

# First Baptist Dallas Renovation Work - Criswell Basement

SUBMITTAL NO: <b>233613-1</b>	DATE: <b>12/1/2025</b>
DESCRIPTION: <b>VAV - PD</b>	CONTRACTOR: <b>SCG Mechanical, LP dba Way Mecahnical</b>

**MANHATTAN CONSTRUCTION COMPANY**

MANHATTAN CONSTRUCTION COMPANY

This submittal has been reviewed for general compliance with the plans and specifications. This review and the response indicated below does not relieve the subcontractor/supplier of any contractual responsibilities including the furnishing of all items required by the documents and the confirmation of all quantities and dimensions.

DATE: 12/1/2025 BY: Maxwell Lewis

NO EXCEPTIONS  
 EXCEPTIONS NOTED  
 REVISE AND RESUBMIT

RETURN SUBMITTAL BY: 12/15/2025  
 DELIVERY REQUIRED FOR THESE MATERIALS \_\_\_\_\_

SUBMITTAL NO. 233613-1

SHOP DRAWING REVIEW	
ENGINEER'S REVIEW	CONTRACTOR RESPONSE
<input checked="" type="checkbox"/> Approved as Submitted	<input type="checkbox"/> Revise and Resubmit
<input type="checkbox"/> Approved as Noted	<input type="checkbox"/> Confirm Items Noted
<input type="checkbox"/> Rejected	<input type="checkbox"/> Resubmit Specific Items Noted
<input type="checkbox"/> Reviewed	<input type="checkbox"/> See Comments

This review was performed only for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Modifications or comments made on the shop drawings during this review do not relieve contractor from compliance with the requirements of the plans and specifications. Approval of a specific item does not include approval of the assembly of which the item is a component. Contractor is responsible for dimensions to be confirmed and correlated at the jobsite, confirming quantities, required information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences, and procedures of construction; coordination of the work of all trades and for performing all work in a safe and satisfactory manner.

BAIRD, HAMPTON & BROWN, INC.  
 By Eric Sweeney Date 12/02/2025

<p><b>BECK ARCHITECTURE, LLC</b> </p> <p><b>SUBMITTAL REVIEW</b></p> <p style="font-size: x-small;">REVIEWED AS TO GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS. SUBMITTER TO VERIFY DIMENSIONS, QUANTITIES, AND FIELD CONDITIONS FOR PROPER AND COMPLETE PERFORMANCE OF THE SUBMITTED ITEMS. REVIEW DOES NOT RELIEVE SUBMITTER FROM RESPONSIBILITY FOR ERRORS OR DEVIATIONS FROM CONTRACT DOCUMENTS. REVIEW DOES NOT CONSTITUTE APPROVAL OF SAFETY PRECAUTIONS OR OF ANY CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES. REVIEW OF A SPECIFIC ITEM SHALL NOT INDICATE APPROVAL OF AN ASSEMBLY OF WHICH THE ITEM IS A COMPONENT.</p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> NOT REVIEWED</td> <td><input type="checkbox"/> REJECTED</td> </tr> <tr> <td><input checked="" type="checkbox"/> NO EXCEPTIONS TAKEN</td> <td><input type="checkbox"/> CONFIRM NOTED ITEMS</td> </tr> <tr> <td><input type="checkbox"/> EXCEPTIONS NOTED</td> <td><input type="checkbox"/> SUBMIT ADDITIONAL INFORMATION</td> </tr> <tr> <td><input type="checkbox"/> REVISE AND RESUBMIT</td> <td></td> </tr> <tr> <td><input type="checkbox"/> SEE CONSULTANT COMMENTS</td> <td></td> </tr> </table> <p>REVIEWED BY: <u>Marlon Perkins Jr</u> DATE: <u>12/3/2025</u></p>	<input type="checkbox"/> NOT REVIEWED	<input type="checkbox"/> REJECTED	<input checked="" type="checkbox"/> NO EXCEPTIONS TAKEN	<input type="checkbox"/> CONFIRM NOTED ITEMS	<input type="checkbox"/> EXCEPTIONS NOTED	<input type="checkbox"/> SUBMIT ADDITIONAL INFORMATION	<input type="checkbox"/> REVISE AND RESUBMIT		<input type="checkbox"/> SEE CONSULTANT COMMENTS	
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<input type="checkbox"/> SEE CONSULTANT COMMENTS										



WAY MECH PROJECT NAME: First Baptist Dallas

WAY MECH SUBMITTAL NO. 122

### SUBMITTAL DATA

ARCHITECT: Beck

Submittal Date: 11/20/25

ENGINEER: Baird Hampton & Brown

GENERAL CONTRACTOR: Manhattan Construction

SUBCONTRACTOR: Way Mechanical

Specification Section: 233613

Description: Air Terminal Units

Vendor/Supplier: Trane

Manufacturer:

Clarifications:

Deviations:

Substitutions:

Submittal Prepared By: Carson Bettison

Phone: 682-208-5162

Email: Carsonb@waymech.com



# BASEMENT SDVAV Submittal

**Design Consultant:**

Baird Hampton & Brown Inc

**Date:**

November 18, 2025

**Mech. Contractor:**

Way Mechanical

**Job Name:**

First Baptist Church Criswell Generator & Basement

**Opportunity ID:** 8242687

Trane U.S. Inc. is pleased to provide the following submittal for your review and approval.

**Product Summary**

**Qty Product**

01 Single Duct VAV Terminal Unit - Tag(s): VAV-B-6

**Notes:**

1. Hydronic specialties, disconnects, **labor warranty, startup**, extended warranties not listed within the submittal, auxiliary drain pans, **smoke detectors**, extra belts/sheaves/filters, **mixing boxes, OA/RA dampers and/or actuators**, equipment wiring, installation, equipment supports and/or isolators are excluded.
2. **Please verify "handedness" of equipment prior to release into production. Trane designates left/right hand connections by looking into the leaving air side of the unit w/ the air hitting you in the face.**
3. Piping packages (ball valves, strainers, unions, etc.) are specifically excluded and not provided by Trane.
4. **Unit includes factory mounted, wired, and engineered Tracer Symbio BACnet controls to connect to current Trane Tracer BAS system.**

**Spencer Rothery, Systems Account Manager  
Trane U.S. Inc.**

4200 N. Sylvania Avenue  
Fort Worth, TX 76137

E-mail: [spencer.rothery@trane.com](mailto:spencer.rothery@trane.com)

Office Phone: (817) 838-1300

Cell: (512) 903-0738

The attached information describes the equipment we propose to furnish for this project and is submitted for your approval.

***Submittal acceptance and return is a critical step, so please ensure submittals are returned with approval to release to production within 14 days of submittal date.***

Product performance and submittal data is valid for a period of 6 months from the date of submittal generation. If six months or more has elapsed between submittal generation and equipment release, the product performance and submittal data will need to be verified. It is the customer's responsibility to obtain such verification.

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**Tag Data - Variable Air Volume Single Duct Terminal Units (Qty: 1)**

Item	Tag(s)	Qty	Description	Model Number
A1	VAV-B-6	1	Variable Air Volume Single Duct Terminal	VCWF08-- *M0SY72B**001L1WW000000**005

**Product Data - Variable Air Volume Single Duct Terminal Units**

**Item: A1 Qty: 1 Tag(s): VAV-B-6**

- Space Temperature Modulating Reheat
- United States
- Single duct with hot water heat
- 8" inlet size (203mm inlet)
- Matte faced insulation - 1" (25 mm)
- SY210 DDC-Basic (Water heat- nc 2pos)
- MSTP Connection
- Standard actuator
- Same side coil connections and control connections
- Duct temperature sensor -factory mounted
- Standard Air Leakage
- Symbio 210 Controller
- 1R HW Heating Coil**
- No water valve
- No piping package
- 120/24 volt transformer**
- Disconnect switch
- Power Fuse
- 1st year total unit parts warranty (Trane 12/18)*

**Performance Data - Variable Air Volume Single Duct Terminal Units**

<b>Tags</b>	<b>VAV-B-6</b>
Design cooling airflow (cfm)	500
Min cooling airflow (cfm)	150
Valve heating airflow (cfm)	150
Cooling inlet diameter	8"
Cooling inlet velocity (ft/min)	1432
APD @ cooling airflow (in H2O)	0.150
Operating weight (lb)	27.5
Coil heating capacity (MBh)	8.69
Primary EDB (F)	55.00
Unit LAT (F)	108.44
Heating ent fluid temp (F)	180.00
Heating lvg fluid temp (F)	150.00
Heating delta T (F)	30.00
Fluid type	Water
Heating Cv (Number)	0.29
Heating flow rate (gpm)	0.58
Coil fluid PD (ft H2O)	0.85
Main coil tube wall	Standard
Main coil rows	1 ROW

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**Mechanical Specifications - Variable Air Volume Single Duct Terminal Units****Item: A1 Qty: 1 Tag(s): VAV-B-6****General Unit Information**

The unit casing is comprised of 22 gauge galvanized steel. Outlet connection is slip and drive. Agency Listing - The unit is UL 60335 and Canadian UL listed as a room air terminal unit. UL Control # 9N65. All Trane terminal units are AHRI 880 - 98 certified. All single duct units are universally handed, meaning they can be rotated in the field for either Left or Right hand control connections.

**General Unit Clearance**

Allow adequate clearance on control box side of unit to meet NEC. A minimum of one and one half duct diameters of straight duct work, upstream of the air inlet connection, must be present for optimum airflow measurement performance. Upstream duct work should be the same diameter as the primary inlet connection. Allow access to the bottom of unit if Optional Bottom Access Door is selected.

**1"Matte - Faced Insulation**

The interior surface of the unit casing is acoustically and thermally lined with 1" 1.80 lb.cu. ft. [16.0 kg./cu. m.] composite density glass fiber with high density facing. The insulation is UL listed and meets NFPA-90A and UL 181 standards. The insulation R-value is 4.2. All cut edges of insulation are completely encapsulated in metal to prevent erosion.

**Air Valve Round**

The air inlet connection is an 18 gauge galvanized steel cylinder sized to fit standard round duct. A multiple point, averaging flow sensing ring is provided with balancing taps for measuring within +/- 5% of unit cataloged airflow. An airflow versus pressure differential calibration chart is provided. The damper blade is constructed of a closed cell foam seal mechanically locked between two 22 gauge galvanized steel disks. The damper blade assembly is connected through a cast zinc stub axle and shaft supported by self lubricating bearings. The shaft is cast with a damper position indicator. The valve assembly includes a mechanical stop to prevent over stroking. At 4.0" w.g. air valve leakage does not exceed 1% of cataloged airflow.

**Air Valve Size - 08**

Air Valve is 900.0 cfm 8" inlet.

**1 Row Water Coil with Duct Temperature Sensor**

Factory flange connected on unit casing outlet. The coil has 144 fpf (fins per foot) [0.305 m.] aluminum fins. Full fin collars provided for accurate fin spacing and maximum fin-tube contact. The seamless copper tubes are mechanically expanded into the fin collars and casing sides. Coils are proof tested at 450 psi and leak tested at 300 psi. Coil connections are sweat type. Coils provided with removable top and bottom access panels. DTS is 4" 10k ohm thermistor and is factory mounted into the water coil casing and is factory wired to the unit controller. The hot water coil can be independently rotated to achieve left or right hand connections.

**Slip & Drive Connection**

A slip and drive connection has two straight flanges on the top and bottom, and two drive connections on the left and right sides. This is a standard option on all VAV single duct terminal units.

**Toggle Disconnect Switch (for VCCF & VCWF)**

A switch, installed in a unit mounted controls enclosure, which breaks both power legs within the control box.

**Line Fuse - VCCF and VCWF**

For VCCF and VCWF units, optional fusing breaks all energized lines of incoming power.

**Control Transformer**

The 50 VA transformer is factory mounted in a unit mounted controls enclosure with 7/8" knockouts to provide 24 VAC for controls.

**Control Fuse**

Replaceable fuse on primary voltage hot line.

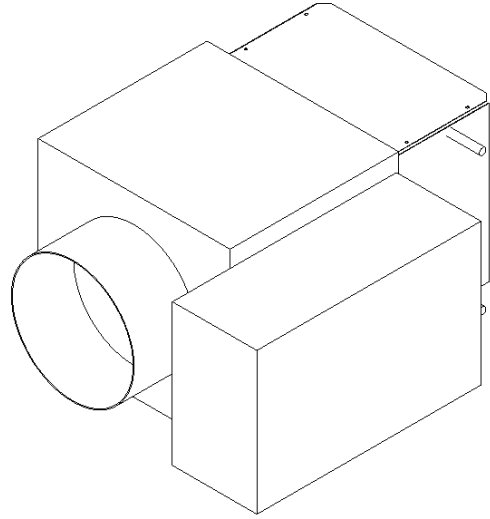
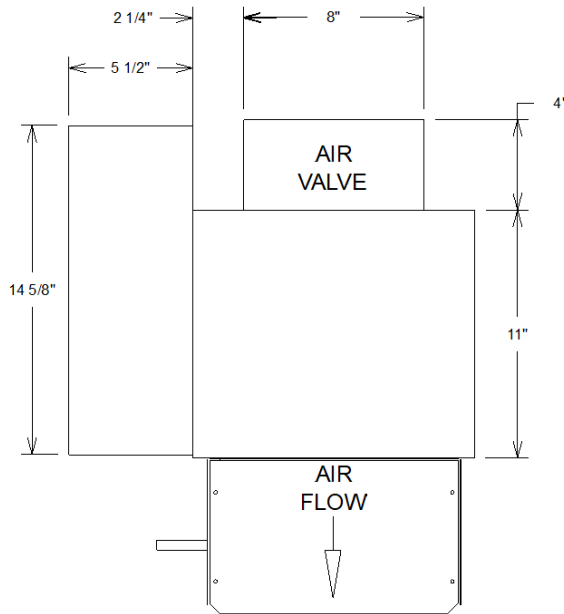
**D.D.C. Floating Point Actuator**

Trane 3 wire, (open, close, common) 26GA when 6-pos amp connector is used for Tracer UC210, VV550, or VAV UCM, otherwise 18GA wires are used. 3.4 VA, 1.7W, 24 VAC, 50/60 Hz. Quarter turn control actuator with linkage release button. Actuator has a constant drive rate independent of load, a rated torque of 35 in-lb, a 90-second drive time and is non-spring return. Travel is terminated by end stops at fully opened and closed positions. An integral magnetic clutch eliminates motor stall. An integral 3 screw terminal block is provided for field wiring. Operating temperature 32.0 F to 125.0 F.

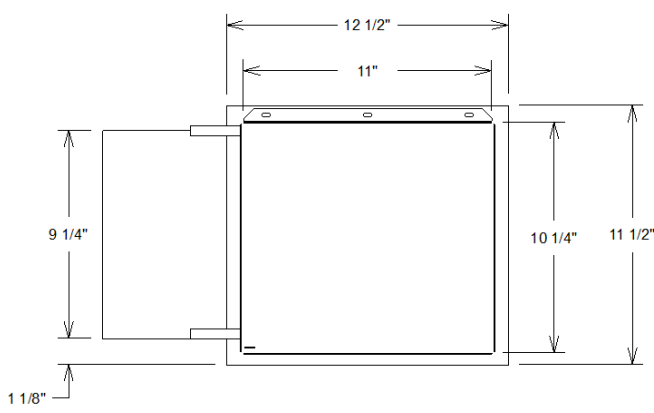
**Factory Mounted DTS (VCWF)**

Factory Mounted into the water coil of the Single Duct Terminal. The DTS is a 4" 10k ohm thermistor and is factory mounted into the water coil and is factory wired back to the Trane controls.

**Dimensional Drawings - Variable Air Volume Single Duct Terminal Units**  
**Item: A1 Qty: 1 Tag(s): VAV-B-6**



TOP VIEW



BACK VIEW

ASINGLE000468

Customer Notes:

1. Air inlet centered in unit front panel.
2. Minimum of 1.5 duct diameters of straight duct required at inlet for proper flow reading.
3. Allow 36-inch (914mm) on control side for servicing.
4. Weights are an estimation and will vary based on selected options, insulation type, etc.
5. Coil furnished with stub sweat connections. Handedness of coil connection is determined by facing air stream.
6. Coils are provided without internal insulation. If the unit is to be installed in a location with high humidity, external insulation around the heating coil should be installed as required.

Approximate Dry Weight	27.5 lb
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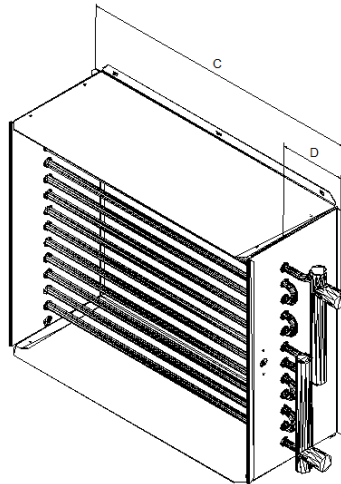
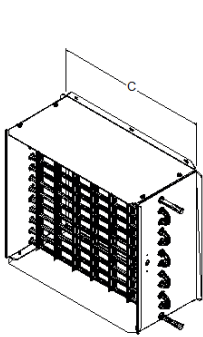
Weights reflected may vary ±5.0 lb based upon options selected.

**Accessory - Variable Air Volume Single Duct Terminal Units**  
**Item: A1 Qty: 1 Tag(s): VAV-B-6**

COIL INFORMATION FOR 1 ROW COIL ASSY				ASINGLE000713						
VALV	CFM	LITERS PER SECOND	COIL CONNECTION		A	B	C	D	E	F
04	225	106	3/8" [10mm] O.D.	SEE	7" [178mm]	7/8" [22mm]	10 1/4" [261mm]	2 1/4" [58mm]	8 1/4" [210mm]	3/8" [10mm]
05	350	165	3/8" [10mm] O.D.	(FIG 1)	7" [178mm]	7/8" [22mm]	10 1/4" [261mm]	2 1/4" [58mm]	8 1/4" [210mm]	3/8" [10mm]
06	500	236	3/8" [10mm] O.D.		7" [178mm]	7/8" [22mm]	10 1/4" [261mm]	2 1/4" [58mm]	8 1/4" [210mm]	3/8" [10mm]
08	900	425	3/8" [10mm] O.D.		9" [229mm]	7/8" [23mm]	11 1/4" [288mm]	2 1/4" [58mm]	10 1/4" [261mm]	3/8" [10mm]
10	1400	661	3/8" [10mm] O.D.		11" [279mm]	7/8" [23mm]	14 1/4" [362mm]	2 1/4" [58mm]	12 1/4" [312mm]	3/8" [10mm]
12	2000	994	7/8" [22mm] O.D.	SEE	9 3/4" [247mm]	2 1/2" [64mm]	17 1/4" [439mm]	2 1/4" [58mm]	14 1/4" [363mm]	2 1/32" [52mm]
14	3000	1416	7/8" [22mm] O.D.	(FIG 2)	15 3/4" [399mm]	1 1/2" [39mm]	19 1/4" [489mm]	2 1/4" [58mm]	18 1/4" [464mm]	1 1/32" [26mm]
16	4000	1888	7/8" [22mm] O.D.		15 3/4" [399mm]	1 1/2" [39mm]	23 1/4" [591mm]	2 1/4" [58mm]	18 1/4" [464mm]	1 1/32" [26mm]
16x24	8000	3776	7/8" [22mm] O.D.		16 3/4" [425mm]	1 1/2" [39mm]	27 1/4" [693mm]	2 1/4" [58mm]	18 1/4" [464mm]	1 1/32" [26mm]

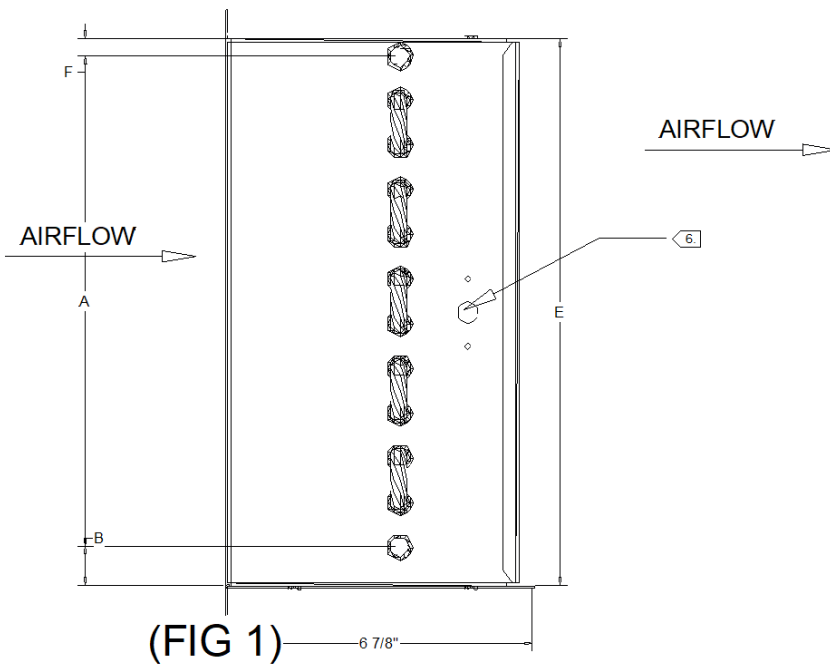
CUSTOMER NOTES:

1. Location of coil connections is determined by facing air stream.
2. Coil furnished with stub sweat connections.
3. Use port at bottom for inlet and port at top for outlet on single row coils. Coil is rotated to achieve opposite hand connection.
4. Coil height and width is dependent upon unit height and width.
5. Top and bottom coil panel removable for access
6. OPTIONAL: Factory installed Duct Temperature Sensor.

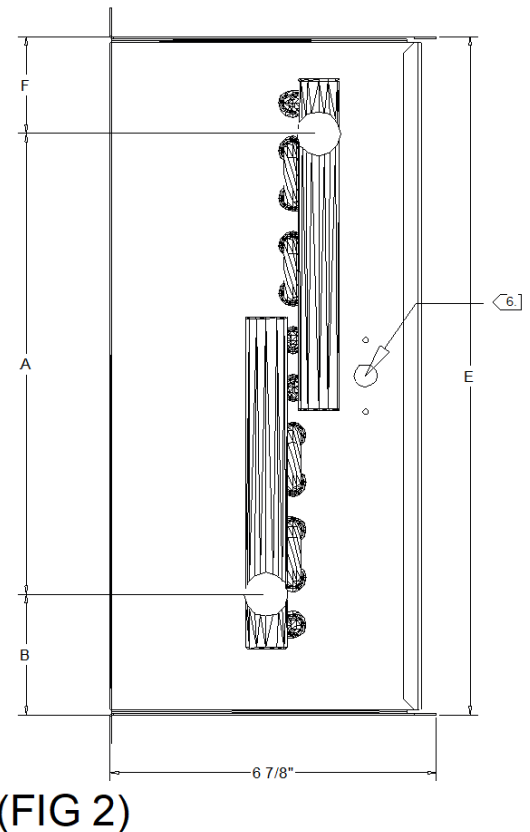


(FIG 1)

(FIG 2)

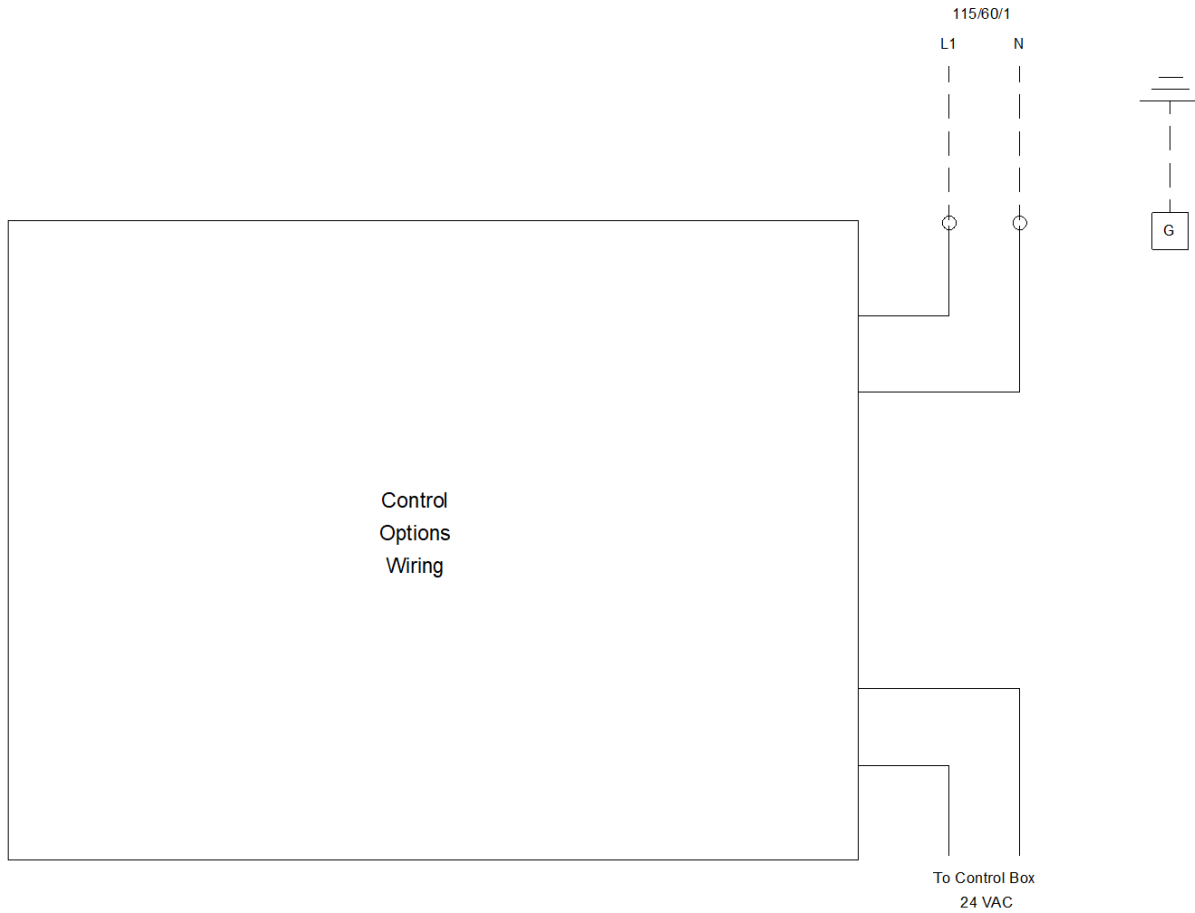




(FIG 1)



(FIG 2)

**Field Wiring - Variable Air Volume Single Duct Terminal Units**  
**Item: A1 Qty: 1 Tag(s): VAV-B-6**



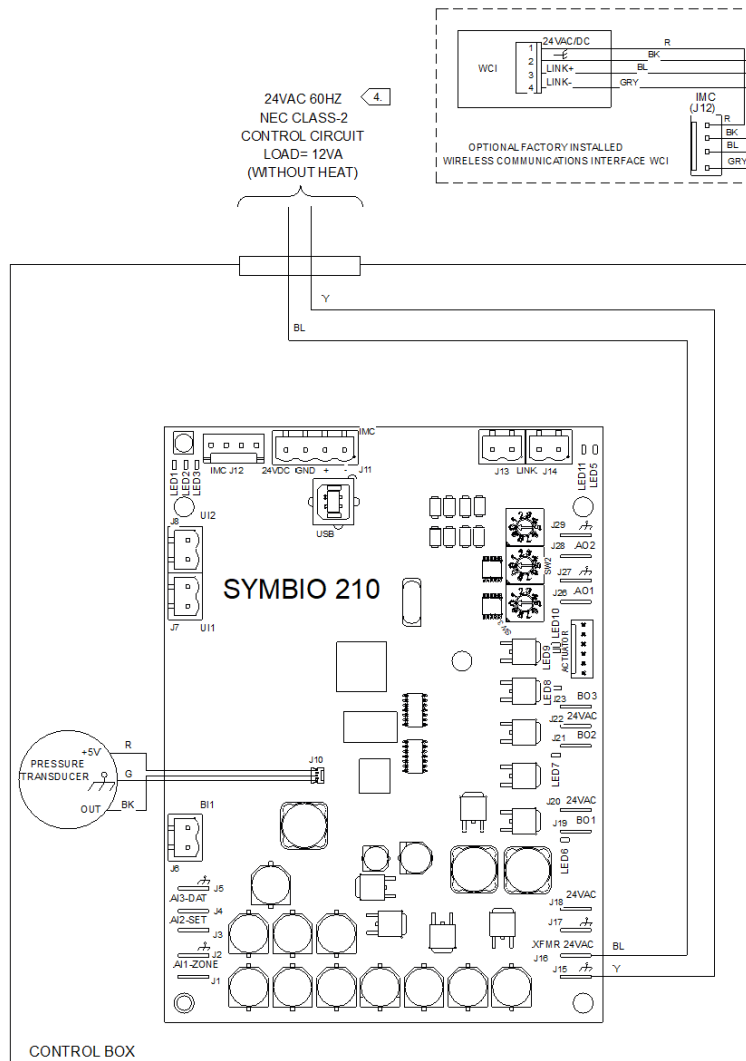
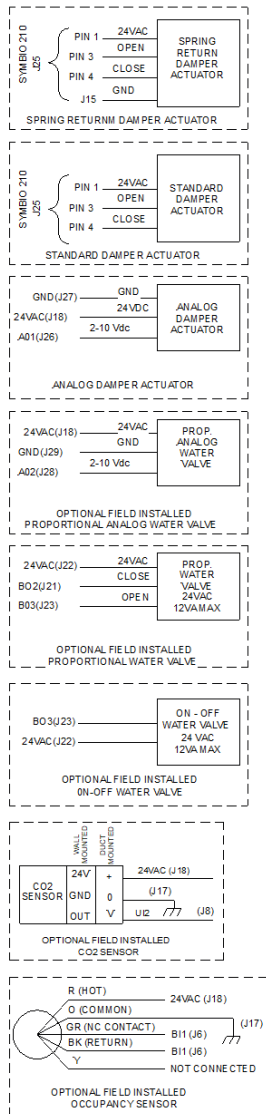
	<p><b>WARNING</b></p> <p>HAZARDOUS VOLTAGE!                  DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING.                  FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH</p>
	<p><b>CAUTION</b></p> <p>USE COPPER CONDUCTORS ONLY!                  UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.                  FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.</p>

**Customer Notes:**

1. ————— Factory installed.  
 - - - - - Optional or installed by others.

# Field Wiring - Variable Air Volume Single Duct Terminal Units

Item: A1 Qty: 1 Tag(s): VAV-B-6



**NOTE**

1. \_\_\_\_\_ FACTORY WIRING  
 \_\_\_\_\_ FIELD WIRING  
 \_\_\_\_\_ OPTIONAL OR ALTERNATE WIRING
2. BARE WIRE ENDS OR 1/4" QUICK CONNECT TERMINALS REQUIRED FOR ALL FIELD CONNECTIONS.
3. NO ADDITIONAL WIRING REQUIRED FOR NIGHT SETBACK OVERRIDE (ON/CANCEL).
4. IF UNIT MOUNTED TRANSFORMER IS NOT PROVIDED, POLARITY FROM UNIT TO UNIT MUST BE MAINTAINED TO PREVENT PERMANENT DAMAGE TO CONTROL BOARD. IF ONE LEG OF 24VAC SUPPLY IS GROUNDED, THEN GROUND LEG MUST BE CONNECTED TO J15.
5. CONTACTORS ARE 24VAC- 10VA MAX/COIL (MAGNETIC CONTACTORS).
6. OPTIONAL FUSE, DISCONNECT SWITCH & TRANSFORMER LOCATED IN CONTROL BOX FOR COOLING & HOT WATER UNITS. LOCATED IN HEATER ON ELECTRIC HEAT UNITS. TRANSFORMER WIRE COLORS: 120V-W, 208V-R, 240V-O, 277V-BR, 480V-R/BK, 575V-R, 190V-R, 220V-R, 347-R.
7. SCREW TERMINAL ADAPTERS REQUIRED FOR B11, U1, U12, IMC & LINK.
8. TO USE A13 WITH A SUPPLY AIR SENSOR FOR AUTO-CHANGEOVER, REASSIGNMENT OF A13 TO SAT WITH TU IS REQUIRED.
9. ZONE SENSOR IMC TERMINALS REQUIRE SHIELDED TWISTED PAIR WIRING FOR OPTIONAL USE OF COMMUNICATIONS JACK.
10. 24Vdc REQUIRED FOR TRANE SCR ELECTRIC HEAT MODULE.

