

# Actuator

51-148.025D2







# 51-148.025D2 Actuator

Front dimension: 18 mm x 18 mm

Front form: Square

**MOUNTING** 

Design: Raised

Mounting type: Panel mounting

# **ELECTRICAL CHARACTERISTICS**

Switching voltage and switching

current:

250 VAC, 5 A (ohmic)

250 VAC, 3 A (Soldering terminal) 250 VAC, 2 A (inductive, cos(phi) = 0.7) 125 VAC, 3 A (inductive, cos(phi) = 0.7) 220 VDC, 0.1 A (inductive, L:R = 30 ms) 110 VDC, 0.2 A (inductive, L:R = 30 ms) 60 VDC, 0.7 A (inductive, L:R = 30 ms)

24 VDC, 2 A (inductive, L:R = 30 ms)

Contacts: 4 NC / 4 NO

**Rated Operational Voltage Ue:** 250 VAC/DC according to EN IEC 60947-1

250 V @ 5 A Switching rating:

**Electrical lifetime:** 50 000 cycles of operation

Electric strength: 2500 VAC, 50 Hz, 1 min. between all terminals and earth, according to IEC 61058-

1, part 15

**Protection class:** 

Standards: According to EN/IEC 61058-1

Thermal current Ith: 5 A, according to EN / IEC 60947-5-1

The maximum current in continuous operation and at ambient temperature not

exceeding the quoted maximum values.

#### **MECHANICAL CHARACTERISTICS**

Terminal: Soldering terminal

Contact material: Gold

Switching action: Rest (a) - Momentary

**Switching system:** Snap-action switching element

Switching system: Self-cleaning, double-break snap action switching system, 1 normally closed and 1

normally open contact per element.

**Switching positions:** 2 positions

**Switching angle:** 42° right

**Mechanical lifetime:** 50 000 cycles of operation

**Operating force:** 1,8 ... 6 N, depending on the number of switching elements

**Tightening torque:** Fixing nut max. 0.5 Nm

Wire cross section: Snap-action switching element with tinned soldering terminals at the sides

Max. wire diameter 2 wires à 1.2 mm

Max. wire cross-section of stranded cable 1 x 1 mm<sup>2</sup>

**Weight:** 0.026 kg

### **AMBIENT CONDITION**

**IP front protection:** IP65, according to DIN EN 60529

**Operating temperature:**  $-25 \, ^{\circ}\text{C} \, ... \, + 55 \, ^{\circ}\text{C}$ 

Storage temperature:  $-40 \,^{\circ}\text{C} \dots + 85 \,^{\circ}\text{C}$ 

**Shock resistance:** 15 g for 11 ms, as per DIN / EN 60512-4-3, DIN / EN 60068-2-27 (Single impacts,

semi-sinusoidal)

Vibration resistance: 10 g at 10 Hz...1500 Hz, amplitude 0.75 mm (Sinusoidal), according to DIN EN

60512-4-4, DIN EN 60068-2-6

Climate resistance: Standard condition, as per DIN EN 60068-2-30

Changing condition, as per DIN EN 60068-2-14

## **CERTIFICATE**

Approbations: CB (IEC 61058-1), CQC, CSA, DNV, ENEC (EN 61058-1), UL

Ce, UKCA, 2011 / 65 / EC (RoHS), 2014 / 30 / EU (EMC), 2014 / 35 / EU (LVD)

**REACH:** REACH compliant

RoHS: RoHS compliant

Short Description: Actuator, 18 mm x 18 mm, Square, 4 NC / 4 NO, Rest (a) - Momentary,

Soldering terminal, IP65, according to DIN EN 60529

Housing colour: Black

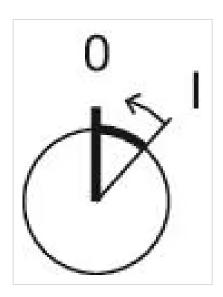
**Hints:** Standard lock: DOM 311

max. number of switching

elements:

4

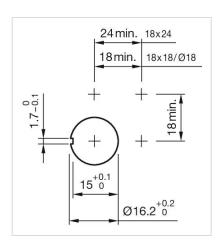
Switching positions:



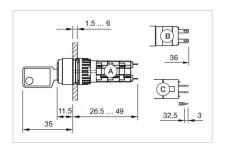
Wiring diagrams:



Mounting cut-outs:



Dimension drawings:



A = Solder terminal B = Plug-in terminal 2.8 mm x 0.5 mm C = Universal terminal 2.0 mm x 0.5 mm