Your Expert Partner for **Human Machine Interfaces**

Switching element

Distribution by DigiKey

45-316.1X40



https://digikey.eao.com/p/45-316.1X40

Your product:



45-316.1X40
Switching element

MOUNTING

Component mounting type: Front mounting

ELECTRICAL CHARACTERISTICS

Contacts: 1 NC / 1 FS

Pollution degree: 3

Switching voltage and switching current:

at AC-12						
Voltage	24 V	48 V	110 V	230 V	400 V	500 V
Current	10 A	10 A	10 A	8 A	6 A	10 A
at AC-15						
Voltage	24 V	48 V	110 V	230 V	400 V	500 V
Current	6 A	6 A	6 A	4 A	3 A	1,4 A
at DC-12						
Voltage	24 V	48 V	110 V	230 V	400 V	500 V
Current	10 A	5 A	2,5 A	1 A	0,3 A	0,2 A
at DC-13						
Voltage	24 V	48 V	110 V	230 V	400 V	500 V
Current	3 A	1,5 A	0,7 A	0,3 A	0,1 A	0,07 A

Contact reliability: One contact failure per 10 million switching operations (5 V, 1 mA)
One contact failure per 100 million switching operations (17 V, 5 mA)

Insulation voltage: Rated value 500 V

Standards: The switches comply with the “Standards for low-voltage switching devices” EN IEC 60947-5-1

Surge voltage resistance: Rated value 6 kV

Thermal current Ith: 10 A Max. permissible current for continuous operation and ambient temperatures not exceeding the specified max. values.

MECHANICAL CHARATERISTIC

Terminal: Spring-type terminal

Weight: 0.018 kg

Contact material: Gold

Switching system:	Slow-make switching element
Mechanical lifetime:	10 Mio. cycles of operation
Operating frequency:	Max. 3 600/h
Tightening torque:	0.8 … 0.9 Nm
Switching system:	The double-break, slow-make switching element is equipped with normally open or normally closed contact. The normally closed contact has forced opening. Up to six switching elements can be snapped to each holder. The NC contact opens automatically upon disconnection of the actuator. On delivery, the contact is open (= safe state). Activation (= NC contacts on the non-actuated commanding device are closed) takes place upon first-time actuation after the contact block is snapped onto the actuator.
Wire cross section:	Solid 2 x (0.25 … 1.5mm^2) Finely stranded – Without end sleeves 2 x (0.5 … 1.5 mm^2) – With end sleeves 2 x (0.5 … 0.75 mm^2) – For AWG cables for auxiliary contacts 2 x (24 … 16)

AMBIENT CONDITION

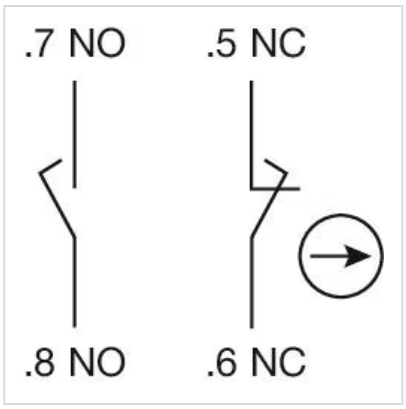
IP Protection:	IP20 Terminal, IP40 Housing
Operating temperature:	– 25 °C … + 70 °C
Storage temperature:	– 40 °C … + 80 °C
Climate resistance:	During operation according to IEC 60721: 3K6, 3C3, 3S2, 3M6
Shock resistance:	According to IEC 60068-2-27: Sinusoidal half-wave 50 g / 11 ms
Vibration resistance:	According to IEC 60068-2-6: 2 … 500 Hz: 5 g

CERTIFICATE

Approbations:	CCC, CSA, UL
Conformities:	CE, UKCA

OTHER

Switching element type:	Double
Short Description:	Switching element, Slow-make switching element, 500 V AC @ 10 A, Gold, 1 NC / 1 FS, Spring-type terminal, Front mounting
Wiring diagrams:	



Dimension drawings:

