

Your Expert Partner for Human Machine Interfaces

**Preliminary Data Sheet** 



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# Series 61

# *Emergency stop switch compact* <u>Compact, robust, reliable.</u> EAO offers intuitive, safety controls for machinery: The compact Series 61 emergency stop switch (E-Stop).

EAO, the expert partner for innovative, intuitive and reliable Human Machine Interfaces (HMIs), offers critical safety controls which are uniquely compact, robust and reliable perfect for mechanical engineering. The Series 61 compact emergency stop switch is especially suited for handheld control units. Installed directly into a machine, the switch reliably protects people and equipment against injury and damage.

Machinery control panels provide many new challenges for manufacturers, not only to make operability simple and intuitive but to ensure systems are compact and capable of withstanding harsh industrial use. Other important factors include environmental sealing against dirt ingress as well as resistance to cleaning with aggressive detergents and high-pressure jets.

The compact E-Stop Series 61 switch satisfies industrial requirements through the material properties and extremely robust build. Sealed to IP69K, the innovative design fully protects against water and dust ingress.

The product complies with current and known future standard requirements pertaining to illumination visibility and optimised usability through improved mechanics. In addition, requirements according to ISO EN 13850 are met.

Choose your switch functions according your individual needs. Thereby you can connect the E-Stop with up to three switching elements.

In brief, the Series 61 compact emergency stop switch is a robust and reliable safety control with a very low back panel depth and improved energy efficiency – a perfect fit for machinery.

# Typical applications

- Handheld control units
- Production and plant machinery
- Construction machinery
- Agricultural machinery

# Materials

The materials used comply with the high EAO standards relating to quality, functional safety, lifetime and design. They are resistant to cleaning agents and are also highly resistant to UV radiation.

#### Mechanical characteristics

- Tightening torque for fixing nut max. 100 Ncm
- Actuating force 30 N ±4 N
- Terminal: Solder/plug-in 2.8 x 0.5 mm
- Mechanical service life ≥20000 switching cycles

#### Electrical characteristics

- Rated operating voltage Ue 50VAC/DC
- Electrical service life ≥20000 switching cycles
- Minimum operating voltage
- 1 VAC/DC
- Current 1 mA

# Ambient conditions

- Temperatures
- Storage temperature –40 °C to +85 °C
- Operating temperature –25 °C to +55 °C
- Shock resistance (semi-sinusoidal) max. 150 m/s<sup>2</sup>, pulse width 11 ms, 3-axis
- Vibration resistance (sinusoidal) max. max. 100m/s<sup>2</sup>, at 10Hz to 500Hz, 20 cycles, 3-axis
- Climate resistance damp heat, state, 56 days,
- +40°C/93% relative humidity
- Dry heat, 96 hours, +55 °C
  Cold, 96 hours, -25 °C

# Protection

IP69K and IP67 front

# Advantages.

- · Very low back panel depth (21.2 mm)
- High front protection IP69K and IP67
- Robust design
- Optional illumination
- Up to three switching elements

# Colours

- Lens: red
- Actuator housing: yellow
- Position indication ring: green
- Illumination: red

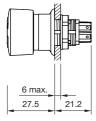
# Standards and directives

- CE
- EN 60947-5-1
- EN 60947-5-5
- DIN EN ISO 13850
- EN IEC 60204

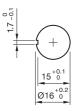
# Mounting

The E-Stop is front mounted using a fixing nut. It is prevented from rotating by the anti-rotation lug in the mounting cut-out. The panel mounting is easy to perform without special tools. The electrical connection is established via plug-in terminals or by soldering.

## Dimensions



# Mounting cut-outs



# Variants

 With illumination, max. two switching elements



 Without illumination, max. three switching elements



# EAO Contact. *Your centre of excellence.*

#### Headquarters

EAO Holding AG

Tannwaldstrasse 88 CH-4600 Olten Telephone +41 62 286 91 11 info@eao.com

# Manufacturing Companies

#### Switzerland

EAO AG Tannwaldstrasse 88 CH-4600 Olten Telephone +41 62 286 91 11 info@eao.com

EAO Systems AG Tannwaldstrasse 88 CH-4600 Olten Telephone +41 62 286 91 11 sales.esy@eao.com

#### **Sales Companies**

#### China

EAO (Guangzhou) Ltd. 3/F, Block G4, South China New Materials Innovation Park 31 Kefeng Road, Guangzhou Science City, CN-Guangzhou, PRC Telephone +86 20 3229 0390 sales.ecn@eao.com

EAO (Shanghai) Office Rm. 403, Block 5#, CIFI Century Square, Lane 28, NO. 21, Danba Road, Putuo District CN-Shanghai PRC Telephone +86 21 6095 0717 sales.ecn@eao.com

### France

EAO France SAS 5, rue Henri François FR-77330 Ozoir-Ia-Ferrière Telephone +33 1 64 43 37 37 sales.efr@eao.com

#### EAO (Guangzhou) Ltd. 3/F, Block G4, South China New Materials Innovation Park 31 Kefeng Road, Guangzhou Science City,

Telephone +86 20 3229 0390

CN-Guangzhou, PRC

sales.ecn@eao.com

China

Germany, Austria, Poland, Czech Republic EAO GmbH Langenberger Straße 570 DE-45277 Essen Telephone +49 201 8587 0 sales.ede@eao.com

#### Hong Kong (Asia Pacific)

EAO (Far East) Ltd. Unit A1, 1/F, Block A Tin On Industrial Building 777 Cheung Sha Wan Road Lai Chi Kok, Kln HK-Hong Kong Telephone +852 27 86 91 41 sales.ehk@eao.com

### Italy

EAO Italia S.r.I. Centro Direzionale Summit – Palazzo D1 Via Brescia, 28 IT-20063 Cernusco sul Naviglio (MI) Telephone +39 02 92 471934 sales.eit@eao.com

# Germany

Japan

EAO Japan Co. Ltd.

Net 1 Mita Bldg. 3F

3-1-4 Mita Minato-ku

Telephone +81 3 5444 5411

JP-Tokyo 108-0073

sales.ejp@eao.com

Netherlands, Belgium

Kamerlingh Onnesweg 46

NL-3300 AM Dordrecht

sales.enl@eao.com

North America

US-CT 06484

Shelton

EAO Corporation

One Parrott Drive

sales eus@eao.com

Telephone +31 78 653 17 00

Telephone +1 203 951 4600

EAO Benelux B.V.

Postbus 544

EAO Automotive GmbH & Co. KG Richard-Wagner-Straße 3 DE-08209 Auerbach/Vogtland Telephone +49 3744 8264 0 sales.esa@eao.com

### North America

EAO Corporation One Parrott Drive Shelton US-CT 06484 Telephone +1 203 951 4600 sales.eus@eao.com

#### Sweden

EAO Svenska AB Box 7032 SE-121 07 Stockholm-Globen Telephone +46 8 683 86 60 sales.esw@eao.se

#### Switzerland

EAO Schweiz AG Tannwaldstrasse 86 CH-4600 Olten Telephone +41 62 286 95 00 sales.ech@eao.com

#### United Kingdom

EAO Ltd. Highland House Albert Drive Burgess Hill GB-West Sussex RH15 9TN Telephone +44 1444 236 000 sales.euk@eao.com 700.066.BR61-NOT-HALT.03/7.15 EAO reserves the right to change specifications without further notice.