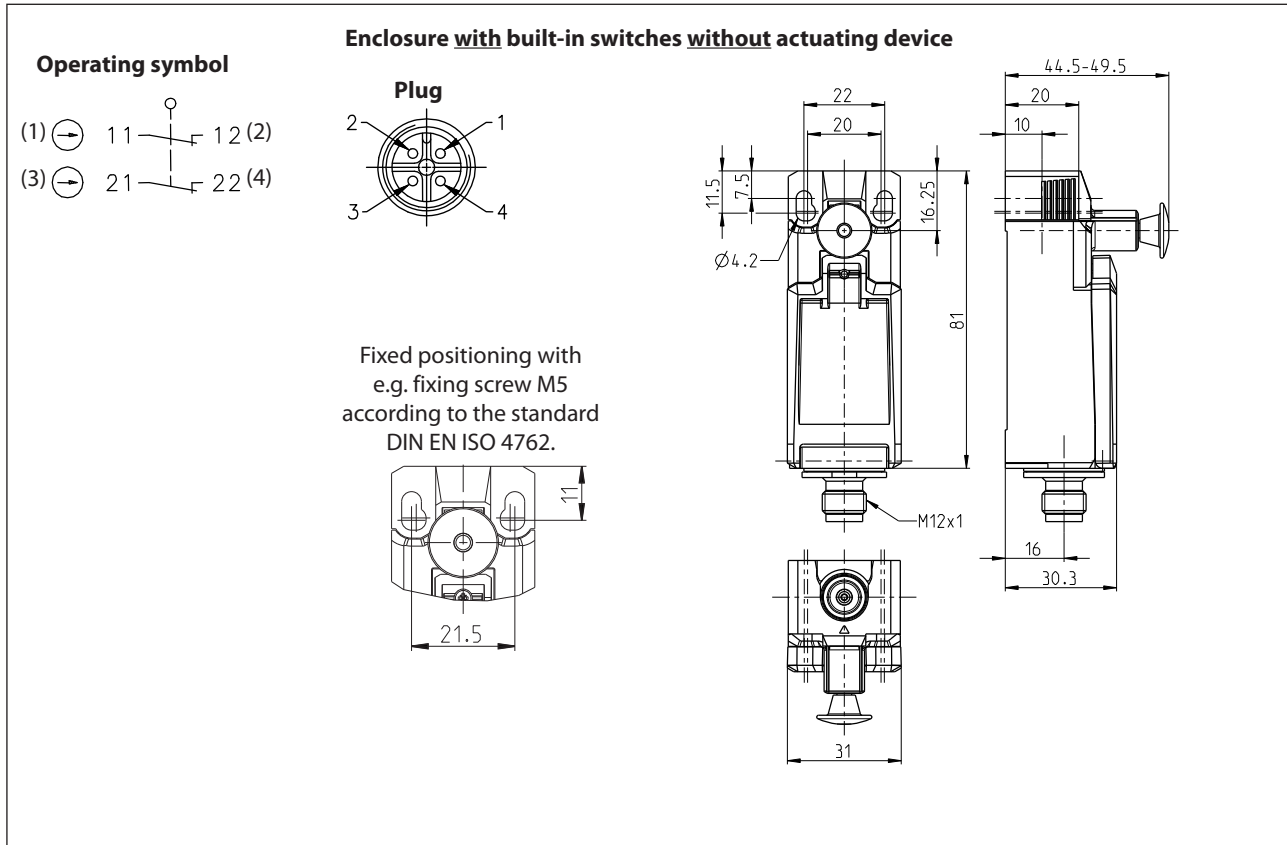


## Plastic bodied limit switch Series I81-modular system

Description **I81-SA2Z M12**

Article number **6083000323**



Electrical Data		
Rated insulation voltage	$U_i$	250 V
Rated impulse withstand voltage	$U_{imp}$	2,5 kV
Rated operational voltage	$U_e$	240 V AC
Rated supply frequency AC		50 / 60 Hz
Overvoltage category		II acc. EN 60947-1 annex H table H1
Conv. thermal current	$I_{the}$	4 A
Minimum current		1 mA
Utilization category		AC 15, $U_e/I_e$ 240 V / 3 A DC 13, $U_e/I_e$ 24 V / 4 A
Direct opening action	$\ominus$	acc. IEC/EN 60947-5-1, annex K; direct opening force: tbd
Short-circuit protective device		Fuse 4 A gG
Rated conditional short-circuit current		400 A
Max. contact resistance		25 mOhm (unused)

Mechanical data	
Enclosure	Thermoplastic, glass fibre reinforced (UL 94-V0)
Cover	Thermoplastic, glass fibre reinforced (UL 94-V0)
Reset facility	pull blue RESET - button
Actuating force	$F_B$ 10 N $\leq F_B \leq$ 30 N
Operating temperature	-30 °C ... +75 °C
Storage temperature	-40 °C ... +80 °C
Protection type	IP66 / IP67 acc. EN 60529
Pollution degree (built-in switch)	3
Contact material	silver
Device Class (built-in switch)	Category E (MC3+CC2+SC1) acc. EN 60947-1 annex Q
Contact type	2 N.C. (Form Zb)
Operating rate	$V$ 0,06 m/min $\leq V \leq$ 30 m/min
Bounce duration	ms The value depends on the operating rate.
Switchover time	ms The value depends on the operating rate.
Switching frequency	$\leq$ 60 / min.
Mechanical life	$1 \times 10^5$ operating cycles
Mission time	$\leq$ 20 years
Connection	Connector M12x1, A-coded
Conductor cross-sections	Solid or Litz wire with ferrules 0,34 mm <sup>2</sup> - 1,5 mm <sup>2</sup> ; AWG 22-16
Cable entrance	1 x M20 x1,5
Weight	$\approx$ 0,06 kg
Installation position	operator definable

ID for safety engineering	
B10d N.C.	$2 \times 10^5$ cycles
B10d N.O.	$1 \times 10^5$ cycles

Standards	
	VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1
	UL 508 / CSA C22.2 No.14
	DIN EN ISO 13849-1

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

Approvals	
	CCC (AC 15, $U_e/I_e$ 240 V / 1,5 A; DC 13, $U_e/I_e$ 24 V / 1,5 A)
	cCSA <sub>US</sub> B300, 240Vac 1.5A G.P., 24Vdc 1.5A R. Enclosure Type 4X

### Notes

The degree of protection specified (IP code) applies only to a properly closed cover and the use of an equivalent connector.  
The connector and the cable (fix or flexible mounted) must at least be suitable for the described ambient air temperatures.  
The connector must not be connected or disconnected when voltage is applied.  
The mechanical life of the connector is 100 connection cycles.

The information on the switching travel can be found in the data sheets of the actuator, as these depend on the actuator used.

Approvals / properties applies only to the fully assembled device.