

# Actuator

51-

146.025D2F







# 51-146.025D2F Actuator

## **FRONT**

Front dimension: 18 mm x 18 mm

Front form: Square

### **MOUNTING**

Design: Flush

Mounting cut-out: 21 mm x 21 mm

Mounting type: Panel mounting

**ELECTRICAL CHARACTERISTICS** 

Switching voltage and switching

250 VAC, 5 A (ohmic)

current:

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: 2 NC / 2 NO

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

Switching rating: 250 V @ 5 A

**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  $\text{mm}^2$ 

**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

**Central Conformities:** CE, UKCA, 2011 / 65 / EC (RoHS), 2014 / 30 / EU (EMC), 2014 / 35 / EU (LVD)

**REACH:** REACH compliant

RoHS: RoHS compliant

#### **OTHER**

Short Description: Actuator, 21 mm, 21 mm, 18 mm, 18 mm, Square, 2 NC / 2 NO, Rest (a) -

Momentary, Soldering terminal, IP65, according to DIN EN 60529

Housing colour: Black

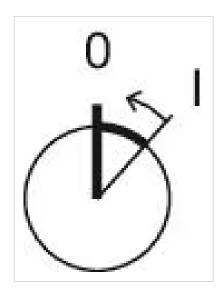
Hints: Standard lock: DOM 311

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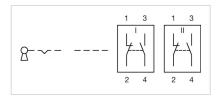
max. number of switching

elements:

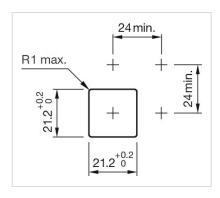
Switching positions:



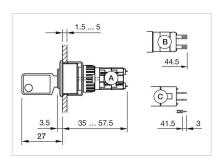
Wiring diagrams:



# Mounting cut-outs:



## Dimension drawings:



A = Solder terminal

B = Solder terminal 2.8 mm x 0.5 mm

C = Universal terminal 2.0 mm x 0.5 mm