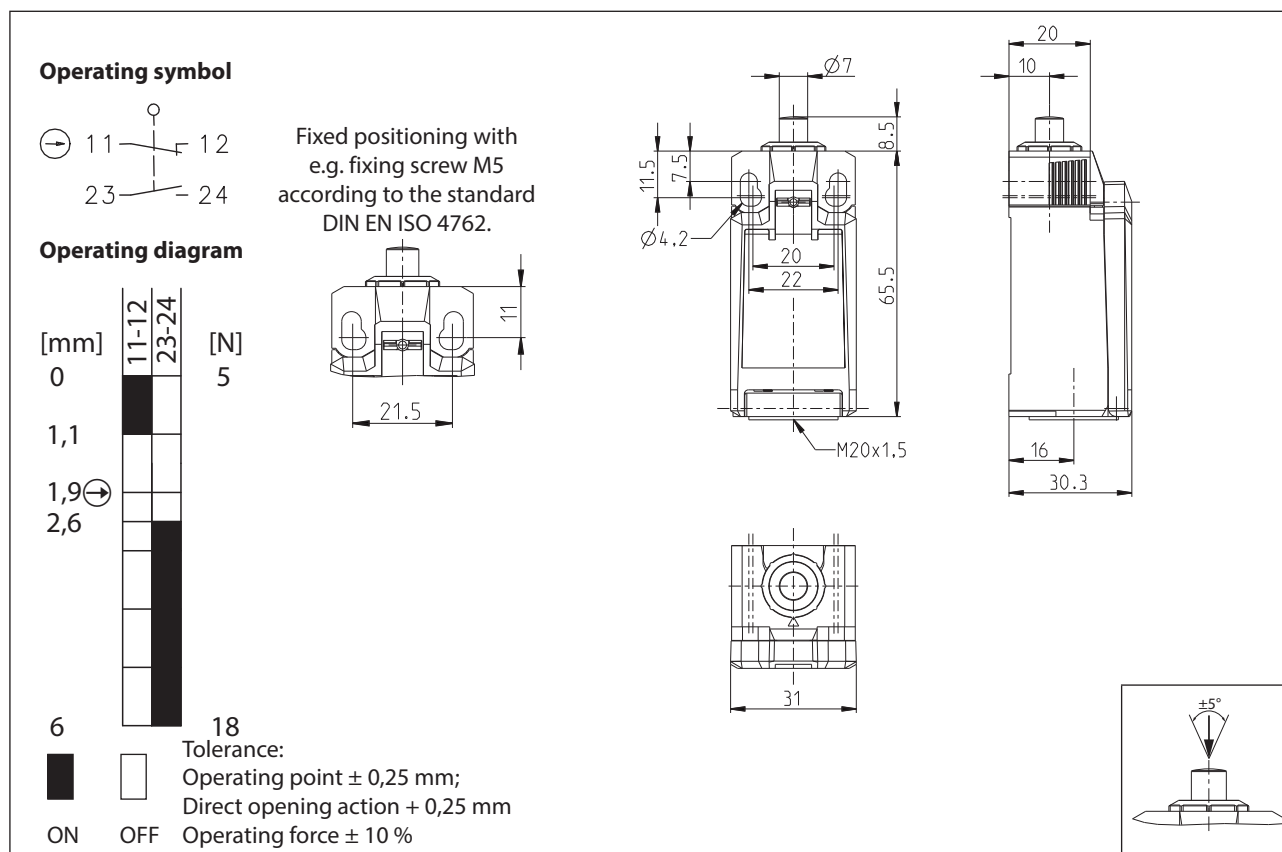


Plastic bodied limit switch

Series IN65

Description **IN65-U1Z SM**

Article number **6083000208**


Electrical Data

Rated insulation voltage	U_i	400 V
Rated impulse withstand voltage	U_{imp}	4 kV
Rated operational voltage	U_e	240 V AC / 24 V DC
Rated supply frequency AC		50 / 60 Hz
Overvoltage category		II acc. EN 60947-1 annex H table H1
Conv. thermal current	I_{the}	5 A
Minimum current		1 mA
Reliability		acc. EN 60947-5-4 @ 24 V DC, 10 mA, 1 mA, U_{kd} 2,4 V DC
Utilization category		AC 15, U_e/I_e 240 V / 1,5 A DC 13, U_e/I_e 24 V / 1,5 A (B300/Q300 table A.1)
Direct opening action		acc. IEC/EN 60947-5-1, annex K; direct opening force: 22 N
Short-circuit protective device		Fuse 4 A gG
Rated conditional short-circuit current		400 A
Max. contact resistance		25 mOhm (unused)
Electrical life		on request

Mechanical data		
Enclosure		Thermoplastic, glass fibre reinforced (UL 94-V0)
Cover		Thermoplastic, glass fibre reinforced (UL 94-V0)
Actuator		Plunger (Steel, nickel)
Actuating force	F_B	$10\text{ N} \leq F_B \leq 30\text{ N}$
Operating temperature		$-30\text{ °C} \dots +75\text{ °C}$
Storage temperature		$-40\text{ °C} \dots +80\text{ °C}$
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		1 N.C. (Form Zb), 1 N.O.
Isolating distance		4 mm (2x2 mm)
Operating rate	V	$0,06\text{ m/min} \leq V \leq 30\text{ m/min}$
Bounce duration	ms	The value depends on the operating rate.
Switchover time	ms	The value depends on the operating rate.
Switching frequency		$\leq 60 / \text{min.}$
Mechanical life		10×10^6 operating cycles
Mission time		≤ 20 years
Connection		4 screw connections (M3)
Conductor cross-sections		Solid or Litz wire with ferrules $0,34\text{ mm}^2 - 1,5\text{ mm}^2$; AWG 22-16
Cable entrance		1 x M20 x1,5
Weight		$\approx 0,07\text{ kg}$
Installation position		operator definable

Actuation	
The push bolt actuator is mainly intended to be actuated along its axis.	

ID for safety engineering	
B10d N.C.	20×10^6 cycles Tbd (check acc. to DIN EN 60947-5-1)
B10d N.O.	1×10^6 cycles (Tbd contact with reduced power for consumers with resistive load)

Standards	
	VDE 0660 T100, DIN EN 60947-1, IEC 60947-1
	VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1
	VDE 0660 T211, DIN EN 60947-5-4, IEC 60947-5-4
	UL 60947-1, CAN/CSA-22.2 No. 60947-1-13
	UL 60947-5-1, CAN/CSA-C22.2 No. 60947-5-1-14
	DIN EN ISO 13849-1
	DIN EN ISO 13849-2
	UL 508
	EN 81

EU Conformity	
acc. to directive 2014/35/EU	

Approvals

DGUV (in preparation)
CCC (in preparation)
cUL _{US} B300/Q300 (in preparation)
TÜV (in preparation)

Notes

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.