RP-2002C

Agent Release Control Panel

NOTIFIER® by Honeywell

Conventional Releasing Panels

General

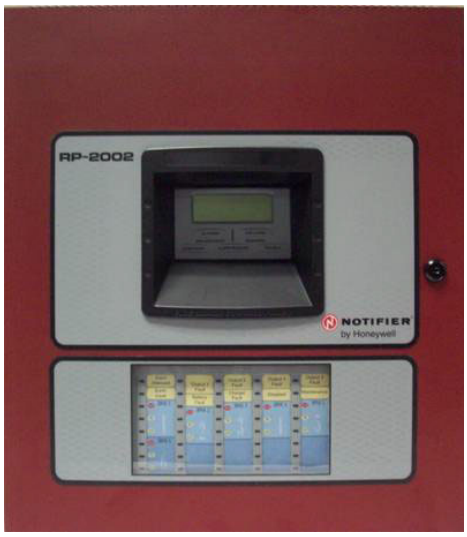
The RP-2002C is a six-zone FACP for single and dual hazard agent releasing applications. The RP-2002C provides reliable fire detection, signaling and protection for commercial, industrial and institutional buildings requiring agent-based releasing. The RP-2002C is compatible with System Sensor's i^3 detectors which are conventional smoke detectors that can transmit a maintenance trouble signal to the FACP indicating the need for cleaning and a supervisory 'freeze' signal when the ambient temperature falls below the detector rating of approximately 45°F (7.22°C). In addition, the control panel is compatible with conventional input devices such as two-wire smoke detectors, four-wire smoke detectors, pull stations, waterflow devices, tamper switches and other normally-open contact devices. Refer to the Notifier Device Compatibility Document for a complete listing of compatible devices.

Four outputs are programmable as NACs (Notification Appliance Circuits) or releasing circuits. Three programmable Form-C relays (factory programmed for Alarm, Trouble and Supervisory) and 24 VDC special application resettable and non-resettable power outputs are also included on the main circuit board. The RP-2002C supervises all wiring, AC voltage, battery charger and battery level.

Activation of a compatible smoke detector or any normally-open fire alarm initiating device will activate audible and visual signaling devices, illuminate an indicator, display alarm information on the panel's LCD, sound the piezo sounder at the FACP, activate the FACP alarm relay and operate an optional module used to notify a remote station or initiate an auxiliary control function.

Features

- Listed to Standard ULC-S527-11.
- FM Approved.
- Designed for agent releasing standards NFPA 12, 12A, 12B, and 2001.
- Meets International Building Code (IBC) seismic requirements.
- Disable/Enable control per input zone and output zone.
- Extensive transient protection.
- Dual hazard operation.
- Adjustable pre-discharge, discharge and waterflow delay timers.
- Cross-zone (double-interlock) capability.
- Six programmable Style B (Class B) IDCs (Initiating Device Circuit).
- System Sensor i^3 series detector compatible.
- Four programmable Style Y (Class B) output circuits - (special application power).
- Strobe synchronization:
  - System Sensor
  - Wheelock
  - Gentex
  - Faraday
  - Amseco
- Three programmable Form-C relays.



- 7.0 amps total 24 VDC output current.
- Resettable and non-resettable output power.
- Built-in Programmer.
- ANN-BUS for connection to optional devices (up to 8 total of any of the following):
  - N-ANN-80 Remote LCD Annunciator
  - N-ANN-I/O LED Driver
  - N-ANN-S/PG Printer Module (only one allowed per panel)
  - N-ANN-RLY Relay Module
  - N-ANN-LED Annunciator Module (built-in)
- 80-character LCD display (backlit).
- Real-time clock/calendar with daylight savings time control.
- History log with 256 event storage.
- Piezo sounder for alarm, trouble and supervisory.
- 24 volt operation.
- Low AC voltage sense.
- Outputs Programmable for:
  - Releasing Circuits or NACS
- NACs programmable for:
  - Silence Inhibit
  - Strobe Synchronization
  - Selective Silence (horn-strobe mute)
  - Temporal or Steady Signal
  - Silenceable or Non-silenceable
  - Release Stage Sounder
- Automatic battery charger with charger supervision.
- Optional Trim Ring TR-CE (red) for semi-flush mounting the cabinet.
- Optional N-CAC-5X Class A Converter Module for Outputs and IDCs.
- Optional 4XTM Municipal Box Transmitter Module.
- Optional Digital Alarm Communicators (411, 411UD, 411UDAC).

- Optional ANN-SEC card for a secondary ANN-BUS

PROGRAMMING AND SOFTWARE:

- Custom English labels (per point) may be manually entered or selected from an internal library file.
- Programmable Abort operation.
- Three programmable Form-C relay outputs.
- Pre-programmed and custom application templates.
- Continuous fire protection during online programming at the front panel.
- Program Check automatically catches common errors not linked to any zone or input point.

USER INTERFACE:

- Integral 80-character LCD display with backlighting.
- Real-time clock/calendar with automatic daylight savings adjustments.
- ANN-Bus for connection to annunciators or remote indicators.
- Audible or silent walk test capabilities.
- Piezo sounder for alarm, trouble, and supervisory.

Controls and Indicators

LED INDICATORS

- FIRE ALARM (red)
- SUPERVISORY (yellow)
- TROUBLE (yellow)
- AC POWER (green)
- ALARM SILENCED (yellow)
- DISCHARGED (red)
- PRE-DISCHARGE (red indicator)
- ABORT (yellow indicator)

CONTROL BUTTONS

- ACKNOWLEDGE
- SIGNAL SILENCE
- SYSTEM RESET (lamp test)
- ALARM SIGNAL

AC Power – TB1

- **RP-2002C:** 120 VAC, 60 Hz, 3.66 amps.
- **Wire size:** minimum #14 AWG (2.0 mm^2) with 600V insulation.
- Supervised, nonpower-limited.

Battery (sealed lead acid only) – J12:

- **Maximum Charging Circuit - Normal Flat Charge:** 27.6 VDC @ 1.4 amp. Supervised, nonpower-limited.
- **Maximum Charger Capacity:** 18 Amp Hour battery (two 18 Amp Hour batteries can be housed in the FACP cabinet. Larger batteries require separate battery box such as the BB-26 or NFS-LBBR).
- **Minimum Battery Size:** 12 Amp Hour.

Initiating Device Circuits - TB4 and TB6

- Zones 1 - 5 on TB4.
- Zone 6 on TB6.
- Supervised and power-limited circuitry.
- Style B (Class B) wiring with Style D (Class A) option.
- Normal Operating Voltage: Nominal 20 VDC.
- Alarm Current: 15 mA minimum.
- Short Circuit Current: 40 mA max.
- Maximum Loop Resistance: 100 Ohms.
- End-of-Line Resistor: 4.7K Ohms, 1/2 watt (PN 71252).
- Standby Current: 4 mA.

Refer to the Notifier Device Compatibility Document for listed compatible devices.

Notification Appliance and Releasing Circuit(s) - TB5 and TB7

- Four Output Circuits.
- Style Y (Class B) or Style Z (Class A) with optional converter module.
- Special Application power.
- Supervised and power-limited circuitry.
- Normal Operating Voltage: Nominal 24 VDC.
- Maximum Signaling Current: 7.0 amps (3.0 amps special application, 300 mA regulated maximum per NAC).
- End-of-Line Resistor: 4.7K Ohms, 1/2 watt (PN 71252).
- Max. Wiring Voltage Drop: 2 VDC.

Refer to the Notifier Device Compatibility Document for compatible listed devices.

Form-C Relays - Programmable - TB8

- Relay 1 (factory default programmed as Alarm Relay)
- Relay 2 (factory default programmed as fail-safe Trouble Relay)
- Relay 3 (factory default programmed as Supervisory Relay)
- Relay Contact Ratings:
  - 2 amps @ 30 VDC (resistive)
  - 0.5 amps @ 30 VAC (resistive)

Auxiliary Trouble Input – J6

The Auxiliary Trouble Input is an open collector circuit which can be used to monitor external devices for trouble conditions. It can be connected to the trouble bus of a peripheral, such as a power supply, which is compatible with open collector circuits.

Special Application Resettable Power - TB9

- **Operating Voltage:** Nominal 24 VDC.
- **Maximum Available Current:** 500 mA - appropriate for powering 4-wire smoke detectors (see note).
- Power-limited Circuitry.

Refer to the Notifier Device Compatibility Document for compatible listed devices.

NOTE: *Total current for resettable power, nonresettable power and Output Circuits must not exceed 7.0 amps.*

Special Application Resettable or Nonresettable Power - TB9

- **Operating Voltage:** Nominal 24 VDC.
- **Maximum Available Current:** 500 mA (see note 1).
- Power-limited Circuitry.
- Jumper selectable by JP31 for resettable or nonresettable power.

Refer to the Notifier Device Compatibility Document for compatible listed devices.

Product Line Information

RP-2002C: Six-zone, 24 volt Agent Release Control Panel (includes backbox, power supply, technical manual, and a frame & post operating instruction sheet) for single and dual hazard agent releasing applications.

N-CAC-5X: Class A Converter Module can be used to convert the Style B (Class B) Initiating Device Circuits to Style D (Class A) and Style Y (Class B) Output Circuits to Style Z (Class A).

NOTE: *Two Class A Converter modules are required to convert all four Output Circuits and six Initiating Device Circuits.*

4XTM: Transmitter Module provides a supervised output for local energy municipal box transmitter and alarm and trouble reverse polarity. It includes a disable switch and disable trouble LED.

N-ANN-80C: Remote LCD indicator that mimics the information displayed on the FACP LCD display but does not allow control of the FACP. Recommended wire type is unshielded.

N-ANN-LED: Built-in Annunciator Module provides three LEDs for each zone: Alarm, Trouble and Supervisory. Ships with red or black enclosure (see DN-60242).

N-ANN-RLY: Relay Module, which can be mounted inside or outside the cabinet, provides 10 programmable Form-C relays. *(See DN-7107.)*

N-ANN-S/PG: Serial/Parallel Printer Gateway module provides a connection for a serial or parallel printer. (See *DN-7103*).

N-ANN-I/O: LED Driver Module provides connections to a user supplied graphic annunciator. (See *DN-7105*).

ANN-SEC: Optional card for a secondary ANN-BUS. *See #53944.*

N-BG-12LR(A): Agent Release Pull Stations designed for use with Notifier Fire Alarm Control Panels with releasing capabilities.

TR-CE: Trim-ring (red) is available as an option. The trim-ring allows semi-flushing mounting of the cabinet.

BB-26: Battery box, holds up to two 26 Amp Hour batteries and CHG-75.

NFS-LBBR: Battery box, houses two 55 Amp Hour batteries, red.

SEISKIT-COMMENC: Seismic mounting kit; required for seismic-certified installations.

BAT Series Batteries: Refer to DN-6933.

PRN-6F: UL-listed compatible event printer. Dot-matrix, tractor-fed paper, 120 VAC.

PRN-7: UL-listed compatible event printer. Dot-matrix, tractor-fed paper, 120 VAC.

PRT-PK-CABLE: Programming cable. Used to update the FACP's flash firmware. (Also requires an RS485 to RS232 converter).

SYSTEM SPECIFICATIONS

System Capacity

- Annunciators 2

Electrical Specifications

- **RP-2002C: (FLPS-7 Power Supply):** 120 VAC, 60 Hz, 3.66 amps
- **Wire size:** minimum 14 AWG (2.0 mm²) with 600 V insulation, supervised, nonpower-limited

Cabinet Specifications

Door: 19.26" (48.92 cm.) high x 16.82" (42.73 cm.) wide x 0.72" (1.82 cm.) deep. **Backbox:** 19.00" (48.26 cm.) high x 16.65" (42.29 cm.) wide x 5.25" (13.34 cm.) deep. **Trim Ring (TR- CE):** 22.00" (55.88 cm.) high x 19.65" (49.91 cm.) wide.

Shipping Specifications

Dimensions:

- Height 20.00" (50.80cm)
- Width 22.50" (57.15cm)
- Depth 8.50" (21.59cm)

Temperature and Humidity Ranges

This system meets NFPA requirements for operation at 0 – 49°C and at a relative humidity 93% ± 2% RH (noncondensing) at 32°C ± 2°C. However, the useful life of the system's standby batteries and the electronic components may be adversely affected by extreme temperature ranges and humidity. Therefore, it is recommended that this system and its peripherals be installed in an environment with a normal room temperature of 15 – 27°C.

NFPA Standards

The RP-2002C complies with the following NFPA 72 Fire Alarm Systems requirements:

- **NFPA 12** CO_2 Extinguishing Systems
- **NFPA 12A** Halon 1301 Extinguishing Systems
- **NFPA 12B** Halon 1211 Extinguishing Systems
- **NFPA 72** National Fire Alarm Code for Local Fire Alarm Systems and Remote Station Fire Alarm Systems (requires an optional Remote Station Output Module)
- **NFPA 2001** Clean Agent Fire Extinguishing Systems

Agency Listings and Approvals

The listings and approvals below apply to the basic RP-2002C control panel. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **ULC:** S635
- ***Seismic Listing:*** *Reference certificate of compliance VMA - 45894-01 by the VMC Group*
- **FM approved**

ISO 9001 CERTIFIED ENGINEERING & MANUFACTURING QUALITY SYSTEMS

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice.

For more information, contact Notifier.
(888) 289-1114
10 Whitmore Road
Woodbridge, Ontario L4L 7Z4
www.notifier.com