

Safety switch

Series SLC

Description SLC-M-230-11/11-R4	Article number 6018200006
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Position monitoring (Interlock D / Guard lock L)	
<p>Actuator inserted Guard closed and locked</p> <p>with current</p> <pre> E1 o---o E2 13 o---o 14 D 21 o---o 22 ⊖ 31 o---o 32 ⊕ 43 o---o 44 L </pre>	<p>Actuator inserted Guard closed and not locked</p> <p>without current</p> <pre> E1 o---o E2 13 o---o 14 D 21 o---o 22 ⊖ 31 o---o 32 ⊕ 43 o---o 44 L </pre>
<p>Actuator withdraw Guard not closed and not locked</p> <p>with or without current</p> <pre> E1 o---o E2 13 o---o 14 D 21 o---o 22 ⊖ 31 o---o 32 ⊕ 43 o---o 44 L </pre>	

The actuator is not included in the scope of delivery. It can only be purchased in conjunction with the safety switch.

Electrical data		
Protection class		II, totally insulated
Contact elements		
Rated insulation voltage	U _i	250 V
Rated impulse withstand voltage	U _{imp}	2,5 kV
Rated operational voltage	U _e	240 V AC / 24 V AC/DC
Conv. thermal current	I _{the}	5 A
Utilization category acc. to IEC	AC-15, U _e / I _e 240 V / 1,5 A DC-13, U _e / I _e 24 V / 1,5 A; 250 V / 0,11 A	
Utilization category acc. to UL / CSA	B300 R300 (same polarity)	
Direct opening action	⊕	according to IEC/EN 60947-5-1, Annex K
Short-circuit protective device	4 A gG	
Rated conditional short-circuit current	400 A	
Electro magnet		
Duty cycle	100 % ED (at E1; E2)	
Temperature class	F (155 °C)	
Permanent power consumption	7,1 VA (W)	
Switch operations permanent	10 / min	
Operating voltage	230 V AC (+10 % /-15 %)	

Mechanical data		
Enclosure	Thermoplastic, glass fibre reinforced (UL 94-V0)	
Cover	Thermoplastic, glass fibre reinforced (UL 94-V0)	
Actuating head	Thermoplastic, glass fibre reinforced / Zn-GD	
Actuator	Separate actuator	
Minimum actuating radius	R_{min}	see separate actuators data sheet
Velocity for actuating	V_{max}	0,5 m/s
Extraction force	≤ 10 N	
Interlocking principle	Magnetic force	
Unlocking	Spring force	
Holding force	F_{Zh}	1500 N (EN ISO 14119)
Ambient air temperature	-25 °C to +55 °C	
Contact type	Interlock (D): 1 NC, 1 NO Guard lock (L): 1 NC, 1 NO	
Switching principle	4 slow make and break contact elements	
Mechanical life	1 x 10 ⁶ switching cycles	
Assembly	4 x M5	
Connection	Screw connection	
Conductor cross-sections	0,34 ... 1,5 mm ² flexible	
Cable entrance	3 x M20x1,5	
Weight	≈ 0,484 kg	
Installation position	operator definable	
Protection type	IP67 acc. to IEC/EN 60529 ; (UL 50 E / CSA C22.2) Type 6 indoor use only	

ID for safety engineering	
B10d	2 x 10 ⁶ Cycles (at DC-13; 24 V; 0,1 A)

Standards	
	DIN EN 60947-5-1
	UL 508 18th Edition, CSA-C22.2 No.14-18
	GS-ET-19 (DGVU)
	DIN EN ISO 14119
	DIN EN ISO 13849-1

EU Conformity	
	acc. to directive 2006/42/EC (Safety-of-Machinery-Directive)

Approvals	
	DGVU (in preparation)
	cCSA _{US}
	CCC

Notes	
<p>The degree of protection (IP code) specified applies solely to a property closed cover and the use of an equivalent cable gland with adequate cable.</p> <p>The switch may not be used as a mechanical stop.</p> <p>In case that power is removed from the solenoid the safety switch will be no longer in a locked position! Operator can open the guard! Attention has to be given to the risks of the machine in this situation!</p>	