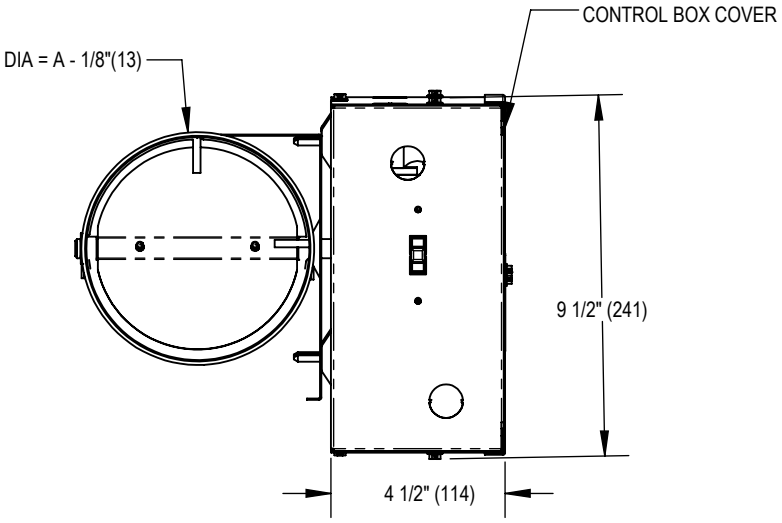
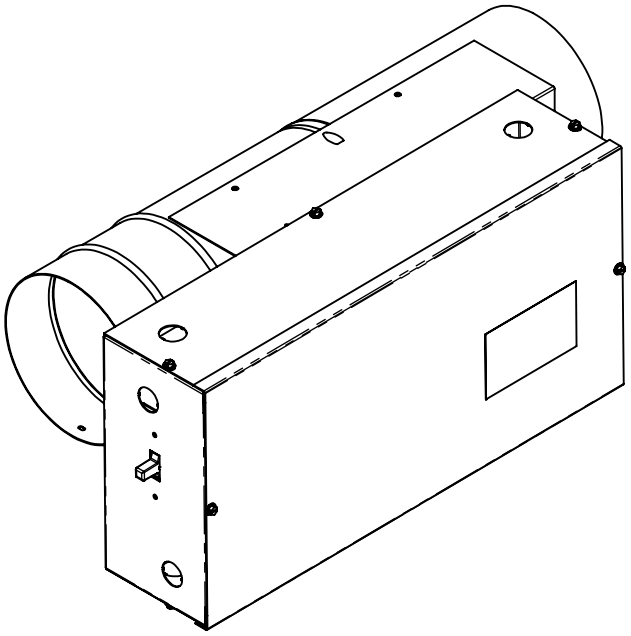
# Submittal Sheet

# PCV PRESSURE CONTROL VALVE
# ROUND DISK DAMPER

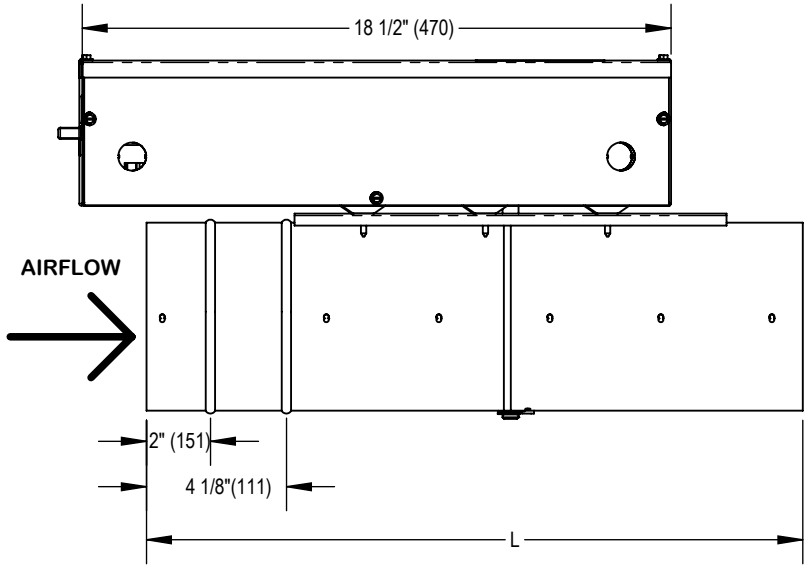
| UNIT SIZE | FLOW RANGE | A | L |
|---|---|---|---|
| 6 | 0-450 CFM (0-212 L/s) | 6" (152) | 20 3/8" (518) |
| 8 | 0-800 CFM (0-378 L/s) | 8" (203) | |
| 10 | 0-1350 CFM (0-637 L/s) | 10" (254) | 20" 7/8 (530) |
| 12 | 0-2100 CFM (0-919L/s) | 12" (305) | 23 1/8" (587) |
| 14 | 0-3000 CFM (0-1416 L/s) | 14" (356) | 24 1/8" (613) |
| 16 | 0-4000 CFM (0-1888 L/s) | 16" (406) | 26 1/8" (664) |



**STANDARD CONSTRUCTION:**

- 22 GA. ZINC COATED STEEL HOUSING. MECHANICALLY SEALED AND GASKETED, LEAK RESISTANT CONSTRUCTION
- CONTROLS ASSEMBLY WILL BE SUPPLIED AS ILLUSTRATED ON RIGHT HAND SIDE UNLESS SPECIFIED OTHERWISE
- STATIC PRESSURE PROBE FACTORY PROVIDED FOR FIELD INSTALLATION
- PRESSURE INDEPENDENT ELECTRIC CONTROLLER & ACTUATOR FACTORY MOUNTED




**OPTIONS:**

**CONTROL CONFIGURATION**

□ BYPASS CONTROL CONFIGURATION
□ ZONE CONTROL CONFIGURATION

**TRANSFORMER**

□ NO TRANSFORMER
□ 24-24V DDC ISOLATION TRANSFORMER
□ 115-24V STEP DOWN TRANSFORMER
□ 230-24V STEP DOWN TRANSFORMER

**NETWORK**

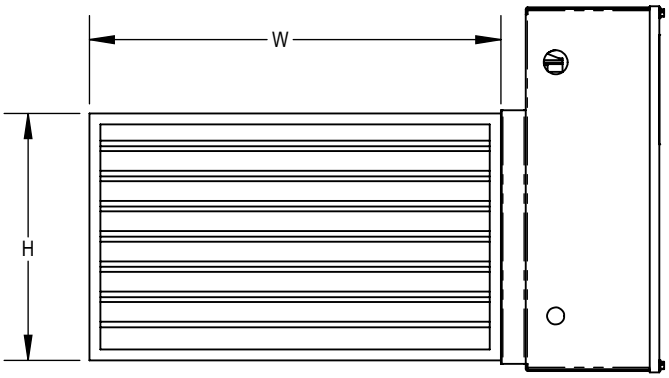
□ BACnet INTERFACE

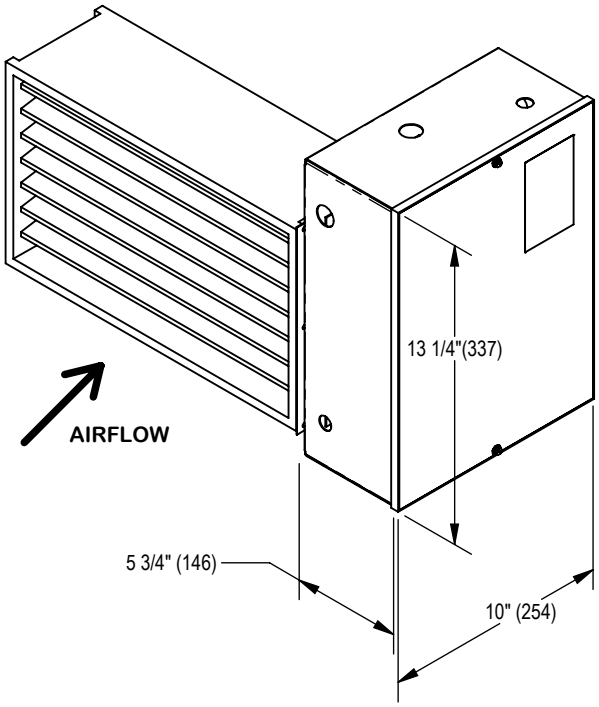
ALL METRIC DIMENSIONS [ ] ARE SOFT CONVERTED. IMPERIAL DIMENSIONS ARE CONVERTED TO METRIC AND ROUNDED TO THE NEAREST MILLIMETER.

| | | | |
|---|---|---|---|
| **PROJECT:** | | | |
| **ENGINEER:** | | **APPROVED BY:** PS | **PCV PRESSURE CONTROL VALVE** |
| **CUSTOMER:** | | **DRAWING NO:** 277332 | |
| **SUBMITTAL DATE:** | **SPEC. SYMBOL:** | **DATE DRAWN:** 9/17/2024 | |

# PCV PRESSURE CONTROL VALVE
# SQUARE BLADED DAMPER

| DAMPER DIMENSIONS | | | |
|---|---|---|---|
| W | | H | |
| MIN | MAX | MIN | MAX |
| 6"(152) | 48"(1219) | 6"(152) | 36"(914) |




**STANDARD CONSTRUCTION:**

- FRAME: ROLL-FORMED 20 GA. GALV STEEL HAT SECTION WITH STAKED CORNERS WITH INTERGRAL BRACING
- BLADES: 16 GA. GALV STEEL ROLL FORMED, TRIPLE VEE PROFILE
- STATIC PRESSURE PROBE FACTORY PROVIDED FOR FIELD INSTALLATION
- PRESSURE INDEPENDENT ELECTRIC CONTROLLER & ACTUATOR FACTORY MOUNTED

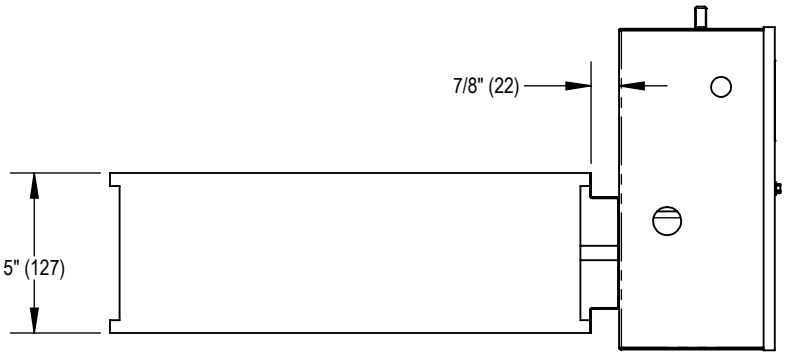
**OPTIONS:**

**CONTROL CONFIGURATION**

□ BYPASS CONTROL CONFIGURATION
□ ZONE CONTROL CONFIGURATION

**TRANSFORMER**

□ NO TRANSFORMER
□ 24-24V DDC ISOLATION TRANSFORMER
□ 115-24V STEP DOWN TRANSFORMER
□ 230-24V STEP DOWN TRANSFORMER




**NETWORK**

□ BACnet INTERFACE

**BLADE SEALS**

□ STANDARD CONSTRUCTION
□ LOW LEAKAGE BLADE SEALS

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| **ENGINEER:** | | APPROVED BY: PS | **PCV PRESSURE CONTROL VALVE** |
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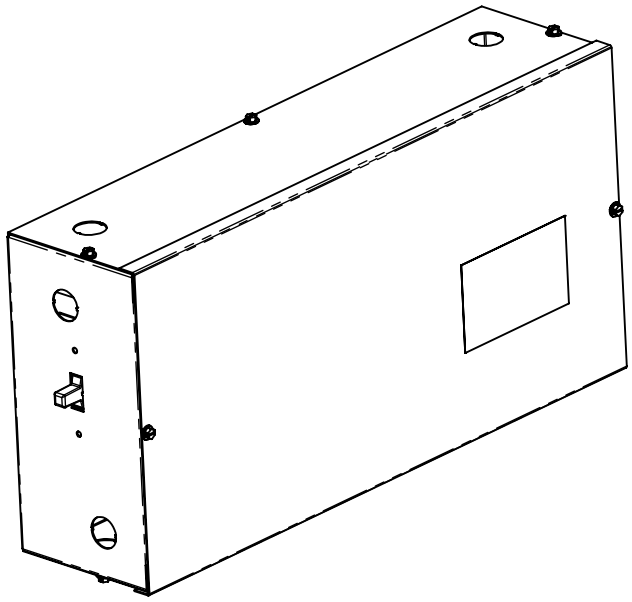
# PCV PRESSURE CONTROL VALVE
# PIC CONTROLLER

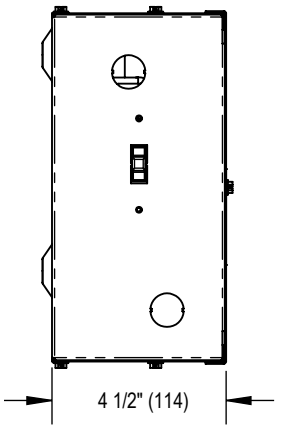


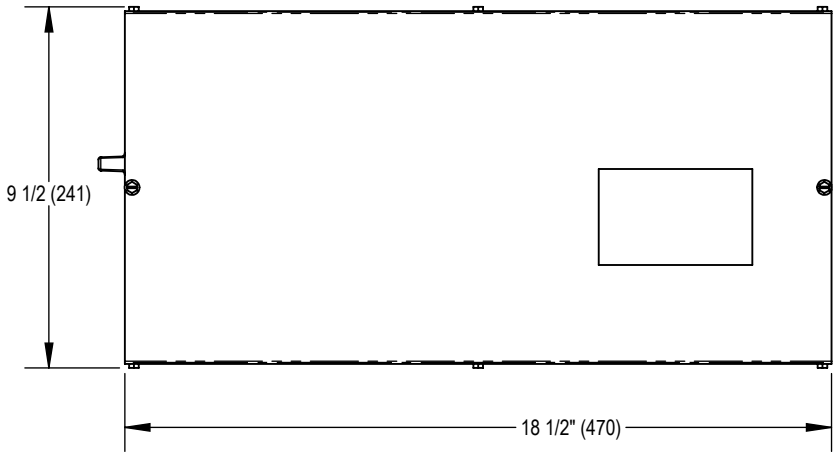
**OPTIONS:**

**CONTROL CONFIGURATION**
□ BYPASS CONTROL CONFIGURATION
□ ZONE CONTROL CONFIGURATION

**TRANSFORMER**
□ NO TRANSFORMER
□ 24-24V DDC ISOLATION TRANSFORMER
□ 115-24V STEP DOWN TRANSFORMER
□ 230-24V STEP DOWN TRANSFORMER

**NETWORK**
□ BACnet INTERFACE

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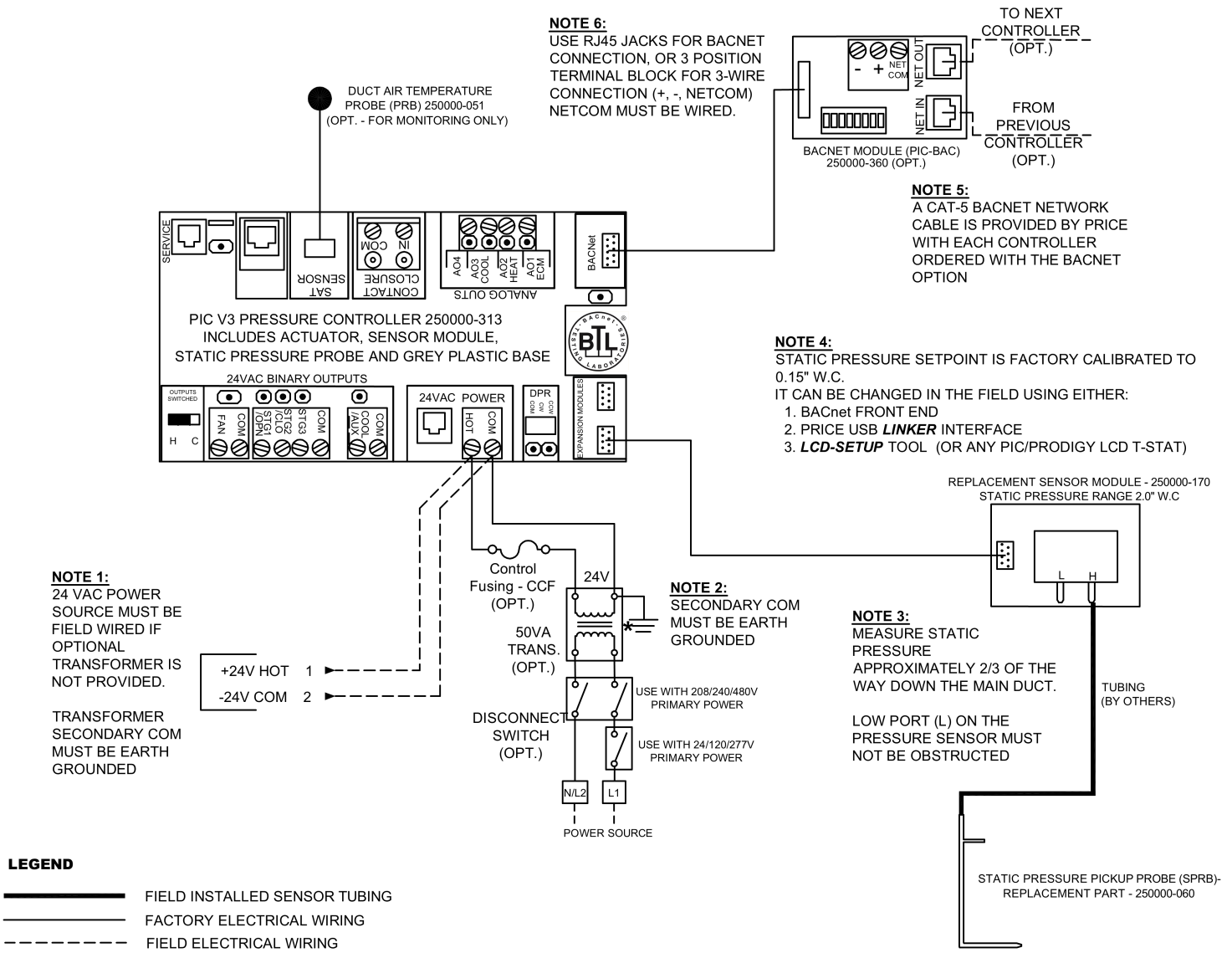
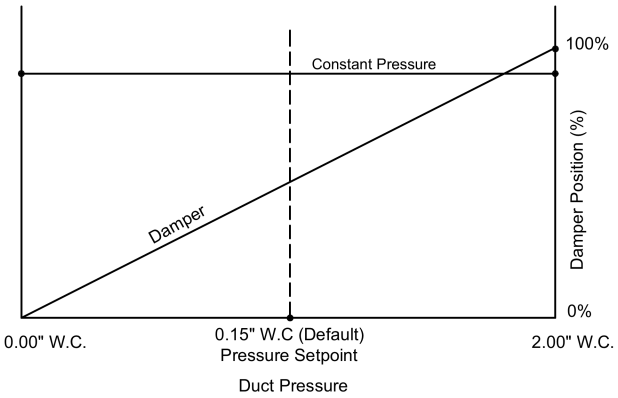
# CONTROL SEQUENCE NUMBER 1550 - CONSTANT PRESSURE BYPASS




**CONTROL GRAPH**




**Sequence of Operation -- Constant Pressure, Bypass.**
On startup, the controller will calibrate to the fully-open position for 2 minutes.

On an increase in duct static pressure the controller/actuator will modulate the VAV damper open to increase the amount of air bypassed.
On a decrease in duct static pressure the controller/actuator will modulate the VAV damper closed to reduce the amount of air bypassed.
Duct static pressure is held constant.

Upon detection of air handler shutdown (Zero duct pressure with bypass damper fully closed), the controller/actuator will place the damper at the pre-selected setback position (default: 50 % open)

**PROJECT:**

**ENGINEER:**

**CUSTOMER:**

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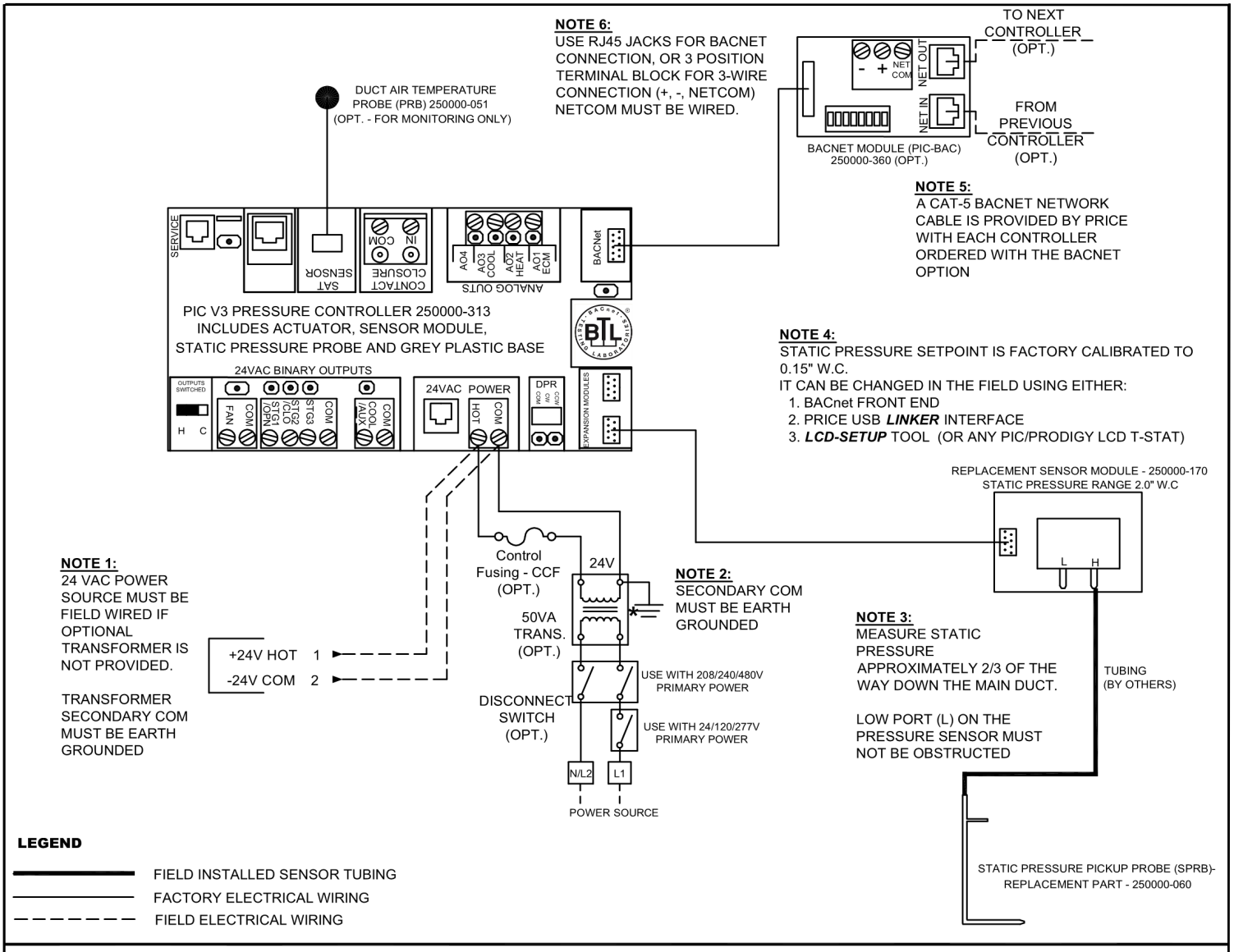
**DRAWING NO:** 277332

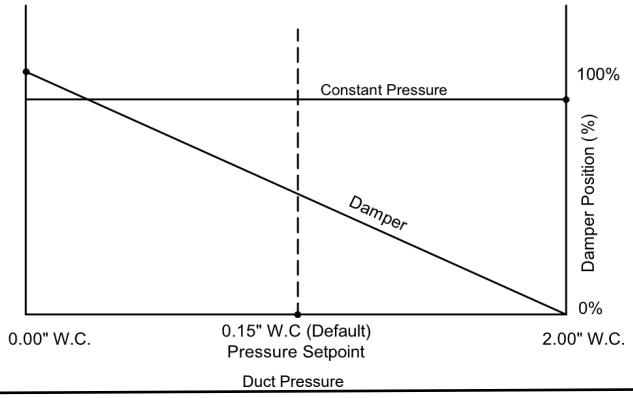
**DATE DRAWN:** 9/17/2024

**PCV**
**PRESSURE CONTROL**
**VALVE**

# CONTROL SEQUENCE NUMBER 1551 - CONSTANT PRESSURE DOWNSTREAM




**CONTROL GRAPH**




**Sequence of Operation -- Constant Pressure, Downstream.**
On startup, the controller will calibrate to the fully-closed position for 2 minutes.

On an increase in duct static pressure the controller/actuator will modulate the VAV damper closed to decrease the amount of air delivered downstream of the box.
On a decrease in duct static pressure the controller/actuator will modulate the VAV damper open to increase the amount of air delivered downstream of the box.
Duct static pressure is held constant.

Upon detection of air handler shutdown (Zero duct pressure with VAV damper fully open), the controller/actuator will place the damper at the pre-selected setback position (default: 50 % open)

**PROJECT:**

**ENGINEER:**

**CUSTOMER:**

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**PCV**
**PRESSURE CONTROL**
**VALVE**