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# FCPS-24FS6 24 Volt, 6 Amp Remote Power Supply

Section: Power Supplies/Accessories

## GENERAL

The **FCPS-24FS6** is a compact, cost-effective, 6-amp remote power supply with battery charger. The FCPS-24FS6 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 and NAC synchronization) or auxiliary power to support 24-volt system accessories. The FCPS-24FS6 provides *regulated* and *filtered* 24 VDC power to four Notification Appliance Circuits configured as either four Class B (Style Y) or Class A (Style A, with ZNAC-4 option module). Alternately, the four outputs may be configured as all non-resettable or all resettable or two non-resettable and two resettable. The FCPS-24FS6 also contains a battery charger capable of charging up to 18 Amp Hour batteries.

## FEATURES

- UL Listed NAC Synchronization using System Sensor, Wheelock or Gentex (Commander Series) appliances.
- Cascadable up to 10 power supplies (four with Gentex) with strobe timing maintained.
- Operates as a sync follower or a sync generator (default). \* See note on reverse side.
- Contains two, fully-isolated input/control circuits (triggered from FACP Notification Appliance Circuit [*NAC expander mode*] or jumpered permanently on [*stand-alone mode*]).
- Optional mounting kit, P/N 90286, to internally house addressable SLC control module (CRF-300 or CMF-300) for alarm activation.
- Four Class B (Style Y) or four Class A (Style Z) (with ZNAC-4 Module) Notification Appliance Circuits.
- 6.0 A full load output (3.0 A maximum per circuit) in NAC expander mode (UL 864).
- 4.0 A 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 or a mix of two and two.
- Fully *regulated* and *filtered* power output (optimal for powering four-wire smoke detectors, annunciators and other system peripherals requiring regulated/filtered power).
- Power-limiting technology meets UL power-limiting requirements.
- Form-C normally-closed trouble relay.
- Fully supervised power supply, battery and Notification Appliance Circuits.
- Selectable earth fault detection.



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FCPS-24FS6.tif

- AC trouble report selectable for immediate or 8 hour delay.
- Works with virtually any UL 864 fire alarm control which utilizes an industry-standard reverse-polarity notification circuit (including unfiltered and unregulated bell power).
- Requires input trigger voltage of 9.0 - 32 VDC.
- Self-contained in compact, lockable cabinet (15" [38.1 cm] H x 14.5" [36.8 cm] W x 2.75" [7.0 cm] D).
- Includes integral battery charger capable of charging up to 18 AH batteries. Cabinet capable of housing 7.0 AH batteries.
- Battery charger may be disabled via dip switch for applications requiring larger batteries.
- Fixed, clamp-type terminal blocks accommodate up to 12 AWG (3.1 mm<sup>2</sup>) wire.

Fire-Lite® Alarms is a Honeywell company.

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 **Fire-Lite Alarms**, One Fire-Lite Place, Northford, Connecticut 06472. Phone: (800) 627-3473, Toll-Free FAX: (877) 699-4105.

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## STANDARDS and CODES

The FCPS-24FS6 complies with the following standards:

- **NFPA 72** 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*).

## SPECIFICATIONS

### Primary (AC) Power

- FCPS-24FS6: 120 VAC 60 Hz, 3.2 A maximum
- Wire size: minimum 14 AWG (2.0 mm<sup>2</sup>) 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

- 5.0 A at 24 VDC.

### Auxiliary Power Output

- Specific Application Power - 500 mA maximum.

### Output Circuits

- +24 VDC filtered, regulated.
- 3.0 A maximum for any one circuit.
- 4.0 A maximum total continuous current for all outputs (*Stand-alone mode*).
- 6.0 A maximum total short-term current for all outputs (*NAC Expander mode*).

### Secondary Power (Battery) Charging Circuit

- Supports lead-acid batteries only.
- Float Charge Voltage: 27.6VDC.
- Maximum Charge Current: 1.5 A.
- Maximum Battery Capacity: 18 AH.

## ORDERING INFORMATION

**FCPS-24FS6** Remote charger power supply (120 VAC). Includes main printed circuit board, transformers, red enclosure, and installation instructions.

**FCPS-2456RB** Replacement mother board.

**PN 90286** FCPS-24F Module Mounting Kit

**ZNAC-4** Class A (Style Z) NAC option module

**A77-716B** 12/24 VDC end-of-line relay for monitoring 4-wire smoke detector power.

**BAT-1270** Battery, 12 volt, 7.0 AH (*two required*).

## APPLICATIONS

### Example 1

Expand notification appliance power an additional 6.0 amps. Use up to 4 Class B (Style Y) outputs or 4 Class A (Style Z) outputs (using the ZNAC-4).

In this example, the FACP notification appliance circuits will activate the FCPS-24FS6 when reverse polarity activation occurs. Trouble conditions on the FCPS-24FS6 are sensed by the FACP through the Notification Appliance Circuit.

### Example 2

Use the FCPS-24FS6 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-24FS6 inputs.

### Example 3

Use addressable control modules to activate the FCPS-24FS6 versus the FACP Notification Appliance Circuits. This typically allows for mounting the FCPS-24FS6 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-24FS6 and an addressable monitor module is used to sense FCPS-24FS6 trouble conditions. Local auxiliary power output from the FCPS-24FS6 provides power to the addressable control module.

\*Fire•Lite's MS-9200, MS-9200UD, (198-point) or MS-9600 (636-point) addressable FACP's have the capability of locating control and monitor modules up to 10,000 feet (3048 m) away.

**Sync Follower/Generator Note:** In some installations, it is necessary to synchronize the flash timing of all strobes in the system for ADA compliance. Strobes accomplish this by monitoring very short timing pulses on the NAC power, which are created by a Fire Alarm Control Panel such as the Fire•Lite MS-9600. When installed at the end of a MS-9600 NAC wire run, this power supply can track (i.e. "follow") the strobe synchronization timing pulses on the existing NAC wire run. This maintains the overall system flash timing of the additional strobes attached to this power supply.

When this power supply is configured (via DIP switch settings) as a "sync follower," this supply's NAC outputs track the strobe synchronization pulses present at this supply's sync input terminal. The pulses are originated from an upstream FACP or other power supply.

When this power supply is configured (via DIP switch settings) as a "sync generator," this supply's sync input terminal are not used. Rather, this power supply is the originator of the strobe synchronization pulses on this power supply's NAC outputs. In "sync generator" mode, the sync type (System Sensor, Wheelock, or Gentex) is selectable via DIP switch settings.