



Features

- One Initiating Device Circuit; Selectable Class A or Class B
- One Class B Circuit for dry contact devices
- One 500mA Class B Indicating Circuit
- One 1 Amp Class B Releasing Circuit
- One Class B Supervisory Circuit
- 2 Amps Alarm and Trouble Contacts
- 200mA Auxiliary Power Output
- Supervised Integral Battery Charger
- Supports 2 or 4-Wire Detectors
- Field Selectable Pre-Discharge and Releasing Circuit Times

Dimensions: 18 1/4" X 14 1/4" X 4 3/4"

General Description

The PFC-100RC is a full featured single hazard releasing control panel for use on pre-action and deluge type sprinkler systems. The model PFC-100RC is Underwriters Laboratories Listed and complies with UL Standard 864 for Local Control Units for Releasing Service. It is designed to be compatible with the requirements of NFPA-72, NFPA-12, NFPA-12A, NFPA-12B, NFPA-13 and NFPA-17. The PFC-100RC is FM, NYMEA and CSFM Approved.

The PFC-100RC features LED indicators for AC, ALARM, TROUBLE, SILENCE, and SUPERVISORY conditions that are visible with the door closed. Operator controls are provided for

RESET, SILENCE, and RELEASE CIRCUIT DISABLE. Thirteen on board LED indicators provide extensive diagnostic ability to ease troubleshooting. Alarm and trouble relays are provided to interface with auxiliary equipment.

The PFC-100RC is housed in a steel cabinet with removable door and key lock. Standard finish is off-white with grey and red trim. Red cabinets with black and white trim are also available. A matching bezel is available as an option for semi-flush mounting in a wall. The cabinet will house up to a 12AH standby battery which is capable of powering the unit in excess of 90 hours.

Ordering Information

Model No.	Description	Stock No.
PFC-100RC	Releasing Control (White Cabinet)	3005900
PFC-100RC	Releasing Control (Red Cabinet)	3005902
PFC-TW	Bezel for Semi-Flush Mounting (White)	5080107
PFC-TR	Bezel for Semi-Flush Mounting (Red)	5090114
BT-40	Battery, 12V 4.0AH for 24 Hr. Standby (2 req'd)	5130092
BT-80	Battery, 12V 8.0AH for 60 Hr. Standby (2 req'd)	5130084
BT-120	Battery, 12V 12.0AH for 90 Hr. Standby (2 req'd)	5130090

Architect/Engineer Specifications

The control panel for the extinguishing agent releasing system shall be of the single hazard type. It shall be Underwriters Laboratory listed under Standard 864 for Local Control Units for Releasing Service. The control shall also be approved by Factory Mutual Research Corporation and be compatible with the requirements of NFPA-72 (Local: A, M, SS service types; NC signaling type), NFPA-12, NFPA-12A, NFPA-12B, NFPA-13 and NFPA-17.

The control shall be housed in an 18 gauge steel cabinet that has a hinged, removable door with a key lock. The finish shall be baked enamel and available in red or off-white with contrasting trim and logo. An optional matching trim bezel should be available for semi-flush mounting. The cabinet shall have adequate space to house standby batteries capable of operating the system for up to 90 hours.

The control shall include a fully supervised integral power supply/battery charger capable of providing 200mA to auxiliary power circuits, 500mA to notification appliance circuits, and 1 Amp to releasing circuit. The auxiliary power circuit shall be configured to provide switched and unswitched power circuits for powering auxiliary devices simultaneously with 4-wire type initiating devices.

The control shall have one single fully supervised initiating circuit capable of supporting the operation of 25 compatible smoke detectors. The zone shall be field selectable to operate in the Class B (Style B) or Class A (Style D) mode. There should be a minimum of five different manufacturers with 2-wire smoke detectors compatibility listed for the control. This circuit shall have a field selectable pre-discharge time of 5 seconds or 45 seconds.

The control shall have one fully supervised Class B (Style B) initiating circuit for connection to pull stations or approved N.O. Dry contacts for the purpose of initiating a release. The circuit shall override the pre-discharge time setting of any other initiating circuit and cause an immediate actuation of the release circuit.

The control shall have one fully supervised Class B (Style B) supervisory circuit for connection to valve tamper or pressure

supervisory switches as required. Operation of this circuit shall result in a distinct supervisory indication.

The control shall have one fully supervised Class B (Style Y) notification appliance circuit. The circuit shall require the use of polarized notification appliances.

The control shall have one Class B (Style Y) releasing circuit that shall be fully supervised for open and short circuits as well as foreign grounds. The releasing circuit shall polarity reverse when a releasing condition occurs. The circuit should be compatibility listed with valves from at least three manufacturers. The releasing circuit shall have a field selectable operating time of 90 seconds or continuous.

The following LED's shall be visible with the door closed: AC (Green), ALARM (Red), TROUBLE (Yellow), SUPERVISORY (Yellow). The following diagnostic LED's shall be visible with the door open: Low or Missing Battery Voltage, Supervisory Cross, Aux. Power Fail, 4-Wire Power Fail, Ground Fault, Releasing Circuit Over Current, High Resistance in Supervised Circuit, Notification Appliance Circuit Over Current, Initiating Circuit High Resistance.

The following switches shall be accessible when the cabinet door is open: RESET - instantaneously resets all alarm circuits, if the condition has been corrected, and momentarily removes power to initiating circuit and 4-Wire detector power circuit. SILENCE - restores all notification appliances and internal buzzer to normal. RELEASING CIRCUIT DISABLE - prevents operation of releasing circuit.

The control shall have one Form C (SPDT) alarm contact and one Form A (SPST) trouble contact, each rated at 2 Amps. The operation of the trouble contact shall be field selectable to follow the trouble buzzer operation or follow trouble conditions. The operation of the local buzzer can be field selectable to operate during an alarm condition in addition to operating in a trouble condition.