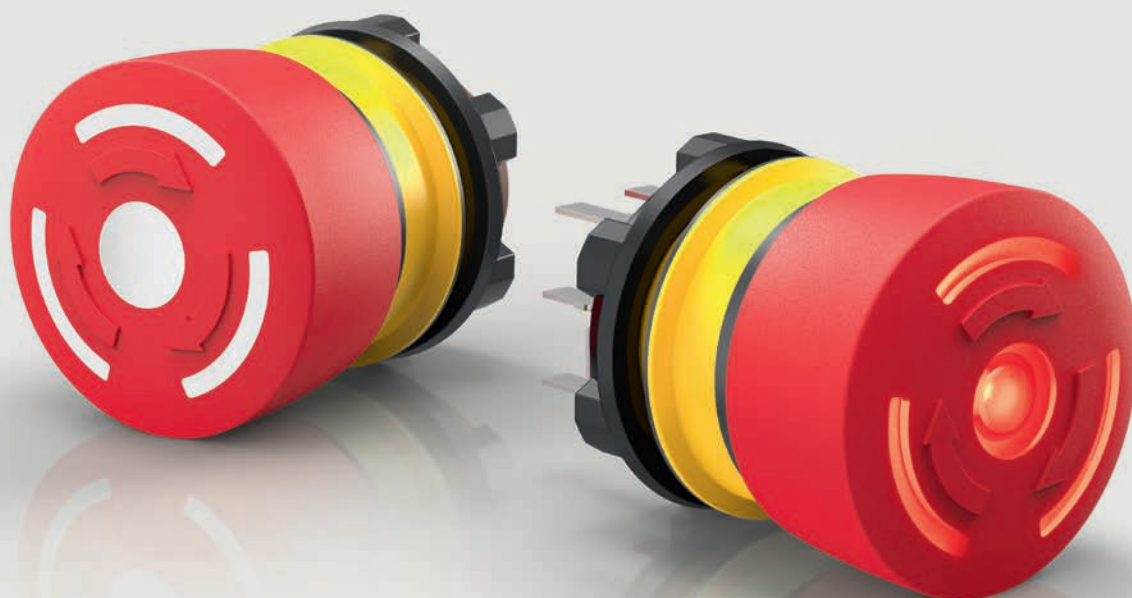


Series

84

*E-Stops and Stop Switches.*

[www.eao.com](http://www.eao.com)



# Series 84

## *E-Stops and Stop Switches.*

**EAO offers intuitive, reliable and robust safety switches for the machinery industry:** *The Series 84 emergency stop and stop switches have a compact, attractive design with a very low back panel depth.*

EAO, the expert partner for innovative, intuitive and reliable Human Machine Interfaces (HMIs), offers with the Series 84 emergency stop (E-Stop) and stop switches the most important safety control elements for machinery and industrial automation equipment with very low back panel depth (13.5 mm with cable connection) and an attractive design.

The intuitive Series 84 emergency stop and stop switches are particularly suitable for handheld and compact control units, where besides highest safety requirements also a very low back panel depth is critical and where the front of panel height as well as ergonomic styling are important design factors.

Installed directly on the machine or in a handheld control unit, these switches reliably protect humans from injury and machines from damage.

The compact design of the Series 84 emergency stop and stop switches makes it ideal for use in industrial machinery, process automation, and robotics as well as lifting, moving and material handling equipment.

The robust mono-block construction and a choice of terminals allow easy mounting in modern safety control systems and help to meet the needs of industry standards for fail-safe actuation.

The actuation status of the switch is visible thanks to the green or black indication ring that is noticeable until actuated. LED illumination gives additional status information and can also be used to locate the switch, even in low ambient light conditions.

#### Typical applications

- Industrial or process automation equipment
- Machinery, in particular for handheld control units
- Robotics
- Material handling and lifting platforms
- Medical devices

#### Product range

All E-Stops and stop switches are available either with solder/plug-in terminal or flat ribbon cable (300 mm).

The switching element is available with a double break contact with either

- a normally closed contact (NC)
- two normally closed contacts (NC)
- a normally closed contact (NC) and a normally open contact (NO)

The normally closed contacts are force-operated according to EN IEC 60947-5-1 and can switch voltages and currents from 1 VAC/DC / 1 mA (1W) thanks to highly reliable, gold-plated silver contacts.

#### Mechanical characteristics

- Mounting cut-out 22.3 mm
- Operation force 17 N  $\pm$  4 N

#### Mechanical life

EAO tested: more than 250 000 cycles of operation

#### Illumination

New and improved LED illumination results in greater visibility even in ambient light conditions. The integrated red LED is equipped with reverse polarity protection and a constant current source, all while maintaining a constant brightness at operating voltages from 5VDC to 30VDC.

#### Switching capacity

Alternating voltage with gold-plated silver contacts  
Utilisation category AC-15, according to EN IEC 60947-5-1

Voltage	120 VAC	240 VAC
Current	3 A	1.5 A

Direct voltage with silver contact (gold-plated)  
Utilisation category AC-13, according to EN IEC 60947-5-1 (inductive)

Voltage	12 VDC	24 VDC	60 VDC	125 VDC	250 VDC
Current – version with solder/plug-in terminal	5 A	4 A	1.7 A	0.55 A	0.27 A
Current – cable version	3 A	3 A	1.70 A	0.55 A	0.27 A

## Advantages.

- Robust mono-block with a foolproof and fail-safe design
- Very low back panel depth
- Attractive, modern design and protection IP65/67
- Reliable and long service life
- Clearly visible illumination

### Recommended operating data

	Minimum	Maximum
Voltage	1 VAC/DC	250 VAC/DC
Current	1 mA	0.27 A
Power	1 Watt	67.5 Watt

### Degree of protections

- IP65/67 front side
- IP20 rear side
- IP40 rear side (cable version)

### Temperatures

- Storage temperature  
–25 °C to +85 °C
- Operating temperature  
–25 °C to +65 °C

### Climate resistance

- Humid heat, cyclical  
96 hours, +25 °C/97%, +55 °C/93% relative humidity
- Humid heat, constant  
56 days, +40 °C/93% relative humidity
- Dry heat, 96 hours, +70 °C
- Cold, 96 hours, –40 °C
- Salt spray, 96 hours,  
+35 °C (in NaCl solution)

### Standards and directives

- Approvals
  - EN 60947-5-1/EN 60947-5-5
  - DIN EN ISO 13850
  - EN IEC 60204
  - UL Cat NISD 508 (pending)
  - CCC (pending)

- Conformities
  - CE

### Mounting

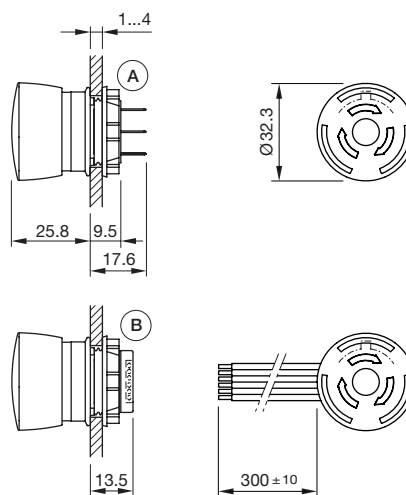
The mounting of the emergency stop and stop switch is performed on the front panel side with the aid of the fixing nut. The anti-rotation device is secured with a cam via its hole shape. The electrical connection takes place using plug-in terminal pairs, which can also be soldered on.

### Accessories

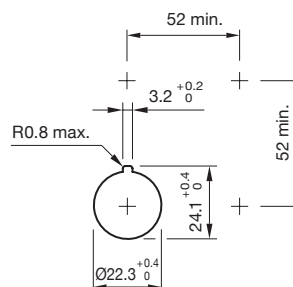
The direct mounting onto the printed circuit board can take place by means of an adapter (part no. 84-920). Further accessories such as mounting tools, protective shrouds or marking plates can be found in the EAO product catalogue.

Further information and the Online Product Configurator are available under [www.eao.com/84-e-stop](http://www.eao.com/84-e-stop)

### Dimensions



### Mounting cut-outs



All dimensions in mm.

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