

Point Module

Product Description

The Point Termination Module (PTM) assembly consists of an electronic point module and a termination block (see Figures 1 and 2). These installation instructions apply to the point module only. See *Installation Instructions* (545-404) for termination block installation.

Product Numbers

Product No.	Point Modules
PTM6.2P1K	2 AI, 1K Platinum RTD
PTM6.2N100K	2 AI, 100K Thermistor
PTM6.U10	2 AI, 0-10 Vdc
PTM6.21420	2 AI, 4-20 mA
PTM6.2D20	2 DI, Dry Contact
PTM6.4D20	4 DI, Dry Contact
PTM6.2D50	2 DI, Voltage Sensing, Isolated
PTM6.2C	2 DI, Pulse Accumulator
PTM6.2Y10S	2 AO, 0-10 Vdc
PTM6.2Y10S-M	2 AO, 0-10 Vdc with Manual Override
PTM6.2Y420	2 AO, 4-20 mA
PTM6.2Y420-M	2 AO, 4-20 mA with Manual Override
PTM6.1PSI20-M	1 AO—Pneumatic with Manual Override
PTM6.2Q250	2 DO, Contact
PTM6.2Q250-M	2 DO, Contact with Manual Override

Product No.	Accessories
PTX6.H	Replacement High Voltage Termination Block
PTX6.L	Replacement Low Voltage Termination Block
545-021	Replacement AO-P Point module. See <i>Installation Instructions</i> (545-406)
545-020	Replacement AO-P Connector Block. See <i>Installation Instructions</i> (545-406)
545-040	Address Keys numbered 004 through 064 (16 keys in increments of 4)
545-041	Address Keys numbered 068 through 128 (16 keys in increments of 4)
545-042	Address Keys numbered 132 through 192 (16 keys in increments of 4)
545-043	Address Keys numbered 196 through 256 (16 keys in increments of 4)
545-044	Address Keys numbered 260 through 296 (10 keys in increments of 4)
545-053	Identification Labels (12 per sheet)
545-825	APOGEE Address Keys numbered 1 through 16 (16 keys)

Product No.	Accessories
545-826	APOGEE Address Keys numbered 17 through 32 (16 keys)
545-827	APOGEE Address Keys numbered 33 through 48 (16 keys)
545-828	APOGEE Address Keys numbered 49 through 64 (16 keys)
545-829	APOGEE Address Keys numbered 65 through 80 (16 keys)


Required Tools

- None

Expected Installation Time

6 minutes per module

Caution Notation

CAUTION:		Equipment damage or loss of data may occur if the user does not follow a procedure as specified.
-----------------	---	--

Prerequisites

- Modular Building Controller (MBC) or Remote Building Controller (RBC) mounted and AC power connected.
- Termination blocks installed.
- All wiring terminated.
- Module identification labels and layout sheet.

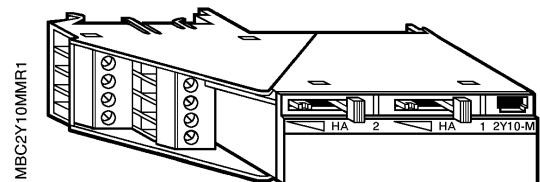


Figure 1. Typical PTM Assembly.

NOTE: Module identification layout sheets and labels are generated in the field office by the Field Workstation and are typically supplied for each MBC or RBC enclosure. These sheets list the devices that are connected and controlled by each PTM.

Instructions

Each Point Module has a small piece of colored-coded tape (Item 7 in Figure 2) affixed to the right side of the transparent identification window to identify the point type. Table 1 outlines PTM color-coding.

Table 1. PTM Color-Coding.

Tape Color	Point Type
Blue	Analog Input
Yellow	Analog Output
Pink	Analog Output-Pneumatic
Orange	Pulse Counting
Clear	Digital Input
Green	Digital Output

1. Match the layout sheet point module address number (for example, 00200004) to the same number shown on your label sheet.

Example

OR2SP	0R1SP	
SUPPLY PROOF	SUPPLY PROOF	
00200005	00200004	SIEMENS

NOTE: If pre-addressed labels have not been supplied, identify each point module by legibly writing the following information for each point on the paper label: Name, Description, and Address.

2. Remove the label from the perforated sheet. Fold label to double thickness and insert it through the slot located on the left-hand side of the module (Figure 3). The label should fit snugly under the transparent module identification window.
3. Repeat Steps 1 through 2 for each point module being labeled.

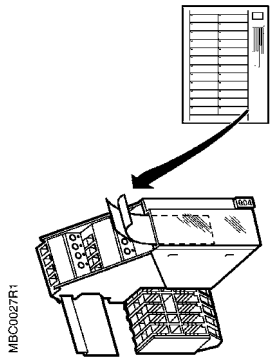


Figure 3. Labeling the Point Module.

1. Point module
 2. Termination block
- NOTE:** High voltage termination blocks are dark gray.
Low voltage termination blocks are light gray.
3. Transparent module identification window
 4. Point identification label
 5. Status LEDs and manual override
 6. Address key
 7. Color-coded tape
 8. PTM and M-Bus connector
 9. Mechanical keys to prevent the insertion of unmatched voltages
 10. Point module and termination block connector
 11. Termination block screw contact
 12. Termination block address marker
 13. Termination block part number
 - PTX6.H (High voltage)
 - PTX6.L (Low voltage)
 14. Mounting rail
 15. Module Bus (M-Bus)

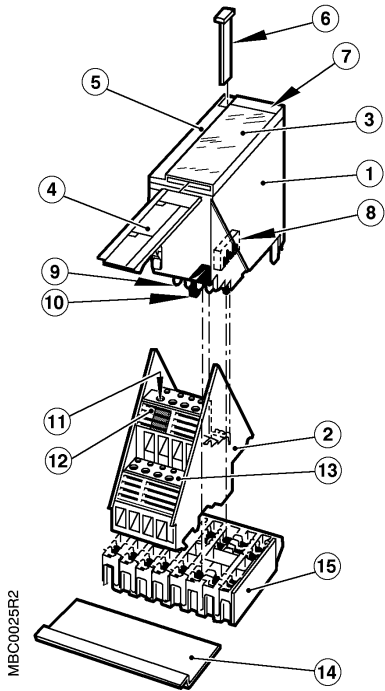


Figure 2. Point Termination Module Components.

Addressing the Point Module

Each point module has an address key that provides a unique address in the field panel. A smaller address marker (Figure 4) also identifies the termination block should the point module and termination block become separated.

1. Unpack a set of address keys from the shipping carton.
2. Match the last three digits of the point module address number (for example, 00200012 shown on the point module label with the corresponding address key number (in this case 012).
3. Detach the appropriate address key from the spine.



CAUTION:

The point address number on the front label **MUST** be identical to the address key number.

4. Insert the address key into the slot located at the top right-hand corner of the point module as shown in Figure 4.
5. Insert the smaller address marker to identify which termination block is used with the point module (Figure 4). If the point module and termination block are separated, compare the address key in the point module to the address marker on the termination block.
6. Repeat Steps 1 through 5 for each point module being addressed.

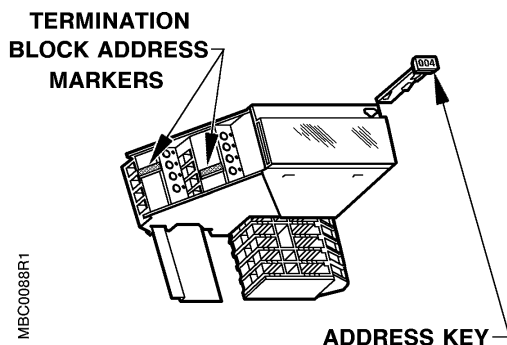


Figure 4. Addressing the PTM.

Installing the Point Module

After labeling and addressing all PTMs, you can begin the installation.



CAUTION:

Circuits powering PTM6.2Q250-M point modules must be limited by a 15 amp (max.) circuit breaker.

NOTE: The point module and termination block contain mechanical keys that prevent the assembly of a module and block of different voltages. If the point module does not mount easily to the termination block, do not use force. Check if the point module and termination block match. The High Voltage block can be identified by the dark gray color and the symbol ⊗ printed next to the termination block part number.

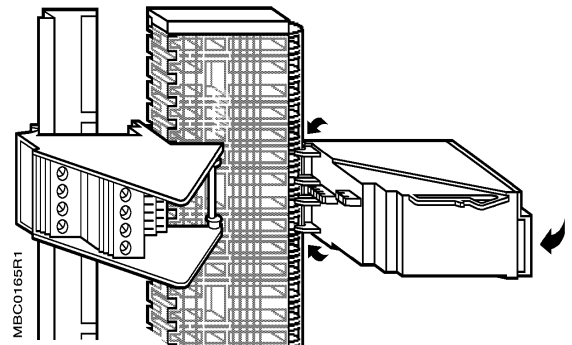


Figure 5. Installing a Point Module.

1. Remove any Module Bus (M-Bus) protective tape that was not already removed when the termination blocks were wired.
2. Starting at the top left-hand side of the MBC or RBC, install each point module in the order shown on the layout sheet.
3. Insert the point module's mounting guides into the right-hand edge of the M-Bus rail as shown in Figure 5.
4. Swing the free end of the point module down so that it mates with the previously installed and wired termination block. Verify that the point module is aligned with the termination block and firmly press the point module into place.

NOTE: You will hear a “click” when the point module is properly mounted.

5. Repeat Steps 1 through 4 for each point module being installed.

6. To reposition or remove the point module, push the point module toward the termination block and press the module housing release tab located at the left-hand side of the point module. Then tilt the point module (Figure 6).

The installation is now complete (Figure 7).

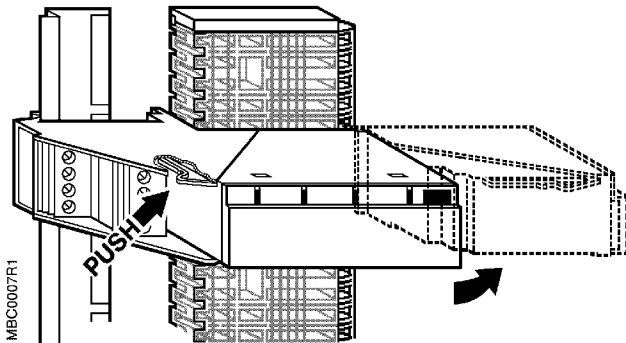


Figure 6. To Reposition or Remove a Point Module.

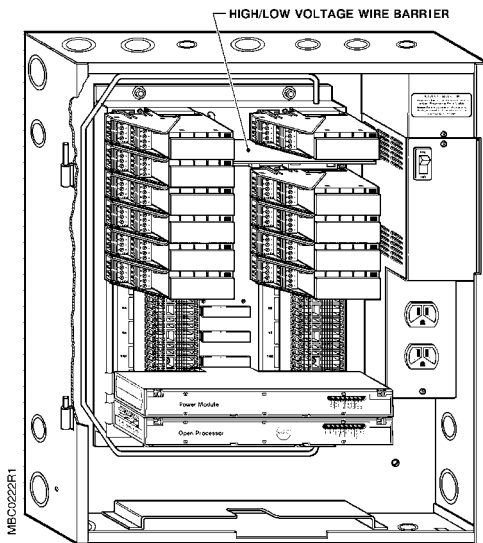


Figure 7. Point Modules and Termination Blocks Installed (MBC Shown).

For MBCs with styled doors and RBCs with windowed doors

1. Leave the layout sheet in the literature pocket located at the bottom of the field panel.
2. Remove the perforated blank-out papers from the view panel to expose each installed module location (Figure 8).

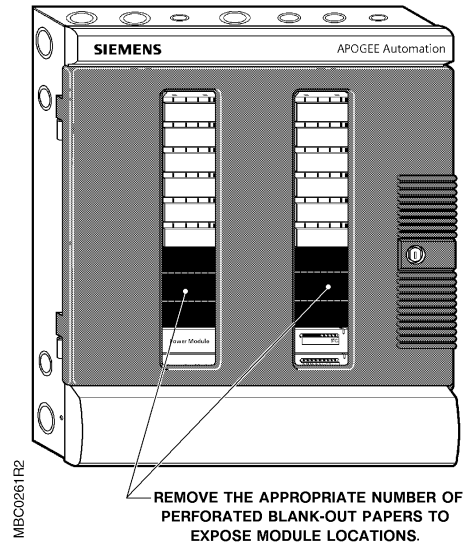


Figure 8. Exposing Module Locations.

Information in this publication is based on current specifications. The company reserves the right to make changes in specifications and models as design improvements are introduced. Other product or company names mentioned herein may be the trademarks of their respective owners. © 2002 Siemens Building Technologies, Inc.