Ⓝ **NOTIFIER**®
by Honeywell

XP6-R Six Relay Control Module

SPECIFICATIONS

Normal Operating Voltage:	15-32VDC
Stand-By Current:	1.90 mA @ 24V
Alarm Current:	32 mA (assumes all six relays have been switched once and all six LEDs solid on)
Temperature Range:	32°F to 120°F (0°C to 49°C)
Humidity:	10 to 93% Non-condensing
Dimensions:	6.8″H × 5.8″W × 1.0″D
Accessories:	CHS-6 Chassis; BB-25 Cabinet; BB-XP Cabinet; CAB-3 Series Cabinets; CAB-4 Series Cabinets
Wire Gauge:	12-18 AWG
Relay Current:	30 mA/Relay Pulse (15.6 mS pulse duration) pulse under panel control

RELAY CONTACT RATINGS:

CURRENT RATING	MAXIMUM VOLTAGE	LOAD DESCRIPTION	APPLICATION
2 A	25 VAC	PF = 0.35	Non-coded
3 A	30 VDC	Resistive	Non-coded
2 A	30 VDC	Resistive	Coded
0.46 A	30 VDC	(L/R = 20ms)	Non-coded
0.7 A	70.7 VAC	PF = 0.35	Non-coded
0.9 A	125 VDC	Resistive	Non-coded
0.5 A	125 VAC	PF = 0.75	Non-coded
0.3 A	125 VAC	PF = 0.35	Non-coded

⚠**WARNING**

All relay switch contacts are shipped in the standby state (open) state, but may have transferred to the activated (closed) state during shipping. To ensure that the switch contacts are in their correct state, modules must be made to communicate with the panel before connecting circuits controlled by the module.

BEFORE INSTALLING

If the modules will be installed in an existing operational system, inform the operator and local authority that the system will be temporarily out of service. Disconnect the power to the control panel before installing the modules. This system contains static sensitive components. Always ground yourself with a proper wrist strap before handling any circuits so that static charges are removed from the body. The housing cabinet should be metallic and suitably grounded.

NOTICE: This manual should be left with the owner/user of this equipment.

GENERAL DESCRIPTION

The XP6-R Six Relay Control Module is intended for use in an intelligent alarm system. Each module is intended for Form-C switching applications, which do not require wiring supervision for the load circuit. A single isolated set of dry relay contacts is provided for each module, which is capable of being wired for either normally open or normally closed for each operation. Each module has its own address. A pair of rotary code switches is used to set the address of the first module from 01 to 154. The remaining modules are automatically assigned to the next five higher addresses. Provisions are included for disabling a maximum of three unused modules to release the addresses to be used elsewhere. Each XP6-R module also has panel controlled green LED indicators. The panel can cause the LEDs to blink, latch on, or latch off.

CONTENTS INCLUDE:

(6) 1 × 3 Terminal Blocks
(1) 1 × 4 Terminal Blocks
(2) 11/4″ (32mm) Stand offs
(4) Machine Screws
(2) Nuts
(1) Shunt (NOTE: For the disable position, not more than one shunt shall be installed at the same time)

COMPATIBILITY REQUIREMENTS

To ensure proper operation, this module shall be connected to a compatible Notifier system control panel.

COMPONENTS

Following are descriptions of the XP6-R mounting frameworks. There are two mounting options for XP6-R modules:

- Up to six XP6-R modules can be installed on a CHS-6 in a CAB-3, CAB-4 or BB-25 cabinet
- One or two XP6-R modules can be installed in a BB-XP cabinet

Chassis

The CHS-6 chassis is used to mount XP6-R modules in a BB-25, CAB-3 or CAB-4 Series cabinet. It accommodates up to six XP6-R modules in a single cabinet row three modules wide and two modules deep.
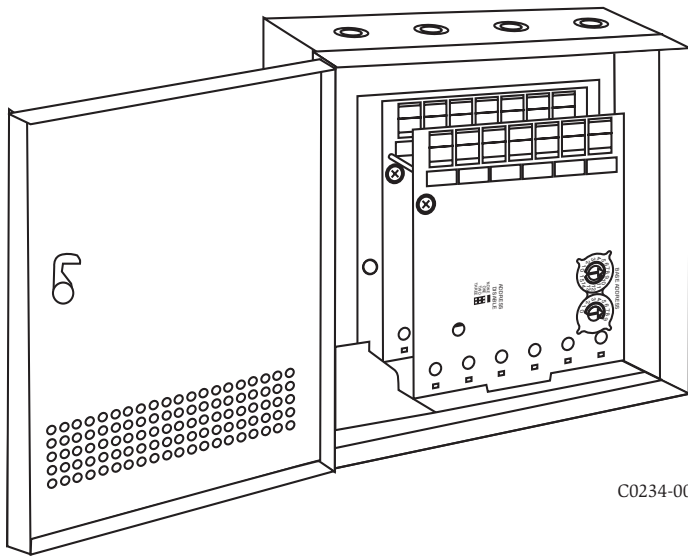
FIGURE 1. CHS-6 CHASSIS:

MOUNT WITH
SELF-THREADING SCREWS
TO BACK OF CABINET
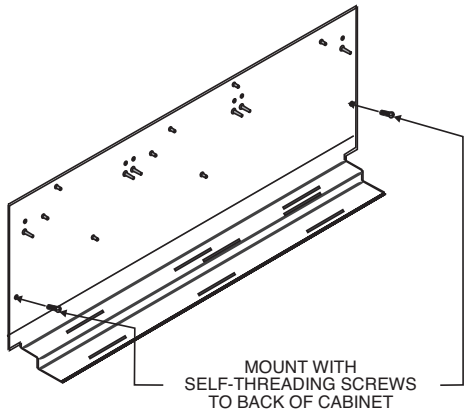
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The BB-XP cabinet has a built-in chassis that will accommodate one or two XP6-R modules.

FIGURE 2. BB-XP CABINET:

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The front XP6-R module positions of each chassis are offset below the rear XP6-R module positions so that all of the status indicators are visible.

Cabinets

A BB-25, CAB-3 or CAB-4 Series cabinet will house the CHS-6 chassis with up to six XP6-R modules installed on it. Refer to cabinet installation documents for dimensions.

The BB-XP cabinet houses one or two XP6-R modules on the internal chassis that is part of the cabinet. Refer to cabinet installation documents for dimensions.

INSTALLATION STEPS
1. Cabinet Mounting
In a clean, dry area, mount the backbox using the four holes provided in the back surface of the cabinet.

FIGURE 3. TYPICAL MOUNTING HOLE LOCATIONS:

BACKBOX
MOUNTING
HOLES
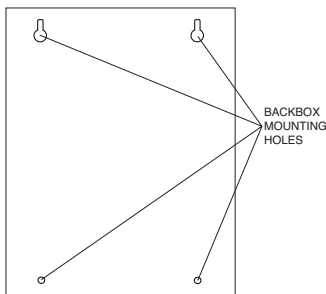
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2. Chassis Installation
The CHS-6 chassis is mounted in the BB-25, CAB-3 or CAB-4 Series cabinets. It is shipped with two self-threading screws, which are used to fasten the chassis to the back wall of the cabinet (see Figure 4).

## FIGURE 4: MOUNTING THE CHS-6 CHASSIS

MOUNT WITH
SELF-THREADING SCREWS
TO BACK OF CABINET
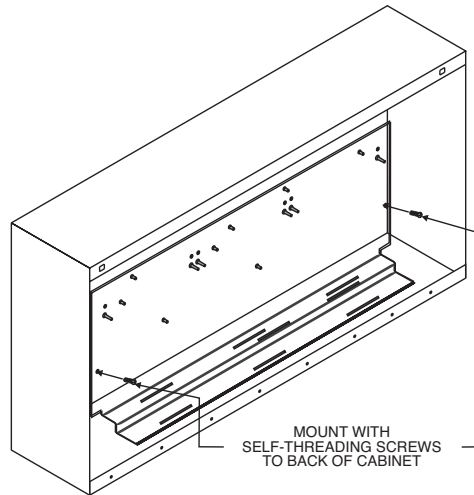
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The BB-XP cabinet comes with the chassis already installed, so no mounting is necessary.

3. Module Installation
There are two methods for installing a module in the rear position of a chassis. Method one is for installation of a rear module only, when no module will be installed in front of it. Refer to Figure 5 for instructions. Method two is for installation of a rear module when another module will be installed in the chassis position in front of it. Refer to Figures 6a and 6b for method two. All necessary screws and standoffs are supplied with the modules.

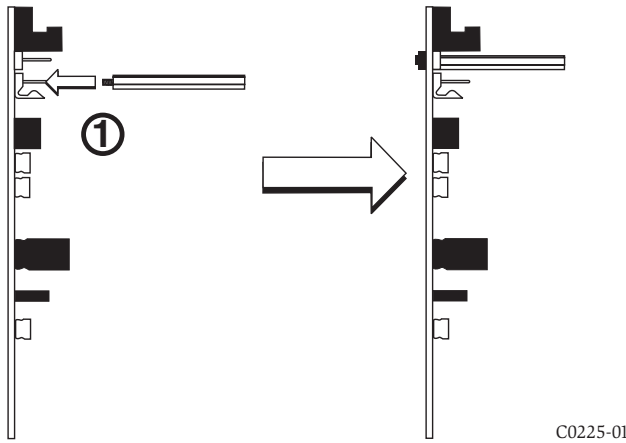## FIGURE 5. INSTALLATION OF REAR MODULE ONLY, METHOD ONE:
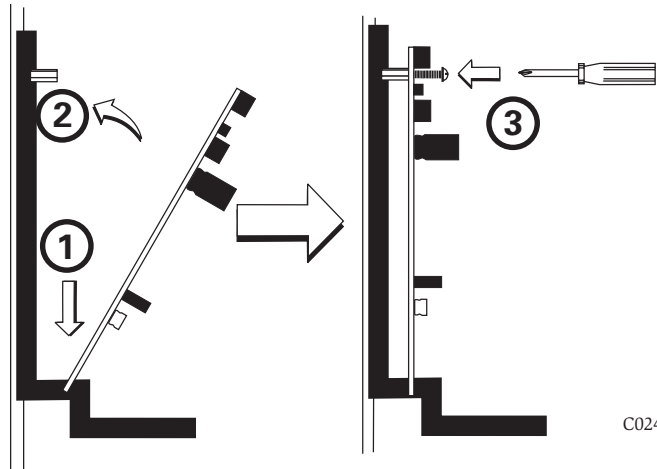
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Step 1: Insert the bottom of the XP6-R module down into a rear slot on the chassis.

Step 2: Carefully swing the upper edge of the board back towards the back of the chassis until it touches the two standoffs.

Step 3: Align two 4-40 screws with the two standoffs and tighten.

Step 4: Address and wire the modules according to the instructions in this manual.

The steps in Figures 6A – 6C describe and illustrate module installation when the rear chassis position and the position in front of it will be filled. Front position installation is possible only if the rear position is filled with an XP module.

FIGURE 6A. INSTALLATION OF XP6-R MODULE IN A REAR CHASSIS POSITION, METHOD TWO:


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Step 1: Install two long standoffs in the lower mounting holes using two 4-40 nuts as shown.

FIGURE 6B.

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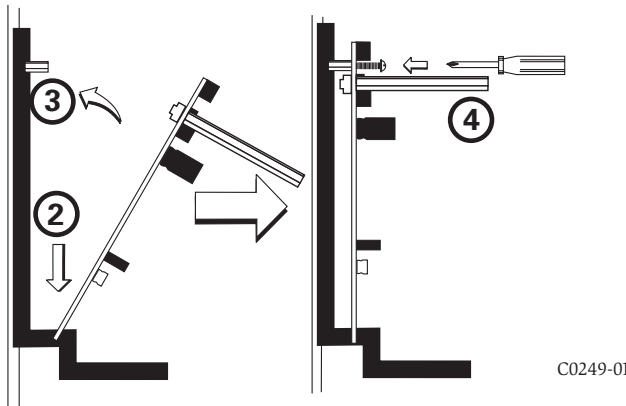
Step 2: Insert the bottom of the XP6-R module down into a rear slot on the chassis.

Step 3: Carefully swing the upper edge of the board back towards the back of the chassis until it touches the two standoffs on the board.

Step 4: Align two 4-40 screws with the two standoffs on the chassis and tighten.

Step 5: Address and wire the modules according to the instructions in this manual.

FIGURE 6C. INSTALLATION OF XP6-R MODULE IN FRONT CHASSIS POSITION:

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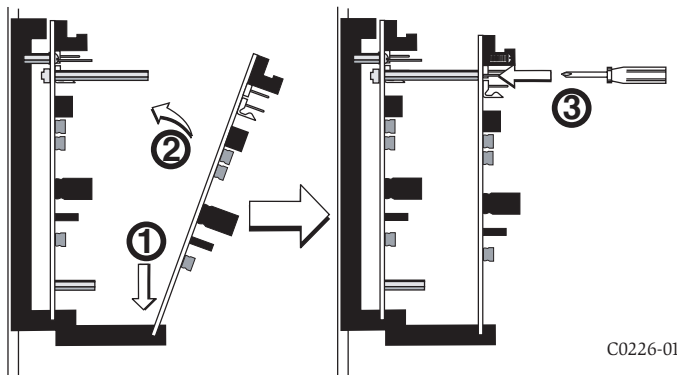
Step 1: Insert the bottom edge of the XP6-R module down into a front slot of the chassis.

Step 2: Carefully swing the upper edge of the board towards the back of the chassis until it touches the 11/4˝ (31.75mm) standoffs installed on the rear module.

Step 3: Align two 4-40 screws with the two standoffs and tighten.

Step 4: Address and wire the modules according to the instructions in this manual.

WIRING

NOTE: All wiring must conform to applicable local codes, ordinances, and regulations.

1. Install module wiring in accordance with the job drawings and appropriate wiring diagrams.

2. Make electrical connections by stripping approximately ¼˝ (6.35mm) of insulation from the end of the wire sliding the bare end of the wire under the clamping plate, and tightening the clamping plate screw.

3. Set the address on the modules per the job drawing. Use the rotary code switches to set the address of the first module (between 01 and 154). The remaining modules are automatically assigned to the next five higher addresses. For example, if the base address switch is set to 28, the next five modules will be addressed to 29, 30, 31, 32, and 33. DO NOT set the lowest address above 154, as the other modules will be assigned to nonexistent addresses.

NOTE: Some panels support extended addressing. In order to set the module above address 99 on compatible systems, carefully remove the stop on the upper rotary switch. If the panel does not support extended addressing, do not set the lowest addressabove 94.

4. A shunt is provided to disable a maximum of three unused modules. Modules are disabled from the highest address and work downward. If two modules are disabled, the lowest four addresses will be functional, while the highest two will be disabled. For example, if the shunt for Address Disable is placed on "two" and the base address switch is set to 28, the modules will be assigned to 28, 29, 30 and 31.

NOTE: Power must not be applied to the unit when changing functionality of the shunts.

NOTE: The XP6-R must have power cycled for shunt changes to take effect.

NOTE: All references to power limited represent "Power Limited (Class 2)".

FIGURE 7. WIRING AND PROGRAMMING THE XP6-R MODULE:
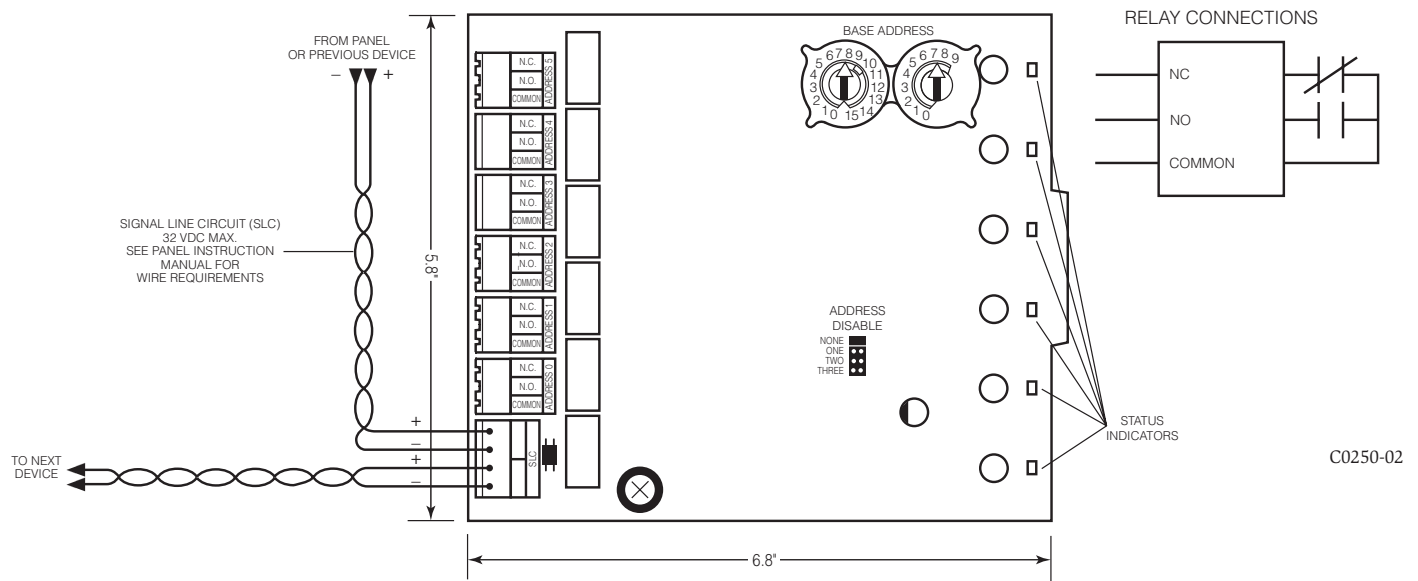
NOTES:
- The relay contacts on the XP6-R may be connected to either a power-limited or non power-limited source, this wiring must remain separated by at least 1/4″ (6.35 mm) from all power-limited wiring.
- Power-limited circuits must employ type FPL, FPLR, or FPLP cable as required by Article 760 of the NEC.
- For easier wiring, assign all power-limited wiring to one side rather than alternating with non power-limited.

PROGRAMMING

The XP6-R module operates with the following Fire Alarm Control Panels:

- AM2020/AFP1010
- AFP-200
- AFP-300/AFP-400
- System 5000 with AIM-200
- AFC-600
- NFS-640
- NFS-3030

The modules are programmed as FRM-1 modules in each system according to the programming instructions in the appropriate FACP manual.