

ESM-BA701 (Order no. 097224)

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



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.

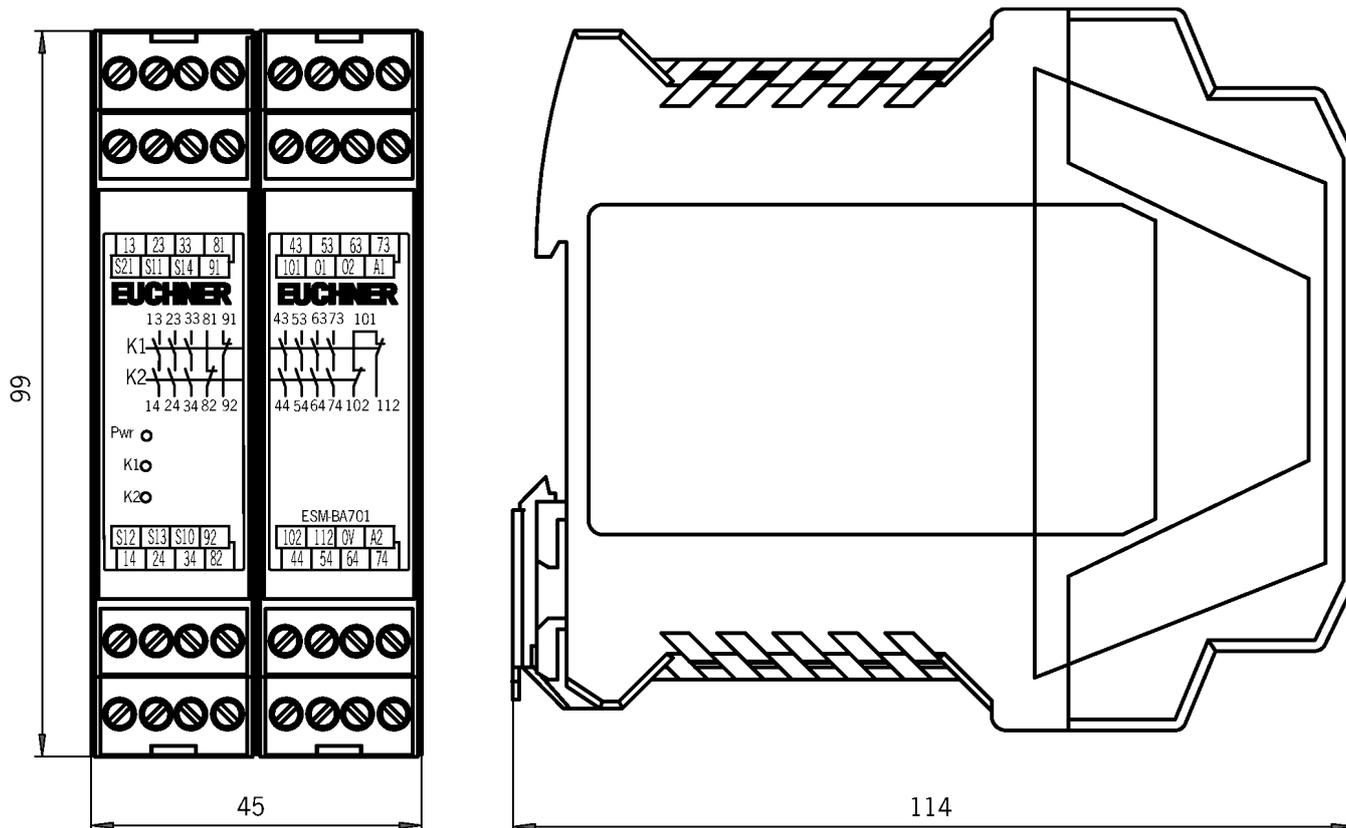
Auxiliary contacts

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

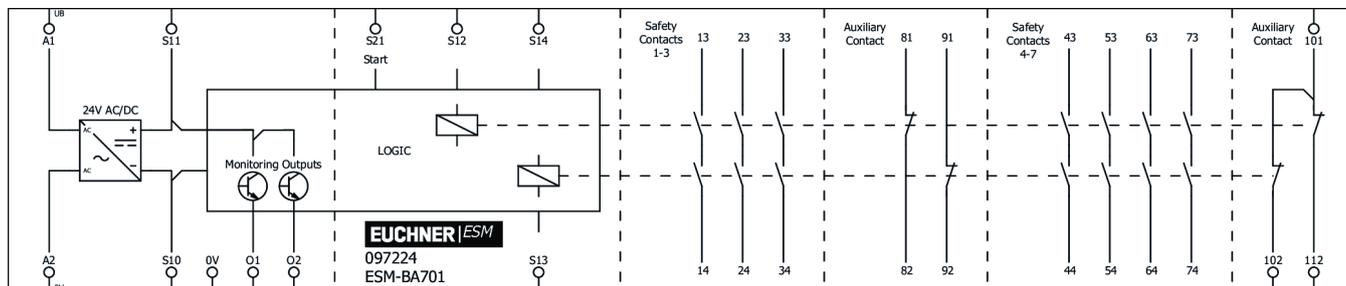
Connection terminals

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

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 10×10^6

Contact material

AgSnO₂

Mounting method

Mounting rail 35mm according to DIN EN 60715 TH35

Number of monitoring outputs

2 semiconductor outputs

Connection

Connection terminals

Length of control cable

With conductor cross-section 0.75mm² 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)