

Plastic bodied limit switch

Series IN65

Description IN65-SE2 KNK	Article number 6083000265
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Operating symbol

13 — 14
 23 — 24

Operating diagram

[mm] 0 2,7 5,2 10,1 13 [N] 10
 ON OFF Tolerance: Operating point ± 0,45 mm; Operating force ± 10 %

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

	m/s	0,1	0,5	1	2	5
A		-	-	-	-	-
B		40°	40°	30°	20°	10°

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
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	Lever with roller (Thermoplastic)
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.O. (Form Zb)
Operating rate	V 0,06 m/min $\leq V \leq$ 30 m/min
Bounce duration	ms < 3 ms
Switchover time	ms < 8 ms
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 0,08 kg
Installation position	operator definable

Actuation
The actuating device is preferably started from 1 side. By lifting the clamp the actuation assembly can be rotated in 45° increments such that 8 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 (check acc. to DIN EN 60947-5-1)
B10d N.O. 1 x 10 ⁶ cycles (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 (Low-Voltage-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 _{US} 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.	