components (EG000017) / Control switch (EC002611)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Control switch (ecl@ss8.1-27-37-14-14 [ACN998008])			
Type of switch			-
Number of poles			0
Max. rated operation voltage U _e AC		V	500
Rated permanent current I _u		A	10
Number of switch positions			0
With 0 (off) position			No

With retraction in 0-position		No
Device construction		Built-in device
Width in number of modular spacings		0
Suitable for ground mounting		No
Suitable for front mounting 4-hole		Yes
Suitable for distribution board installation		No
Suitable for intermediate mounting		No
Complete device in housing		No
Type of control element		Toggle
Front shield size		30x30 mm
Degree of protection (IP), front side		IP65

Additional product information (links)

Form for ordering non-standard switches	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=4.84
Form for ordering non-standard front plates	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=4.87
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