



August 3, 2001

DN-5132 • E-130

FCPS-24(E) 24 Volt, 6 Amp Remote Power Supply

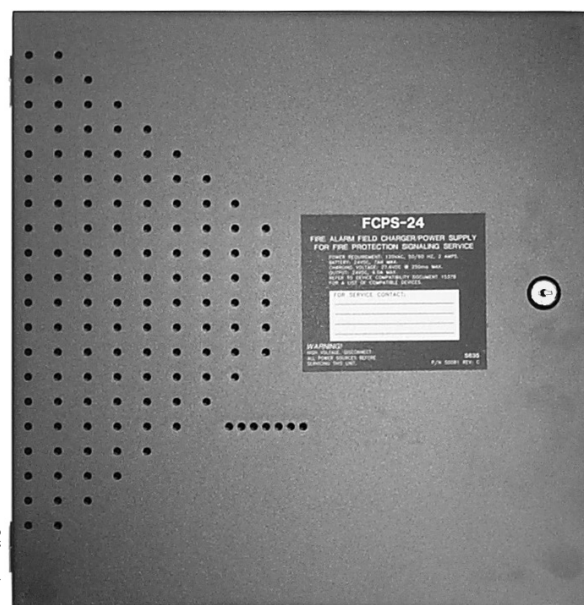
Section: Power Supplies/Accessories

GENERAL

The **NOTIFIER FCPS-24** (120 VAC model) and **FCPS-24E** (220/240 VAC model) are compact, cost-effective, 6-amp remote power supplies with built-in battery charger. The FCPS-24(E) may be connected to any 12- or 24-volt Fire Alarm Control Panel (FACP) or may stand alone. Primary applications include Notification Appliance (bell) Circuit (NAC) expansion (to support ADA requirements) or auxiliary power to support 24-volt system accessories. The FCPS provides *regulated* and *filtered* 24 VDC power to four Notification Appliance Circuits (two Class A [Style Z] and two Class B [Style Y] or four Class B only). Alternately, the four outputs may be configured as any combination of resettable/non-resettable power outputs (optimal for powering four-wire smoke detectors). The FCPS-24(E) also contains a battery charger capable of charging up to 7.0 Amp Hour batteries.

FEATURES

- Requires input trigger voltage of 9.0 - 32 VDC.
- Contains two, fully-isolated input/control circuits (triggered from FACP Notification Appliance Circuit [NAC expander mode] or jumpered permanently on [stand-alone mode]).
- Two Class A (Style Z) or Class B (Style Y) Notification Appliance Circuits (circuits 1 & 3).
- Two additional NACs that may be individually configured for Class B (Style Y) operation only (circuits 2 & 4).
- 6 Amp full load output (3 amps max./ckt.) in NAC expander mode (UL 864).
- 4 Amp continuous output in stand-alone mode (UL 1481).
- In stand-alone mode, output power circuits may be configured as resettable (reset line from FACP required) or non-resettable.
- Fully *regulated* and *filtered* power output (optimal for powering four-wire smoke detectors, annunciators and other system peripherals requiring regulated/filtered power).
- Fuseless, power-limited technology meets new UL power-limiting requirements, effective May 1, 1995.
- Normally closed trouble contact.
- Fully supervised power supply, battery and Notification Appliance Circuits.
- Selectable earth fault detection.
- AC trouble report selectable for immediate, 8- or 16- hour delay.
- Optional ammeter/voltmeter.
- Works with virtually any UL 864 fire alarm control which utilizes an industry-standard reverse-polarity notification circuit.

California
State Fire
Marshal7315-0028:178
(FCPS-24 only)**MEA**
387-94-E
(FCPS-24 only)

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- Self-contained in compact, lockable cabinet (15" [381 mm] high x 14.5" [368 mm] wide x 2.75" [70 mm] deep).
- Includes integral battery charger capable of charging up to 7.0 AH batteries.
- Fixed, clamp-type terminal blocks accommodate up to 12 AWG (3.25 mm²) wire.

STANDARDS and CODES

The FCPS-24 complies with the following standards:

- **NFPA 72-1996** National Fire Alarm Code.
- **UL 864** Standard for Control Units for Fire Alarm Systems (NAC expander mode).
- **UL 1481** Power Supplies for Fire Alarm Systems (stand-alone mode).

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact **NOTIFIER**. Phone: (203) 484-7161 FAX: (203) 484-7118

**NOTIFIER**

12 Clintonville Road, Northford, Connecticut 06472

ISO 9001
CERTIFIED
ENGINEERING & MANUFACTURING

Made in the U.S.A.

SPECIFICATIONS

Primary (AC) Power

- FCPS-24: 120 VAC 50/60 Hz, 2.0 A max.
- FCPS-24E: 220/240 VAC 50/60 Hz, 1.0 A max.
- Wire size: min. 14 AWG (2.0 mm²) with 600V insulation.

Control Input Circuit

- Trigger input voltage: 9.0 to 32 VDC.
- Trigger current: 2.0 mA (16 - 32 V).
(per input) 1.0 mA (9 - 16 V).

Trouble Contact Rating

- 5 amps at 24 VDC.

Auxiliary Power Output

- Specific application power - 45 mA short circuit.

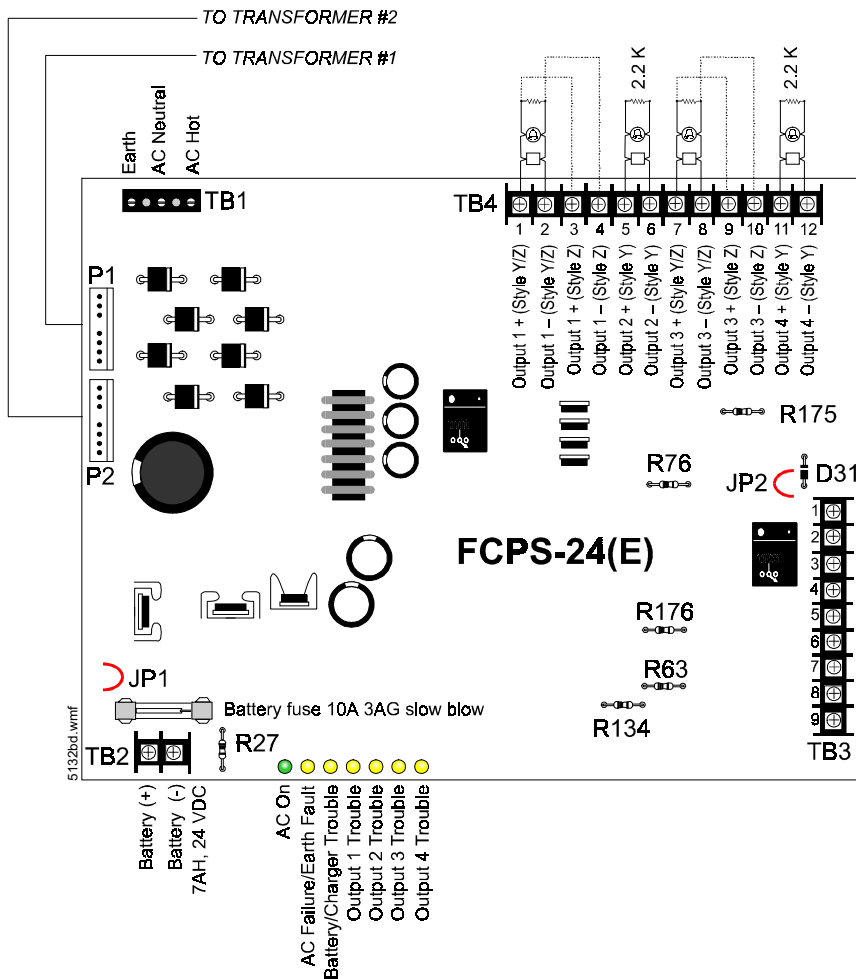
Output Circuits

- Output voltage: 24 VDC filtered regulated (under primary AC mains) under secondary power source 19.1 to 26.4 VDC.
- 3.0 amps maximum for any one circuit.
- 4.0 amps maximum total continuous current for all outputs (stand-alone mode).
- 6.0 amps maximum total short-term current for all outputs (NAC expander mode).

Secondary Power (Battery) Charging Circuit

- Supports lead-acid batteries only.
- Float charge voltage: 27.6V.
- Maximum charge current: 250 mA.
- Maximum battery capacity: 7.0 AH.

TERMINAL DESIGNATIONS



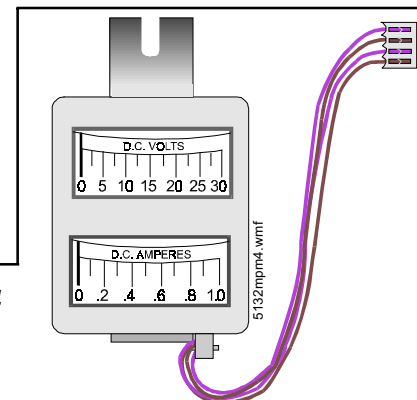
Notes:

- 1) Cut JP1 to use a UL-Listed external battery charger.
- 2) Cut R134 to delay AC loss reporting for 8 hours (24-hour standby), or cut R134 and R76 to delay AC loss reporting 16 hours (60-hour standby).
- 3) Cut R175 to make output #2 non-resettable in stand-alone mode.
- 4) Cut R176 to make output #4 non-resettable in stand-alone mode.

ORDERING INFORMATION

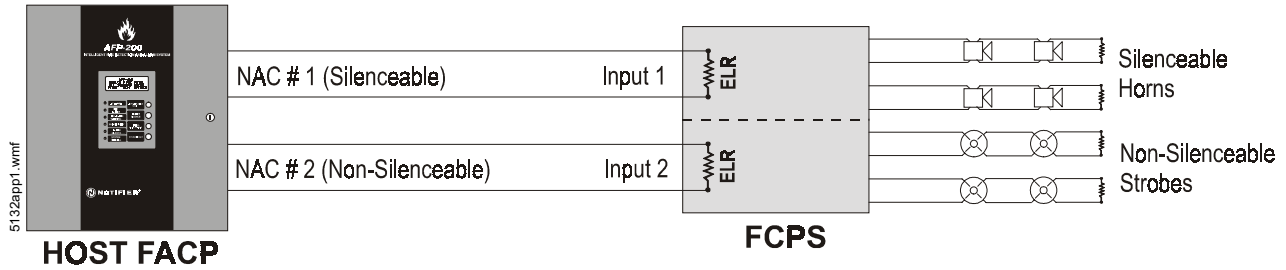
- FCPS-24** Remote charger power supply (120 VAC). Includes main printed circuit board, transformers, surface-mount backbox, and installation instructions.
- FCPS-24E** Remote charger power supply (220/240 VAC). Includes main printed circuit board, transformers, surface-mount backbox, and installation instructions.

- A77-716B** 12/24 VDC end-of-line relay for monitoring four-wire smoke detector power.
- PS-1270** Battery, 12 volt, 7.0 AH (*two required*).
- MPM-4** Optional ammeter/voltmeter. Mounts in FCPS backbox.



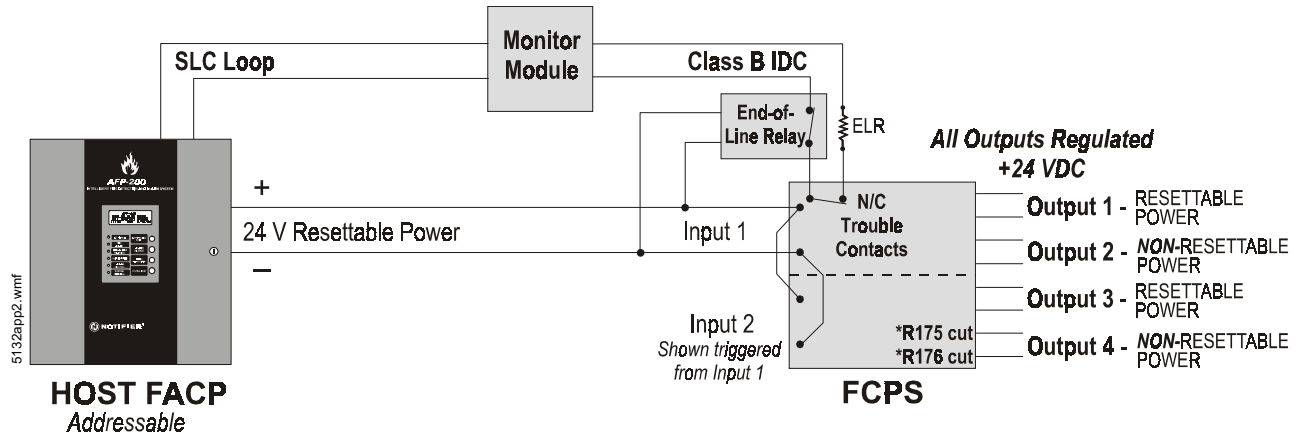
APPLICATION EXAMPLES

Example 1: Expand notification appliance power an additional 6.0 amps.
Use up to 4 Class B (Style Y) outputs **or** 2 Class A (Style Z) and 2 Class B (Style Y) outputs.



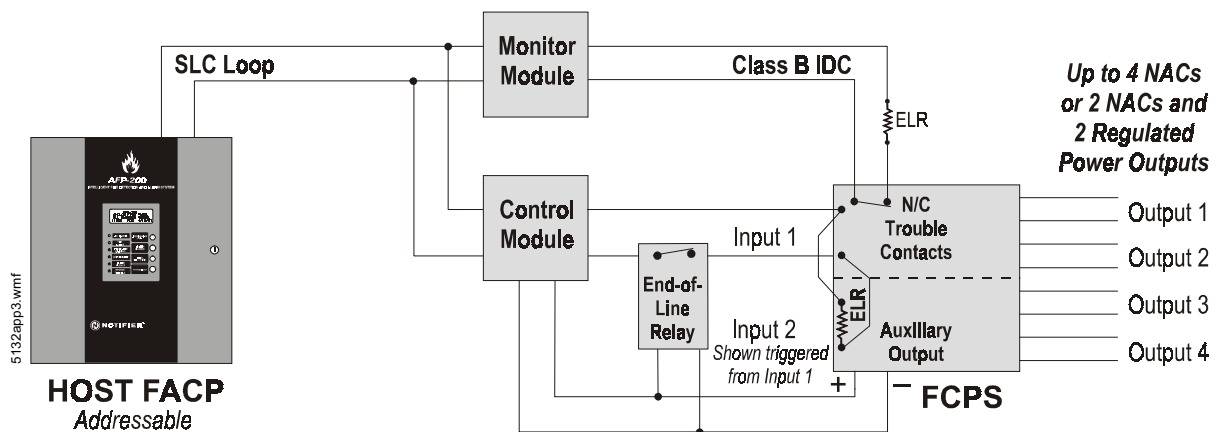
In this example, the FACP notification appliance circuits will activate the FCPS when reverse polarity activation occurs. Trouble conditions on the FCPS are sensed by the FACP through Notification Appliance Circuit #1.

Example 2: Use the FCPS to expand auxiliary regulated 24-volt system power up to 4 amps.
Both non-resettable and resettable power options are available.



Resettable outputs are created by connecting the resettable output from the FACP to one or both of the FCPS inputs. Non-resettable outputs are created simply by cutting on board resistors. For addressable panel applications, use a monitor module to sense the trouble status of the FCPS via the trouble relay contacts.

Example 3: Use addressable control modules to activate the FCPS versus the FACP Notification Appliance Circuits. This typically allows for mounting the FCPS at greater distances away from the FACP while expanding system architecture in various applications.



In this example, an addressable control module is used to activate the FCPS and an addressable monitor module is used to sense FCPS trouble conditions. Local auxiliary power output from the FCPS provides power to the addressable control module.