Shook Construction Co.
2000 West Dorothy Lane
Moraine, OH 45439

Phone: (937) 276-6666
Fax: (937) 276-6676
www.shookconstruction.com

Submittal Request

TO: GE Aerospace Colibrium Additive
8556 Trade Center Drive
West Chester Township, OH 45069
Attn: Mohamed Hijazi

Project No. :

Date: November 4, 2025

Project : GE Colibrium Lab and Office Expansion

Specification No:

Transmittal No: 23.00

We are sending you the following items:

x **Attached**	____ **Copy of Letter**	____ **Plans**	x **Submittals**
____ **Under Separate Cover**	____ **Prints**	____ **Samples**	____ **Other**
____ **Shop Drawings**	____ **Change Order**	____ **Specifications**	

Copies	Number	Description
1		VAVs

These are transmitted as checked below:

x **For Your Approval**	____ **Approved as Submitted**	____ **Resubmit 2 copies for Approval**
____ **For Your Use**	____ **Approved as Noted**	____ **Submit Copies for Distribution**
____ **As Requested**	____ **Returned for Corrections**	____ **Return 10 clarified copies**

If enclosures are not as noted, kindly notify us at once.

cc: File
Phil Arraje, Shook

Phil Arraje

Phil Arraje
Project Engineer

The Geiler Company
6561 Glenway Avenue
P.O. Box 11324
Cincinnati, Ohio 45211-0324
Service (513) 574-0025
Contract (513) 574-1200 ex 1014

GEILER
Mechanical Contractors

SUBMITTAL

TO: Shook Construction
2000 W. Dorothy Lane
Moraine, OH 45439

ATTN: Phil Arraje

Date: November 4, 2025

Job Name: GE Colibrium Lab & Office Renovation

Geiler Job # 25-205

The Geiler Company respectfully submits the following:

X	Submittals
	Literature
	Letter

These are submitted as follows:

X	For Approval
	For Your Use
	For Pricing
	Approved As Noted
	Correct & Resubmit

Please make necessary corrections and return: 1 copies to The Geiler Company.

Copies	Description	Drawing #
	VAV's	M3100

REMARKS:

Respectfully submitted,

Mike Weberding
Project Manager
Office: (513) 574-1200 ex. 1014
Cell: (513) 413-7120

☑ APPROVED ☐ For Information ☐ Revise and Resubmit
☐ APPROVED AS NOTED ☐ REJECTED – SEE REMARKS

Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance with requirements of the drawings and specification. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents. The contractor is responsible for confirming and correcting all quantities and dimension; selecting fabrication processes and techniques of construction/ coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner.
BSI ENGINEERING

BY Erin Whittington DATE 11/06/2025

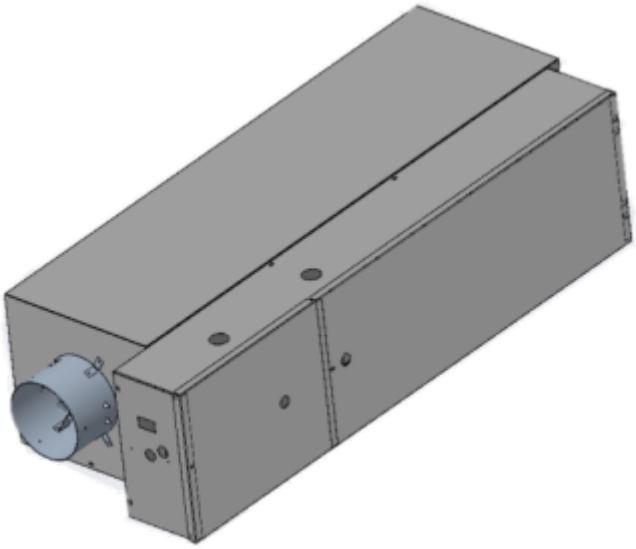
Variable Air Volume Single Duct

Unit Overview - V29-63

Unit model	Primary inlet	Design cooling airflow	Min cooling airflow	Trane Supplied Controls
VCEF (Electric Heating)	5" (127mm)	180 cfm	90 cfm	SY210 DDC-Basic (Electric heat- staged)

Construction and Airflow

APD @ cooling airflow	0.010 in H2O
Cooling inlet velocity	1320 ft/min
Valve heating airflow	90 cfm
Unit Insulation	1" foil faced
Elevation	0.00 ft
Operating weight	81.7 lb
Air Leakage Class	Standard Air Leakage
Exhaust Box	No



Electrical

Full load amps	3.61 A
Max fuse size	15.00 A
Min circuit ampacity	4.51 A

Heating Coil

Primary EDB	60.00 F
Room heating setpoint	90.00 F
Room heat loss	0.49 MBh
Unit LAT	94.97 F
Coil heating capacity	3.41 MBh
Electric heater voltage	277/1
Electric heater kilowatt	1.0
Electric heater stage	1
Electric heater control	24 volt magnetic contactors

Controls and Sensors

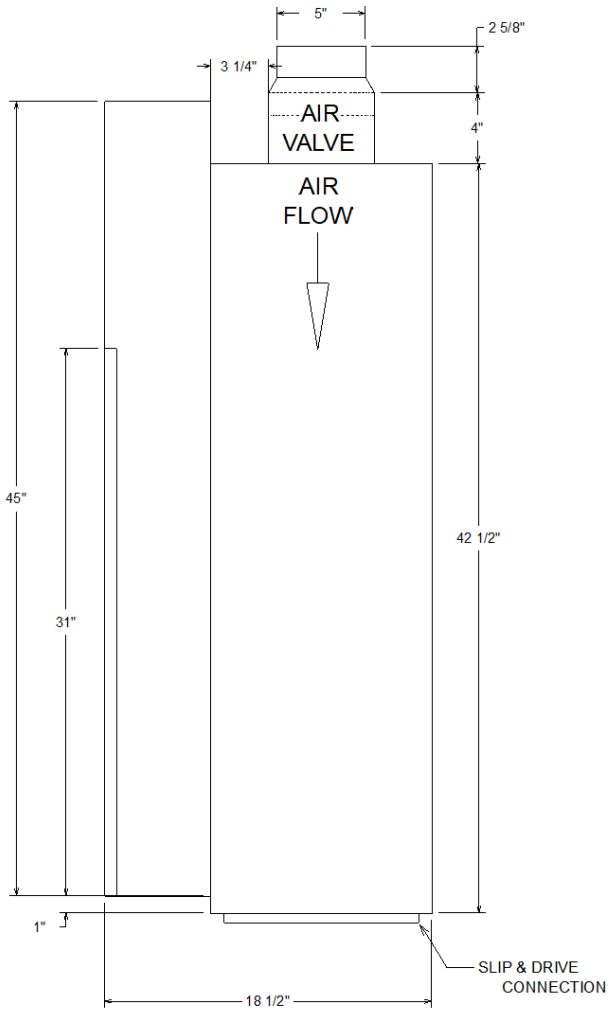
Actuator	Standard actuator
DTS & HW Valve Harness	Four point averaging temperature sensor
Wireless Sensor Options	Air - Fi Wireless Communication Module
WCI Address	11
Wireless Zone Sensor	Trane Air-Fi - WCS-SD (display)

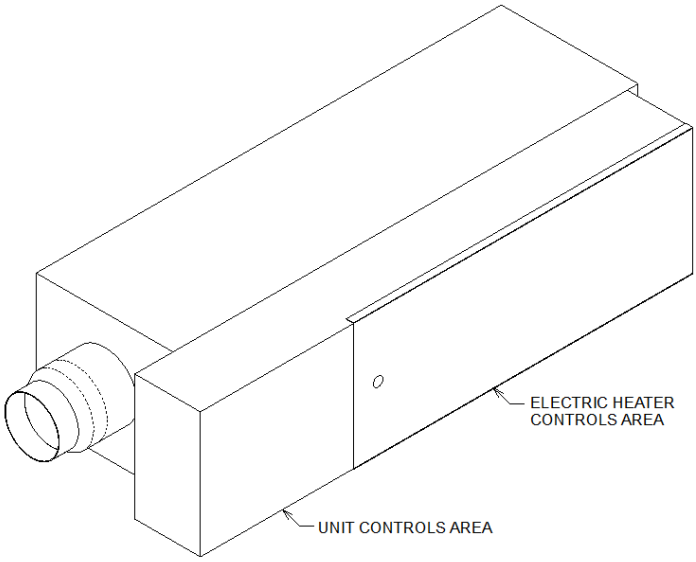
Accessory Options

Disconnect Switch	Disconnect switch
Transformer	277/24 volt transformer

Warranty

Labor warranty first year	1st year labor warranty whole unit



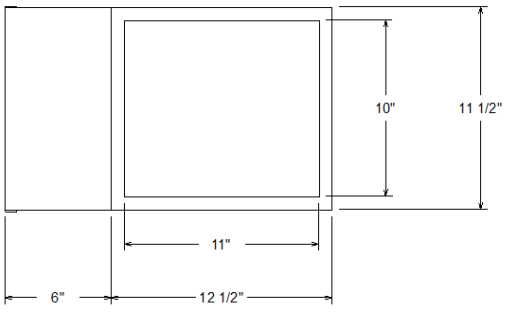


ASINGLE000656

Customer Notes

1. Air Inlet is centered in unit front panel.
2. Slip & Drive discharge outlet standard.
3. Minimum of 1.5 times duct diameter of straight duct at inlet for proper flow reading.
4. For electric heater access, side hinged door must have minimum distance per NEC or local code.
5. Allow 48" of straight duct downstream of unit before first runout & inside of the duct should be equal discharge size. (A & B)
6. Left-hand orientation shown. (Facing discharge) Unit can be flipped to right-hand orientation

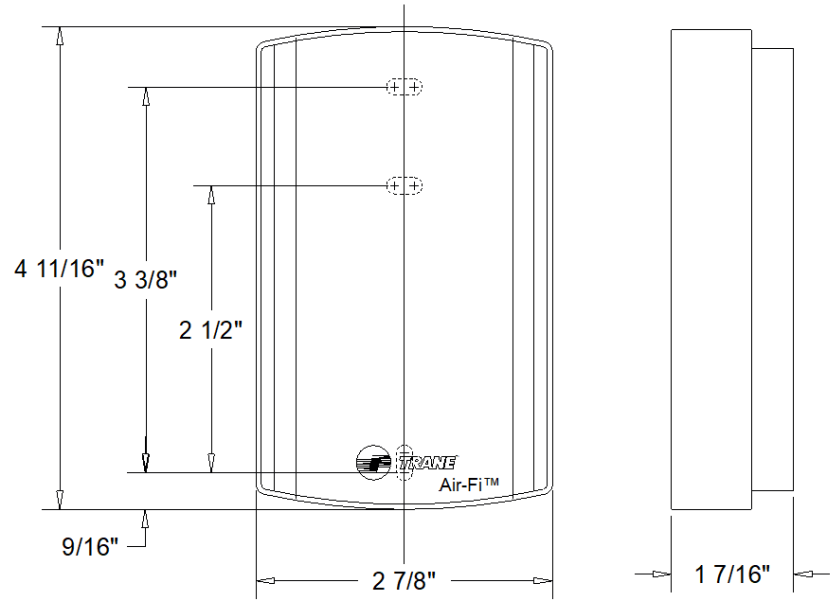
TOP VIEW



BACK VIEW

Approximate Dry Weight	81.7 lb

Weight reflected may vary 5 lbs(2.27kgs) based upon options selected.



Air-Fi™ WIRELESS COMMUNICATIONS INTERFACE (Air-Fi™WCI)

(INSTALLED, WIRED & TESTED ON UNIT)

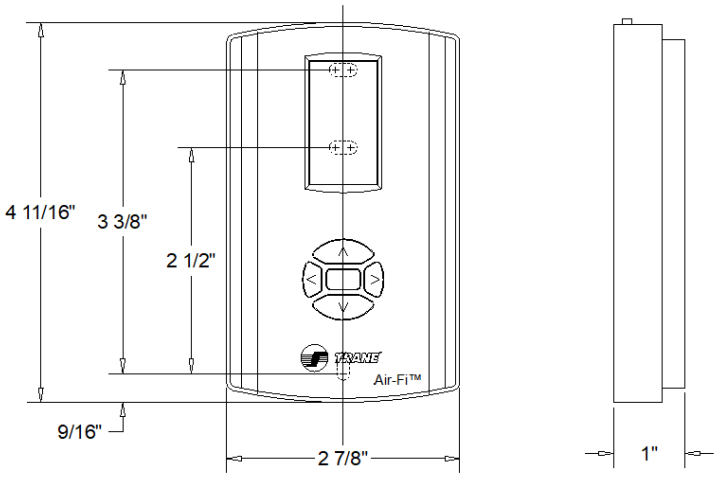
Wireless specifications

Air-Fi™ WCI works with other Air-Fi™ WCI's for wireless communications and optionally with wireless communications sensor.
(Does not work with non- Air-Fi™ Wireless Zone Sensors)

WCI operating temperature	-40 to 158ºF (-40 to 70ºC)
Storage temperature	-40 to 185ºF (-40 to 85°C)
Storage and operating humidity range	5 % to 95 % relative humidity (RH), non-condensing
Resolution	±0.125ºF over a range of 60 to 80ºF (15.56 to 26.67°C) ±0.25 ºF when outside this range
Receiver voltage	24 V nominal ac/dc ± 10%
Receiver power consumption	<2.5VA
Housing Material	Polycarbonate/ABS blend, suitable for plenum mounting, UV protected, UL 94: 5 VA flammability rating
Mounting	Factory mounted on exterior of control box.
Range(i)	Open range - 2,500 ft (762m) w/ packet error rate of 2 % Indoor: Typical range is 200ft (61mm); actual range is dependent on the environment.
Output power	100 mW - North America
Radio frequency	2.4 GHz (IEEE Std 802.15.4-2003 compliant) (2405-2480 MHz, 5 MHz spacing)
Radio channels	16
Address range	00-99
RoHS compliance	Yes
Agency Listing	UL Listed: UL94, 5VA flammability rating and UL916. CSA - C22.2 No. 205-M1983 Signal Equipment

(i) Range values are estimated transmission distances for satisfactory operation of the 100 mW version. Estimated transmission distance for the 10 mW version will be less. Actual distance is job specific and must be determined during site evaluation.

Placement of the receiver and the sensor is critical to proper system operation. In most general office space installations, distance is not the limiting factor for proper radio signal quality. It is more greatly affected by walls, barriers, and general clutter. In general, sheetrock walls and ceiling tiles offer little restriction to the propagation of the radio signal throughout the building as opposed to concrete or metal barriers.



Air-Fi™ WIRELESS COMMUNICATIONS SENSOR w/DIGITAL DISPLAY (WCS-SD)

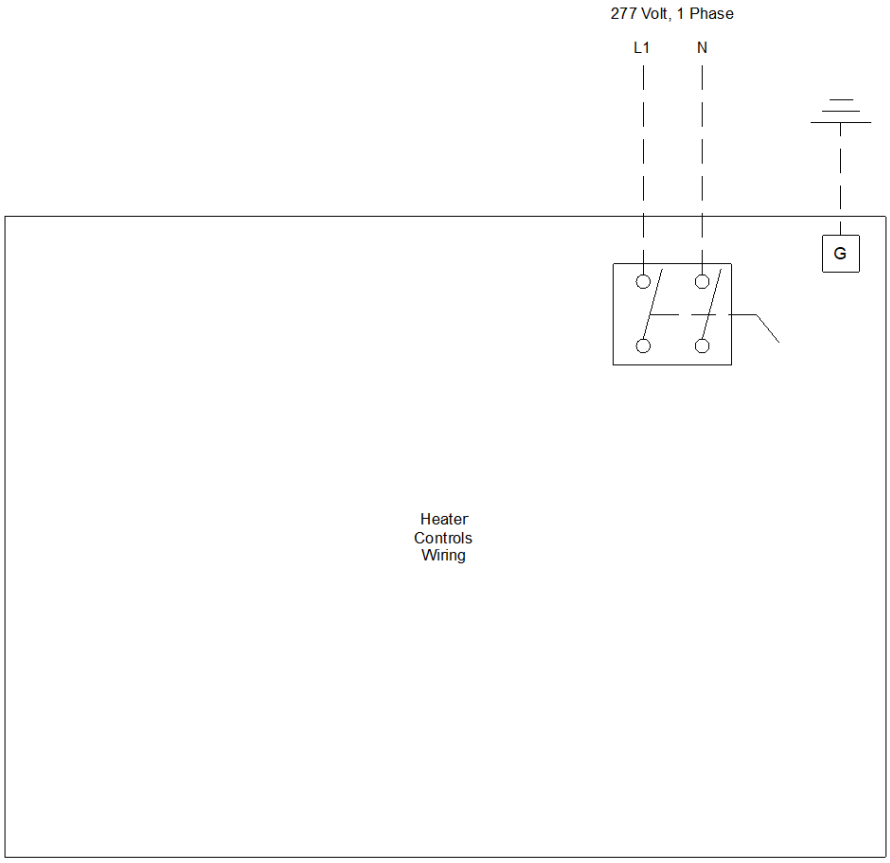
Wireless specifications

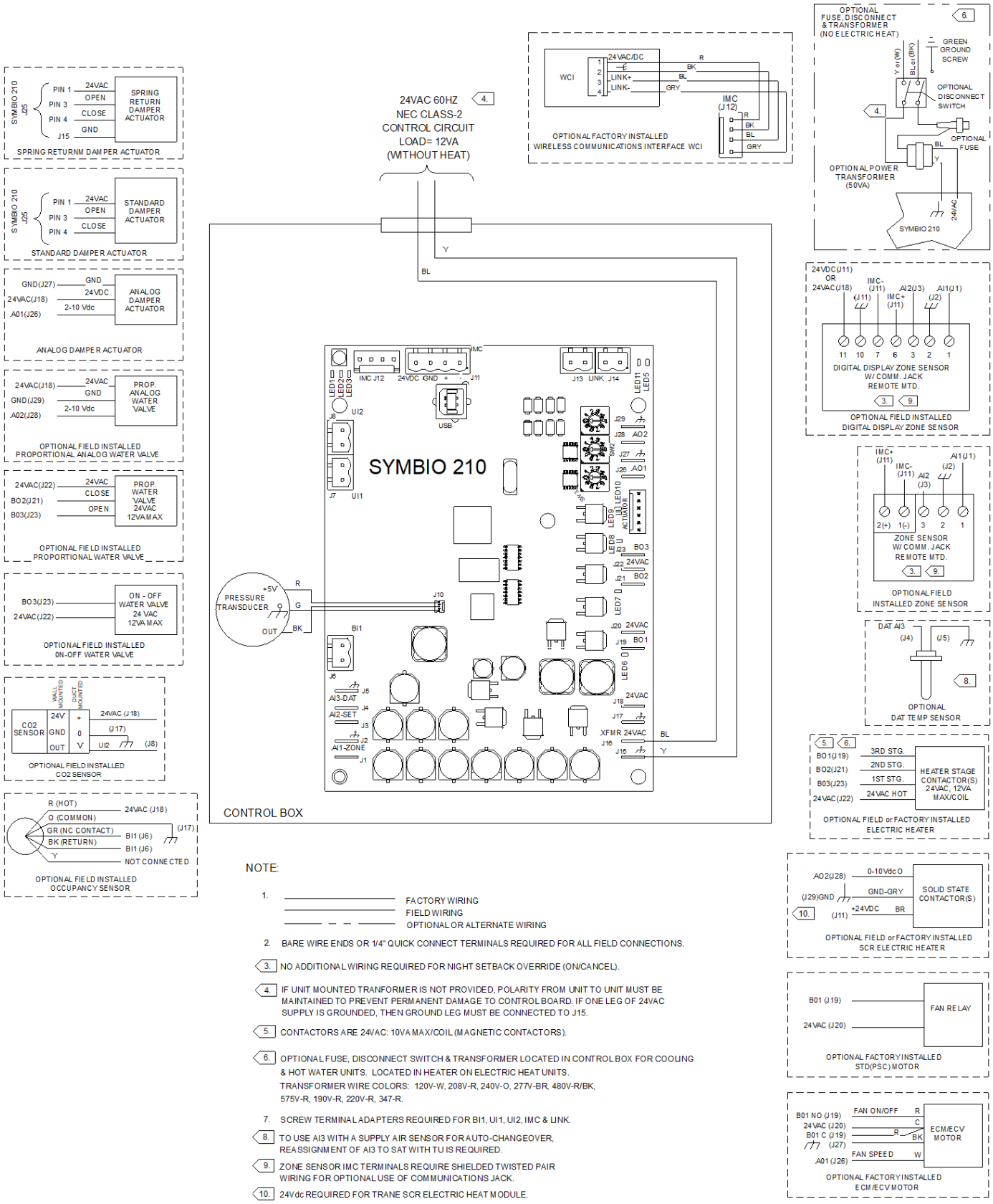
Sensor works with Air-Fi™ Wireless Communications Interface.

Sensor operating temperature	32 to 122ºF (0 to 50ºC)
Storage temperature	-40 to 185ºF (-40 to 85°C)
Storage and operating humidity range	5% to 95%, non-condensing
Accuracy	0.5 °F over a range of 55 to 85°F (12.8 to 29.4 °C)
Resolution	±0.125ºF over a range of 60 to 80ºF (15.56 to 26.67°C) ±0.25 ºF when outside this range
Setpoint functional range	45 to 95ºF (7.22 to 35ºC)
Setpoint/Zone Temperature Display	50 to 90ºF (ones, halves or tenths increments) and *, ** 11 to 32ºC (ones, halves or tenths increments) and *, **
Housing	Polycarbonate/ABS blend, suitable for plenum mounting, UV protected, UL 94: 5 VA flammability rating
Mounting	3.375 in (82.73 mm) for 2 mounting screws (supplied)
Sensor battery	(2) AA, 1.5 V, 2800 mAh, Lithium, 15-year life
Range(i)	Open range - 2,500 ft (packet error rate = 2 Usable - 200 ft (61 m) Typical - 75 ft (25 m)
Output power	100 mW - North America
Radio frequency	2.4 GHz (IEEE Std 802.15.4-2003 compliant) (2405-2480 MHz, 5 MHz spacing)
Radio channels	16
Address range	000-999
Minimum time between transmissions	30 seconds
Maximum time between transmissions	15 minutes
RoHS compliance	Yes
Agency Listing	UL916 Energy Management Equipment CSA - C22.2 No. 205-M1983 Signal Equipment

(i) Range values are estimated transmission distances for satisfactory operation of the 100 mW version. Estimated transmission distance for the 10 mW version will be less. Actual distance is job specific and must be determined during site evaluation.

Placement of the receiver and the sensor is critical to proper system operation. In most general office space installations, distance is not the limiting factor for proper radio signal quality. It is more greatly affected by walls, barriers, and general clutter. In general, sheetrock walls and ceiling tiles offer little restriction to the propagation of the radio signal throughout the building as opposed to concrete or metal barriers.


277 Volt, 1 Phase
L1
N
G
Heater
Controls
Wiring



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 TRANFORMER 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 BI1, UI1, UI2, IMC & LINK.
8. TO USE AI3 WITH A SUPPLY AIR SENSOR FOR AUTO-CHANGEOVER, REASSIGNMENT OF AI3 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.

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"Foil - Faced Insulation
The interior surface of the unit casing is acoustically and thermally lined with 1", 1.8 lb/cu. ft density glass fiber with foil facing. The insulation is UL listed and meets NFPA-90A, UL 181 standards, and bacteriological standard ASTM C 665. The insulation R-value is 4.2. All cut edges of insulation are completely encapsulated in metal to prevent erosion.

Air Valve Size - 05
Air Valve is 350.0 cfm 5" inlet.

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.

Power Disconnect Switch (for VCEF)
A factory provided interlocking door disconnect switch located on the electric heater control panel.

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.

Electric Heat Coil
Factory provided and mounted resistance open-coil type heater with airflow switch, a disc-type automatic pilot duty thermal primary cutoff, and manually resettable pilot-duty thermal secondary cutoff with associated backup contactor. Heater element material is type C nickel-chromium alloy. The heater terminal box is provided with 7/8" knockouts for customer power supply. Terminal connections are plated steel with ceramic insulators.

Magnetic Contactor
An electric heater 24 volt contact for use with Direct Digital Control (D.D.C.) or Analog Electronic VAV Controls.

Electric Heat Transformer
A 50VA class 2 transformer will be an integral component of the heater control panel dependent on unit load requirements to provide 24 VAC for controls.

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.

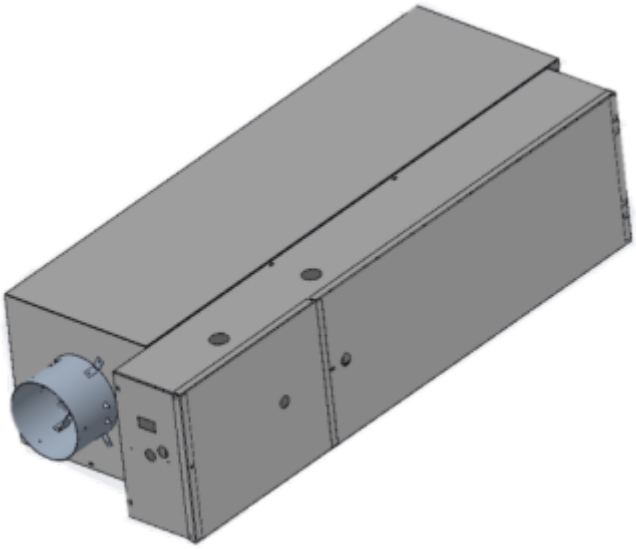
Variable Air Volume Single Duct

Unit Overview - V29-64

Unit model	Primary inlet	Design cooling airflow	Min cooling airflow	Trane Supplied Controls
VCEF (Electric Heating)	8" (203mm)	500 cfm	250 cfm	SY210 DDC-Basic (Electric heat- staged)

Construction and Airflow

APD @ cooling airflow	0.040 in H2O
Cooling inlet velocity	1432 ft/min
Valve heating airflow	250 cfm
Unit Insulation	1" foil faced
Elevation	0.00 ft
Operating weight	84.7 lb
Air Leakage Class	Standard Air Leakage
Exhaust Box	No



Electrical

Full load amps	7.22 A
Max fuse size	15.00 A
Min circuit ampacity	9.03 A

Heating Coil

Primary EDB	60.00 F
Room heating setpoint	90.00 F
Unit LAT	85.18 F
Coil heating capacity	6.83 MBh
Electric heater voltage	277/1
Electric heater kilowatt	2.0
Electric heater stage	1
Electric heater control	24 volt magnetic contactors

Controls and Sensors

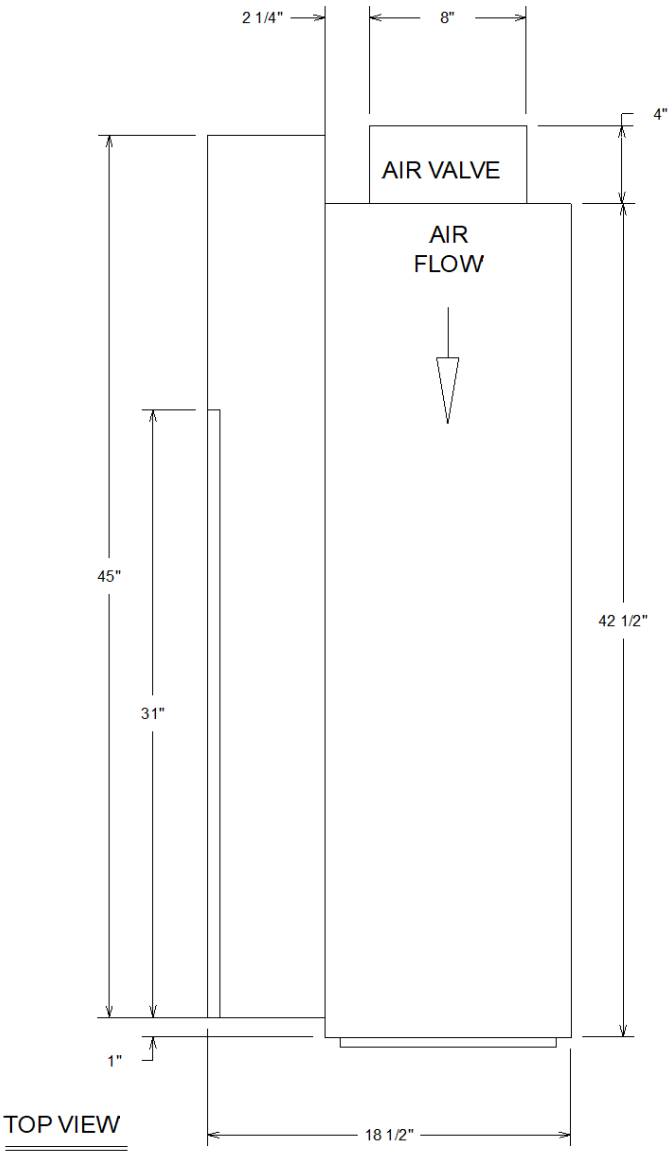
Actuator	Standard actuator
DTS & HW Valve Harness	Four point averaging temperature sensor
Wireless Sensor Options	Air - Fi Wireless Communication Module
WCI Address	11
Wireless Zone Sensor	Trane Air-Fi - WCS-SD (display)

Accessory Options

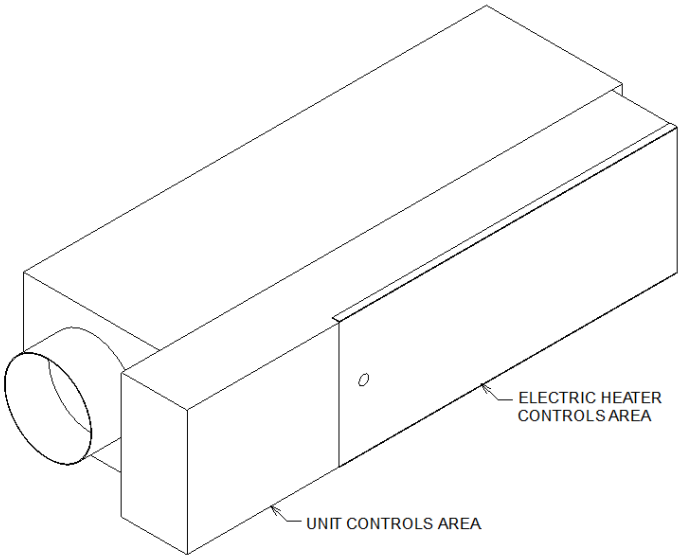
Disconnect Switch	Disconnect switch
Transformer	277/24 volt transformer

Warranty

Labor warranty first year	1st year labor warranty whole unit



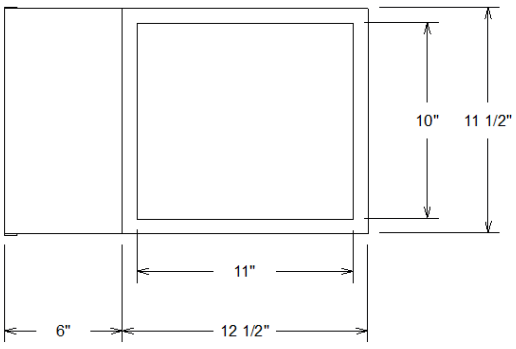
TOP VIEW



ASINGLE000644

Customer Notes

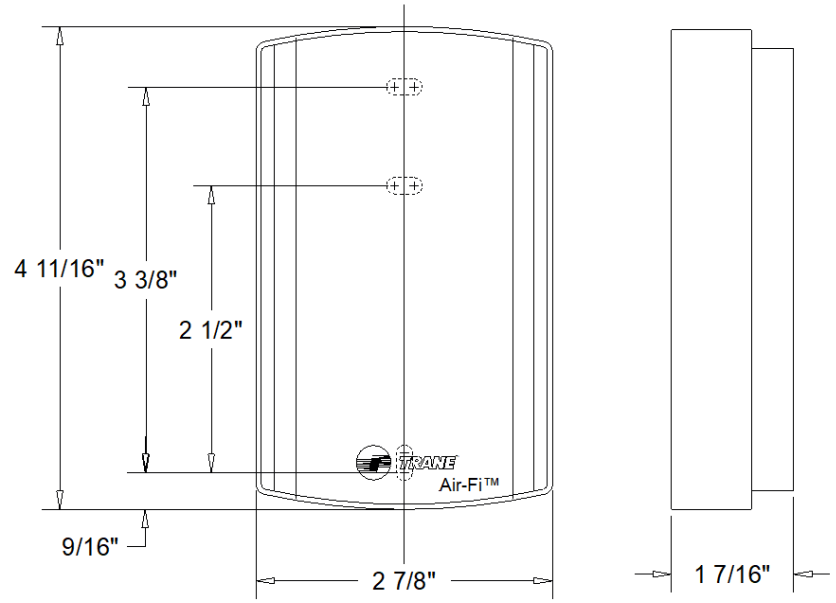
1. Air Inlet is centered in unit front panel.
2. Slip & Drive discharge outlet standard.
3. Minimum of 1.5 times duct diameter of straight duct at inlet for proper flow reading.
4. For electric heater access, side hinged door must have minimum distance per NEC or local code.
5. Allow 48" of straight duct downstream of unit before first runout & inside of the duct should be equal discharge size. (A & B)
6. Left-hand orientation shown. (Facing discharge) Unit can be flipped to right-hand orientation



BACK VIEW

Approximate Dry Weight	84.7 lb

Weights reflected may vary ±5.0 lb based upon options selected.



Air-Fi™ WIRELESS COMMUNICATIONS INTERFACE (Air-Fi™WCI)

(INSTALLED, WIRED & TESTED ON UNIT)

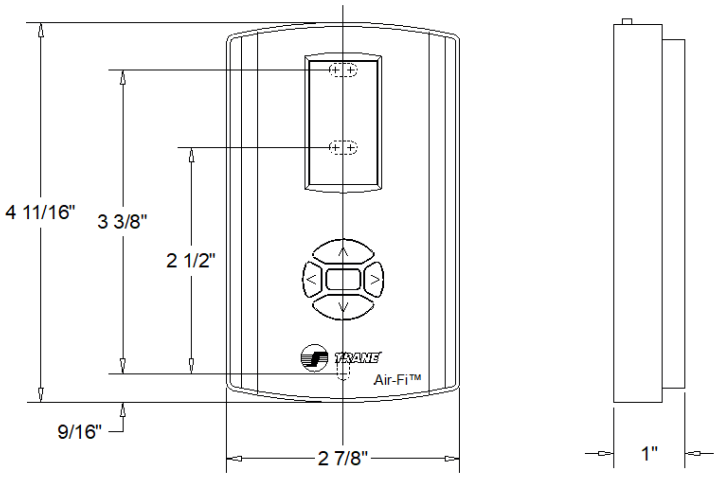
Wireless specifications

Air-Fi™ WCI works with other Air-Fi™ WCI's for wireless communications and optionally with wireless communications sensor.
(Does not work with non- Air-Fi™ Wireless Zone Sensors)

WCI operating temperature	-40 to 158ºF (-40 to 70ºC)
Storage temperature	-40 to 185ºF (-40 to 85°C)
Storage and operating humidity range	5 % to 95 % relative humidity (RH), non-condensing
Resolution	±0.125ºF over a range of 60 to 80ºF (15.56 to 26.67°C) ±0.25 ºF when outside this range
Receiver voltage	24 V nominal ac/dc ± 10%
Receiver power consumption	<2.5VA
Housing Material	Polycarbonate/ABS blend, suitable for plenum mounting, UV protected, UL 94: 5 VA flammability rating
Mounting	Factory mounted on exterior of control box.
Range(i)	Open range - 2,500 ft (762m) w/ packet error rate of 2 % Indoor: Typical range is 200ft (61mm); actual range is dependent on the environment.
Output power	100 mW - North America
Radio frequency	2.4 GHz (IEEE Std 802.15.4-2003 compliant) (2405-2480 MHz, 5 MHz spacing)
Radio channels	16
Address range	00-99
RoHS compliance	Yes
Agency Listing	UL Listed: UL94, 5VA flammability rating and UL916. CSA - C22.2 No. 205-M1983 Signal Equipment

(i) Range values are estimated transmission distances for satisfactory operation of the 100 mW version. Estimated transmission distance for the 10 mW version will be less. Actual distance is job specific and must be determined during site evaluation.

Placement of the receiver and the sensor is critical to proper system operation. In most general office space installations, distance is not the limiting factor for proper radio signal quality. It is more greatly affected by walls, barriers, and general clutter. In general, sheetrock walls and ceiling tiles offer little restriction to the propagation of the radio signal throughout the building as opposed to concrete or metal barriers.



Air-Fi™ WIRELESS COMMUNICATIONS SENSOR w/DIGITAL DISPLAY (WCS-SD)

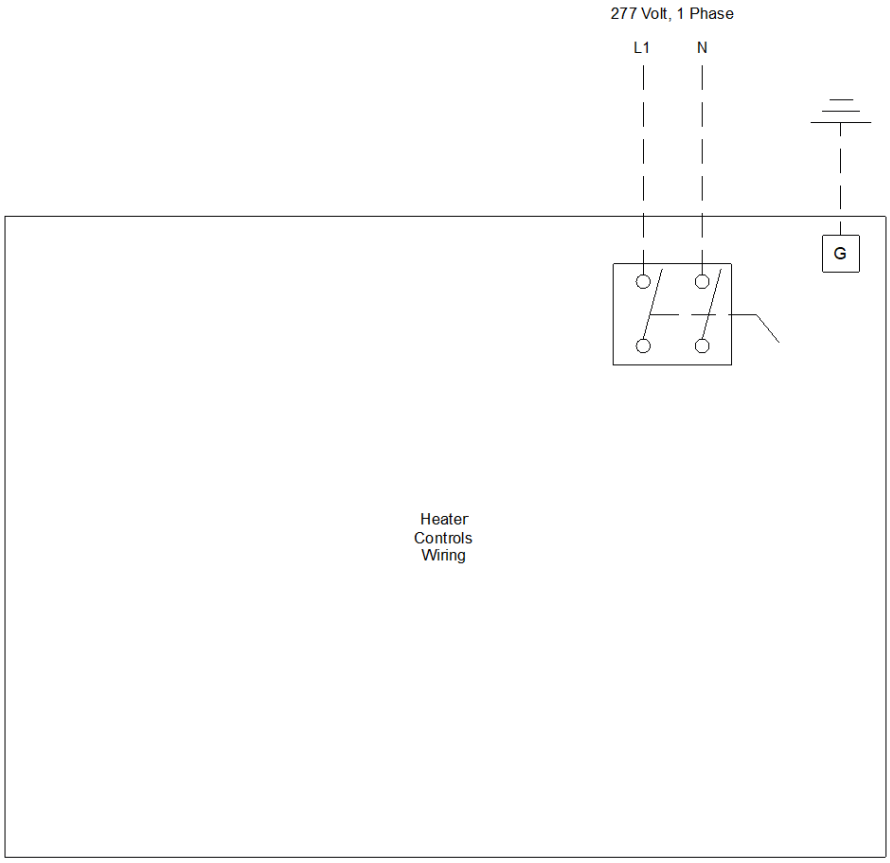
Wireless specifications

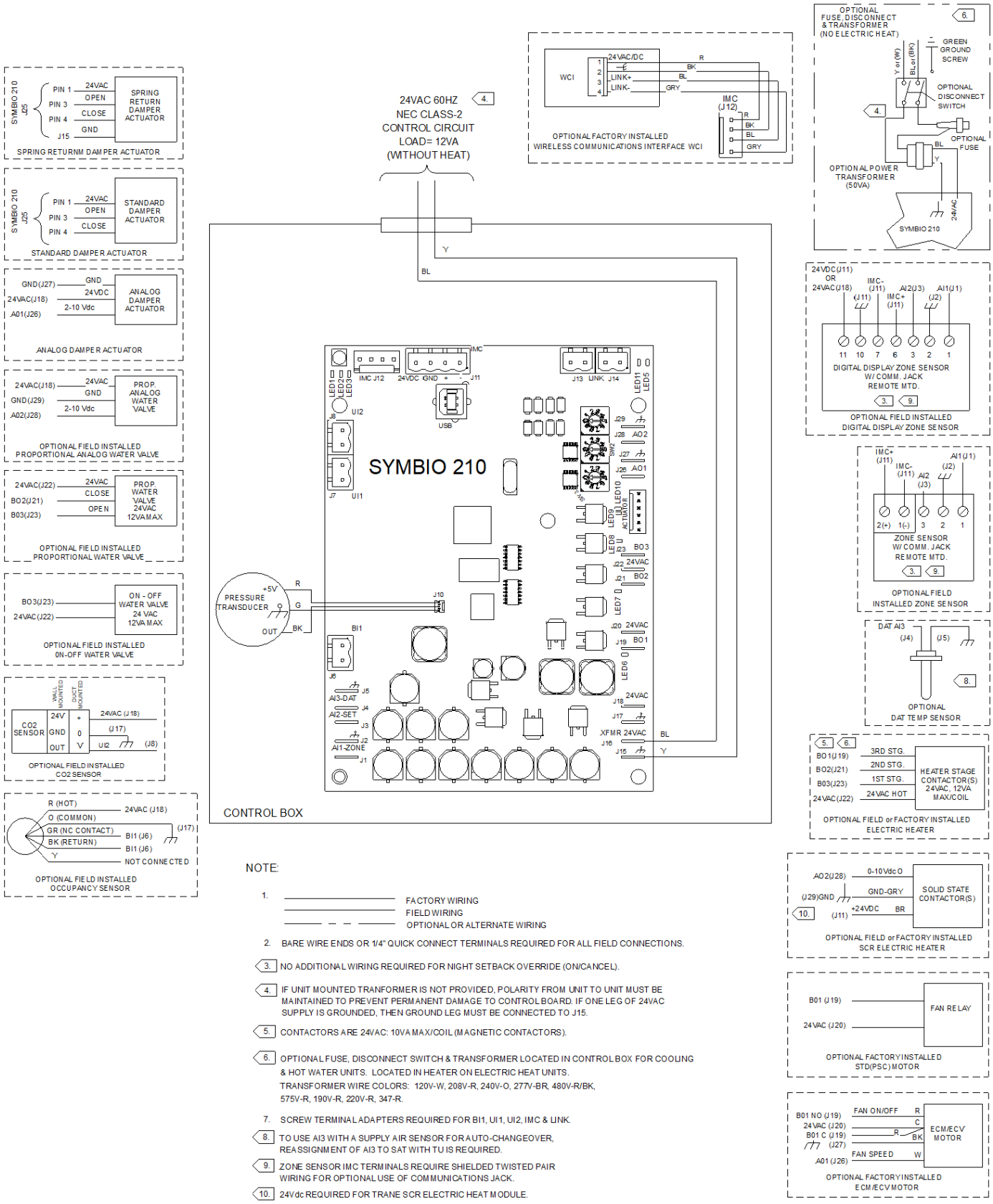
Sensor works with Air-Fi™ Wireless Communications Interface.

Sensor operating temperature	32 to 122ºF (0 to 50ºC)
Storage temperature	-40 to 185ºF (-40 to 85°C)
Storage and operating humidity range	5% to 95%, non-condensing
Accuracy	0.5 °F over a range of 55 to 85°F (12.8 to 29.4 °C)
Resolution	±0.125ºF over a range of 60 to 80ºF (15.56 to 26.67°C) ±0.25 ºF when outside this range
Setpoint functional range	45 to 95ºF (7.22 to 35ºC)
Setpoint/Zone Temperature Display	50 to 90ºF (ones, halves or tenths increments) and *, ** 11 to 32ºC (ones, halves or tenths increments) and *, **
Housing	Polycarbonate/ABS blend, suitable for plenum mounting, UV protected, UL 94: 5 VA flammability rating
Mounting	3.375 in (82.73 mm) for 2 mounting screws (supplied)
Sensor battery	(2) AA, 1.5 V, 2800 mAh, Lithium, 15-year life
Range(i)	Open range - 2,500 ft (packet error rate = 2 Usable - 200 ft (61 m) Typical - 75 ft (25 m)
Output power	100 mW - North America
Radio frequency	2.4 GHz (IEEE Std 802.15.4-2003 compliant) (2405-2480 MHz, 5 MHz spacing)
Radio channels	16
Address range	000-999
Minimum time between transmissions	30 seconds
Maximum time between transmissions	15 minutes
RoHS compliance	Yes
Agency Listing	UL916 Energy Management Equipment CSA - C22.2 No. 205-M1983 Signal Equipment

(i) Range values are estimated transmission distances for satisfactory operation of the 100 mW version. Estimated transmission distance for the 10 mW version will be less. Actual distance is job specific and must be determined during site evaluation.

Placement of the receiver and the sensor is critical to proper system operation. In most general office space installations, distance is not the limiting factor for proper radio signal quality. It is more greatly affected by walls, barriers, and general clutter. In general, sheetrock walls and ceiling tiles offer little restriction to the propagation of the radio signal throughout the building as opposed to concrete or metal barriers.


277 Volt, 1 Phase
L1
N
G
Heater
Controls
Wiring



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 TRANFORMER 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 BI1, UI1, UI2, IMC & LINK.
8. TO USE AI3 WITH A SUPPLY AIR SENSOR FOR AUTO-CHANGEOVER, REASSIGNMENT OF AI3 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.

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"Foil - Faced Insulation
The interior surface of the unit casing is acoustically and thermally lined with 1", 1.8 lb/cu. ft density glass fiber with foil facing. The insulation is UL listed and meets NFPA-90A, UL 181 standards, and bacteriological standard ASTM C 665. 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.

Power Disconnect Switch (for VCEF)
A factory provided interlocking door disconnect switch located on the electric heater control panel.

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.

Electric Heat Coil
Factory provided and mounted resistance open-coil type heater with airflow switch, a disc-type automatic pilot duty thermal primary cutoff, and manually resettable pilot-duty thermal secondary cutoff with associated backup contactor. Heater element material is type C nickel-chromium alloy. The heater terminal box is provided with 7/8" knockouts for customer power supply. Terminal connections are plated steel with ceramic insulators.

Magnetic Contactor
An electric heater 24 volt contact for use with Direct Digital Control (D.D.C.) or Analog Electronic VAV Controls.

Electric Heat Transformer
A 50VA class 2 transformer will be an integral component of the heater control panel dependent on unit load requirements to provide 24 VAC for controls.

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.