

## REMOTE POWER SUPPLY

### DESCRIPTION

Fike's Remote Power Supply (P/N 10-2829) is a 10 amp power supply that can be used to extend the signaling capacity of Fike's fire alarm and suppression control systems. The Remote Power Supply can be activated by a notification appliance circuit (NACs) or optional control modules, or used for standalone applications to supply power to auxiliary devices (i.e., door holders, panel peripheral bus devices, etc.). The Remote Power Supply provides its own AC power connection, battery charging circuit, and battery connections.

### FEATURES

- Regulated, filter power supply's supervised with Form C Trouble Relay - General trouble relay that will de-energize for any trouble condition.
- Output Configurations - 4 power-limited circuits that can be configured for notification appliance circuit (NAC) or auxiliary power supply operation. When used for NAC operation, each circuit can be configured as Class B or Class A, and is rated for 3 amps maximum output, continuous duty. When used for auxiliary power output, a maximum of 10 amps total can be drawn from all four NACs and the AUX output combined.
- Input Configurations - 2 electrically isolated control inputs that provide signal connection from the host control panel or control module. The inputs are triggered by the activation of a NAC or by a 12 or 24 VDC power source. When the control input circuit activates, the Remote Power Supply will activate or deactivate its circuits.
- Auxiliary Output - Dedicated, power-limited, non-resettable (always on), auxiliary power output, 1A maximum output.
- Ground Fault Detection - Circuit board monitors for ground faults between the system power or system ground. If detected, the trouble relay de-energizes.
- Synchronization - Provides two configuration options that allow the Remote Power Supply to be setup as a Generator or Follower for notification appliance synchronization. In the Generator mode, the Remote Power Supply is capable of generating a sync pulse for System Sensor, Gentex, or Wheelock appliances, based on DIP-switch selection. In the Follower mode, the Remote Power Supply will follow the signal (continuous or modulated) provided by the host control panel or control module through the control inputs.
- Enclosure - The Remote Power Supply enclosure is made of 18 gauge steel and is available with a red finish. The enclosure is equipped with a hinged (left side only) outer door equipped with a key lock. The enclosure provides a mounting location for the circuit board, four addressable modules and up to two 12 AH batteries.
- The Remote Power Supply can sync up to 10 power supplies in Follower mode.



*Remote Power Supply*

### APPROVALS:

- UL Listed - S3217



## SPECIFICATIONS

### Enclosure

Steel Enclosure 23.05" H x 14.35" W x 3.25" D (Back-box dimensions)

- Flush or surface mounting
- Removable door for ease of installation
- Available in red finish

### Power

- 10.0 amps useable alarm power
- Supports up to 35AH of battery charging capacity
- Controller consumes 0.035A @ 24VDC in normal standby mode and 0.141 @ 24 VDC in alarm

### Outputs

- 4 NAC or auxiliary output circuits, 24VDC, 3.0 Amps maximum Class A or B
- 1 dedicated auxiliary output rated at 1 amp
- Built-in synch protocol for System Sensor®, Gentex® and Cooper Notification® devices
- When used for auxiliary power output, each circuit is rated for 3 amps, with a combined total of 10 amps @ 120/240 VAC for all 5 outputs

### Operating Environment

- 32 - 120°F (0 - 49°C)
- 93% relative humidity, non-condensing

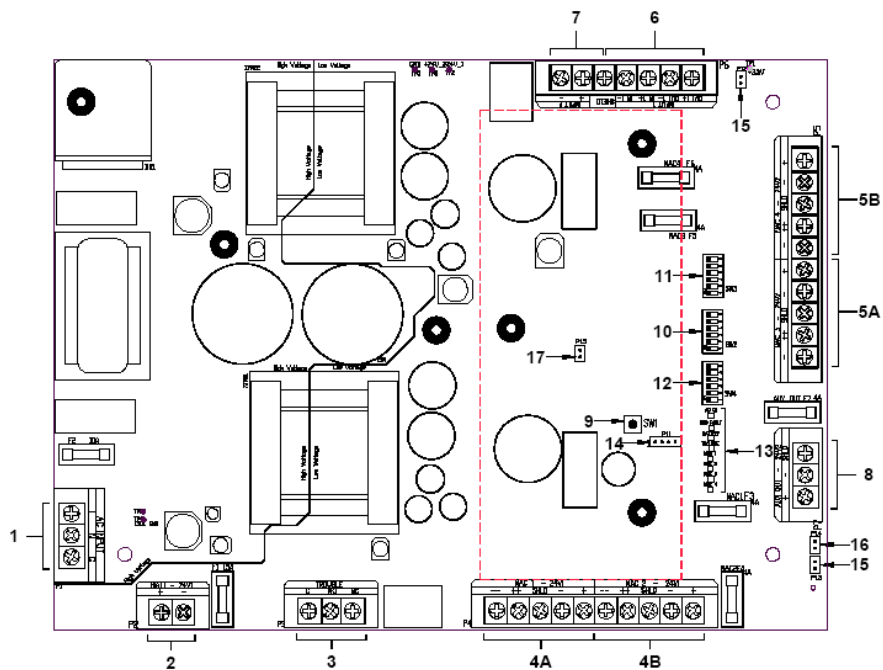
## ENCLOSURE CAPACITY

The remote power supply enclosure provides capacity for mounting the following system components:

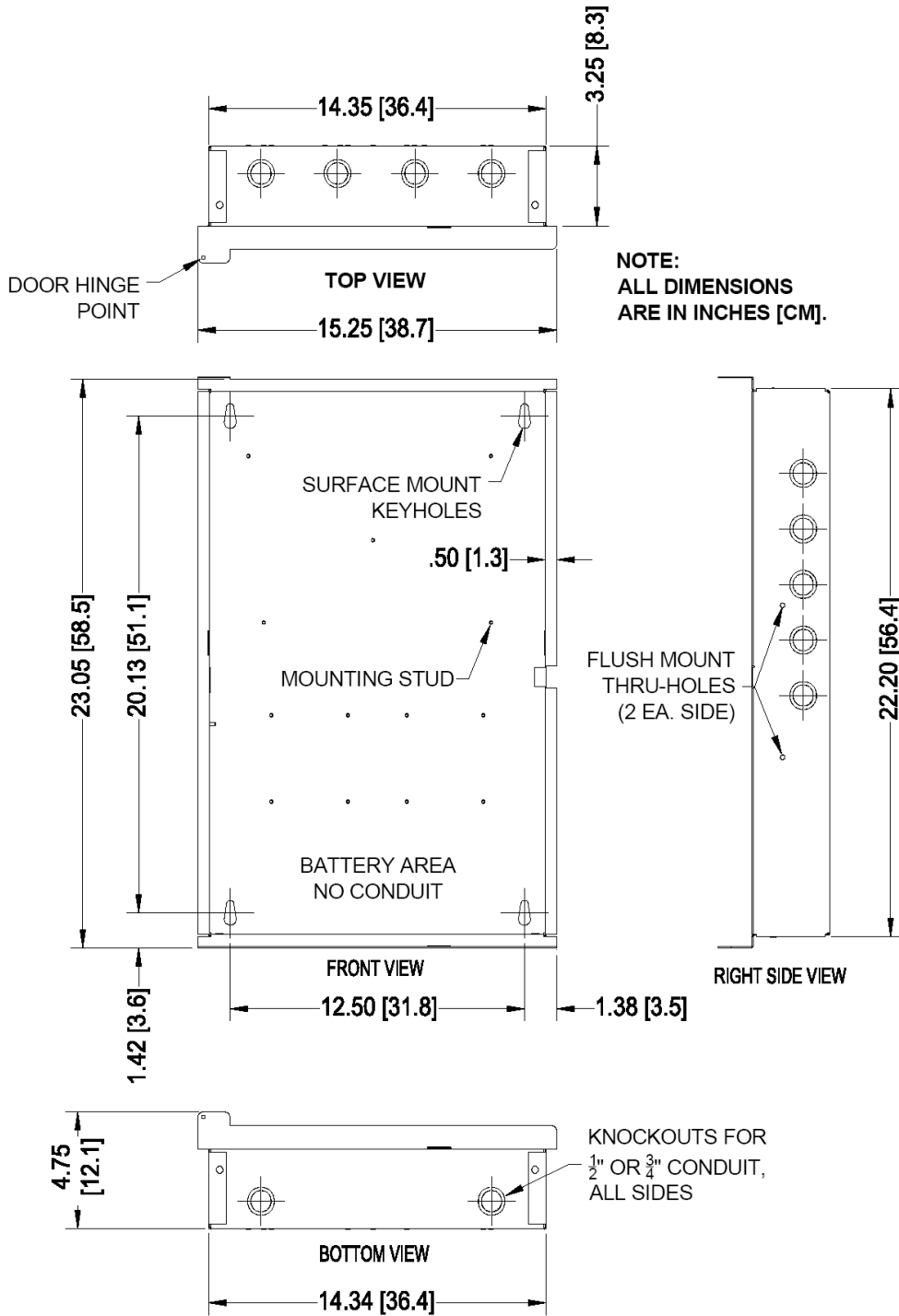
- (1) Remote Power Supply Circuit Board
- Up to (2) standby batteries max of 12 AH
- Up to (4) addressable modules
  - Monitor Module (P/N 55-041/55-046)
  - Control Module (P/N 55-042/55-047)
  - Relay Module (P/N 55-043/55-048)

## CIRCUIT BOARD LAYOUT

- 1-AC Input
- 2-Battery Input
- 3-Trouble Relay
- 4-NAC 1 & 2
- 5-NAC 3 & 4
- 6-Input 1
- 7-Input 2
- 8-Aux Out
- 9-Reset Switch
- 10-Configuration Dip Switches (Output 1 & 2)
- 11-Configuration Dip Switches (General Operation)
- 12-Configuration Dip Switches (Output 3 & 4)
- 13-Diagnostic LEDs
- 14-Programming Header (Factory Use Only)
- 15-Ground Fault Jumpers
- 16-Piezo Enable/Disable
- 17-AC Power Input Jumper



**ENCLOSURE DIAGRAM**



## ORDERING INFORMATION

Fike P/N	Description
10-2829-1-0-01-0-1-01	Remote Power Supply Kit (includes enclosure and PCB board)
10-2767	Remote Power Supply, circuit board
02-13527	Circuit board, mounting hardware
10-2782-1-0-01-0-1-01	Remote Power Supply Enclosure
02-13061	10 A Glass Tube Fuse, AC input (F2) <sup>1</sup> Mfg. P/N Littlefuse 0477010.MPX
02-4174	15 A Fast Mini Auto Fuse, Battery input (F1)
02-13081	4 A Glass Tube Fuse, NAC outputs (F3-F6)
02-13542	1 A Glass Tube Fuse, AUX Output (F7)
02-12392	Addressable Module, mounting hardware
02-4622	Battery, 12 AH (2 required)
02-2820	Battery, 18 AH (2 required) <sup>2</sup>
02-3468	Battery, 33 AH (2 required) <sup>2</sup>
10-2154	Battery Enclosure, 33 AH
02-1973	NAC Circuit EOL, 1K $\Omega$

### Notes:

<sup>1</sup> Must be ordered from Fike or replaced with mfg. part number called out above.

<sup>2</sup> Batteries larger than 12 AH must be housed in separate battery enclosure.

## OUTPUT CIRCUIT OPERATING MODES

- **Circuit Off** - In this mode, the circuit is off and will not activate under any condition.
- **24 V Power Supply** - In this mode, the circuit turns on during power up, supplying continuous 24 VDC output to connected devices. Maximum for all 5 outputs is 10 amps @ 120/240 VAC.
  - **24 V NAC, Continuous**
    - **Generator mode** - the NACs turn on upon activation of the selected input circuit (IN 1 or 2). The circuit will provide a continuous 24 VDC output to connected devices. No Sync or selective silence functions available.
    - **Follower mode** - the NACs turn on upon activation of the selected input circuit (IN 1 or 2). The circuit will provide a continuous 24 VDC output to connected devices. The circuit will follow the operation of the controlling input circuit (IN 1 or 2).
- **24 V NAC, Protocol**
  - **Generator mode** - the NACs turn on upon activation of the selected input circuit (IN 1 or 2). The circuit will utilize the sync pulse generated by the Remote Power Supply.
  - **Follower mode** - the NACs turn on upon activation of the selected input circuit (IN 1 or 2). The circuit will utilize the sync pulse provided into the corresponding input circuit (IN 1 or 2).
- **24 V Door Holder, 30 Second Shutdown** - In this mode, the circuit turns on during power up supplying continuous 24 VDC output to connected devices. The circuit will turn off immediately upon activation of Input 1. Upon loss of AC power, the circuit will turn off after 30 seconds.
- **24 V Door Holder, <18.4 V** - In this mode, the circuit turns on during power up supplying continuous 24 VDC output to connected devices. The circuit will turn off immediately upon activation of Input 1. Upon loss of AC power, the circuit will turn off if the battery supply voltage drops below 18.4 volts.