

**INSTALLATION INSTRUCTIONS FOR VAV MODULE KIT (86M71)
USED ON ROOFTOP UNITS WITH IMC VERSIONS M1-7 OR HIGHER**

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Shipping and Packing List

Package 1 of 1 contains:

- 1- Terminal block assembly
- 1- VAV (1) A133 (GP1-1) board
- 1- Wiring diagram sticker
- 2- 6-32 X 1" MS Hex head screws (in bag assy.)

Application

The VAV Module Kit is used on rooftop units containing an IMC (version M1-7 or higher). The kit is used to control an optional field-installed supply bypass damper for zoning applications.

Installation (overleaf)



Installation

1. Disconnect all power to unit and open control panel.
2. Make field wiring connections to terminal block assembly as shown in wiring diagram provided with optional drive. Also refer to figure 1.

TB18	
<input type="radio"/>	1 S37 Bldg. Press. Sw. Stg. 1 Input
<input type="radio"/>	2 S39 Bldg. Press. Sw. Stg. 2 Input
<input type="radio"/>	3 Common
<input type="radio"/>	4 RLY-H (24VAC)
<input type="radio"/>	5 RLY-NO Output to K201
<input type="radio"/>	6 A30 Supply Press. Sensor Input (0-10VDC)
<input type="radio"/>	7 A34 Bldg. Press. Sensor Input (0-10VDC)
<input type="radio"/>	8 Optional A1 (0-10vdc)
<input type="radio"/>	9 Optional A1 (0-10vdc)
<input type="radio"/>	10 Analog Ground
<input type="radio"/>	11 Analog Output to Supply VFD A96 (0-10VDC) or By-Pass Damper B9 (2-10VDC)
<input type="radio"/>	12 Analog Output to Exhaust VFD (A137 (0-10VDC)

Figure 1. TB18 Connections

⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a qualified installer or service agency.

⚠ IMPORTANT

When wiring 0-10VDC sensors, two separate twisted pair cables with shield are required. One cable is used for the 24VAC power and one cable is used for the 0-10VDC output. The shield drain wires must be connected to the common at the unit field wiring terminal block only. The shield drain wires must not be connected to common at the sensor.

3. Confirm that DIP switch on GP1 board is set as shown in figure 2.

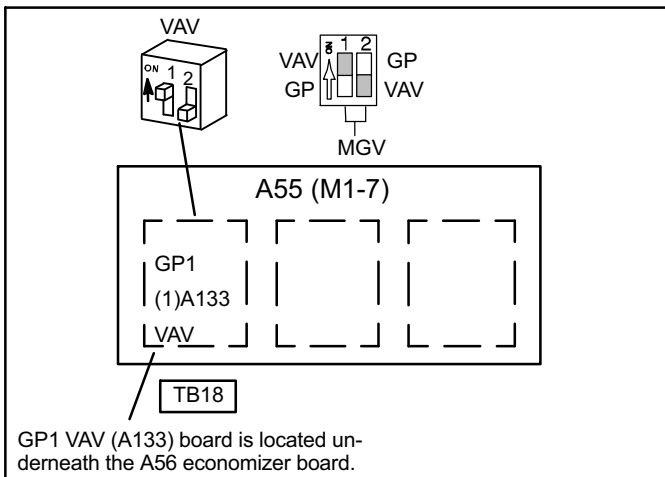


Figure 2. GP1 Board Position on IMC

4. Plug P194 connector on GP1 board into J194 on terminal block assembly. See figure 3.
5. If IMC (A55) board is equipped with an EM1 (A56) economizer board, remove and retain.

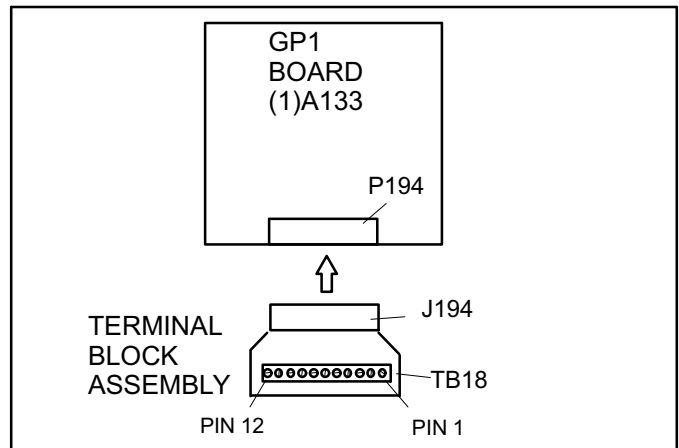


Figure 3. Connect GP1 Board to Terminal Block

⚠ IMPORTANT

Circuit boards are extremely sensitive to static electricity. Care must be taken in handling. Hold board by the edges and avoid touching any components. Be extremely careful when removing black plastic cover over gold connector pins. DO NOT touch pins.

6. Carefully remove GP1 board from protective packaging. Properly position board over the molex connector at the far top left of the main control board. See figure 2.
7. Pins must be properly aligned with receptacle. Snap board in place. Secure with screws provided in kit.

IMPORTANT - Misaligned pins can damage the IMC and/or GP1 board.

8. Position economizer board over the VAV board molex connector and snap into place. Secure using retained screws.

IMPORTANT - Misaligned pins can damage the economizer, IMC, and/or GP1 board.

9. Locate the unit wiring diagram sections on the compressor access panel. Affix the wiring diagram, provided in kit, in alpha-numeric order near the other diagrams.
10. Restore power to unit and refer to IMC manual provided with unit for start-up.
11. Set ECTO parameters to application specifications. See Block 9 parameters in the IMC manual.