

## MPC-6000 — Intelligent Addressable Releasing Control Panel

### Features

- One (1) intelligent signaling line circuit
- SLC loop supports up to 252 addressable inputs and signal / relay outputs (504 total inputs / outputs)
- *SureWire*<sup>™</sup> polarity insensitive addressable device loop wiring
- Devices operate on standard wire (no twist or shield required)
- *FireSmart*<sup>™</sup> application-specific fire detection
- Four (4) Class B – Style Y / Two (2) Class A – Style Z notification-appliance circuits
- Built-in strobe synchronization protocol
- Releasing Features
  - Supports two (2) hazards
  - Offers four (4) *Abort* options
  - 1-inch tall, 3-inch wide numerical countdown-timer display (pre-configured with 30-second delay)
- Courtesy delay for manual release
- One-man walk test (Silent or Audible)
- Auto program feature makes system commissioning more efficient
- Up to four (4) remote LCD displays with control capabilities
- Optional internal DACT and city-tie module capable of transmitting point or group information
- Easily programmable from front keypad or Windows<sup>®</sup>-based PC configuration tool (not required)
- Made in the USA, ISO 9001 quality crafted

### Product Overview

The MPC-6000 Addressable Releasing Control Panel is an advanced, modular fire-alarm panel. MPC-6000 features analog / addressable detection, programming, and memory capability. The base configuration for MPC-6000 includes: one (1) analog / addressable loop; four (4) notification-appliance output circuits, and one (1) releasing module.

Operating controls and indicators are mounted behind a locked cabinet door. A 1-inch tall, 3-inch wide numerical countdown-timer display is available at the main panel, while LEDs indicate general panel status.

Models MPC6-ENC-B (Black enclosure) and MPC6-ENC (Red enclosure) are available for the MPC-6000 Addressable Releasing Control Panel.

### Specifications

The main termination board for the MPC-6000 panel mounts in the rear of the panel. The main power supply is built into the main termination board.



**MPC-6000**

- Three (3) on-board, programmable relays, plus one (1) non-programmable *Fail / Safe* relay for *Trouble* events
- Maintenance and technician-level passwords for added security
- <sup>®</sup>UL 864 9<sup>th</sup> Edition Listed; FM, CSFM & NYMEA Approved

### Specifications – (continued)

MPC-6000's main termination board provides the interface for external system connections:

- SLC loop interface PCB
- Notification Appliance Circuits (NACs)
- Remote signaling circuits
- Indicating interfaces
- Releasing module

The front display board mounts on a hinged front plate, which is located behind a locked cabinet door. All normal operation is controlled from the front of the panel, via membrane switches. The display board manages all of the processing operations of the MPC-6000 panel.

The main termination board for the MPC-6000 releasing panel mounts in the rear of the panel. The main power supply is built into the main termination board. The main termination board for the MPC-6000 panel provides the interface for external system connections.

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## Specifications – (continued)

### Intelligent Addressable Device Loop

MPC-6000 utilizes the advanced X-1 protocol for the detection circuit. The X-1 loop features include *SureWire*<sup>™</sup> technology, providing 252 input-and-output addresses, polarity insensitivity, response time under 3 seconds, and retrofit installations using almost any type of wire (i.e. – shielded, non-shielded, twisted, etc.)

### Abort Station

Model AW-1 Abort Station employs a momentary, normally closed contact 'Dead Man' type push-button switch, which – while held in – prevents discharge of the clean agent. Upon release of the push button, the Sinorix<sup>™</sup> Engineered Fire-Suppression System will follow the sequence of events as programmed in the releasing panel, ultimately resulting in the release of the Sinorix agent.

### Releasing Module

Model MPC-REL provides two (2) releasing circuits and four (4) open-collector outputs.

### Manual Release Station

The basic, standard model for the Manual Release Station is the double-action Model MH-501, which contains one normally open contact. Model MH-501 has a rating of 120VAC for connection to other systems. Model MH-501 is 'dual-action' type.

Hence, it is necessary to operate the 'push-in' tab first to provide access to the 'pull-down' lever, which – when operated – locks in position after releasing a spring-loaded contact switch to effect actuation of the release circuit.

Model MH-501 is constructed of durable, molded polycarbonate material, matte-finished in red with raised lettering in white. Restoring the system to normal can only be accomplished by opening the cover of the hinged housing with a special tool, and then closing and locking its cover.

Model MH-501 is constructed with a molded housing, fitted with a 'pull-down' lever and a 'push-in' tab. The body of Model MH-501 is hinged to a back-plate assembly, which is locked with a socket-head screw.

## Minimum Control Unit Configuration

### A. Intelligent Signaling Line Circuit:

The main termination board has addressable-loop interface circuitry supporting one (1) SLC loop. Devices are polarity insensitive, and can operate on untwisted, unshielded wire.

### B. Notification Appliance Circuits:

The base panel has four (4) independent NACs. Each circuit can be configured to give continuous output, or one (1) of five (5) sounding patterns. NACs can be configured as: two (2) 'Class A – Style Z' or four (4) 'Class B – Style Y.'

### C. Dry Contacts:

Three (3) programmable 'Form C' dry-contact relays are provided. One (1) additional 'Form C' dry-contact relay is provided that activates only on *Trouble* events. This relay operates in Fail / Safe mode in order to activate if there is a system power failure.

### D. Power Supply:

The power-supply component provides all operating power to the Model MPC-6000 panel for *Standby* and *Alarm* conditions.

## Optional Control Unit Configuration

### A. MPC-DACT Module:

The Model MPC-DACT provides a dual-line, digital-alarm communicator transmitter that is programmable, via the control panel or CIS-4 configuration tool.

Model MPC-DACT is compatible with the following formats:

- SIA DCS 8
- SIA DCS 20
- Ademco Contact ID
- 4/2 1400 Hz
- 4/2 2300 Hz
- 3/1 1400 Hz
- 3/1 2300 Hz

### B. City Tie:

The main board supports a city-tie module that transmits local energy and reversed polarity.

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## Specifications – (continued)

### Auxiliary Devices

#### Remote Annunciation:

##### A. Remote LCD Annunciator (RDC-2):

The remote LCD annunciator consists of a backlit 80-character alphanumeric display, four (4) menu buttons, four (4) dedicated buttons for operator interaction, six (6) LED indicators and one (1) security key switch.

##### B. Serial Annunciator (SLU-2):

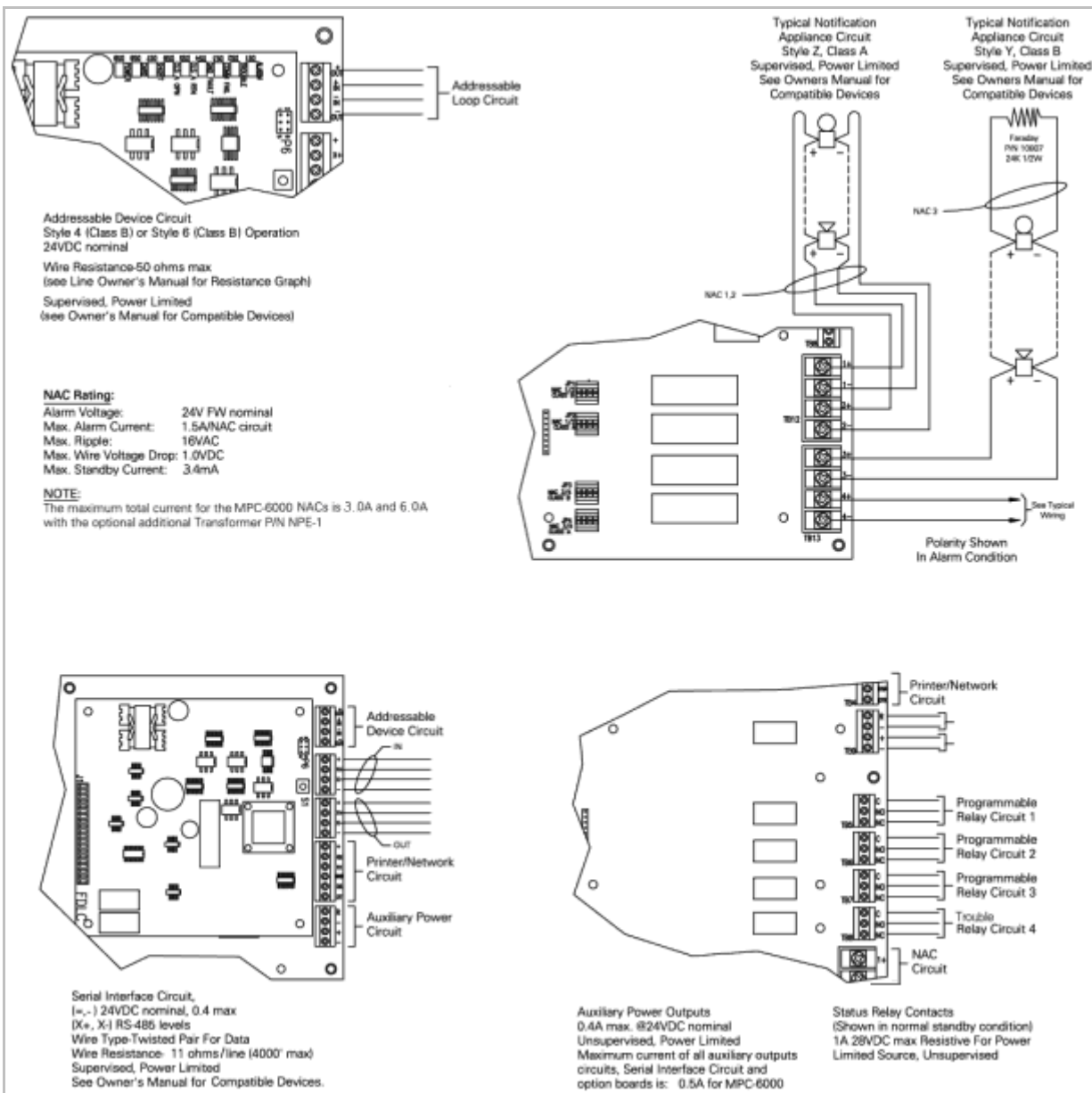
Model SLU-2 consists of one (1) remote processor and one (1) annunciator driver board capable of providing 16 supervised outputs for LEDs or incandescent lamps.

Model SLU-2 is expandable to four (4) annunciator devices per remote processor board by adding Model SLE-16 annunciator-driver boards for a total of 512 outputs.

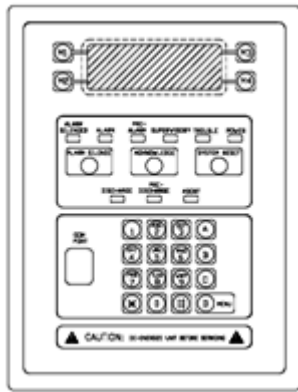
##### C. Serial Relay Unit (SRU-2):

Model SRU-2 consists of one (1) remote processor and one (1) relay board; providing eight (8) 'Form C' dry-contact relays rated at 1 Amp. Model SRU-2 is expandable to three (3) relay boards per processor board by adding Model SRE-8 relay boards for a total of 192 relays.

### Wiring Diagram Main Termination Board

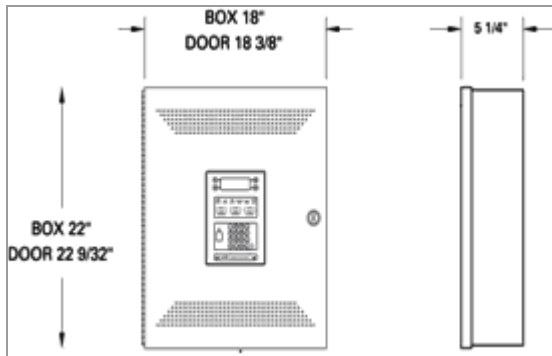


## MPC- 6000



(Front View)

### Dimensions



(Shown In Inches)

### Details for Ordering

Model No.	Part No.	Description
MPC6-REL-EKIT	599-050592	MPC-6000 Electronics Releasing Package MPC6-EP: 1 Qty. MPC-REL: 1 Qty. NPE-1: 2 Qty. RPT-1: 1 Qty.
MPC6-ENC-B	599-648952FA	MPC-6000 Releasing Panel: Black Enclosure
MPC6-ENC	599-648953FA	MPC-6000 Releasing Panel: Red Enclosure

### Optional Accessories

Model No.	Part No.	Description
RDC-3	500-649700FA	Remote Releasing Annunciator
NPE-1	500-649120FA	Transformer (to expand NAC power)
SLU-2	500-649307FA	RS-485 LED Drive Card: 16 outputs
SRU-2	500-649308FA	RS-485 Relay Card
MPC-DACT	500-649330FA	Dialer (for Model MPC-6000 panel)
CT-1K	500-649336FA	City Tie Module (for Model MPC-6000 panel)
SRE-8	500-649337FA	8-Relay Extender

### Technical Data

#### MPC-6000 Control Panel Environment

Operating Temperature: 32-120°F, (0-49°C)  
Relative Humidity: 93% @ 90°F, (32°C)

#### Primary Supply

Primary input voltage: 120VAC (60 Hz.),  
Maximum primary-input current:  
2.4 Amp. @ 120VAC

#### Secondary Power Supply

24-volt, lead-acid battery with 7AH - 38AH capacity

#### Auxiliary Power Outputs

Current: 0.5 Amp with resettable & non-resettable  
power outputs

#### Status System Relays

4 relays rated @ 1 Amp, 28VDC resistive

#### NAC Circuits

Rating per NAC circuit;  
1.5 Amp. each, 6A max.

#### Battery

Base cabinet accommodates a 12 AH battery set.  
Larger batteries require separate enclosures:  
Model BE-1 (38 AH — 100 AH);  
Model 14050 (up to 18 AH).

#### Dimensions

##### Enclosure only:

22" (56cm.) x 18" (46cm.) x 5-1/4" (13.3cm.) deep

##### Enclosure with door:

22-9/32" (56cm.) x 18 3/8" (46cm.)  
x 5-1/4" (13.3cm.) deep

### Optional Accessories

Model No.	Part No.	Description
SLE-16	500-649339FA	16 LED-Driver Extender
SFTK-6B	500-648954FA	Semi-Flush Trim, Black (for Model MPC-6000 panel)
SFTK-6R	500-648955FA	Semi-Flush Trim, Red (for Model MPC-6000 panel)
MPC-REL	500-649570FA	Releasing Module
RPT-1	500-649590FA	Releasing Power Transformer
AW-1	500-822500	Abort Switch
MH-501	500-822543	Manual Release Station
REL-EOL	500-696359	Releasing End-of-Line device (for $\text{UL}$ 9 <sup>th</sup> Edition)



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