FPP-RNAC-8A-4C Remote Notification Appliance Circuit (RNAC) Power Supply

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- ▶ 8 A of power
- ► Fully supervised outputs
- Configurable for NAC output or constant auxiliary power
- ► Regulated 24 VDC output (nominal) with over-current protection
- ▶ Built-in NAC patterns

Use the FPP-RNAC-8A-4C power supply to add four additional notification appliance circuits to a fire alarm control panel (when connected via the option bus), or as a NAC power supply for fire-protective signaling systems (when connected directly to the NAC output). The additional notification appliance circuits can be NFPA 72, Class B (Style Y) or Class A (Style Z). This regulated power supply provides up to 8 A of power that is 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 Control 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:

- 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 will be synchronized.
- FPD-7024 or 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 will be 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 needs its own 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 | Certifica | ition |
|--------|--------------|--|
| USA | UL | UOXX: Control Unit Accessories, System (ANSI/UL 864, 9th edition) and UTRZ: Power-supply Units (UL 1481) |
| | FM | FPP-RNAC-8A-4C |
| | CSFM | see our website |
| | FDNY- CoA | #6101 |
| | FDNY- CoA | #6173 |

Installation/configuration notes

Compatible Products

The following products are compatible with the FPP-RNAC-8A-4C RNAC Power Supply:

| Category | Product ID | Product Description |
|-----------------------|--|--|
| Batteries | D126 | 12 V, 7 Ah battery |
| | D1218° | 12 V, 18 Ah battery |
| | D1224** | 12 V, 24 Ah battery |
| | D1238** | 12 V, 38 Ah battery |
| | *Up to two 18 Ah batto **Requires BATB-40 B | eries fit in the enclosure attery Box |
| Magnetic Door Holders | D370B | Brass-Plated Wall-Mount |
| | D370C | Chrome-Plated Wall-Mount |
| | D371B | Brass-Plated Floor-Mount |
| | | |

| | D371C | Chrome-Plated Floor-Mount |
|------------------------------|---------------------|------------------------------|
| Four-wire Smoke Detectors | Refer to Technogram | (P/N: F01U010790) |
| NAC Devices | Refer to Technogram | (P/N: 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

| Quant. | 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 | $2.21~\rm k\Omega$ end-of-line (EOL) resistors (P/N: F01U034504) For retrofitting applications, allowable EOL values are in the range of $1~\rm k\Omega$ to $20~\rm k\Omega$ |
| 1 | Hardware pack |

Technical specifications

Environmental Considerations

| Temperature (operating): | +32°F to +120°F (0°C to +49°C) |
|--------------------------|--------------------------------|
| | |

Inputs (NAC)

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 steel Base: 18 gauge (1.2 mm) Cover: 19 gauge (1.1 mm) |

Outputs (auxiliary)

| Current (output): | 850 mA maximum |
|-------------------|--------------------|
| Voltage (output): | 24 VDC (regulated) |

Outputs (NAC)

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

Outputs (NAC when configured as power supply)

| Compatibility range: | 19.6 VDC to 27.5 VDC |
|----------------------|----------------------|
| Current (output): | 1.3 A maximum |

| Voltage (output): | 24 VDC nominal |
|-------------------|----------------|
| Voltage (ripple): | 250 mVp-p |

Outputs (trouble and ac trouble relays)

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

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 |

Ordering information

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Accessories

D102 Replacement Key

Replacement key (#1358) for LOCK-1358 and the D101 lock.

Order number **D102**

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