Safety relays ESM-2H...

- Usage up to category 4 according to EN ISO 13849-1
- Requirement level IIIC according to EN 574
- ► LED status indicators
- Operation using 2-hand control
- 2 redundant safety contacts
- Short-circuit and earth fault/ground fault monitoring can be selected



Relay outputs

The outputs are electrically decoupled and of redundant design.

Connection

- ► Two buttons each with one normally closed contact and one normally open contact that are monitored for simultaneity according to EN 574. In this way a high level of protection against tampering is provided.
- Short circuit monitoring to detect short circuits between the connection cables and to shut down the outputs or prevent relay starting if necessary.
- ▶ Earth fault/ground fault monitoring to detect short circuits between the connection cables and earth or ground and to shut down the outputs or prevent relay starting if necessary.

Connection option

By using suitable wiring the following function can be selected:

► Monitoring of downstream relays or contactors

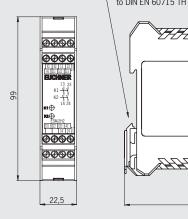
Safety relay ESM-2H...

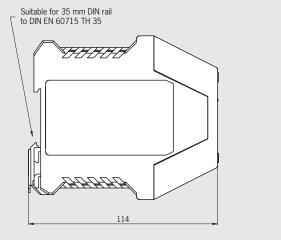




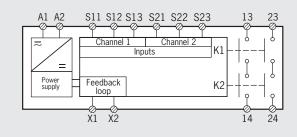


Dimension drawing





Block diagram



Technical data outputs

Parameter	Value						
Min. switching current at DC 24 V		20 mA					
Switching voltage max.	DC 24 V / AC 250 V						
Utilization category *		U _e	I _e	Σ I_{e}			
According to EN 60947-5-1	AC-12	250 V	6 A				
	AC-15	230 V	4 A	- 8.4 A			
	DC-12	24 V	1.25 A	- 0.4 A			
	DC-13	24 V	2 A				

 U_e = switching voltage

 $I_{\rm e}$ = max. switching current per contact

 Σ I_e = max. switching current on all safety contacts (cumulative current)

* See page 26 for information about the utilization category

Ordering table

Series	Version	Outputs	AC/DC 24 V	AC 115 V	AC 230 V
ESM	2H Safety relay	2 2 NO	085620 FSM-2H201	098345 ESM-2H202	-