

# ESM-BA201 (Order no. 085610)

## Base unit ESM-BA2.., 2 safety contacts, Cat. 4

- ► ESM-BA.. Use up to category 4 according to EN ISO 13849-1
- LED status indicators
- ▶ 1-channel or 2-channel control
- 2 redundant safety contacts
- ▶ Short circuit and earth fault/ground fault monitoring



## **Relay outputs**

The outputs are electrically decoupled and of redundant design.

## **Connection options**

By using suitable wiring, the following functions can be selected:

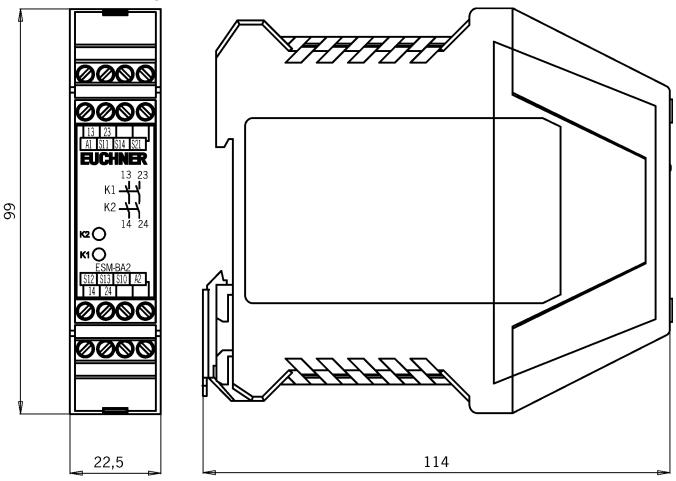
- ▶ Relay start with automatic start or a start button
- ▶ Monitoring of downstream relays or contactors.
- Simultaneity monitoring to monitor safety components over time
- Relay start using a monitored start button
- ▶ Short circuit monitoring to detect short circuits between the connecting cables and to shut down the outputs or prevent relay starting if necessary
- Earth fault/ground fault monitoring to detect short circuits between the connecting cables and earth or ground and to shut down the outputs or prevent relay starting if necessary.

#### **Connection terminals**

Optionally, the ESM-BA... devices are also available as versions with plug-in connection terminals.

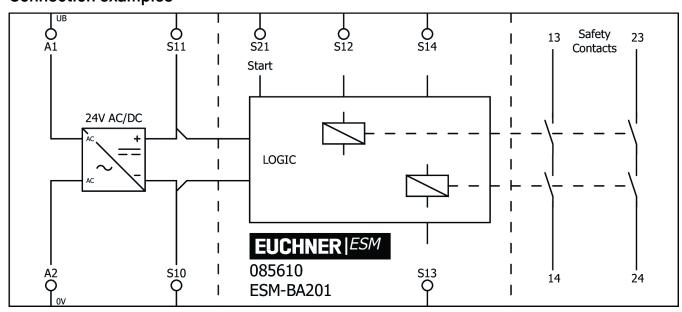


# **Dimensional drawings**



ESM-BA2...

## **Connection examples**





### Technical data

### **Approvals**

Zulassung EAC Zulassung TÜV Rheinland, BMPB mit ZG: Product Safety, Functional Safety Zulassung c\_UL\_us LISTED

#### Mechanical values and environment

Housing material

Housing Polyamide PA6.6

Weight

Net 0,23 kg

Ambient temperature

At  $U_{R} = 24V AC -15 ... 40 °C$ 

At  $U_B = 24V DC -15 ... 60 °C$ 

(at 20% undervoltage T<sub>max</sub>: 50°C)

Degree of protection IP20

Mechanical life

operating cycles 10 x 10<sup>6</sup>

Contact material AgSnO<sub>2</sub>

Mounting method Mounting rail 35mm according to DIN EN 60715 TH35

Connection Connection terminals

Length of control cable

With conductor cross-section 0.75mm<sup>2</sup> 1000 m

Safety contacts 13/14, 23/24

Number of safety contacts 2

#### **Electrical connection ratings**

Operating voltage

AC/DC 24 V -10% ... +10%

(All the electrical connections must either be isolated from the mains supply by a safety transformer according to EN 61558-2-6 with limited output voltage in the event of a fault, or by other equivalent isolation measures.)

Rated insulation voltage U<sub>i</sub> 250 V