

Plastic bodied limit switch Series IN65

Description IN65-U1 AVK	Article number 6083000284
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Operating symbol

Fixed positioning with e.g. fixing screw M5 according to the standard DIN EN ISO 4762.

Operating diagram

Tolerance:
 Operating point $\pm 3,5^\circ$;
 Direct opening action $+ 3,5^\circ$
 Operating force $\pm 10\%$

	m/s	0,1	0,5	1	2	5
A		45°	45°	45°	40°	30°
B		45°	45°	45°	40°	30°

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 table A.1)
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		Metal lever with plastic roller / lever in 15 ° increments adjustable
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		1 N.C., 1 N.O. (Form Zb)
Isolating distance		4 mm (2x2 mm)
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		10 x 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 mm ² - 1,5 mm ² ; AWG 22-16
Cable entrance		1 x M20 x1,5
Weight		\approx 0,09 kg
Installation position		operator definable

Actuation	
The actuating device is preferably started from 2 sides.	
By lifting the clamp the actuation assembly can be rotated in 45° increments such that 16 actuation directions are possible.	
The actuation assembly is to be again fastened to the housing by lowering the clamp.	

ID for safety engineering	
B10d N.C.	20 x 10 ⁶ cycles Tbd (check acc. to DIN EN 60947-5-1)
B10d N.O.	1 x 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

EU Conformity	
	acc. to directive 2014/35/EU

Approvals	
	DGUV (in preparation)
	CCC
	Approvals for the North American market have been applied for
	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.	