

# Conventional Panels

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# FP Conventional Fire Panels



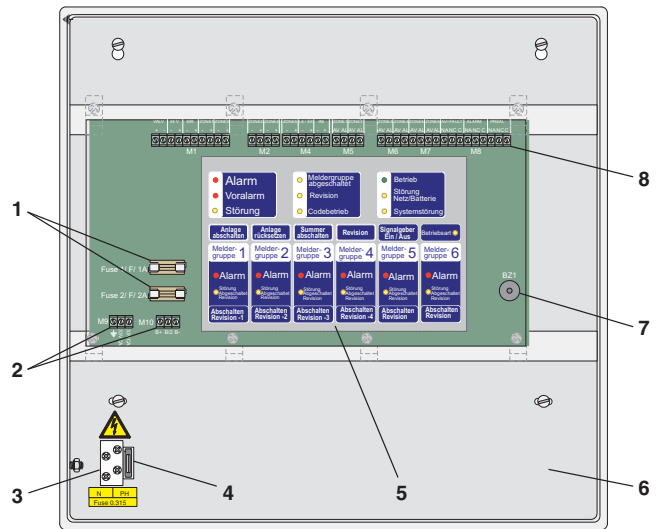
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## Features

- ▶ 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 <sub>E</sub> (when connected to Bosch detectors)	3.92 kΩ ¼ W
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Maximum line resistance	100 Ω (per primary line)
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**Mechanics**

Dimensions (W x H x D)	350 x 340 x 90 mm
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**Weight**

• Without batteries	3.5 kg
• With 2 batteries (12V/7.2Ah)	7.9 kg

Housing color	Light-gray, RAL 9002
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**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)