



Submittal

Prepared For:
All Bidders

Date: August 01, 2024

Job Name:
Christian Brothers Maineville

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

Product Summary

Qty Product

1 Split System Air Conditioning Units (Small)

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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 - Split System Air Conditioning Units (Small) (Qty: 1)

Item	Tag(s)	Qty	Description	Model Number
A1	AHU/CU-1	1	4 Ton Unitary Split Systems	4TTA3048D3-S8X2B080M4PSC-4TXCB006DS3HC

Product Data - Split System Air Conditioning Units (Small)

Item: A1 Qty: 1 Tag(s): AHU/CU-1

- Split System Cooling Outdoor Unit
- 4 Ton Nominal Cooling Capacity
- 200 - 230 Volt 3 Phase 60 Hertz
- 80% Eff, 2 Stg, Multi-speed, 17.5" Wide
- 80,000 Heating input BTUH
- 4-Way (Upflow/Horz Left/Right, Downflow)
- 4 Ton Capacity
- Permanent split capacitor Two Speed
- Standard 24 Volt
- Cased upflow/dnflow/horiz left
- 17.5"/16.3" cabinet
- Brazed
- 48,000 Nominal cooling capacity
- Hi efficiency
- TXV-Non bleed
- Conv-upflow/dnflw, left airflow coil
- Low Ambient Control (Field Installed)
- Touchscreen Programmable 4H/2C (Field Installed)

Performance Data - Split System Air Conditioning Units (Small)

Tags	AHU/CU-1
Design clg EDB (F)	80.00
Design clg EWB (F)	67.00
Cooling outdoor DB (F)	95.00
Cooling EDB (F)	80.00
Cooling EWB (F)	67.00
Capacity @ AHRI (Btuh)	48000.00
Elevation (ft)	0.00
Clg net total capacity (Btuh)	49065.00
Clg net sensible capacity (Btuh)	34761.00
Clg net latent capacity (Btuh)	14303.00
Calc clg LDB (F)	58.20
Calc clg LWB (F)	56.20
SEER/SEER2 @ AHRI (btuh/watt)	14.00
EER/EER2 @ AHRI (EER)	11.5
Cooling airflow (cfm)	1500
Min system airflow clg (cfm)	1300
Max system airflow clg (cfm)	1675
AHRI airflow (cfm)	1320
AHRI reference number	2
AHRI compressor power clg mode (W)	3519.0
AHRI condenser fan power clg mode (W)	235.0
AHRI supply fan power clg mode (W)	420.0
ASHRAE 90.1 S6.4.1 compliant	Yes
Cooling unit MCA (A)	18.00
Cooling unit Max Fuse Size (A)	30.00
Heating airflow (cfm)	1500
Heating EDB (F)	70.00
80 to 90 second blower off delay	Not Required
OD AHRI Model (Each)	-1.00
ID AHRI Model (Each)	7153016.00

Mechanical Specifications - Split System Air Conditioning Units (Small)**Item: A1 Qty: 1 Tag(s): AHU/CU-1****4TTA3 - General**

This unit is fully charged from the factory for matched indoor section and up to 180" of piping. Unit is designed to operate at outdoor ambient temperatures as high as 115.0 F]. Cooling capacities matched with a wide selection of air handlers and furnace coils that are A.R.I certified. The unit shall be UL listed. Exterior must be designed for outdoor application.

4TTA3 - Casing

Unit casing is constructed of heavy gauge, galvanized steel and painted with a weather-resistant powder paint. Corrosion and weatherproof CMBP-G30 Duratuff base.

4TTA3 - Compressor

The Climatuff compressor features internal over temperature and pressure protector, total dipped hermetic motor. Other features include: centrifugal oil pump, and low vibration and noise.

4TTA3 - Condenser Coil

The Spine Fin coil is continuously wrapped, corrosion resistant, all aluminum with minimum brazed joints. The coil is 3/8" O.D. seamless aluminum glued to a continuous aluminum fin. Coils are lab tested to withstand 2000.0 lb of pressure per square inch. The outdoor coil provides low airflow resistance and efficient heat transfer.

4TTA3 - Refrigerant controls

Refrigeration system controls include condenser fan and compressor contactor. High and low pressure protection is inherent to the compressor. Another standard feature is the factory installed liquid line drier.

4TXC - General

Upflow, Downflow, or Horizontal coils shall be designed for cooling and heat pump applications. The coil shall be 3/8" seamless aluminum tubing me-chanically bonded to aluminum plate fin.

Refrigerant for the TXC coils shall be controlled with factory installed Non-Bleed TXV refrigerant control. Refrigerant connections are brazed fittings with an additional Schrader Valve for system service.

The coil cabinet shall have a removable front and interior access panel for evaporator coil entering air surface cleaning.

The coil includes a drain pan with drain connections for vertical or horizontal operation and a horizontal auxiliary drain pan.

These coils are A.R.I. certified with Trane's matching condensing units.

4TXC - Accessories

Evaporator Defrost Control installed on coil for lower ambient operating conditions.

S8X2 - GENERAL OPERATION

The S-Series furnace utilizes a Silicon Nitride Hot Surface Ignition system, which eliminates the waste of a constant burning pilot. The integrated system control lights the main burners upon a demand for heat from the room thermostat. Complete front service access.

- a. Low energy power venter
- b. Vent proving pressure switches.

S8X2 - NATURAL GAS MODELS

Central Heating furnace designs are certified by Intertek for both natural and L.P. gas. Limit setting and rating data were established and approved under standard rating conditions using American National Standards Institute standards.

S8X2 - SAFE OPERATION

The Integrated System Control is a solid state device which continuously monitors for presence of flame when the system is in the heating mode of operation. Dual solenoid combination gas valve and regulator provide additional safety.

S8X2 - QUICK HEATING

Durable, cycle tested, heavy gauge tubular aluminized steel heat exchanger quickly transfers heat to provide warm conditioned air to the structure. Low energy power vent blower, to increase efficiency and provide a discharge of gas fumes to the outside.

S8X2 - BURNERS

Multiport, Inshot burners will give years of quiet and efficient service. All models can be converted to L.P. gas with LP conversion kit.

S8X2 - INTEGRATED SYSTEM CONTROL

Exclusively designed operational program provides total control of furnace limit sensors, blowers, gas valve, flame control and includes self diagnostics for ease of service.

S8X2 - ENERGY EFFICIENT OPERATION

Furnace is certified by the manufacturer to leak 1% or less of nominal air conditioning CFM delivered when pressurized to .5" water column with all inlets and outlets sealed.

S8X2 - AIR DELIVERY

The 9 speed constant torque blower motor has sufficient airflow for most heating and cooling requirements and will switch from heating to cooling speeds on demand from room thermostat.

S8X2 - STYLING

Heavy gauge steel and "wrap-around" cabinet construction is used in the cabinet with baked-on enamel finish for strength and beauty. Every orientation has at least two venting options. There are no knockouts on cabinet.

Head Pressure Control Accessory

The Head Pressure Control (BAYLOAM***) accessory is a low voltage (24 Volts) electronic head pressure control that cycles the condenser fan motor based on liquid temperature. The addition of this field installed Head Pressure Control accessory permits cooling operation to 0 deg F [-17.8 deg C] providing that non-bleed TXV's, quick start components, and compressor crankcase heat are provided with the system when required.

Head Pressure Control

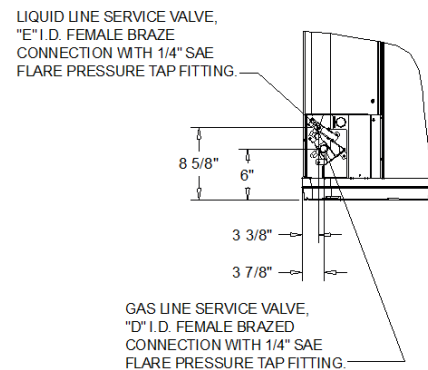
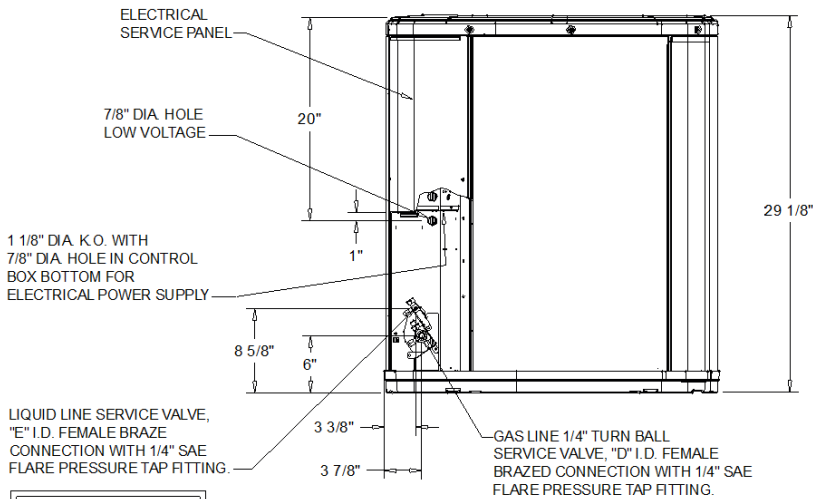
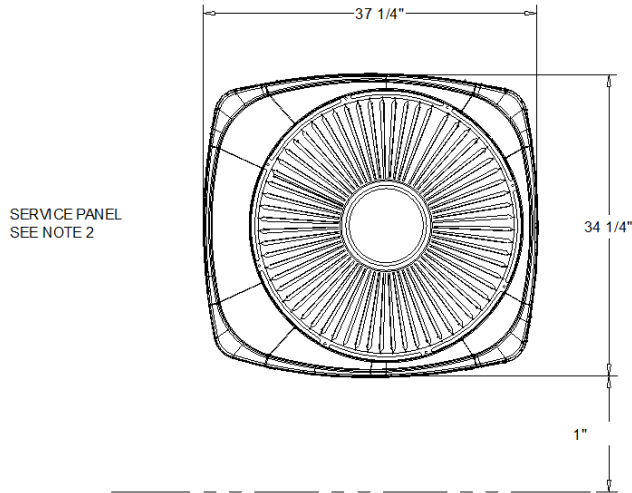
Controls fan motor (on/off) in response to outdoor ambient temperature in conjunction with liquid line temperature. Accessory provides unit cooling operation to outdoor temperatures of 0F

Dimensional Drawings - Split System Air Conditioning Units (Small)

Item: A1 Qty: 1 Tag(s): AHU/CU-1

NOTES

1. TOP DISCHARGE AREA SHOULD BE UNRESTRICTED FOR AT LEAST 60" ABOVE UNIT. UNIT SHOULD BE PLACED SO ROOF RUN-OFF WATER DOES NOT POUR DIRECTLY ON UNIT, AND SHOULD BE AT LEAST 12" FROM WALL AND ALL SURROUNDING SHRUBBERY ON TWO SIDES. OTHER TWO SIDES UNRESTRICTED.
2. ELECTRICAL AND REFRIGERANT COMPONENT CLEARANCES PER PREVAILING CODES.



UNIT DIMENSIONS	
DIM - D	3/8"
DIM - E	7/8"

SPLIT SYSTEM COOLING - 4TTA3048
 OUTLINE DRAWING

Dimensional Drawings - Split System Air Conditioning Units (Small)

Item: A1 Qty: 1 Tag(s): AHU/CU-1

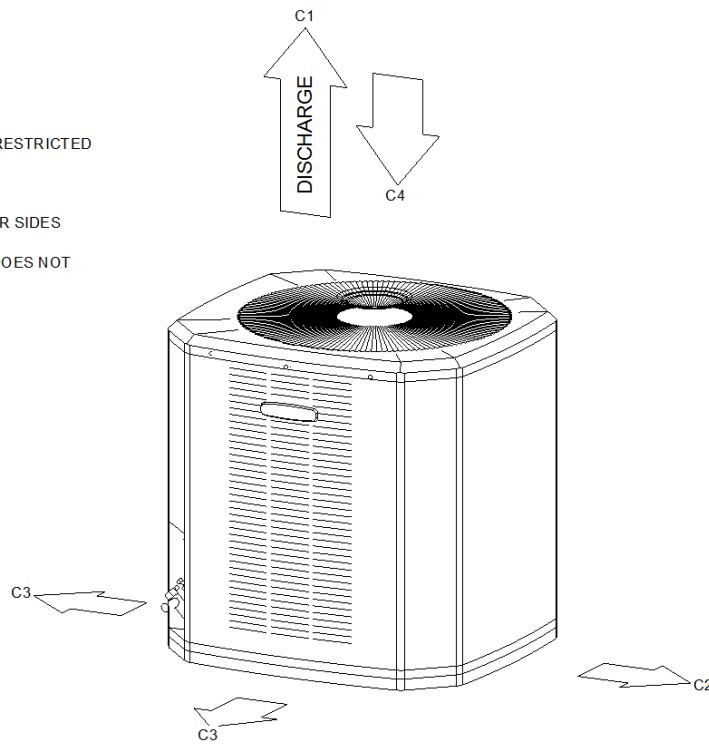
ELECTRICAL / GENERAL DATA

<p>GENERAL</p> <p>Model: 4TTA3048*</p> <p>Operating Voltage:</p> <p>Unit Primary Voltage:</p> <p>Unit Secondary Voltage:</p> <p>Unit Hertz:</p> <p>Unit Phase:</p>	<p>POWER CONN.</p> <p>Minimum Circuit Ampacity: 18.0</p> <p>Maximum Circuit Breaker: 30.0</p> <p>Minimum Protection Rating: 30.0</p>	<p>COMPRESSOR</p> <p>Number: 1</p> <p>Phase: 3</p> <p>Rated Load Amps: 13.7</p> <p>Locked Rotor Amps: 83.0</p>
<p>OUTDOOR MOTOR</p> <p>Number: 1</p> <p>Horsepower: 0.20</p> <p>Motor Speed (RPM): 825</p> <p>Phase: 3</p> <p>Full Load Amps: 0.93</p> <p>Locked Rotor Amps: -</p>	<p>NOTES:</p> <ol style="list-style-type: none"> 1. Certified in accordance with the Unitary Air-Conditioner equipment certification program which is based on AHRI Standard 210/240. 2. Calculated in accordance with N.E.C. Use only HACR circuit breakers or fuses. 3. Standard line lengths - 60'. Standard lift - 60' Suction and Liquid line. For Greater lengths and lifts refer to refrigerant piping software Pub# 32-3312-0 4. * = 15, 20, 25, 30, 40 and 50 foot lineset available. 	
<p>REFRIGERANT</p> <p>Type: R-410</p> <p>Charge: 6.8 lb</p> <p>Line Size O.D. Gas: 7/8"</p> <p>Line Size O.D. LIQ: 3/8"</p>		

WEIGHT	
NET	203"
SHIPPING	235.0 lb

NOTES:

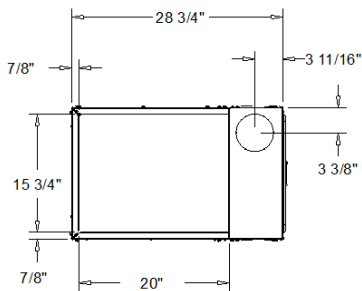
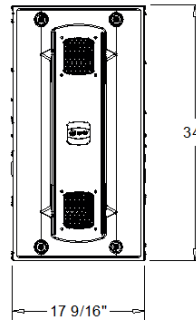
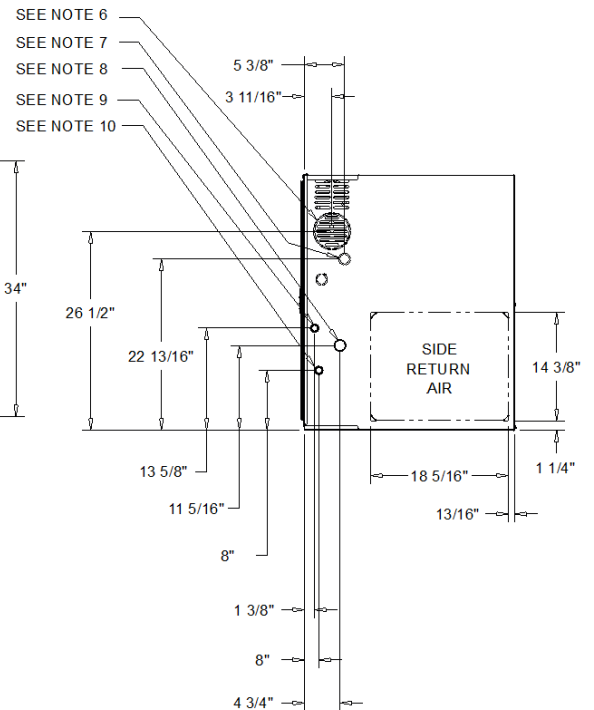
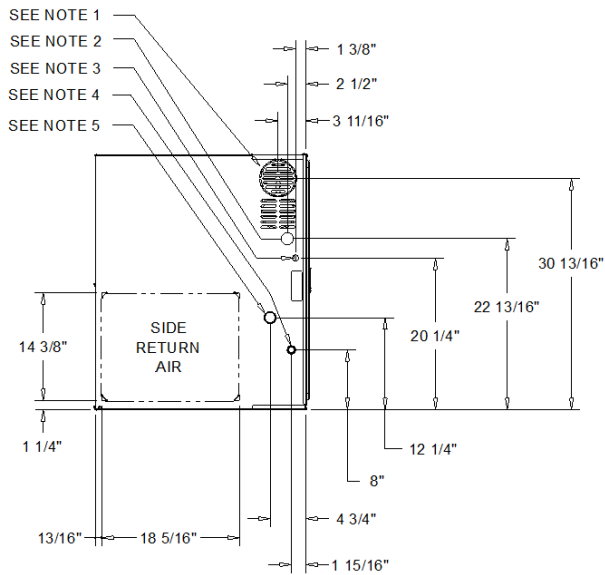
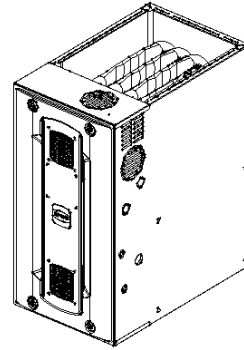
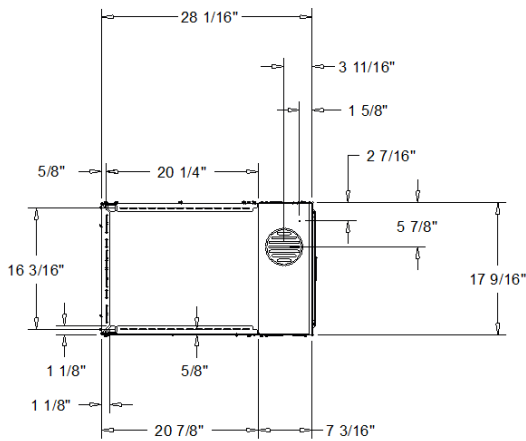
- C1. TOP DISCHARGE SHOULD BE UNRESTRICTED FOR AT LEAST 60" ABOVE UNIT
- C2. PLACE UNIT FROM WALL
- C3. PLACE SHRUBBERY AT LEAST 12" FROM UNIT ON TWO SIDES, OTHER SIDES UNRESTRICTED
- C4. PLACE UNIT SO ROOF RUN-OFF DOES NOT FALL DIRECTLY ON UNIT



WEIGHT AND CLEARANCE

Dimensional Drawings - Split System Air Conditioning Units (Small)

Item: A1 Qty: 1 Tag(s): AHU/CU-1



- NOTES:
- 1) 5" FLUE OUTLET
 - 2) 1 5/8" DIA GAS SUPPLY
 - 3) 7/8" ELECTRICAL WIRES
 - 4) 7/8" THERMOSTAT WIRES
 - 5) NOT USED
 - 6) 5" FLUE OUTLET
 - 7) 1 5/8" DIA GAS SUPPLY (ALTERNATE)
 - 8) 7/8" ELECTRICAL WIRES (ALTERNATE)
 - 9) NOT USED
 - 10) 7/8" THERMOSTAT WIRES (ALTERNATE)
 - 11) VERIFY WEIGHT, CONNECTION, AND ALL DIMENSION WITH INSTALLER DOCUMENTS BEFORE INSTALLATION

S8X2 - B CABINET SIZED FURNACE
UNIT DRAWING

Dimensional Drawings - Split System Air Conditioning Units (Small)
Item: A1 Qty: 1 Tag(s): AHU/CU-1

ELECTRICAL / GENERAL DATA

Furnace

<p>GENERAL - POWER CONN</p> <p>Model: S8X2B080M4PSAB</p> <p>Voltage: 120/1/60</p> <p>Ampacity (Amps): 12.0</p> <p>Max Over. Pro. (Amps): 15.0</p>	<p>COMBUSTION FAN</p> <p>Type: Centrifugal</p> <p>Motor HP: -</p> <p>Motor Speed RPM: 3300/2600</p> <p>Phase: 1</p> <p>Full Load Amps: 0.66</p>	<p>BLOWER DRIVE</p> <p>Drive: Direct</p> <p>No. Used: 1</p> <p>Motor HP: 0.75</p> <p>Speed RPM: 1075</p> <p>Phase: 1</p> <p>FLA: 8.4</p>
<p>ORIFICES</p> <p>Nat. Gas Qty - Drill Size: 4 - 45</p> <p>L.P. Gas Qty. - Drill Size: N/A</p> <p>Gas Valve: Redundant - Two Stage</p>	<p>RATINGS (b)</p> <p>1st Stage input BTUH: 52000</p> <p>1st Stage Capacity BTUH (ICS): 41600</p> <p>2st Stage input BTUH: 80000</p> <p>2st Stage Capacity BTUH (ICS) (c,d): 64000</p>	<p>FILTERS</p> <p>Type: High Velocity</p> <p>Furnished: No</p> <p>Recommended: 1 - 16"x25"x1"</p>
<p>BURNERS</p> <p>Type: 120 V SIni Igniter</p> <p>Number: 4</p>	<p>1st Stage Temp. Rise (Min.-Max.): 30-60</p> <p>2nd Stage Temp. Rise (Min.-Max.): 30-60</p> <p>AFUE (%) (c,d): 80</p>	<p>WEIGHT / DIMENSIONS</p> <p>Shipping: 137.0 lb</p> <p>Net: 129.0 lb</p> <p>Dimension (Crated): 35 1/2"x19 1/2"x30 7/8"</p>

Notes:

- (a) For U.S. applications, above input ratings (BTUH) are up to 2,000 feet, derate 4 % per 1,000 feet for elevations above 2,000 feet above sea level. For Canadian applications, above input ratings (BTUH) are up to 4,500 feet, derate 4 % per 1,000 feet for elevations above 4,500 feet above sea level.
- (b) Central Furnace heating designs are certified to ANSI Z21.47 / CSA 2.3 - latest edition.
- (c) Based on U.S. government standard tests.
- (d) Refer to the Vent Length Table in the Installer's Guide.
- (e) The above wiring specifications are in accordance with National Electrical Code; however, installations must comply with local codes.

Field Installed Options - Part/Order Number Summary

This is a report to help you locate field installed options that arrive at the jobsite. This report provides part or order numbers for each field installed option, and references it to a specific product tag. It is NOT intended as a bill of material for the job.

Product Family - Split System Air Conditioning Units (Small)

Item	Tag(s)	Qty	Description	Model Number
A1	AHU/CU-1	1	1.5 - 5 Ton Unitary Split Systems (SSC)	4TTA3048D30000*00000*0 000000000*00***** *****S8X2B080M4PSC4 TXCB006DS3HC

Field Installed Option Description	Part/Ordering Number
Low Ambient Control	BAYLOAM107A
Touchscreen Programmable 4H/2C	TCONT302AS42DA