

# Emergency stop switch

84-5231.2B40



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Your product:

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## 84-5231.2B40

### Emergency 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:** Red

**Lens material:** Plastic, according to UL 94 V0

**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 (gold plated) |               |                |
| Service category AC-15 as per EN IEC 60947-5-1     |               |                |
| Voltage                                            | 120 VAC       | 240 VAC        |
| Current                                            | 3 A           | 1,5 A          |
| Switch rating AC with silver contact (gold plated) |               |                |
| Service category DC-13 as per EN IEC 60947-5-1     |               |                |
| NO contacts                                        | NC contacts   | NO/NC contacts |
| (48 VA)                                            | (60 VA)       |                |
| 12 VDC/2.0 A                                       | 12 VDC/2.5 A  | 125 VDC/0.22 A |
| 24 VDC/2.0 A                                       | 24 VDC/2.5 A  | 250 VDC/0.11 A |
| 48 VDC/1.0 A                                       | 48 VDC/1.25 A |                |
| 60 VDC/0.8 A                                       | 60 VDC/1.0 A  |                |

|                                              |                                                                         |          |
|----------------------------------------------|-------------------------------------------------------------------------|----------|
| <b>Contacts:</b>                             | 1 NC / 1 NO                                                             |          |
| <b>Operating voltage:</b>                    | 5 - 30 V DC (LED)                                                       |          |
| <b>Operation current:</b>                    | 9,7 - 12,4 mA                                                           |          |
| <b>Rated Operational Voltage Ue:</b>         | 250 VAC/DC according to EN IEC 60947-1                                  |          |
| <b>Rated impulse withstand voltage Uimp:</b> | 4 kV, according to EN IEC 60947-1                                       |          |
| <b>Rated insulation voltage Ui:</b>          | 250 V according to EN / IEC 60947-1                                     |          |
| <b>Rated short-circuit current caused:</b>   | 1 000 A, type of short-circuit device 6 A gG (EN 60947-5-1)             |          |
| <b>Recommended minimum operational data:</b> | Silver contacts (gold plated)                                           |          |
|                                              | Voltage                                                                 | 1 VAC/DC |
|                                              | Current                                                                 | 1 mA     |
| <b>Switching rating:</b>                     | 250 V AC @ 1,5 A                                                        |          |
| <b>Electrical lifetime:</b>                  | 50 000 cycles of operation                                              |          |
| <b>Electric strength:</b>                    | 500 VAC, 50 Hz, 1 minute according to DIN IEC 60512-2                   |          |
| <b>Overvoltage category:</b>                 | III, according to EN / IEC 61058-1                                      |          |
| <b>Pollution degree:</b>                     | 3, according to EN IEC 60947-1                                          |          |
| <b>Protection class:</b>                     | II, according to EN / IEC 60947-5                                       |          |
| <b>Standards:</b>                            | According to EN 60947-5-1, EN 60947-5-5, DIN EN ISO 13850, EN IEC 60204 |          |
| <b>Thermal current Ith:</b>                  | 5 A                                                                     |          |

## MECHANICAL CHARACTERISTICS

|                             |                             |
|-----------------------------|-----------------------------|
| <b>Terminal:</b>            | Flat ribbon cable 300 mm    |
| <b>Contact material:</b>    | Gold                        |
| <b>Switching action:</b>    | Maintained                  |
| <b>Switching system:</b>    | Slow-make switching element |
| <b>Release type:</b>        | Twist to unlock             |
| <b>Mechanical lifetime:</b> | 250 000 cycles of operation |

|                           |                   |
|---------------------------|-------------------|
| <b>Operating force:</b>   | 20 N ±4 N         |
| <b>Operating Travel:</b>  | ca. 4 mm          |
| <b>Tightening torque:</b> | Fixing nut 0.8 Nm |
| <b>Weight:</b>            | 0.036 kg          |

## AMBIENT CONDITION

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>IP front protection:</b>   | IP65, IP66, IP67, according to DIN EN 60529                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>IP Protection:</b>         | IP20 rear side                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>IK Protection:</b>         | IK07 as per IEC 62262                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Operating temperature:</b> | – 25 °C ... + 70 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Storage temperature:</b>   | – 25 °C ... + 85 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Shock resistance:</b>      | Max. 150 m / s <sup>2</sup> , pulse width 11 ms, 3-axis, (semi-sinusoidal as per EN IEC 60068-2-27)                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Vibration resistance:</b>  | Max. 50 m / s <sup>2</sup> from 10 Hz ... 500 Hz, 10 cycles, 3-axis (sinusoidal EN IEC 60068-2-6)                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Climate resistance:</b>    | Damp heat, cyclic: 96 hours, + 25 °C/97 %, + 55 °C/93 % relative humidity, as per EN IEC 60068-2-30<br>Damp heat, steady: 56 days, + 40 °C/93 % relative humidity, according to EN IEC 60068-2-78<br>Saline mist: 96 hours, + 35 °C in chemical solution NaCl, as per EN IEC 60068-2-11<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)<br>Simulated solar radiation test SA2 and weathering test SB1 as per EN IEC 60068-2-5 |

## CERTIFICATE

|                      |                                                              |
|----------------------|--------------------------------------------------------------|
| <b>Approbations:</b> | CB (IEC 60947-5-1. IEC60947-5-5), CCC, EN ISO 13850, UL NISD |
| <b>Conformities:</b> | CE, 2006 / 42 / EC (MD), 2011 / 65 / EC (RoHS)               |
| <b>REACH:</b>        | REACH compliant                                              |
| <b>RoHS:</b>         | RoHS compliant                                               |

## OTHER

|                           |                                                                                                                                                                                                                                                 |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Short Description:</b> | Emergency stop switch, Ø 22.3 mm, Ø 32 mm, Mushroom-head, Illuminated, Red, Plastic, according to UL 94 V0, opaque, Round, 1 NC / 1 NO, Maintained, Flat ribbon cable 300 mm, IP65, IP66, IP67, according to DIN EN 60529, Twist to unlock, Red |
| <b>Material:</b>          | Plastic, according to UL 94 V0                                                                                                                                                                                                                  |
| <b>Housing colour:</b>    | Yellow                                                                                                                                                                                                                                          |
| <b>Housing material:</b>  |                                                                                                                                                                                                                                                 |

Plastic, according to UL 94 V0

**Product attributes:**

Twist to unlock clockwise, position indication ring black

**Hints:**

Twist to unlock clockwise

Luminosity and wave length variations caused by LED manufacturing processes may cause slight differences regarding the illumination.

Foolproof according to EN IEC 60947-5-5

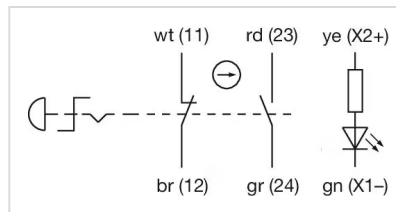
Lens colour Red

Standard version: Flat ribbon-cable length 300 mm or plug-in terminal 2.8 mm x 0.5 mm

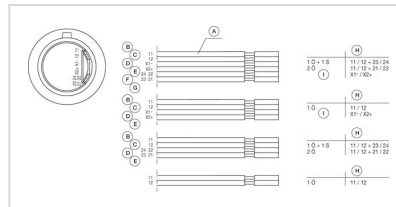
**Description component:**

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

**Wiring diagrams:**

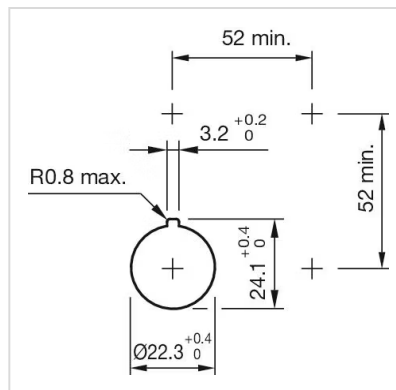


**Component layouts:**



A = Cable  
B = white  
C = brown  
D = green  
E = yellow  
F = grey  
G = pink  
H = Terminals  
I = Illumination

**Mounting cut-outs:**



**Dimension drawings:**

