

Snap-action switching element			
When using the switching element, the application guidelines must be observed.		Tightening torque Screws at the plastic mounting flange max. 0.4–0.5 Nm Screws at the metal mounting flange max. 0.25–0.3 Nm Screws at switching element max. 0.8 Nm	
Switching system The double-break, snap-action switching element is equipped with one or two independent contact systems, acting as normally open or normally closed contact. The snap-action switching element is fitted with self-cleaning contacts. Up to three switching elements can be snapped to each actuator. Snap-action switching elements are not permissible for emergency-stop pushbuttons!		Actuating force 1 Normally closed 1.9 N 1 Normally open 2 N Actuating travel Approx. 5.8 mm ± 0.2 mm	
Material Housing The indicator lights/switches may be installed in enclosures with protection class 2 according to DIN EN 61140. The enclosure must at least have enclosure class 2 according to UL50E.		Mechanical lifetime (with 1 switching element) Pushbutton maintained action 1.5 million cycles of operation Pushbutton momentary action 3 million cycles of operation Selector switch maintained action 1.25 million cycles of operation Selector switch momentary action 2.5 million cycles of operation Keylock switch maintained action 25 000 cycles of operation Keylock switch momentary action 50 000 cycles of operation	
Material of contact Hard silver, gold-silver, silver-palladium (for aggressive atmospheres)		Electrical characteristics Standards The switches comply with the “Standards for low-voltage switching devices” DIN EN 60947-5-1	
Switch housing Plastic		Rated Insulation Voltage U_i 500 V, as per DIN EN 60947-5-1	
Mechanical characteristics Terminals Screw terminal - max. wire cross section 2.5 mm ² - stripping length wire 10 mm - max. number of wire 2 - max. strand cross section 1.5 mm ² - stripping strands use stranded wires only with wire end ferrules of 10 mm length - max. number of strands 2 Only one polarity is allowed on each side when wiring. Plug-in terminal 1 x 6.3 mm x 0.8 mm or 2 x 2.8 mm x 0.8 mm For devises with plug-in connections, insulating sleeves are re-quired and the mounting cut-out of 65 mm must be observed. Double plug-in terminal 2 x 6.3 mm x 0.8 mm For units with plug-in connections, insulating sleeves are required and the mounting cut-out of 65 mm must be observed.		Rated impulse withstand voltage U_{imp} 4 kV, according to EN/IEC 60947-5-1 Electrical life 50 000 cycles of operation Thermal current I_{th} Max. current at continuous operation and limit temperatures which do not exceed the specified max. values. 10 A Switching voltage and switching current as per EN IEC 60947-5-1	
		voltage	DC13 24 V 2.5 A 60 V 0.8 A 110 V 0.6 A 120 V 230 V 0.2 A 400 V 0.15 A 500 V 0.07 A
			AC15 4.5 A 4.5 A 4.5 A 4.5 A 4.0 A 2.5 A

Recommended minimum operational data

Gold-silver contacts:

Voltage	5 VDC	24 VDC	110 VDC
Current	15 mA	5 mA	2 mA

Hard silver contacts:

Voltage	24 VDC	110 VDC
Current	50 mA	10 mA

Protection class

Indicators and switches, fit for mounting into devices with protection class II.

Ambient conditions

Storage temperature

−40 °C ... +85 °C

Operating temperature

−40 °C ... +55 °C

(other temperatures on request)

Protection degree

IP00

Shock resistance

(single impacts, semi-sinusoidal)

300 m/s² pulse width 11 ms, as per DIN EN 60068-2-27

Vibration resistance

(sinusoidal)

100 m4/s² at 10 Hz ... 500 Hz, amplitude 0.75 mm, as per DIN EN 60068-2-6

Pollution degree

3

Climatic resistance

Relative humidity

10 ... 95 % non-condensing

Approvals

Approbations

CB (IEC 60947-5-1)

DNV

EAC

NFF

cULus

VDE

Conformities

CE

CCC

UKCA