

### **PFC 2000RC**

## FIRE ALARM CONTROL AND EXTINGUISHING AGENT RELEASING PANEL

#### **Features**

**Initiating Zones -** Two, Selectable Style D (Class A) or Style B (Class B) zones for smoke and/or heat detectors. Compatible with 2 or 4-wire detectors. One, Selectable, Style D (Class A) or Style B (Class B) manual zone.

Supervisory Zone - One Style B (Class B).

**Indicating Appliance Circuits -** Two, Style Y, (Class B) each rated 1.0 Amp, 24VDC

Abort Circuit - One, Style B (Class B)

**Releasing Circuit -** One, Style Y (Class B) rated 1.0 Amp at 24VDC

**Pre-discharge Timer -** Selectable 0 to 60 seconds; in 10 second increments with 5 modes of activation, i.e., Single Zone, Cross Zone, Sequential, Cross/Sequential or Manual Circuit Activation.

**Discharge Timer -** Selectable for two minutes, or continuous, releasing circuit activation.

**Auxiliary Power Output -** To operate 4-wire detectors, door holders, etc. Rated 500mA at 24VDC.

**Power Limited Circuits** - All circuits powered from the panel are power limited.

**One Man Test Feature -** Panel automatically resets when in this mode.

**LCD Display Panel -** 32 character alpha-numeric display with backlight indicates all alarm, trouble, and supervisory conditions in an English format.

Trouble Buzzer - Built in

Silence Switch - One switch silences alarm or trouble.

**Reset Delay -** 3 second delay prevents accidental reset.

**Auxiliary Contacts -** One set each for trouble and alarm. Rated 2.0 Amps at 30VDC. Output for optional alarm relay.

**Standby Battery -** Available for 24, 60 or 90 hours standby.

Listings and Approvals - UL, FM, NYMEA and CSFM

**Service Use -** Designed to meet NFPA Standards 12, 12A, 12B, 13, 17 and 72



**Housing -** 18 1/4" X 14 1/4" X 4 3/4" - 18 gauge steel with hinged, removable, locked cover. Standard finishes are off-white with grey and red trim or red with black and white trim available.

Ordering Information	Stock No.
PFC 2000RC Fire Control Panel (White Cabinet)	3005800
PFC 2000RC Fire Control Panel (Red Cabinet)	3005802
Bezel for semi-flush mounting (White)	5090107
Bezel for semi-flush mounting (Red)	5090114
BT-40 Battery 4.0AH	5130092
BT-80 Battery 8.0AH	5130084
BT-120 Battery 12.0AH	5130090
Main Circuit Board Module (Spare)	3005810
Power Supply Module (Spare)	3004520
End of line Resistor (Spare)	5080600
Installation, Operation and Instruction Manual	5403521
ARM-2 DPDT Relay Assembly	3004725



### **PFC 2000RC**

# FIRE ALARM CONTROL AND EXTINGUISHING AGENT RELEASING PANEL

## **Architects/Engineers Specifications**

The control panel for the fire alarm, extinguishing agent releasing system shall be a model PFC 2000RC manufactured by Potter Electric Signal Co. of St. Louis, MO. It shall be listed by Underwriters Laboratories Inc. and approved by Factory Mutual Research Corporation and comply with National Fire Protection Association Standards 12, 12A, 12B, 13, 17 and 72.

The housing shall be 18 gauge sheet steel and shall have a hinged, removable door with a key lock. The finish shall be baked enamel. An optional trim bezel shall be available for semi-flush mounting. The unit shall be microprocessor based and the main circuit board module shall be removable without disconnecting the field wiring.

A combination power supply/battery charger shall be provided as a part of the control. Adequate space shall be provided for standby batteries that are capable of operating the system for up to 24 hours. A matching battery cabinet shall be available to house batteries capable of operating the system for up to 90 hours. All over-current protection devices shall be resettable type circuit breakers. All circuits powered from the control panel shall meet Underwriters Laboratories Inc. requirements for power limited circuits. Regulated 24 Volts DC rated at .5 Amp shall be available for the operation of 4-wire detectors or other auxiliary devices.

Two supervised signal initiating device circuits, for smoke and/or heat detectors, with a capacity of  $25-100\mu A$ , 2-wire detectors shall be provided. A separate manual station circuit shall also be provided. Each circuit shall be switch selectable to be Style D (Class A) or Style B (Class B).

Two supervised signal indicating device circuits shall be provided that reverse polarity when an alarm condition occurs. These circuits shall supply regulated 24V DC rated at 1.0 Amp to the indicating devices.

A separate, supervised Style B (Class B) supervisory circuit shall be provided for the connection of such items as valve, pressure or temperature monitoring switches. Operation of this circuit shall result in a distinct supervisory indication.

A supervised extinguishing agent releasing circuit shall be provided that reverses polarity when a releasing condition occurs. This circuit shall be rated at 24VDC, 1.0 Amp continuous or 3 Amps momentary.

The following visual indicators shall be visible with the door closed: AC ON - Green LED, ALARM - Red LED, SUPERVISORY - Yellow LED, TROUBLE - Yellow LED and DISCHARGED - Red LED. A 32 character alphanumeric liquid crystal display, with backlight, shall also be provided to display, in an English format, the condition, status and circuit for all Alarm, Trouble and Supervisory signals. The time to discharge will be displayed whenever the pre-discharge timer is activated.

The unit shall contain the following Control Switches: A common Silence Switch that silences the alarm indicating devices and Trouble Buzzer, a Reset Switch that must be held for 3 seconds to prevent accidental resetting, a Test Switch that turns on all Alarm and Trouble indicators and outputs, a Zone Disable Switch for each zone, a Releasing Circuit Disable Switch, and an Auto-Reset Switch that disables the latching function making a "One Man Test" possible.

A pre-discharge timer that is switch selectable from 0 to 60 seconds, in 10 second increments, shall be provided. This timer shall have 5 switch selectable modes of operation: Single Zone, Cross Zone, Sequential, Cross/Sequential or Manual Circuit. A discharge timer with selectable periods of 2 minutes or continuous shall also be provided.

One set of form C (SPDT) contacts shall be provided for each, system alarm and system trouble. The contacts shall be rated at 2 Amps-30 Volts.

The end of the line resistors for all circuits shall be the same value. All selectable operating modes shall be switch selectable and the panel shall be free of programming jumpers.