

Characteristics

- Relay conforms to EN 60204-1 and VDE 0113-1
- For use in applications up to cat. 4 per EN 954-1
- 4 safety contacts
- 2 auxiliary contacts
- Off-delayed versions available

Description

For safety control circuits – to be used for personal- and object protection –we supply emergency-stop relays, safety gate monitors and two-hand relays.

These relays fulfil the requirements: EN954-1 (3.97); EN574 and EN60204-1. If the number of contacts in safety-oriented controls is not high enough, then contact module **F132** can be used to increase the number of contacts. It may also be used if off-delayed contacts are needed in the safety control system.

Contact module **F132** 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 X1-X2 has to be connected to the feedback loop of the control unit to monitor the safe function of the **F132**.

The off-delayed versions remain activated until the fixed delay time has run down.

Comment

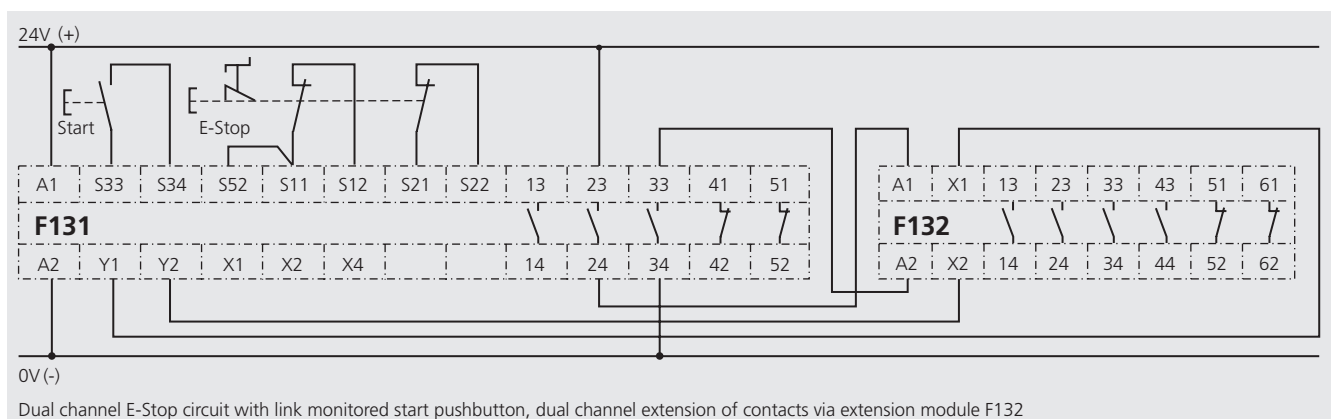
All **F** series safety relays can be connected to the contact module **F132**. The use of single or dual channel activation depends on the level of safety required for the control unit.

Please pay attention to the wiring examples. The off delayed versions are only available for DC supply and are limited to cat 3 applications (Types /0.5s /1s /2s /3s).

Models and Ordering Data

| Contacts | 4 N/O Safety Contacts 2 N/C Auxiliary Contacts | |
|--------------|---|---------------------|
| Order No. | | |
| Type F132 | F132 | F132A |
| Terminals: | Fixed Terminals | Removable Terminals |
| 24VAC / DC | 074 00286 | 074 00291 |
| 24Vdc / 0,5s | 074 00287 | 074 00292 |
| 24Vdc / 1s | 074 00288 | 074 00293 |
| 24Vdc / 2s | 074 00289 | 074 00294 |
| 24Vdc / 3s | 074 00290 | 074 00295 |

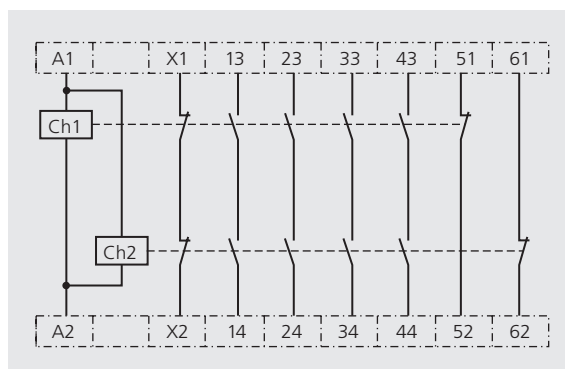
Wiring Example 1



Technical Data

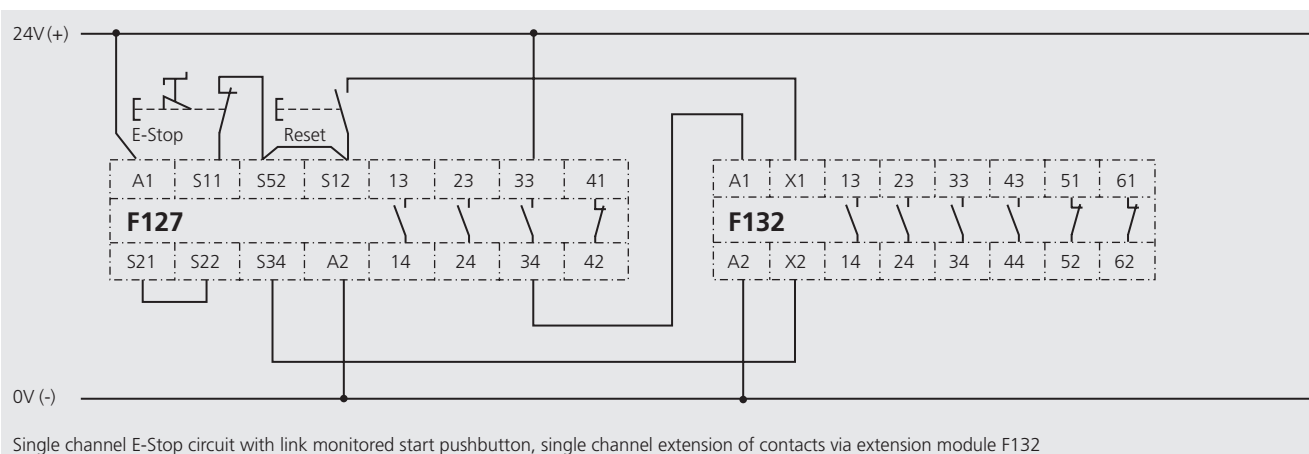
| | |
|---------------------------------|--|
| Rated voltage | 24V _{DC} (Versions without delay: AC/DC) |
| Voltage range | 0.85 to 1.1 x rated voltage |
| Power consumption | Approx. 1.5W |
| Rated insulation voltage | 250V |
| Creep distance and gaps | Oversvoltage category III, Pollution level 2 to DIN VDE 0110: Part 1 |
| Test voltage | 2.5kV |
| Operating temperature | -5°C to + 55°C |
| Storage temperature | -20°C to + 70°C |
| Mode of protection | Terminals IP 20, IP 40 casing to VDE 0470-1 |
| Thermic current I _{th} | 4 x 4A, 3 x 5A oder 2 x 6A |
| Utilisation categorie | AC-15 250V 6A; DC-13 24V 3A |
| Response time | < 50ms |
| Release time | <100ms (or .5s, 1s, 2s, 3s) |
| Output contacts | 4 N/O (safety contacts) 2 N/C (auxiliary contact) |
| Mechanical lifetime | 10 ⁷ switching cycles |
| Switch material | AgSnO ₂ , 2μ Au |
| Terminals | Terminal box with wire protection |
| Line cross section | 2.5mm ² |

Circuit Diagram

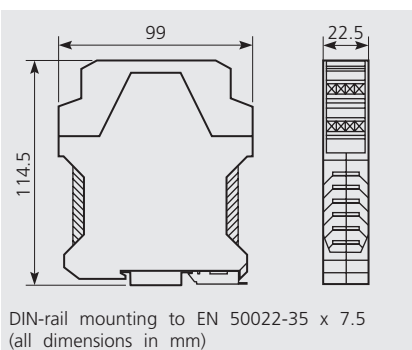


| | |
|---------------------|--|
| Contact protection: | Screwed-type fuse max. 6A slow blow Auto.circuit breaker max. 10A |
| Weight | 215g |

Wiring Example 2



Dimensional Diagram



Wiring Diagram

