

FPP-RNAC-8A-4C Power supply, RNAC 8A 24V

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- ▶ 8 A of power
- ▶ Fully supervised, regulated 24 VDC output (nominal) with over-current protection
- ▶ Configurable for NAC output or constant auxiliary power
- ▶ Built-in NAC patterns
- ▶ Four Class B or Class A circuits

When connected to the panel’s option bus, the FPP-RNAC-8A-4C adds four additional NACs to the fire panel. The additional NACs can be NFPA 72, Class B or Class A.

When connected directly to the NAC output, the FPP-RNAC-8A-4C is a NAC power supply for fire-protective signaling systems. The regulated power supply provides up to 8 A of power used to operate both continuous and intermittent loads. This 8 A of power can be distributed through the four output circuits and auxiliary power circuit. The FPP-RNAC-8A-4C power supply is UL Listed for use in commercial fire alarm applications.

Functions

Compatible panel connections

The FPP-RNAC-8A-4C power supply is compatible with any UL Listed control panel that uses reverse polarity supervised notification outputs with 12 VDC or 24 VDC regulated outputs. It is also compatible with the following Bosch Control Panels.

Panels	Connections
D7022 Two-zone Conventional FACP D8024 and D10024A Analog FACPs	For the D7022 conventional panel and the D8024 and D10024A analog panels, the FPP-RNAC-8A-4C connects through a NAC circuit. No option bus connection is necessary.
D7024 Four-zone Addressable FACP DS9400i Four-zone FACP DS9400M AddressiFire FACP	Connect up to two FPP-RNAC-8A-4C power supplies to a D7024, DS9400i, or DS9400M Control Panel. The control panel can individually control each of the four NAC outputs for each power supply. Only the four NAC outputs of a single power supply are synchronized.
FPD-7024 Analog Addressable Fire Panels FPA-1000 Analog Addressable Fire Panels	Connect up to four FPP-RNAC-8A-4C power supplies to an FPD-7024 or an FPA-1000 control panel. Each RNAC’s four NAC outputs are synchronized and can be individually controlled for a total of 16 synchronized circuits.

NAC output patterns

The NAC circuits can be set to produce the following output patterns:

- Steady
- Temporal Code 3
- Pulsed
- California March
- Wheelock Synch
- Gentex Synch
- System Sensor Synch

Status displays

There are eight local status display LEDs on the power supply's printed circuit board that show the following conditions:

- AC OK
- System Trouble
- Ground Fault
- Input Active
- Trouble Output 1, 2, 3, and 4

DIP switch settings

If connected to the fire alarm control panel's option bus, the power supply requires an option bus address. Set this address through the DIP switches.

Set the DIP switches to choose:

- NAC or power supply output
- NAC Input Variable option
- AC Delay Time

Certifications and approvals

Region	Regulatory compliance/quality marks	
USA	UL	UL 864, Control Units and Accessories for Fire Alarm Systems
	UL	UL 1481, Power Supplies for Fire-Protective Signaling Systems
	FM	FPP-RNAC-8A-4C
	CSFM	see www.boschsecurity.com (the Bosch website)
	FDNY-CoA	6101
	FDNY-CoA	6173

Installation/configuration notes

Compatible Products

The FPP-RNAC-8A-4C is compatible with the D340 and D341 Door holders. For additional FPP-RNAC-8A-4C compatibility information, refer to the *Smoke Detector Compatibility List* (F01U010790) or the *NAC Compatibility List* (F01U010791).

Wiring

All wiring is connected to the power supply board by lift-gate terminals that can accept up to 12 AWG (ISO 4 mm²) wire.

Parts included

Quantity	Component
1	FPP-RNAC-8A-4C board
1	AE4 Large Enclosure (red), vented
1	Lock set with two #1358 (D102) keys (P/N: F01U083084)
4	2.21 k Ω end-of-line (EOL) resistors (P/N: F01U034504) <i>For retrofitting applications, allowable EOL values are in the range of 1 kΩ to 20 kΩ</i>
1	Hardware pack 3 Cables (1 red and 1 black [14 AWG, 610 mm], 1 black [14 AWG, 153 mm]) 1 Grounding wire (green, 10 in.) with nut 3 Hex nuts with lock washers 7 standoffs and screws (mounting)
1	Literature Installation manual Electronic document downloads (EDD) Release Notes

Technical specifications

Environmental Considerations

Temperature (operating)	+32°F to +120°F (0°C to +49°C)
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Inputs (NAC)

Response Time (input to output)	10 ms maximum
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Outputs (auxiliary)

Auxiliary

Current (output)	750 mA maximum
Voltage (output)	24 VDC (regulated)

NAC

Output per circuit	2.5 A maximum
Output (total)	8 A (all NAC and auxiliary outputs)
Voltage (output)	24 VDC (regulated)
Voltage (standby)	5 VDC (regulated)

NAC (power supply)

Compatibility range	19.6 VDC to 27.5 VDC
Current (output)	1.3 A maximum
Inrush current	25 A at <40 ms
Voltage (output)	24 VDC nominal
Voltage (ripple)	250 mVp-p

Trouble/AC trouble relays

Contact Type	Form C
Rating (contact)	1.5 A at 32 VDC

Mechanical Properties

Color	Red
Dimensions (HxWxD) without door	20.4 in. x 14.8 in. x 4.1 in. (52 cm x 38 cm x 10.4 cm)
Material	cold-rolled Base: 18 gauge (1.2 mm) Cover: 19 gauge (1.1 mm)

Power Requirements

Current (input)	4.5 A maximum (RMS)
Power (primary input)	120 VAC, 60 Hz or 220 VAC, 50 Hz
Voltage (battery)	24 VDC nominal

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Ordering information

FPP-RNAC-8A-4C Power supply, RNAC 8A 24V

When connected to a panel's option bus, the FPP-RNAC-8A-4C adds four additional NFPA 72, Class B or Class A NACs. When connected directly to the NAC output, it is also a NAC power supply for fire-protective signaling systems.

Order number **FPP-RNAC-8A-4C**

Accessories

D102 Replacement key for D101 lock set

The D102 is a replacement key for locks stamped with 1358.

Order number **D102**

D126 Battery, 12V 7Ah

A rechargeable sealed lead-acid power supply used as a secondary power supply or in auxiliary or ancillary functions.

Order number **D126**

D1218 Battery, 12V 18Ah

The D1218 is a 12 V 18 Ah sealed lead-acid battery with two bolt-fastened terminals. It is used for standby and auxiliary power. It connects to a compatible control panel using a D122 or D122L Dual battery harness.

Order number **D1218**

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