

Conventional Panels

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FP Conventional Fire Panels



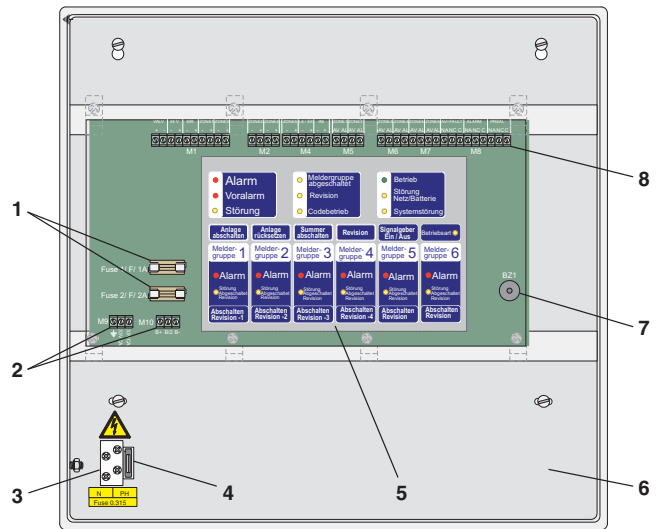
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Features

- ▶ Simple operation with clearly-structured operating panel and membrane keypad
- ▶ For two, four or six detector groups, each connecting up to 30 detectors.
- ▶ Alarm and fault display by multicolour LEDs, customized for each detector group
- ▶ Internal buzzer for acoustic alarm and fault display
- ▶ Separate function control for fire panel and for each individual detector zone
- ▶ Robust sheet steel housing

The FP Conventional Fire Panel, using trusted DC line techniques, is the ideal solution for small and medium-sized objects when modern bus technology can be done without.

System Overview



Pos. Designation

- 1 Fuses F1 and F2
- 2 Terminal blocks M9 and M10 for mains and battery power.
- 3 Mains connection clamp block
- 4 Fuse F3
- 5 Operating panel (in corresponding national language)
- 6 Control panel housing
- 7 Internal buzzer
- 8 Clamp blocks M1 - 8 for detector and sensor lines

Functions

The fire panels FP 102/104/106-PA have a pre alarm function, and can be made dependent on the activation of two detectors.

The fire panels FP 102/104/106-2SO have an English operating panel (country-specific customization possible), a second sensor lead, although no pre alarm.

In the case of versions with pre alarms (PA control panels), three delay times can be selected: 30, 60 or 120 s.

In the event of an alarm being triggered, a controllable signaling device (siren) can be switched on or off at any time. The sounder can also be activated if the fire panel is not in alarm status.

Reset of the fire panel after a fault is automatically carried out once the reason for the fault has been dealt with.

Operating levels

The fire panels have three different operating levels:

Access to level 0 is possible without code entry. Four-digit access codes are required to access operating level 1 and 2. The access codes are set at the works and cannot be amended.

A test of various functions can be carried out at each operating level.

- The level 0 test checks the functioning of the LEDs and the buzzer.

- The test at level 1 puts all detector zones simultaneously into revision operation, whereby the fire panel must be reset following the triggering of a detector.
- The level 2 test allows certain detector groups to be selected for testing, the other groups remaining in normal mode.

Programming

The PA fire panels can be used to program each individual detector zone either for one-detector or for two-detector dependency. Independent of the programming of the individual detector zones, all detector zones can be switched simultaneously to single detector dependency. The switching does not affect the respective programming of the individual detector zones.

Certifications and Approvals

| Region | Certification |
|--------|---------------|
| Europe | CE |
| | FP 102-PA |
| | FP 104-PA |
| | FP 106-PA |
| | FP 102-2SO |
| | FP 104-2SO |
| | FP 106-2SO |

Installation/Configuration Notes

- The fire panel must be mounted in a dry, maintained interior room, environmental conditions (see Technical Data) being taken into account.
- Attach the fire panels to the wall in such a way that the operating panel is at eye level.
- To enable the front door to be removed, at least 50 mm of free space must be left on the left-hand side of the control panel.
- For optimum battery life, the fire panel should only be operated in locations having normal room temperatures.
- The appropriate requirements stipulated by the local authorities (e. g. fire service) are to be conformed to.

Technical Specifications

Special features

| | |
|--------------------------|---------------------------|
| Number of detector zones | |
| • FP 102-PA / FP 102-2SO | 2 |
| • FP 104-PA / FP 104-2SO | 4 |
| • FP 106-PA / FP 106-2SO | 6 |
| Connectable detectors | Max. 30 per detector zone |

Electrical

| | |
|--|--|
| Power supply voltage | 230 V AC +/- 10% |
| Power supply current | 300 mA |
| Frequency | 50/60 Hz |
| Power supply output voltage | 28V DC |
| Power supply output current | Max. 1,800 mA |
| Current consumption in stand-by mode | |
| • FP 102-PA / FP 102-2SO | 100 mA |
| • FP 104-PA / FP 104-2SO | 120 mA |
| • FP 106-PA / FP 106-2SO | 140 mA |
| Current consumption in alarm mode | |
| • FP 102-PA / FP 102-2SO | 1,400 mA |
| • FP 104-PA / FP 104-2SO | 1,600 mA |
| • FP 106-PA / FP 106-2SO | 1,800 mA |
| Fuses | |
| • Power supply | T – 315 mA |
| • Battery power supply | F – 2 A |
| • Primary line output | F – 1 A |
| Battery power supply | |
| Battery type and amount | Gel-accumulator, 2 units (connected in series) |
| Battery capacity | 12 V / 7.2 Ah |
| Battery charge voltage | 27.4 V DC |
| Battery charge current | 500 mA |
| Back-up time | |
| • FP 102-PA / FP 102-2SO | Max. 70 h in stand-by mode Max. 4 h in event of alarm |
| • FP 104-PA / FP 104-2SO | Max. 59 h in stand-by mode Max. 4 h in event of alarm |
| • FP 106-PA / FP 106-2SO | Max. 45 h in stand-by mode Max. 4 h in event of alarm |
| Primary line features | |
| Stand-by voltage | |
| • Zones | 20 V DC (+5% / -10%) |
| • Signaling device lines | 24 V DC (±5%) |
| Current consumption | |
| • In standby mode | Approx. 5 mA (±1%) |
| • In alarm mode | Approx. 102 mA (±1%) |
| Terminator resistance R _E (when connected to Bosch detectors) | 3.92 kΩ ¼ W |
| Maximum line resistance | 100 Ω (per primary line) |
| Mechanics | |
| Dimensions (W x H x D) | 350 x 340 x 90 mm |
| Weight | |
| • Without batteries | 3.5 kg |
| • With 2 batteries (12V/7.2Ah) | 7.9 kg |
| Housing color | Light-gray, RAL 9002 |

Environmental Considerations

| | |
|--------------------------------------|---------------------|
| Protection class as per EN 60529 | IP 30 |
| Classes of equipment as per EN 60950 | Class II equipment |
| Permissible operating temperature | 0 °C . . . +40 °C |
| Permissible storage temperature | -40 °C . . . +70 °C |

Ordering Information**FP 102-PA Conventional Fire Panel** **FP-102-PA**

For two detector zones, up to 60 detectors, with pre-alarm, two-detector dependency possible

FP 104-PA Conventional Fire Panel **FP 104-PA**

For four detector zones, up to 120 detectors, with pre-alarm, two detector dependency possible

FP 106-PA Conventional Fire Panel **FP 106-PA**

for six detector zones, up to 180 detectors, with pre-alarm, two detector dependency possible

FP 102-2SO Conventional Fire Panel **FP 102-2SO**

for two detector zones, up to 60 detectors, without pre-alarm, two signaling device outputs

FP 104-2SO Conventional Fire Panel **FP 104-2SO**

for four detector zones, up to 120 detectors, without pre-alarm, two signaling device outputs

FP 106-2SO Conventional Fire Panel **FP 106-2SO**

for six detector zones, up to 180 detectors, without pre-alarm, two signaling device outputs

Accessories

Gel Battery 12 V / 7.2 Ah **IPP-12V-7.2Ah**
(DU = 1 unit)