POTTER

The Symbol of Protection

PFC-5004
FIRE ALARM CONTROL PANEL

PFC-5004 Stock No. 3992015
PFC-5004D Stock No. 3992190

MEA approved

Optional Modules
• UDACT-9100 Digital Communicator
• PR-5000 Polarity Reversal and City Tie Module
• ARM-4 Quad Relay Module
• ARM-8 Eight Relay Module

• 4 Class B (Style B) Initiating Circuits which may be configured as 2 Class A (Style D) circuits.
• 2 Class A/B (Style Z/Y) Indicating Circuits with individual trouble indicators 1.7 Amp max. per circuit (2.0 Amp total)
• Each Indicating Circuit can be configured as Silenceable or Non-Silenceable
• Audibles may be configured as Steady, Temporal Code, California Code or March Time
• Predefined Initiating circuits can be configured as Waterflow or Latching/Non-Latching Supervisory
• Auxiliary relay contacts for Common Alarm, Common Trouble and Common Supervisory. If no Supervisory circuits are enabled, the Supervisory relay becomes a second Alarm relay.
• Individual Zone Disconnect Switches
• Built-in RS-485 Interface for RA8F Multiplexed Remote Annunciators (Up to 3 Annunciators)
• Interface for Remote Trouble Indicator
• Built-in Walk Test operation
• Auto Signal Silence
• Selectable Alarm Verification on Initiating Circuits
• Selectable Retard operation on Water Flow circuit
• 2.75 Amp Power Supply
• Output for 4-wire resettable regulated smoke power supply of 24 VDC 100mA maximum Output for PRTI or Remote Annunciators of 24VDC, 300mA unfiltered
• Extensive Transient Protection
• Easy configuration via DIP switches

Potter's PFC-5004 Fire Alarm Control Panel is a microprocessor based unit designed for small commercial, residential, multi-family, institutional and industrial occupancies. Fully configurable using DIP switches, it enables the user to configure the system to meet their specific requirements.

The PFC-5004 comes standard with 4 Class B (Style B) Initiating Circuits which may be configured as 2 Class A (Style D) circuits. In addition it comes equipped with 2 Class A/B (Style Z/Y) Indicating circuits which are each rated at 1.7 Amps. The panel also includes a 2.75 Amp Power Supply which powers the system and supplies a 4-wire resettable regulated smoke power supply of 24 VDC 100mA maximum.

The PFC-5004 utilizes a simple DIP switch configuration which allows for the programming of the initiating and indicating circuits as well as the enabling and disabling of system functions such as Signal Silence, Fire Drill and Auxiliary Disconnect. Some predefined Initiating circuits can optionally be configured as Waterflow or Latching/Non-Latching Supervisory. In addition the PFC-5004 allows for Alarm Verification on the Initiating circuits. The Indicating circuits may be configured as Silenceable or Non-Silenceable with the audibles configured for Steady, March-Time, Temporal Code, or California Code. The PFC-5004 is equipped with auxiliary relay contacts for Common Alarm, Trouble and Supervisory. If no Supervisory circuits are enabled, The Supervisory relay becomes a second Alarm relay.

The cabinet is available in a red exterior only. A Fire Retardant Lexan Window in the door allows for viewing of the status LEDs.

Specifications
Electrical Requirements
Primary Input Power: 120 volts, 60 Hz, 2 Amp maximum Indicating Current: 24VDC unfiltered, 2.5 Amps maximum Standby Power: 24VDC Standby Batteries
Charging Capability: 4 - 12 AH Batteries

Space is provided for two 8 AH batteries

Dimensions
12 3/4"H x 13 3/4"W x 3 1/8"D

Potter Fire Alarm Control Panel

POTTER
The Symbol of Protection

PFC-5004
FIRE ALARM CONTROL PANEL

Architects & Engineering Specification

The fire alarm control panel shall be a four-zone fire panel UL listed to meet the requirements of UL Standard 864. The panel shall also have the CSFM listing and New York MEA approval. The panel shall utilize a microprocessor and be configurable via selectable dipswitches. The panel shall have four Class B initiating zones that may be configured as two Class A initiating zone. Also, the panel shall have two 24 VDC unfiltered Class A/B indicating zones that may be configured as silencable or nonsilencable. The audibles shall be capable of being configured as steady, march time, temporal or California Code.

The panel shall have common LED's to indicate AC power on, common alarm, common supervisory, common trouble, battery trouble, ground fault, remote trouble and test. Switches shall be provided to disconnect each initiating zone individually. In addition, switches shall be provided for signal silence, fire drill, auxiliary disconnect, system reset, buzzer silence and lamp test. The panel shall have three sets of form C relays for common trouble, common supervisory and common alarm.

The panel shall be capable of supporting one DACT, Polarity Reversal/City Tie Module or Relay Module. The cabinet shall be constructed of 18 gauge cold rollled steel and have a removable door. In addition, the door shall have a lock installed. Provisions shall be provided for a remote trouble indicator. In addition, the panel shall have resettable power for four wire smoke detectors.

Ordering Information

Part No.	Model No.	Description
3992015	PFC-5004	Four Zone Microprocessor Based Fire Alarm Control Panel c/w 4 Class B (Style B) or 2 Class A (Style D) Initiating Circuits, 2 Class A/B (Style Z/Y) Indicating Circuits and a 2.75 Amp Power Supply. Allows for one UDACT-9100 Digital Communicator or one PR-5000 Polarity Reversal Module or one ARM-4 or ARM-8 Relay Adder Module. Red enclosure c/w keylock door.
3992190	PFC-5004D	PFC 5004 (as above) with factory installed DACT
3002140	PRTI-1	Remote Trouble Indicator

	Adder Modules	
3992500	UDACT-9100	Digital Alarm Communication Transmitter/Dialer Module (Requires CFG-LCD)
3002100	PR-5000	Polarity Reversal/City Tie Module
3992505	CFG-LCD	Programmer for UDACT
3002120	ARM-4	Auxiliary Relay Module c/w 4 configurable relays
3002125	ARM-8	Auxiliary Relay Module c/w 8 configurable relays (Note: Only one adder module can be used with the PFC-5002)

	Remote Annunciator	
3002135	RA8F	Remote Multiplex Annunciator c/w Common Control Features Indicators and 8 Bi-colored LEDs *Controls:* Signal Silence, Buzzer Silence, Lamp Test & System Reset *Indicators:* A.C. On, Common Trouble & Signal Silence

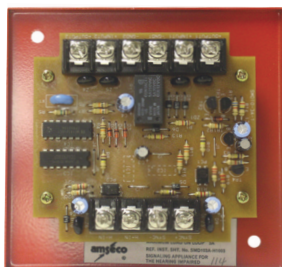|	**Batteries**	
5130092	BT-40	12 Volt, 4 Amp/Hr. Battery - 2 pcs required per panel
5130084	BT-80	12 Volt, 8 Amp/Hr. Battery - 2 pcs required per panel

7

Potter Sync Module

POTTER
The Symbol of Protection

SMD10-3A
SYNC MODULE

• Polarized with wide operating voltage range using filtered DC or unfiltered FWR input voltage
• Mounts to 4" square back box
• Daisy chain up to 20 modules maximum
• Screw terminal capacity up to AWG #12
• Red metal plate

Stock Number - 4670017

The Sync Module is designed to provide a synchronized temporal pattern (code 3) tone, and synchronize the strobe flashes when used with Amseco's Select-A-Strobe, Select-A-Horn, and Select-A-Horn/Strobe series as well as the ability to silence the horn while maintaining the strobe flashes.

The SMD10-3A has the capability of connecting two Style Y (Class B) circuits or one Style Z (Class A) circuit and is rated for 3 Amperes per circuit.

The SMD10-3A can be interconnected so that more than two alarm zones can be synchronized by connecting the sync terminals (daisy chain connection). The maximum number of interconnected modules is twenty. All inputs are polarized for compatibility with standard reverse polarity supervision of circuit wiring by F.A.C.P.

For additional compatibility information refer to Compatibility Document 5401513 Rev. A.

Specifications

Input Voltage	Regulated 24V DC/FWR
Operating Voltage Range	16 - 33V DC/ FWR
Max. Load on Loop	3A Average Max. 5A Peak
Max. RMS Operating Current	DC - 34mA FWR - 68mA
Mounting Back Box	4" x 4" x 1 1/2"
Operating Temperature Range	32°F - 120°F (0°C - 49°C)

Compatible Potter Products

CM24C	SCM24-3075110	SL24C
CSH-1224W	SCM24C	SL24C-177
CSH24W	SH-1224	SL24C-3075110
CSHB24	SH-1224-WP	SL-24H
CSL-1224W	SH24-153075	SL-24H-WP
CSL-24C	SH24-75110	SL24W-153075
CSL-24W	SH24C	SL24W-75110
CSLB24	SH24C-177	SLB24-75
CSS	SH24C-3075110	SSC2-3075110
H-1224	SH-24H	SSC8-3075110
H24W	SH-24H-WP	SSR-2
HP-25T	SHB24-75	SSR-8
SB24	SL-1224	SSS-2
SC-24	SL-1224-WP	SSS-8

Daisy Chain Modules
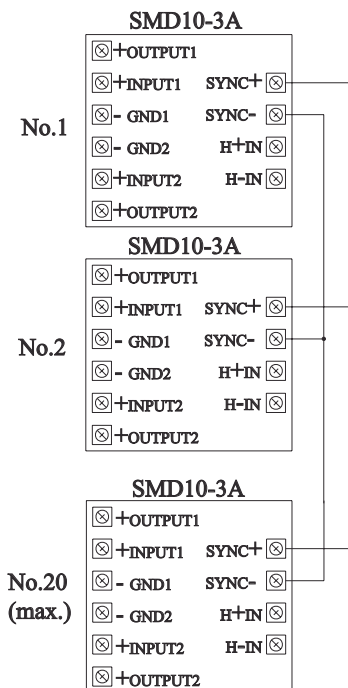
POTTER
The Symbol of Protection

PULL STATION SERIES
DIE-CAST METAL
MANUAL PULL STATIONS

- UL and cUL Listed, FM Approved, CSFM Listed, MEA Approved, ADA Compliant
- Single or Dual Action
- Terminal connectors
- 10 Amp Snap Action Switch
- Gold plated SPST contacts
- Optional auxiliary contacts
- Mounts on standard single gangbox
- Surface backboxes available
- High-gloss red enamel finish
- Glass breakrod
- Made in the U.S.A.

Description
The Potter Pull Station Series offers a complete line of die-cast pull stations for a variety of applications focusing mainly on fire alarm systems. The pull stations are available in single or dual action models. All of the pull stations have a 10-amp snap action switch and a dedicated terminal block for the ease of wire connections. All of the metal is completely coated to inhibit corrosion and provide for a uniform and quality finish.

The standard models have a hex key reset, however a key reset is also available. The models are available with shallow and deep surface mount back boxes, nine different colors, and two different plating materials, as well as a weatherproof version that is rated for NEMA 4.

Operation
The Potter single action series of pull stations operate by pulling the white operating handle straight down and the handle will lock into place. The dual action stations require the lifting of the front cover and then pulling the white operating handle straight down. The stations are reset by opening the front and placing the handle in the normal position.

Engineering Specifications
The contractor shall furnish and install the Potter series of pull stations as indicated. The pull station shall be die cast construction with a "T" type pull handle that is ADA compliant. Single action pull stations shall be a P32-1T. Dual action pull stations shall be the Potter P32-1T-LP. The contact shall be a single pole, single throw switch rated at 1 amp 30V DC/125V AC. The device shall have a terminal block for ease of wiring. Once activated, the pull station shall be reset by opening the front cover. Opening of the cover in a normal state shall initiate an alarm.

Specifications
Switch Rating: 1 Amp @ 30 VDC
                  1 Amp @ 125 VAC
Pull Station Dimensions: 4-3/4" H x 3-1/4" W x 7/8" D
Color: Red with raised white letters, white pull bar with raised red letters
Optional Colors: Blue, Green, Yellow, White, Black, Gray, Purple, Orange, Chrome or Brass plated

Ordering Information

Type	Model Number	Stock Number	Contact Type	Nema Rating
Single Action	P32-1T	1000447	SPST	
	RMS-2T	1000477	DPST	
	RMS-6T	1000478	DPDT	
Dual Action	P32-1T-LP	1000476	SPST	
Weather Proof	RMS-1T-WP	1000401	SPST	NEMA 4
Accessories			Notes	
Dual Action	RMS-LP	1000480	Converts single action to dual action	
Back Box	P32-BB	1000444	Surface mount back box	
Back Box	P32-DBB	1000445	Deep surface mount back box	

Potter Zone Remote Annunciator

POTTER
The Symbol of Protection

RA8F
8 ZONE REMOTE ANNUNCIATOR
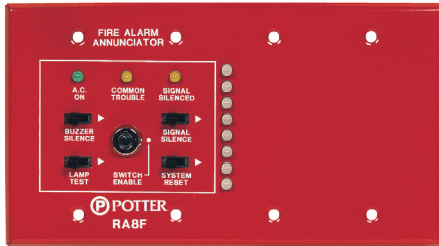
- Provides up to 8 zones of annunciation
- Bi-Colored LED's that are automatically red for Alarm and amber for supervisory
- Signal Silenced, Buzzer Silenced, System Reset, and Lamp Test switches
- Key required for operation per NFPA 72
- Up to 3-RA8F per PFC-5004, PFC-5004E, or PFC-5008
- LED's for AC power, Common Trouble, and Signal Silenced
- 35 mA standby current, 90 mA maximum Alarm Current
- Available in red or white
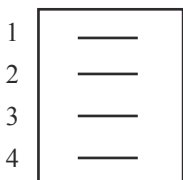
UL ULc MEA approved

Description

The RA8F is a remote annunciator for the PFC-5004, PFC-5004E and PFC-5008 conventional fire alarm control panels. The RA8F communicates using a RS-485 connection to the main panel to provide common indication of AC power, Common Trouble and Signal Silence. In addition, the RA8F provides 8 bi-colored LED's that indicate Red for an Alarm condition and Amber for a Supervisory condition.

The common switches are disabled until the key switch is activated. The common switches, when activated, will act exactly the same as the main fire alarm panel. Up to three of the RA8F annunciators may be installed on a single fire panel. The RA8F mounts on a four gang electrical box and has labels provided for identifying the LED's. The RA8F is available in red or white.
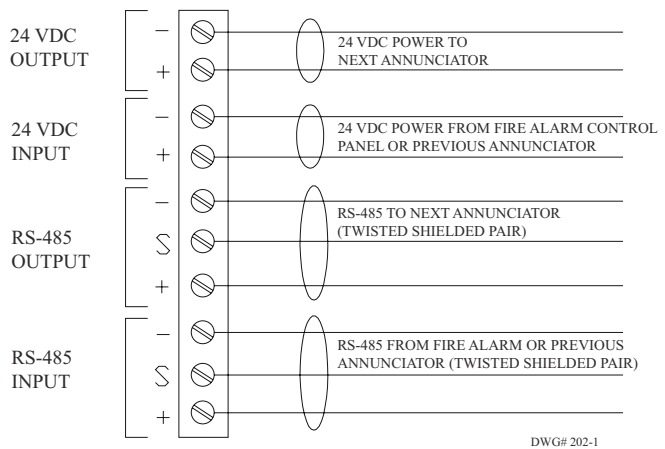
Address Setting

Annunciator Address	Dip Switch Settings		
	SW-1	SW-2	SW-3
1	On	Off	Off
2	Off	On	Off
3	On	On	Off

Up to three RA8F annunciators can be attached to the PFC-5000 series (excluding the PFC-5002). The address needs to be set sequentially for operation. In addition, the main FACP must have the dip switches configured for the number of annunciators attached.

1
2
3
4

Wiring Diagram

24 VDC OUTPUT
  – 24 VDC POWER TO NEXT ANNUNCIATOR
  +

24 VDC INPUT
  – 24 VDC POWER FROM FIRE ALARM CONTROL PANEL OR PREVIOUS ANNUNCIATOR
  +

RS-485 OUTPUT
  –
  S RS-485 TO NEXT ANNUNCIATOR (TWISTED SHIELDED PAIR)
  +

RS-485 INPUT
  –
  S RS-485 FROM FIRE ALARM OR PREVIOUS ANNUNCIATOR (TWISTED SHIELDED PAIR)
  +

DWG# 202-1

Engineering Specification

The contractor shall furnish and install the RA8F Remote Annunciator where indicated on the plans. The RA8F shall be used with compatible fire alarm control panels in particular the four zone and greater PFC-5000 series. The RA8F shall mount in a four-gang box and can be either surface mounted or flush mounted without any additional accessories. The fire alarm control panel shall be capable of a maximum of three (3) RA8F annunciators. The annunciators shall be available in the colors of red and white. The RA8F shall require 24 VDC power as well as shielded RS-485 connection for communication.

The RA8F shall provide annunciation of AC power with a green LED, Common Trouble and Signal Silenced with an amber LED. In addition, all switches shall be disabled until the keyed enable switch is activated. When the Enable Switch is activated, the common switches shall then be active and capable of controlling the system. The common switches shall include Buzzer Silence, Signal Silence, Lamp Test and System Reset.

7