



## REMOTE POWER SUPPLY

### GENERAL

The 27-032 is a compact, cost-effective, 8-amp remote power supply with battery charger. The 27-032 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 27-032 provides regulated and filtered 24 VDC power to four Notification Appliance Circuits configured as either four Class B (Style Y) or Class A (Style Z, with 27-034 option module). Alternately, the four outputs may be configured as all non-resettable or all resettable or two non-resettable and two resettable. The 27-032 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 [standalone mode]).
- Four Class B (Style Y) or four Class A (Style Z) (with 27-034 Module) Notification Appliance Circuits.
- 8.0 A full load output (3.0 A maximum per circuit) in NAC expander mode (UL 864).
- 6.0 A continuous output in stand-alone mode (UL 1481).
- Compatible with coded inputs; signals passed through.
- Optional power supervision relay (27-035).
- 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 power-limiting requirements.
- Normally-closed trouble contact.
- Fully supervised power supply, battery and Notification Appliance Circuits.
- Selectable earth fault detection.
- 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.



Remote Power Supply

### APPROVALS

- UL S2424
- FM Approved
- MEA 219-02-E
- CSFM 7315-0075:206

Form No. P.1.63.01-1

## STANDARDS AND CODES

The 27-032 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

- 27-032: 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.
- 6.0 A maximum total continuous current for all outputs (Stand-alone mode).
- 8.0 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

27-032 Remote charger power supply (120 VAC). Includes main printed circuit board, transformers, red enclosure, and installation instructions.

27-033 Replacement mother board for 27-032

27-034 Class A (Style Z) NAC option module.

27-035 12/24 VDC end-of-line relay for monitoring 4-wire smoke detector power.

10-2190-1 Battery Pack, 24 volt, 7.0 AH.

## APPLICATIONS

### Example 1

Expand notification appliance power an additional 8.0 amps. Use up to 4 Class B (Style Y) outputs or 4 Class A (Style Z) using the 27-034.

In this example, the FACP notification appliance circuits will activate the 27-032 when reverse polarity activation occurs. Trouble conditions on the 27-032 are sensed by the FACP through the Notification Appliance circuit.

### Example 2

Use the 27-032 to expand auxiliary regulated 24 volt system power up to 6.0 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 27-032 inputs.

### Example 3

Use addressable control modules to activate the 27-032 versus the FACP Notification Appliance Circuits. This typically allows for mounting the 27-032 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 27-032 and an addressable monitor module is used to sense 27-032 trouble conditions. Local auxiliary power output from the 27-032 provides power to the addressable control module.

\*Fike's Cybercat 254 and 1016 FACP's have the capability of locating control and monitor modules up to 12,000 feet.

### 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 CyberCat 254 or 1016. When installed at the end of a CyberCat 254 or 1016 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.

