

Safety switch

Series SLC

Description SLC-M-024-10/20-R4-01	Article number 6018200033
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Position monitoring

Actuator
inserted
Guard closed and
locked

Actuator
inserted
Guard closed and not
locked

with current

without current

Pin 8- E1 E2 -Pin 7
Pin 2- 11 12 -Pin 5
-- 21 22 --
Pin 6- 31 32 -Pin 3
Pin 1- 41 42 -Pin 4

Pin 8-E1 E2 -Pin 7
Pin 2- 11 12 -Pin 5
-- 21 22 --
Pin 6- 31 32 -Pin 3
Pin 1- 41 42 -Pin 4

Actuator
withdraw
Guard not closed and
not locked

Plug
(In the direction of the arrow)

with or without
current

Pin 8- E1 E2 -Pin 7
Pin 2- 11 12 -Pin 5
-- 21 22 --
Pin 6- 31 32 -Pin 3
Pin 1- 41 42 -Pin 4

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	30 V
Rated impulse withstand voltage	U _{imp}	800 V
Rated operational voltage	U _e	24 V AC / DC
Conv. thermal current	I _{the}	2 A
Utilization category acc. to IEC	DC-13, U _e / I _e 24 V / 1,5 A	
Utilization category acc. to UL / CSA	30 V / 2 A general use	
Direct opening action	⊙	according to IEC/EN 60947-5-1, Annex K
Short-circuit protective device	2 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	6,7 VA (W)	
Switch operations permanent	10 / min	
Operating voltage	24 V AC / DC (+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	a) Spring force b) auxiliary release from front and back side	
Holding force	F_{Zh}	1500 N (EN ISO 14119)
Ambient air temperature	-25 °C to +55 °C	
Contact type	Interlock: 1 NC Guard lock: 2 NC	
Switching principle	4 slow make and break contact elements	
Mechanical life	1 x 10 ⁶ switching cycles	
Assembly	4 x M5	
Connection	Plug connector, M12-plug, 8-pin, A-coded, DIN EN 61076-2-101	
Cable entrance	2 x M20x1,5	
Weight	≈ 0,50 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 (DGVV)
	DIN EN ISO 14119
	DIN EN ISO 13849-1

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

Approvals	
	DGVV (in preparation)
	cCSA _{US}

Notes
<p>The degree of protection specified (IP code) applies only to a properly closed cover and the use of an equivalent connector and when required the use of an equivalent cable gland with adequate cable.</p> <p>The connector and the cable (fix or flexible mounted) must at least be suitable for the described ambient air temperatures.</p> <p>The connector must not be connected or disconnected when voltage is applied.</p> <p>The mechanical life of the connector is 100 connection cycles.</p> <p>Suitable connector and cable must be used to meet approval requirements.</p> <p>The switch may not be used as a mechanical stop.</p> <p>In the event of a power failure, the guard does not remains locked.</p>