



Basic features

Approval/Conformity	CE cULus EAC WEEE
Basic standard	IEC 60947-5-2

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Connection	M12x1-Male
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

Min. operating current I_m	5 mA
Operating voltage U_b	20...250 VDC/20...250 VAC
Protection class	I
Rated insulation voltage U_i	250 V AC
Rated operating current I_e	250 mA
Rated operating voltage U_e AC	110 V
Rated short circuit current	100 A
Ready delay t_v max.	100 ms
Residual current I_r max.	1700 μ A
Switching frequency	150 Hz
Utilization category	AC-140 DC -13
Voltage drop static max.	11 V

Environmental conditions

Ambient temperature	-25...70 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

Material

Housing material	Brass, nickel plated
Material sensing surface	PA 12

Mechanical data

Dimension	\varnothing 30 x 70.5 mm
Installation	for flush mounting
Size	M30x1.5
Tightening torque	70 Nm

Output/Interface

Switching output	Normally closed (NC)
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Range/Distance

Assured operating distance S_a	8.1 mm
Hysteresis H max. (% of S_r)	15.0 %
Rated operating distance S_n	10 mm
Real switching distance s_r	10 mm
Repeat accuracy max. (% of S_r)	10.0 %
Temperature drift max. (% of S_r)	10 %
Tolerance S_r	\pm 10 %

Remarks

Once the overload has been eliminated, interrupt operating voltage V_s for approx. 2 sec.
Leakage current I_r max. at rated operating voltage U_e AC 110 V
 $T_a \geq 25 \text{ }^\circ\text{C} \dots \leq 70 \text{ }^\circ\text{C}$: $I_e = 250 - 1.6 \times (T_a - 25)$
With connector, e.g. BKS-S 28-... total length = switch length +20 mm.

Connector Drawings



Wiring Diagrams

