

Title: Expansion Module Wiring To Stand Alone Price VAV i-Controller REV.200 And Above

## Purpose

This document will assist with wiring the Price VAV to the Small Expansion Module A when there is no Low Voltage Terminal Block (LVTB). If the unit does have a terminal block, verify the terminals on the unit wiring diagram.

## Small Expansion Module A to Price VAV Field Connection Overview

To make VAV field wiring connections to the FLO unit, it will be necessary to wire directly to the Small Expansion Module A using the points listed below.

From control Pins 4 & 14 for the VAV Temp sensor

From control Pins 20 & 21 for the VAV Damper actuator

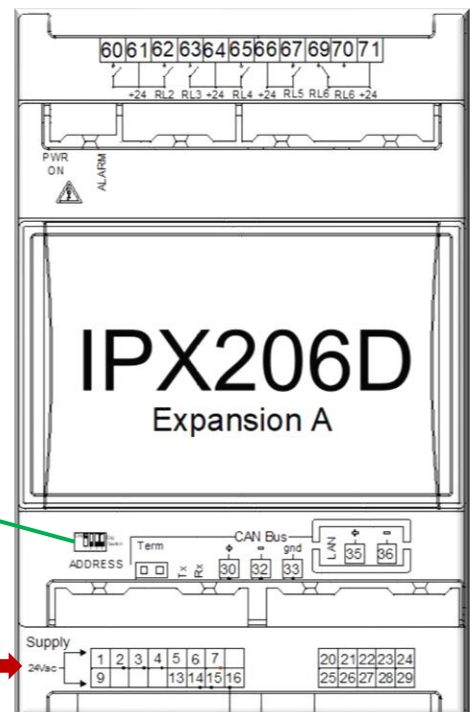
From control Pins 20 & 22 for the VAV Fan Speed

From control relay output terminal 67 and 71 for VAV Fan

From control relay output terminal 70 and 71 for VAV Booster Heat

## Pin & Dipswitch Detail Overview

Refer to the figure below for this information. The bottom section of Phoenix connectors (red arrow) on this module has two rows, the lower numbers are closest (front) and the higher numbers are against the unit wall. For example: Pins 1-8 & 20-24 are in front and Pins 9-16 & 25-29 are against the unit wall.



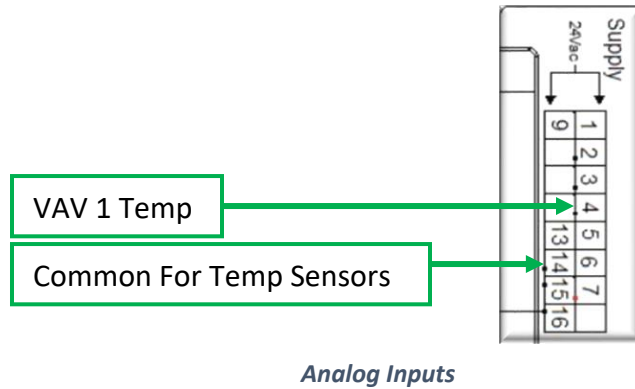
The correct dipswitch settings are highlighted →.

**NOTE:** Switch 1 is On/Up and Switches 2-4 are Off/Down shown above.

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## VAV Temp Sensor Analog Input Overview

Refer to the Analog Inputs picture shown below for the following information. A total of two wires will be needed, one on pin 4 and the common on Pin 14.



## VAV Damper & VAV Fan Speed Analog Outputs Overview

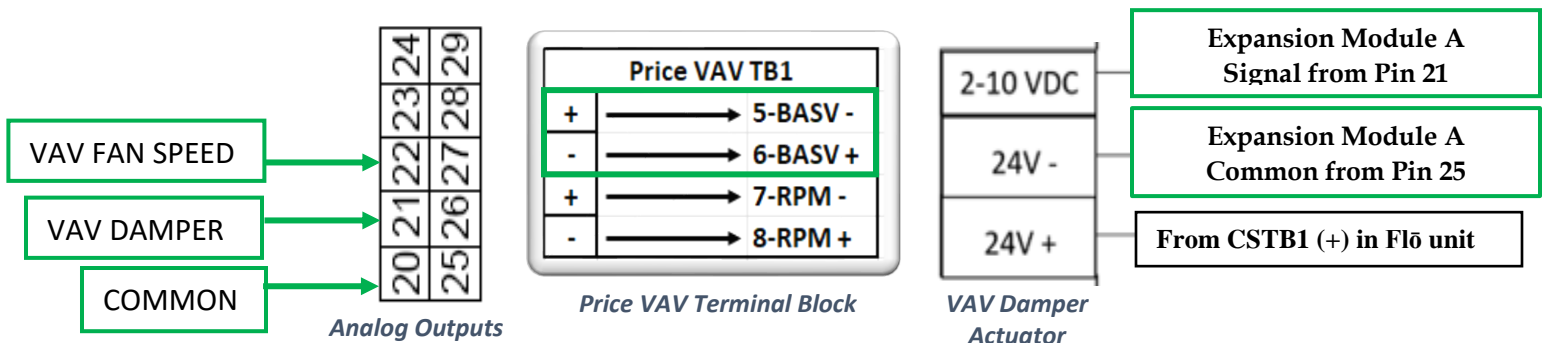
Refer to the Analog Outputs diagram, Price VAV Terminal Block diagram, and the Damper Actuator wiring diagram all shown below for the following information. **NOTE:** View the Price VAV's internal wiring diagram for full **TB1** detail.

A total of four wires will be needed for this section.

- Two of the wires are the shared commons that will go to Pin 20  
**NOTE:** Only space for one wire in Pin 20 so they will need to be bundled.
- Two of the wires are the DC signal outputs that will go to Pin 21 (VAV DAMPER) and Pin 22 (VAV FAN SPEED).

The *VAV FAN SPEED* common wire will connect to **TB1** on the (-) terminal labeled **BASV -** and the DC signal wire will connect to **TB1** on the (+) terminal labeled **BASV +**.

The *VAV DAMPER* common wire will connect to the 24vac (-) terminal on the damper actuator and the DC signal wire will connect to the 2-10 VDC terminal on the damper actuator. In addition, there will be a 24V power wire that will come from the CSTB1 in the Flō unit that connects to the 24V (+) terminal on the damper actuator. **Note:** Make sure the damper actuator is set for 2-10vdc.



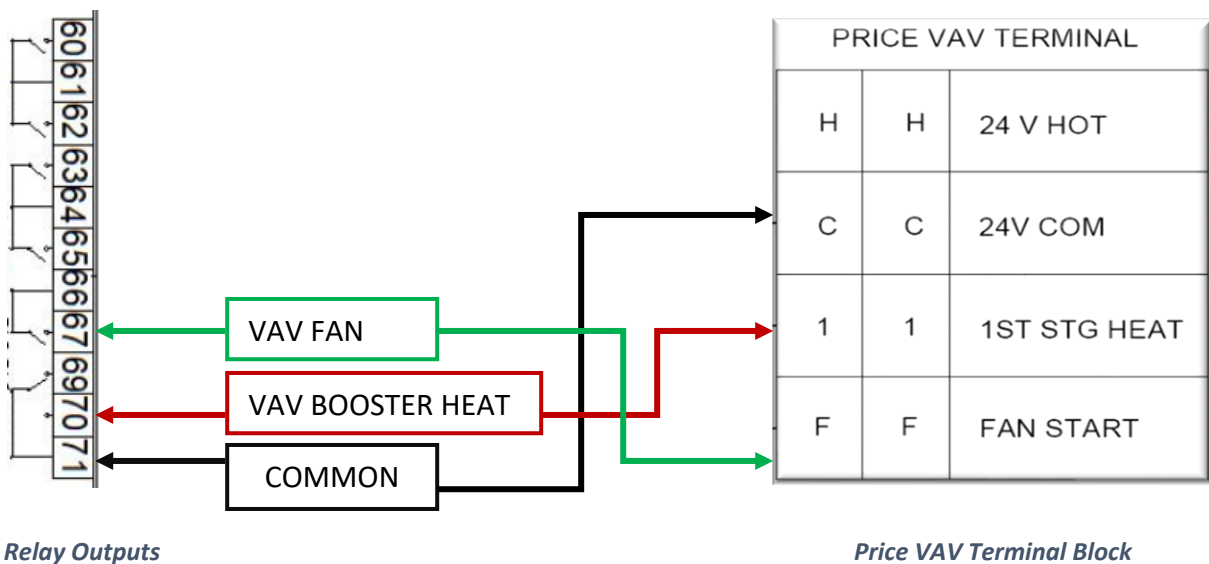
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## VAV Fan & VAV Booster Heat Relay Outputs Overview

Refer to the Relay Outputs & Price VAV Terminal Block diagrams shown below for the following information.

There will be a total of 3 wires needed for this section.

- One of the wires is a common that comes from Terminal 71 shown highlighted below and will go to the Price VAV “C” terminal also shown highlighted below.
- The other two are relay outputs: 1. VAV FAN that comes from Terminal 67 then connects to the “F” terminal on the Price VAV terminal block and 2. VAV BOOSTER HEAT that comes from Terminal 70 then connects to the “1” terminal on the Price VAV Terminal Block.



Relay Outputs

Price VAV Terminal Block