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# Stop switch

84-6221.2B20





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# Your product:



# 84-6221.2B20 Stop switch

## FRONT

| Front dimension: | Ø 32 mm |
|------------------|---------|
| Front form:      | Round   |

# MOUNTING

| Mounting cut-out: | Ø 22.3 mm      |
|-------------------|----------------|
| Mounting type:    | Panel mounting |

## **OPERATING-/INDICATION PART**

| Lens colour:             | Grey          |
|--------------------------|---------------|
| Lens material:           | Plastic       |
| Lens illumination:       | Illuminated   |
| Lens shape:              | Mushroom-head |
| Lens optics:             | opaque        |
| Lens:                    | round         |
| Switching position ring: | Black         |
| Illumination colour:     | Red           |

## **ELECTRICAL CHARACTERISTICS**

Switching voltage and switching current:

| Switch rating AC with silver contact (g<br>Service category AC-15 as per EN IEC<br>Voltage<br>Current<br>Switch rating AC with silver contact (g<br>Service category DC-13 as per EN IEC<br>NO contacts<br>(48 VA)<br>12 VDC/2.0 A<br>24 VDC/2.0 A<br>48 VDC/1.0 A<br>60 VDC/0.8 A | 60947-5-1<br>old plated)  | 120 VAC<br>3 A<br>NC contacts<br>(60 VA)<br>12 VDC/2.5 A<br>24 VDC/2.5 A<br>48 VDC/1.25 A<br>60 VDC/1.0 A | 240 VAC<br>1,5 A<br>NO/NC contacts<br>125 VDC/0.22 A<br>250 VDC/0.11 A |
|--|---|---|--|
| Contacts:  | 1 NC  |   |  |
| Operating voltage:   | 5 - 30 V DC   | (LED)   |  |
| Rated Operational Voltage Ue:  | 250 VAC/DC according to EN IEC 60947-1                                  |   |  |
| Rated impulse withstand voltage<br>Uimp:   | 4 kV, according to EN IEC 60947-1                                       |   |  |
| Rated insulation voltage Ui:   | 250 V accord  | ding to EN / IEC 6094   | 47-1   |
| Rated short-circuit current caused:  | 1 000 A, typ  | e of short-circuit devi   | ice 6 A gG (EN 60947-5-1)  |
| Recommended minimum operational data:  | Silver con<br>Voltage<br>Current  | tacts (gold plated)   | 1 VAC/DC<br>1 mA   |
| Switching rating:  | 250 V AC @  | 1,5 A   |  |
| Electrical lifetime:   | 50 000 cycle  | es of operation   |  |
| Electric strength:   | 500 VAC, 50 Hz, 1 minute according to DIN IEC 60512-2                   |   |  |
| Overvoltage category:  | III, according to EN / IEC 61058-1                                      |   |  |
| Pollution degree:  | 3, according to EN IEC 60947-1  |   |  |
| Protection class:  | II, according to EN / IEC 60947-5                                       |   |  |
| Standards:   | According to EN 60947-5-1, EN 60947-5-5, DIN EN ISO 13850, EN IEC 60204 |   |  |
| Thermal current Ith:   | 5 A   |   |  |

## **MECHANICAL CHARACTERISTICS**

| Terminal:            | Plug-in terminal, 2.8 x 0.5 mm |
|----------------------|--------------------------------|
| Contact material:    | Gold                           |
| Switching action:    | Maintained                     |
| Switching system:    | Slow-make switching element    |
| Release type:        | Twist to unlock                |
| Mechanical lifetime: | ≥50 000 cycles of operation    |
| Operating force:     | 20 N ±4 N                      |

| Operating Travel:  | ca. 4 mm          |
|--------------------|-------------------|
| Tightening torque: | Fixing nut 0.8 Nm |
| Weight:            | 0.028 kg          |

## **AMBIENT CONDITION**

| IP front protection:   | IP65, IP66, IP67, according to DIN EN 60529   |
|------------------------|---|
| IK Protection:         | IK07 as per IEC 62262   |
| Operating temperature: | – 25 °C + 70 °C   |
| Storage temperature:   | – 25 °C + 85 °C   |
| Shock resistance:      | Max. 150 m / s <sup>2</sup> , pulse width 11 ms, 3-axis, (semi-sinusoidal as per EN IEC 60068-2-27)   |
| Vibration resistance:  | Max. 50 m / $\rm s^2$ from 10 Hz 500 Hz, 10 cycles, 3-axis (sinusoidal EN IEC 60068-2-6)  |
| Climate resistance:    | Damp heat, cyclic: 96 hours, + 25 °C/97 %, + 55 °C/93 % relative humidity, as per<br>EN IEC 60068-2-30<br>Damp heat, steady: 56 days, + 40 °C/93 % relative humidity, according to EN IEC<br>60068-2-78<br>Saline mist: 96 hours, + 35 °C in chemical solution NaCl, as per EN IEC 60068-2-<br>11<br>Dry heat: 96 hours, + 70 °C, as per EN IEC 60068-2-2<br>Low temperature: 96 hours, - 40 °C (as per EN IEC 60068-2-1) |

| CERTIFICATE |  |
|-------------|--|
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| Approbations: | CCC, UL  |
|---------------|--|
| Conformities: | CE, UKCA, 2006 / 42 / EC (MD), 2011 / 65 / EC (RoHS) |
| REACH:        | REACH compliant                                      |
| RoHS:         | RoHS compliant                                       |

OTHER

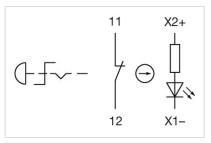
| Short Description:  | Stop switch, Ø 22.3 mm, Ø 32 mm, Mushroom-head, Illuminated, Grey, Plastic, opaque, Round, 1 NC, Maintained, Plug-in terminal, 2.8 x 0.5 mm, IP65, IP66, IP67, according to DIN EN 60529, Twist to unlock, Red |
|---------------------|--|
| Material:           | Plastic, according to UL 94 V0   |
| Housing colour:     | Grey   |
| Housing material:   | Plastic, according to UL 94 V0   |
| Product attributes: | Twist to unlock clockwise  |
| Hints:              | Position indication ring black,Twist to unlock clockwise,Luminosity and wave length variations caused by LED manufacturing processes may cause slight differences  |

regarding the illumination. The customer has to decide what resistor shall be used to the  $\ensuremath{\mathsf{LED}}$ 

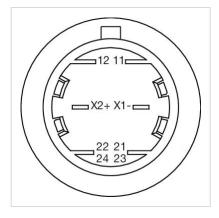
#### **Description component:**

The double-break switching system can be supplied for the following switching functions: 1 Normally closed, 2 Normally closed, 1 Normally closed + 1 Normally open. The Normally closed contacts have forced opening according to EN 60947-5-5, Material housing actuator: Plastic as per UL94 V0, Material lens: Plastic as per UL94 V2

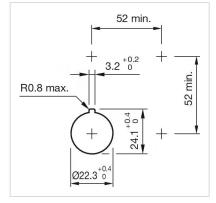
#### Wiring diagrams:



#### **Component layouts:**



#### Mounting cut-outs:



**Dimension drawings:** 

