

Extension of safety contacts

Characteristics

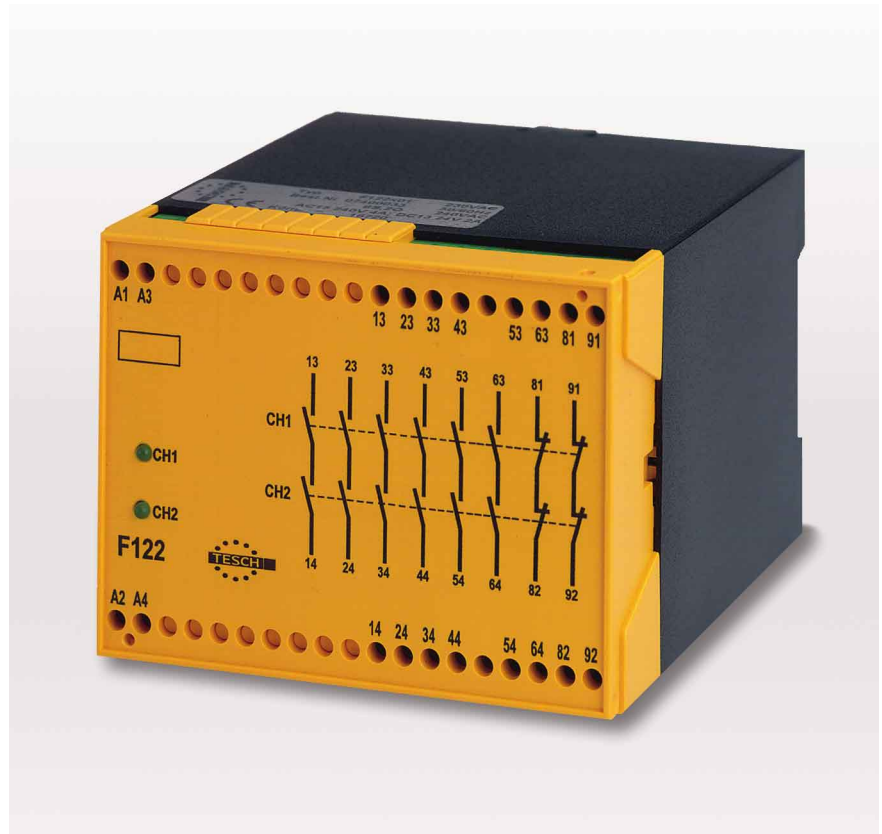
- Relay conforms to standards EN 60204-1 and VDE 0113-1
- 6 safety contacts
- 2 auxiliary contacts
- Safety category according to the main unit

Description

For safety power circuits – to be used for personal- and object protection – we supply emergency-stop relays, safety guard monitors and two-hand relays. The relays fulfil the requirements: EN 954-1 (3.97); EN 574; EN 60204-1 and VDE 0113-1.

If the number of contacts in safety-oriented controls is not sufficient, then contact module **F122** can be used for increasing the number of contacts.

Contact module **F122** is activated via one or two safety contacts of the main unit.



Mode of Operation

If both internal relays are activated, the safety output contacts are closed. The two LEDs in the front indicate the status of the relays. The N/C contact 81-82 has to be connected to the feedback loop of the control unit to monitor the safe function or the **F122**.

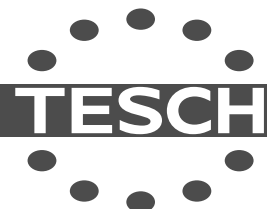
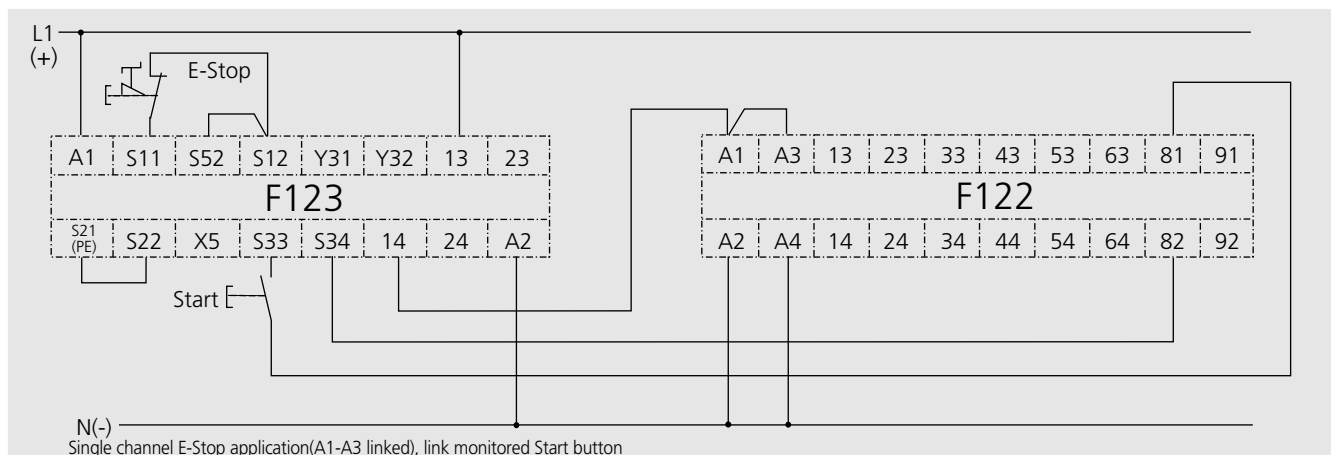
Comment

All **F** series safety relays can be connected to the contact module **F122**. The use of single or dual channel activation depends on the level of safety required for the control unit. Please pay attention to the wiring examples as detailed below.

Models and Ordering Data

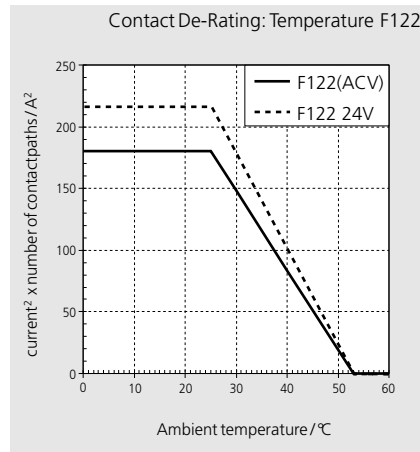
Contacts	6 N/O Safety Contacts 2 N/C Auxiliary Contacts
Type F122	Order No.
230 VAC	074 00033
115 VAC	074 00034
24 VAC/DC	074 00036

Wiring Example 1



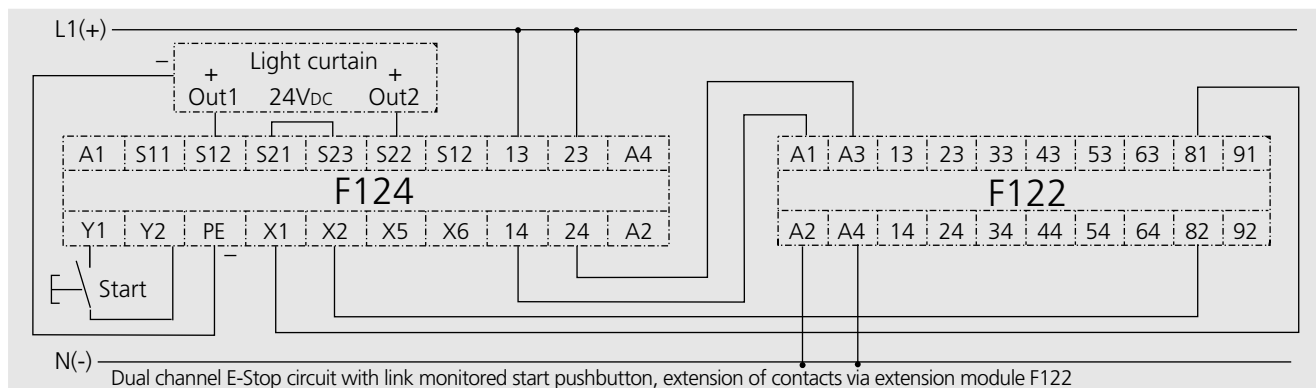
Technical Data

Rated voltage	230/115 V _{AC} 24 V _{AC/DC}
Voltage range	0.8 (0.85 at 24 V _{DC}) to 1.1 x rated voltage
Power consumption	Approx. 3 W
Rated insulation voltage	250 V
Creep distance and gaps	Overtoltage category III Pollution level 2 to DIN VDE 0110-1 (01/89) and DIN VDE 0110-2 (01/89)
Test voltage	2.5 kV
Ambient temperature	-5 °C to + 50 °C
Mode of protection	Terminals IP 20 casing IP 40 to DIN VDE 0470-1 (11/92)
Switching capacity	250 V _{AC} ; 6A, 1500 VA / 24 V _{DC} ; 6A, 144 W, Preferably with spark arrest
Thermic current I _{th}	According to current summary limit curve (right) (max. 10 A in one current path)
Utilisation categorie	AC-15 250 V 4 A; DC-13 24 V 2 A
Output contacts	6 N/O (safety contacts) 2 N/C (auxiliary contact)
Mechanical lifetime	10 ⁷ switching cycles
Switch material	AgSNO ₂ + 0.5µ Au
Terminals	Terminal box with wire protection
Line cross section	Rigid 4 mm ² , flexible 2.5 mm ² Connecting lead to be stripped up to max. 4mm
Control circuit	Approx. 24 V _{DC}
Contact protection	Screwed-type fuse max. 6 A slow blow Auto.circuit breaker max C10 A quick break

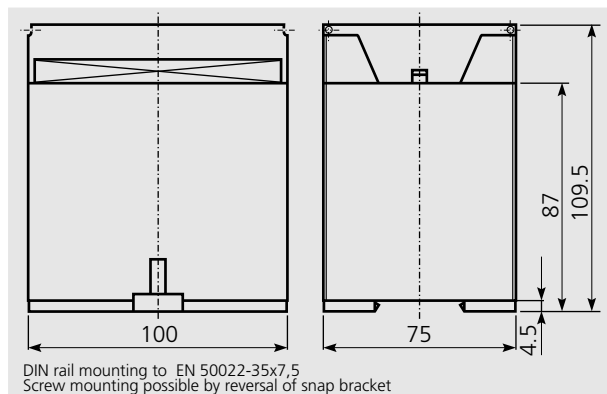


Response time	<60 ms
Release time	<30 ms
Weight	550 g

Wiring Example 2



Dimensional Diagram



Circuit Diagram

