

## ESM-BA701P (Order no. 097225)

### Base unit ESM-BA7.., 7 safety contacts, 4 auxiliary contacts, 2 monitoring 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
- ▶ 7 redundant safety contacts
- ▶ 4 auxiliary contacts
- ▶ 2 monitoring contacts
- ▶ Short circuit and earth fault/ground fault monitoring optional
- ▶ plug-in connection terminals



### 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.

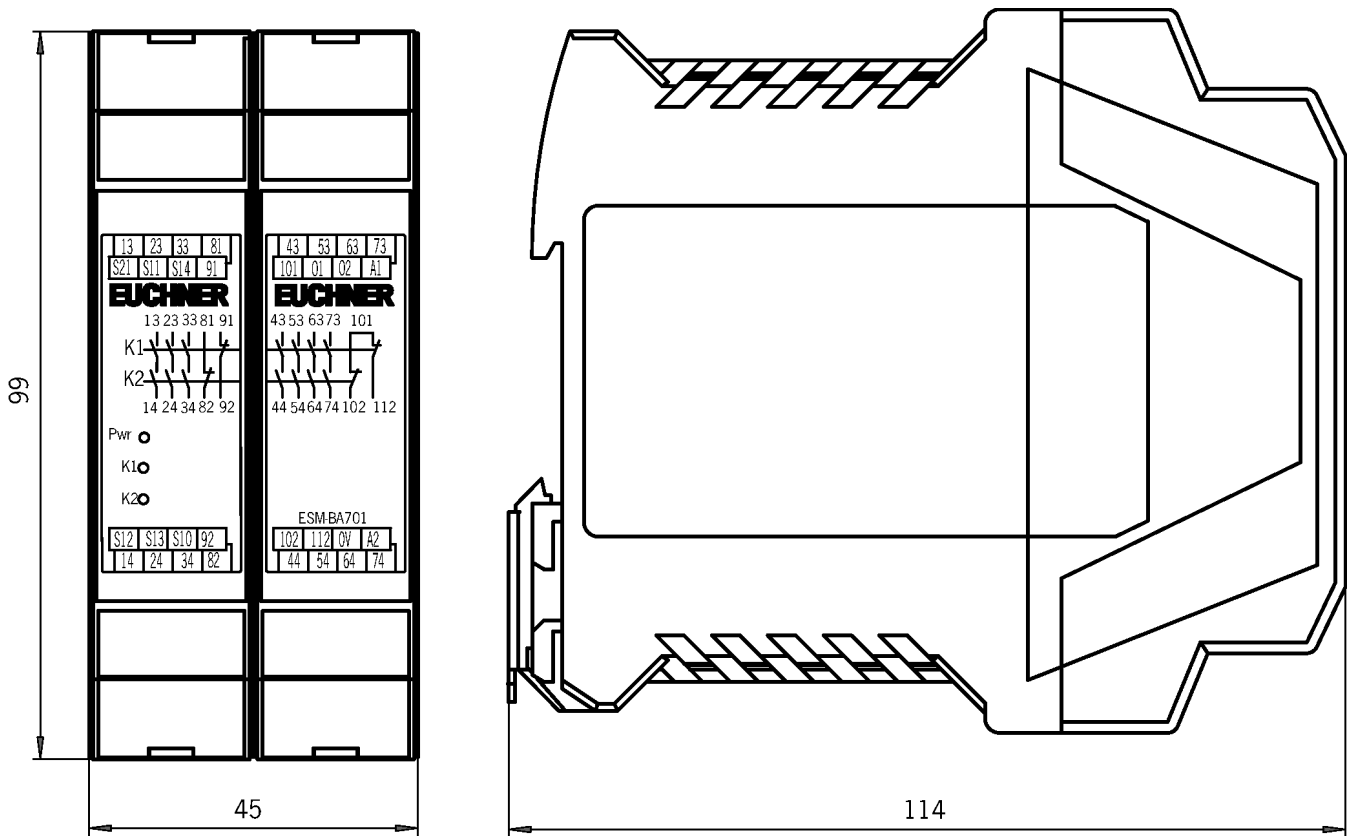
### Auxiliary contacts

The relays in the series ESM-BA7 are available with electrically separate normally closed contacts and auxiliary contacts.

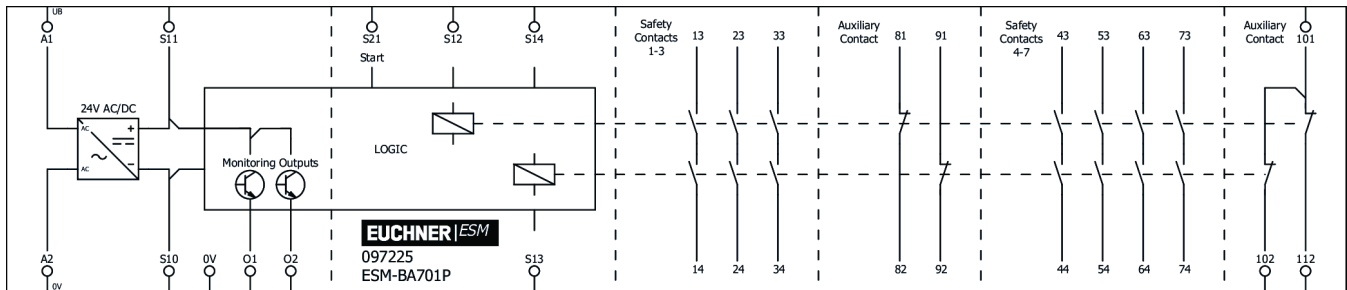
### Important:

Two connection kits must be ordered for this device.

Dimensional drawings



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    0,35 kg

Ambient temperature    -15 ... 40 °C

Degree of protection    IP20

Mechanical life

operating cycles     $10 \times 10^6$

Contact material     $\text{AgSnO}_2$

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

Number of monitoring outputs    2 semiconductor outputs

Connection    Plug-in connection terminals

Length of control cable

With conductor cross-section  $0.75\text{mm}^2$     1000 m

#### Monitoring outputs 01 / 02

Number of monitoring contacts    2

#### Auxiliary contacts 81/82, 91/92, 101/102, 101/112

Number of auxiliary contacts    4

#### Safety contacts 13/14, 23/24, 33/34, 43/44, 53/54, 63/64, 73/74

Number of safety contacts    7

### Electrical connection ratings

Operating voltage

AC/DC    24 V -10% ... +10%

(All the electrical connections must either be isolated from the mains supply)