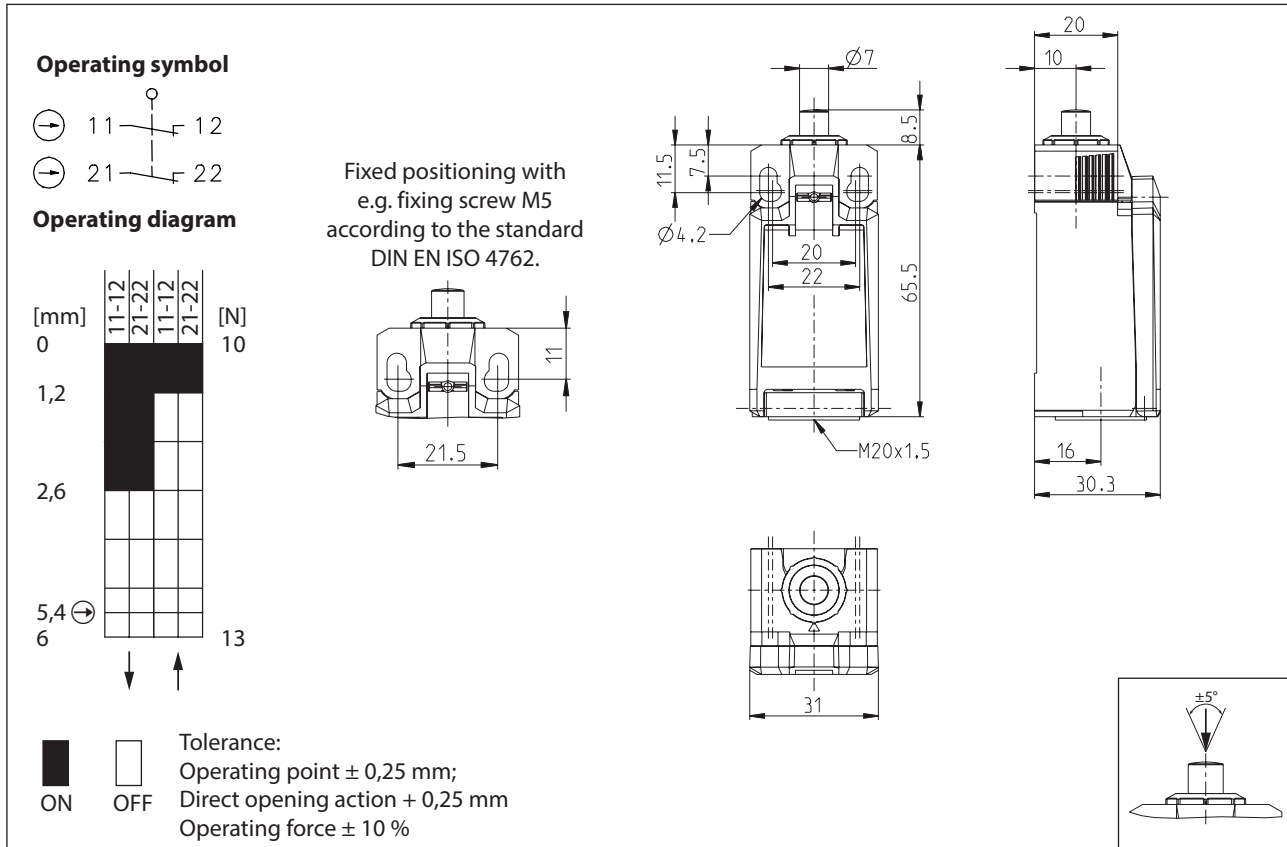


## Plastic bodied limit switch Series IN65

Description **IN65-SA2Z SM**

Article number **6083000209**



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 / 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: 33 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

<b>Mechanical data</b>	
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 °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	$V$ $0,06\text{ m/min} \leq V \leq 30\text{ m/min}$
Bounce duration	ms < 3 ms
Switchover time	ms < 8 ms
Switching frequency	$\leq 60 / \text{min.}$
Mechanical life	$15 \times 10^6$ operating cycles
Mission time	$\leq 20$ 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

<b>Actuation</b>
The push bolt actuator is mainly intended to be actuated along its axis.

<b>ID for safety engineering</b>	
B10d N.C.	$20 \times 10^6$ cycles (check acc. to DIN EN 60947-5-1)
B10d N.O.	$1 \times 10^6$ cycles (contact with reduced power for consumers with resistive load)

<b>Standards</b>
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

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

Approvals	
	DGUV (AC 15, $U_e/I_e$ 240 V / 1,5 A; DC 13, $U_e/I_e$ 24 V / 1,5 A)
	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
	TÜV

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.	