



Quality People. Building Solutions.

Comfort Systems USA (Arkansas), Inc.
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Phone 501-834-3320
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Date: 5/6/2024

Return Request: 5/19/2024

Project: LRAFB – Dorm 854 Renovation

Supplier: Trane

Manufacturer: Trane

Submittal: Terminal Heating & Cooling Units

Submittal Number: 23 82 00-01

Drawing # and Installation: Mechanical Drawings

ARCHITECT

ENGINEER

EECI
10 Corporate Hill Dr. Suite 100
Little Rock, AR 72205
501-244-0511

GENERAL CONTRACTOR

HGL Construction
P.O. Box 1035
Jacksonville, AR 72099
501-983-1160

MECHANICAL SUBCONTRACTOR

Comfort Systems USA (Arkansas), Inc.
9924 Landers Rd.
N. Little Rock, AR 72117
501-834-3320

Notes:

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CSUSA PROJECT NO.

24-7031

joseph@comfortar.com

9924 Landers Rd.
No. Little Rock, AR 72117



FCU Submittal Revision 1

Prepared For:
Energy Engineering Consultants, Inc.

Date: April 02, 2024
Revision Date: May 2, 2024
Job Name:

Sold To:
Comfort Systems USA (AR), Inc

LRAFB B854 Dorm Renovation

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

Product Summary

Qty Product

- 72 Horizontal Concealed, Size 040, Fan Coil Air Conditioning Units - 208V
- 3 Horizontal Exposed, Size 030, Fan Coil Air Conditioning Units - 115V
- 3 Horizontal Recessed, Size 040, Fan Coil Air Conditioning Units - 115V
- 3 Horizontal Concealed, Size 030, Fan Coil Air Conditioning Units - 115V
- 2 Horizontal Concealed, Size 040, Fan Coil Air Conditioning Units - 208V (FCU-229 & FCU-329)

Equipment Submitted Based on Plans Dated 29 FEB, 2024

Submittal Notes:

- Heating Reheat Coil
- Setup for 30% Glycol Chilled Water System
- 1" Throwaway Filter
- Disconnect Switch
- All Units with Right Hand Connection (Contractor to Verify) – Reference by Looking Toward the Supply Air (Air Hitting You in the Face)
- Deluxe Beige Selected as Standard Color on Exposed FCUs – Please Specify if Any Other Color Desired (Attached to End of Document)

Not Included: **Startup**, Labor Warranty, Installation, Wiring, Rigging, Any Kind of Vibration Isolation, Seismic Isolation, Extra Filters, **Condensate Overflow Pumps**, **Piping Packages**, **Control Valves**, Hanging Kits, And Any Other Item Not Specified Above.

Austin Johnson

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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.

Tag Data - Fan Coil Air Conditioning Units (Qty: 81)

Item	Tag(s)	Qty	Description	Model Number
A1	FCU-123, FCU-226, FCU-326	3	Fan Coil Air Conditioners	FCDB0301CAYD0B10AJ3M000DD3000L200BL0L
A2	FCU-101, FCU-102, FCU-103, FCU-104, FCU-105, FCU-106, FCU-107, FCU-108, FCU-109, FCU-110, FCU-111, FCU-112, FCU-113, FCU-114, FCU-115, FCU-116, FCU-117, FCU-118, FCU-119, FCU-120, FCU-121, FCU-122, FCU-201, FCU-202, FCU-203, FCU-204, FCU-205, FCU-206, FCU-207, FCU-208, FCU-209, FCU-210, FCU-211, FCU-212, FCU-213, FCU-214, FCU-215, FCU-216, FCU-217, FCU-218, FCU-219, FCU-220, FCU-221, FCU-222, FCU-223, FCU-224, FCU-225, FCU-301, FCU-302, FCU-303, FCU-304, FCU-305, FCU-306, FCU-307, FCU-308, FCU-309, FCU-310, FCU-311, FCU-312, FCU-313, FCU-314, FCU-315, FCU-316, FCU-317, FCU-318, FCU-319, FCU-320, FCU-321, FCU-322, FCU-323, FCU-324, FCU-325	74	Fan Coil Air Conditioners	FCCB0402CAYF0A00BJ3M000DD3000L200CL0L
A3	FCU-124, FCU-227, FCU-327	3	Fan Coil Air Conditioners	FCCB0301CAYF0A00AJ3M000DD3000L200BL0L
A4	FCU-125, FCU-228, FCU-328	3	Fan Coil Air Conditioners	FCEB0401CAYD0A10BJ3M000DD3000L200BL0L

Product Data - Fan Coil Air Conditioning Units

All Units

- Fan Coil
- W/o piping, right hand connection, w/ aux drain pan without tamperproof locks or leveling feet
- 4 row cooling only
- Polymer Drain pan
- Manual air vent
- High capacity hot water reheat - 12 FPI
- With disconnect switch
- 1" throwaway filter + 1 extra (Field Installed)
- UC400-B
- Wall mounted zone sensor module (OALMH, sp dial, on/cnc buttons, comm. jack) (Field Installed)
- Valves: Field Supplied, Modulating
- Without projection panel (Field Installed)

Item: A1 Qty: 3 Tag(s): FCU-123, FCU-226, FCU-326

- Horizontal cabinet
- Size 030
- 115v/60hz/1ph
- Bottom stamped louver return
- Front bar grille supply
- Color to be selected from Trane Standard Colors by the Architect
- Free discharge fan motor
- Condensate Overflow

Item: A2 Qty: 74 Tag(s): FCU-101, FCU-102, FCU-103, FCU-104, FCU-105, FCU-106, FCU-107, FCU-108, FCU-109, FCU-110, FCU-111, FCU-112, FCU-113, FCU-114, FCU-115, FCU-116, FCU-117, FCU-118, FCU-119, FCU-120, FCU-121, FCU-122, FCU-201, FCU-202, FCU-203, FCU-204, FCU-205, FCU-206, FCU-207, FCU-208, FCU-209, FCU-210, FCU-211, FCU-212, FCU-213, FCU-214, FCU-215, FCU-216, FCU-217, FCU-218, FCU-219, FCU-220, FCU-221, FCU-222, FCU-223, FCU-224, FCU-225, FCU-301, FCU-302, FCU-303, FCU-304, FCU-305, FCU-306, FCU-307, FCU-308, FCU-309, FCU-310, FCU-311, FCU-312, FCU-313, FCU-314, FCU-315, FCU-316, FCU-317, FCU-318, FCU-319, FCU-320, FCU-321, FCU-322, FCU-323, FCU-324, FCU-325 FCU-229, FCU-329

Horizontal concealed

Size 040

208v/60hz/1ph

Back duct collar return

Front duct collar supply

High static fan motor

Low Limit and Condensate Overflow

Item: A3 Qty: 3 Tag(s): FCU-124, FCU-227, FCU-327

Horizontal concealed

Size 030

115v/60hz/1ph

Back duct collar return

Front duct collar supply

Free discharge fan motor

Condensate Overflow

Item: A4 Qty: 3 Tag(s): FCU-125, FCU-228, FCU-328

Horizontal recessed

Size 040

115v/60hz/1ph

Bottom stamped louver return

Front duct collar supply

Color to be selected from Trane Standard Colors by the Architect

High static fan motor

Condensate Overflow

Performance Data - Fan Coil Air Conditioning Units **FCU-229, FCU-329**

Tags	FCU-123, FCU-226, FCU-326	FCU-101, FCU-102, FCU-103, FCU-104, FCU-105, FCU-106, FCU-107, FCU-108, FCU-109, FCU-110, FCU-111, FCU-112, FCU-113, FCU-114, FCU-115, FCU-116, FCU-117, FCU-118, FCU-119, FCU-120, FCU-121, FCU-122, FCU-201, FCU-202, FCU-203, FCU-204, FCU-205, FCU-206, FCU-207, FCU-208, FCU-209, FCU-210, FCU-211, FCU-212, FCU-213, FCU-214, FCU-215, FCU-216, FCU-217, FCU-218, FCU-219, FCU-220, FCU-221, FCU-222, FCU-223, FCU-224, FCU-225, FCU-301, FCU-302, FCU-303, FCU-304, FCU-305, FCU-306, FCU-307, FCU-308, FCU-309, FCU-310, FCU-311, FCU-312, FCU-313, FCU-314, FCU-315, FCU-316, FCU-317, FCU-318, FCU-319, FCU-320, FCU-321, FCU-322, FCU-323, FCU-324, FCU-325	FCU-124, FCU-227, FCU-327	FCU-125, FCU-228, FCU-328
Design airflow (cfm)	275	300	275	325
Total cooling capacity (MBh)	9.40	12.80	9.40	11.50
Sensible capacity (MBh)	6.96	8.61	6.96	8.32
Cooling EDB (F)	80.00	80.00	80.00	80.00
Cooling EWB (F)	67.00	67.00	67.00	67.00
Cooling LDB (F)	56.78	53.67	56.78	56.51
Cooling LWB (F)	55.97	52.83	55.97	55.54
Cooling ent fluid temp (F)	42.00	42.00	42.00	42.00
Cooling lvg fluid temp (F)	49.85	49.07	49.85	50.85
Cooling delta T (F)	7.85	7.07	7.85	8.85
Cooling flow rate (gpm)	2.59	3.92	2.59	2.81
Cooling fluid PD (ft H2O)	13.94	33.42	13.94	18.51
Fluid freeze pt (F)	9.31	9.31	9.31	9.31
Cooling fluid concentration (%)	30.00	30.00	30.00	30.00
Cooling fluid type	Propylene Glycol	Propylene Glycol	Propylene Glycol	Propylene Glycol
Heating EAT (F)	60.00	60.00	60.00	60.00
Heating ent fluid temp (F)	180.00	180.00	180.00	180.00
Aux heating total capacity (MBh)	7.90	6.40	7.90	8.20
Aux heating EAT (F)	65.00	65.00	65.00	65.00
Aux LAT (F)	91.49	84.68	91.49	88.26
Aux lvg fluid temp (F)	153.44	127.17	153.44	148.20
Aux heating ent fluid temp (F)	160.00	140.00	160.00	160.00
Aux heating delta T (F)	6.56	12.83	6.56	11.80
Aux fluid PD (ft H2O)	0.85	0.22	0.85	0.50
Aux heating flow rate (gpm)	2.41	1.00	2.41	1.46
Basis of selection	Cooling	Cooling	Cooling	Cooling
ESP (in H2O)	0.000	0.500	0.000	0.100
Motor power (W)	67.0	111.0	61.0	76.0
Motor rpm #1 (rpm)	1262	1607	1175	1327
Motor hp #1 (hp)	0.130	0.130	0.130	0.130
Min circuit ampacity (A)	2.75	1.75	2.75	2.75
Max fuse size (A)	15.00	15.00	15.00	15.00

Acoustics report	Yes	Yes	Yes	Yes
Inlet duct height (in)	-	7.000	7.000	-
Inlet duct width (in)	-	22.250	17.250	-
Inlet duct length (in)	-	36.000	36.000	-
Discharge duct height (in)	-	5.375	5.375	5.375
Discharge duct width (in)	-	24.375	19.375	24.375
Discharge duct length (in)	-	36.000	36.000	36.000
Unit length (in)	33.000	37.688	32.688	38.000
Unit width (in)	26.000	25.000	25.000	30.000
Unit height (in)	10.000	10.000	10.000	11.000
Shipping weight (lb)	84.0	96.0	68.0	78.0
Operating weight (lb)	97.0	109.0	81.0	88.0
Elevation (ft)	0.00	0.00	0.00	0.00
Aux heating fluid type	Water	Water	Water	Water
Aux heating fluid concentration (%)	-	-	-	30.00
Brake HP #1 (hp)	0.046	0.091	0.039	0.056
Max Brake HP #1 (hp)	0.175	0.139	0.177	0.171

Mechanical Specifications - Fan Coil Air Conditioning Units

Item: A1 - A4 Qty: 81 Tag(s): FCU-123, FCU-226, FCU-326, FCU-101, FCU-102, FCU-103, FCU-104, FCU-105, FCU-106, FCU-107, FCU-108, FCU-109, FCU-110, FCU-111, FCU-112, FCU-113, FCU-114, FCU-115, FCU-116, FCU-117, FCU-118, FCU-119, FCU-120, FCU-121, FCU-122, FCU-201, FCU-202, FCU-203, FCU-204, FCU-205, FCU-206, FCU-207, FCU-208, FCU-209, FCU-210, FCU-211, FCU-212, FCU-213, FCU-214, FCU-215, FCU-216, ...

Performance Data

Capacity: Unit capacities are certified under the Industry Room Fan Coil Air Conditioner Certification Program in accordance with AHRI standard 440-97.

Safety: All standard units are UL and CUL approved.

Horizontal Cabinet Basic Construction

The basic unit includes a chassis, coil(s), fan wheel(s), fan casing(s), fan board and motor(s). Units also include a positively sloped (multi-plane), non-corrosive main drain pan with closed cell insulation. A thermoplastic auxiliary drain pan is included on fan coils with standard piping packages. The fan board assembly and both drain pans are removable. The fan board assembly includes a quick disconnect motor plug. The chassis is the structural frame constructed of 18 ga. galvanized steel. The unit is acoustically and thermally insulated with closed cell insulation. The bottom panel is fabricated from 16 ga. galvanized steel. All other panels are fabricated from 18 ga. galvanized steel. All panels are made rigid by channel forming. Side panels are removable for piping access. The discharge grille is recessed to resist condensate formation. The hinged access door is flush with the unit.

Bar Grille Outlet

Supply air grilles are supplied on cabinet style units. The grille is constructed of 18 gauge steel construction with black paint finish. Louvers are formed at a 15.00 Deg angle and fixed in one discharge direction.

Concealed Unit Basic Construction

The basic unit includes a chassis, coil(s), fan wheel(s), fan casing(s), fan board and motor(s). Units also include non-corrosive main drain pan which is positively sloped in every plane and is insulated with closed cell insulation. Thermoplastic auxiliary drain pan is included on fan coil units with standard piping packages. Steel parts exposed to moisture are galvanized. The fan board assembly and both drain pans are easily removable. The fan board assembly includes a quick-disconnect motor plug. The chassis is the structural frame constructed of 18 gauge galvanized steel. The unit is acoustically and thermally insulated with closed cell insulation.

Recessed Unit Basic Construction

The basic unit includes a chassis, coil(s), fan wheel(s) and fan casing(s), fan board and motor(s). Units also include non-corrosive main drain pan which is positively sloped in every plane and insulated with closed cell insulation. A thermoplastic auxiliary drain pan is included on fan coil units with standard piping packages. Steel parts exposed to moisture are galvanized. The fan board assembly and both drains pan are easily removable. The fan board assembly includes a quick-disconnect motor plug. The chassis is the structural frame constructed of 18 gauge galvanized steel. The unit is acoustically and thermally insulated with closed cell insulation. Exposed recessed panel is fabricated from 16 gauge steel and ships separate from the unit. All panels are made rigid by channel forming.

Unit Finish

All cabinet parts are cleaned, bonderized, phosphatized and painted with one of six decorator colors. Standard finish meets ASTM B117 specifications (salt spray test).

Fan

The galvanized steel fan wheels are centrifugal forward-curved and double-width. Fan wheels and housings are corrosion resistant. Fan housings are constructed of formed sheet metal.

Electronically Commutated Motors (ECM)

All motors are brushless DC (BLDC) electronically commutated motors (ECM) factory programmed and run tested in assembled units. The motor controller is mounted in a control box with a built in integrated user interface and LED tachometer. If adjustments are needed, motor parameters can be adjusted through momentary contact switches accessible without factory service personnel on the motor control board. Motors will soft ramp between speeds to lessen the acoustics due to sudden speed changes. Motors can be operated at three speeds or at variable speed with factory supplied or field supplied controllers. The motor will choose the highest speed if there are simultaneous or conflicting speed requests. All motors have integral overload protection with a maximum ambient operating temperature of 104.0 F and use permanently sealed ball bearings. Motors can operate at plus or minus 10 percent of rated voltage on all speed settings.

Coil

All water coils are burst tested at 450.00 psi (air) and leak tested at 100.00 psi (air under water). Maximum main coil working pressure is 300.00 psi. Maximum entering water temperature is 200.0 F. Tubes and U-bends are 3/8" OD copper. Fins are aluminum and are mechanically bonded to the copper tubes. Coil connections are 5/8" OD copper tubing.

Coil Air Vents - Manual

Manual air vents are rated at 300 psig.

Coil Connections - (RH)

Right hand coil connection with no interconnecting piping is provided.

Installation Note

Unit leveling and drain line pitch: Set unit level by checking the casing. The Trane Company and the industry in general recommends a drain line pitch of 1" (25mm) drop per ten feet.

WARNING: Tighten all unions when piping units. Factory tightens unions, but they may loosen during shipping.

UC400-B/SYMBIO 400-B

The UC400-B/SYMBIO 400-B controller is a factory installed microprocessor based controller. The controller is located in a control box containing line voltage to 24VAC transformer, ECM engine board, adapter board and disconnect switch (optional). The wires from the transformer are terminated in the factory on the control board. All factory mounted end devices are installed and wires are terminated on the control board. All field connections other than power are made with screw type connections on the control board with the exception of field supplied valves which are connected to a factory supplied harness. This option can be used in a stand-alone application or as part of a Trane Integrated Comfort System (ICS). The UC400-B/SYMBIO 400-B controller ships with a unit of measure over BACnet link in SI units. When a Building Automation System (BAS) is unable to convert to other desired units, a free software tool is available for changing to another unit of measure. A number of control options may be configured to meet the customer's needs at the factory, through an Integrated Comfort System (ICS) or by using Integrated Comfort System (ICS) service tool software. Refer to the current installation operation programming guide (IOM) for all available configurations and control options.

Disconnect Switch

A unit mounted, non-fused disconnect switch is available as a standard option on all units.

End Pockets

Standard end pockets are provided.

Throwaway Filters

The filter is concealed from sight and easily removable. A 1" throwaway filter is provided in the unit.

Low Limit Sensor

This safety option de-energizes the system switch when the low limit sensor, located in the entering airstream, senses a temperature of 36 degrees F (2.2 degrees C) or below. At this condition, this normally closed input latches open, and the fan is shut down. In addition, any end devices will go to their de-energized position. The low limit sensor is factory-installed and wired.

Low Limit Sensor

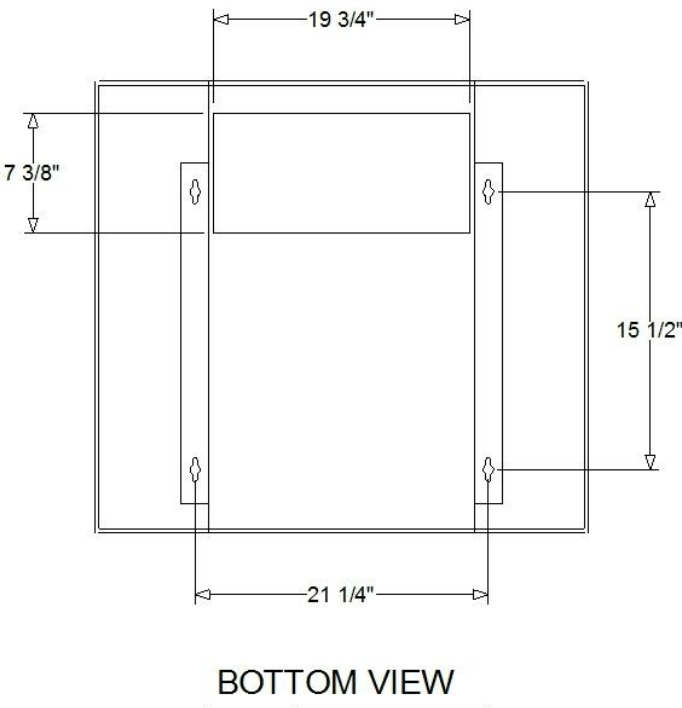
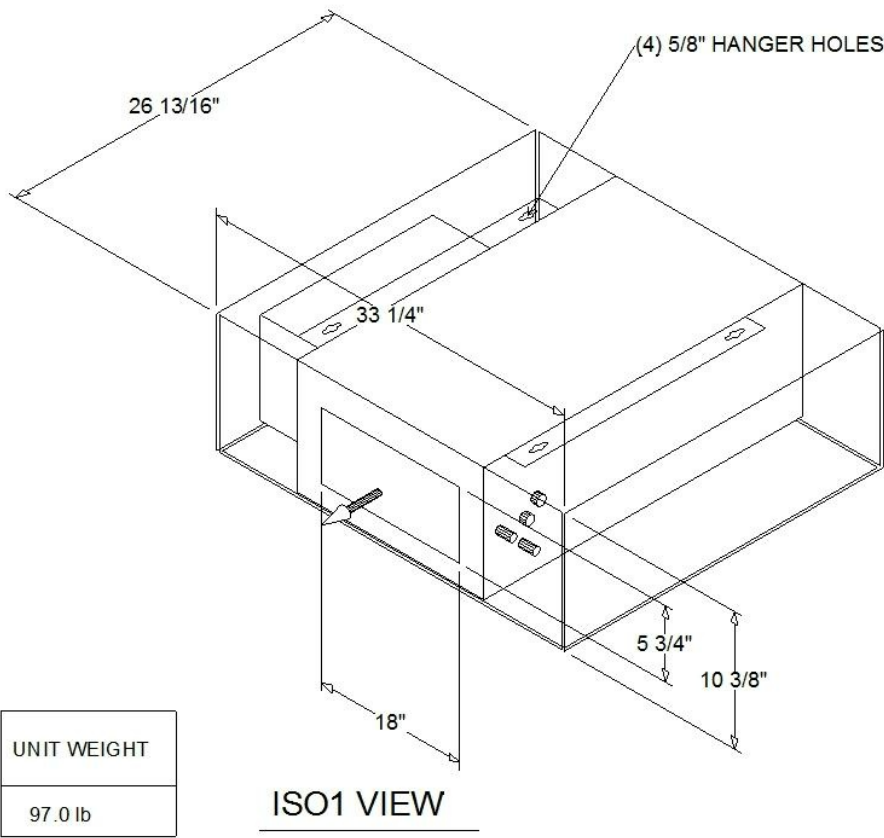
This safety option de-energizes the system switch when the low limit sensor, located in the entering airstream, senses a temperature of 36 degrees F (2.2 degrees C) or below. At this condition, this normally closed input latches open, and the fan is shut down. In addition, any end devices will go to their de-energized position. The low limit sensor is factory-installed and wired.

Condensate Overflow Sensor

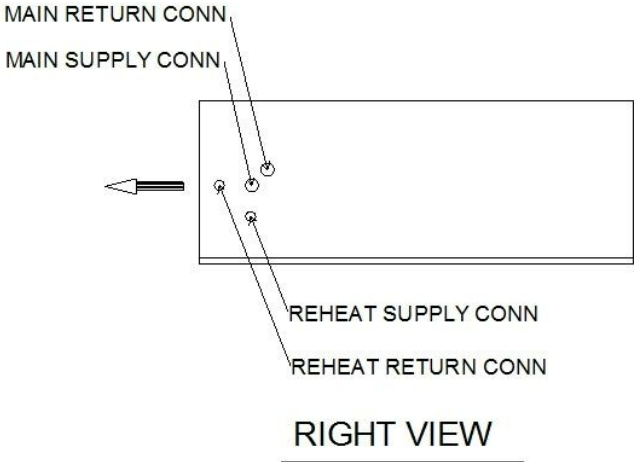
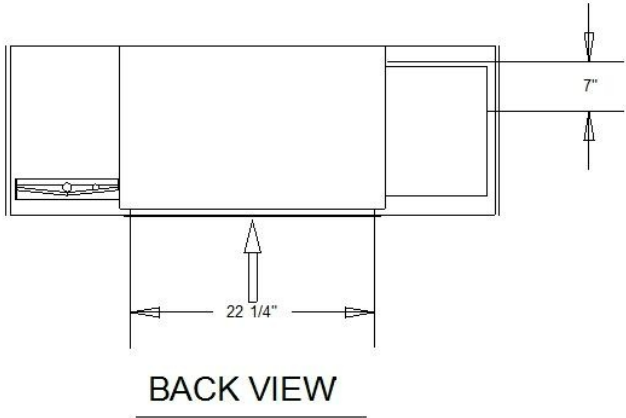
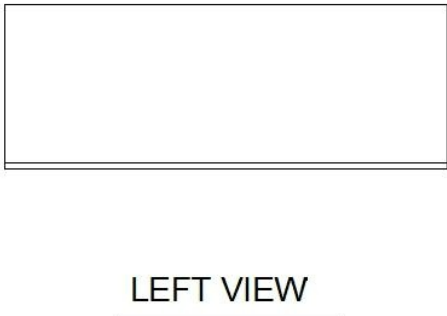
This option de-energizes the system switch when the auxiliary drain pan is in danger of overflowing with condensate. This condition is indicated when the float switch rises to 50% of its travel and the normally closed input latches open. The fan shuts off and any end devices (valves or actuators) go to their de-energized position. The float switch is provided at the auxiliary drain pan and factory-wired.

Dimensional Drawings - Fan Coil Air Conditioning Units

Item: A1 Qty: 3 Tag(s): FCU-123, FCU-226, FCU-326

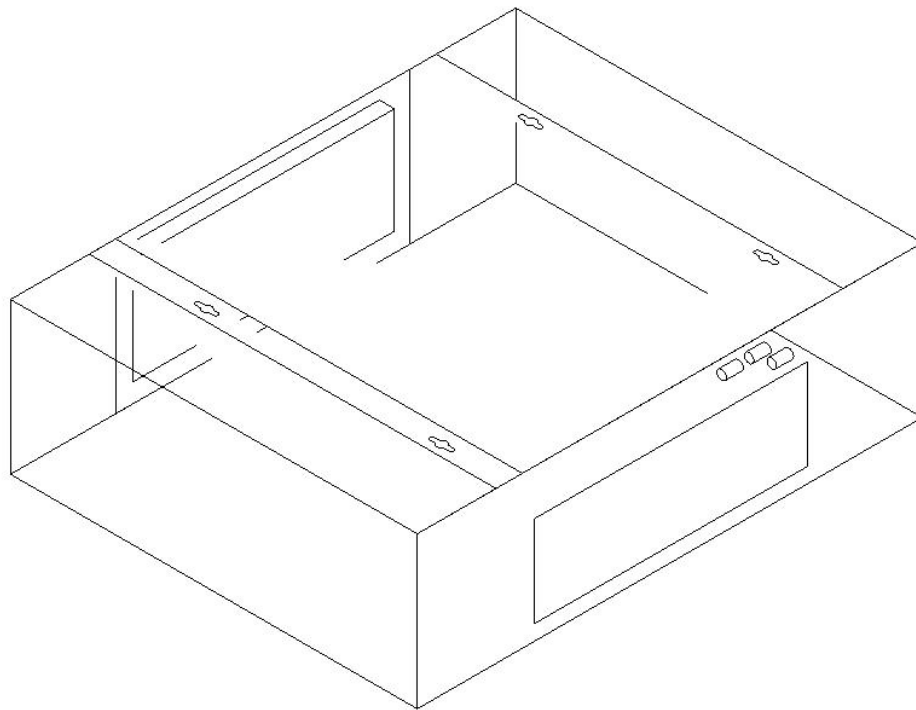


- NOTES:
1. ARROW(S) INDICATE THE DIRECTION OF AIRFLOW.
 2. FILTERS ARE ACCESSED THROUGH THE BOTTOM OF UNIT.
 3. CONTROL WIRES SHOULD ENTER CONTROL BOX THROUGH TOP FRONT KNOCKOUT.
 4. POWER WIRES ARE TO ENTER CONTROL BOX THROUGH FRONT BOTTOM CONDUIT ENTRANCE KNOCKOUTS.
 5. PIPING CONNECTIONS ARE 5/8" OD COPPER.
 6. AUXILIARY DRAIN PAN CONN:
MAIN: 7/8" OD TUBE & CLAMP
SECONDARY: 3/8" ID TUBE
 7. STANDARD ENDPOCKET WIDTH IS 8".



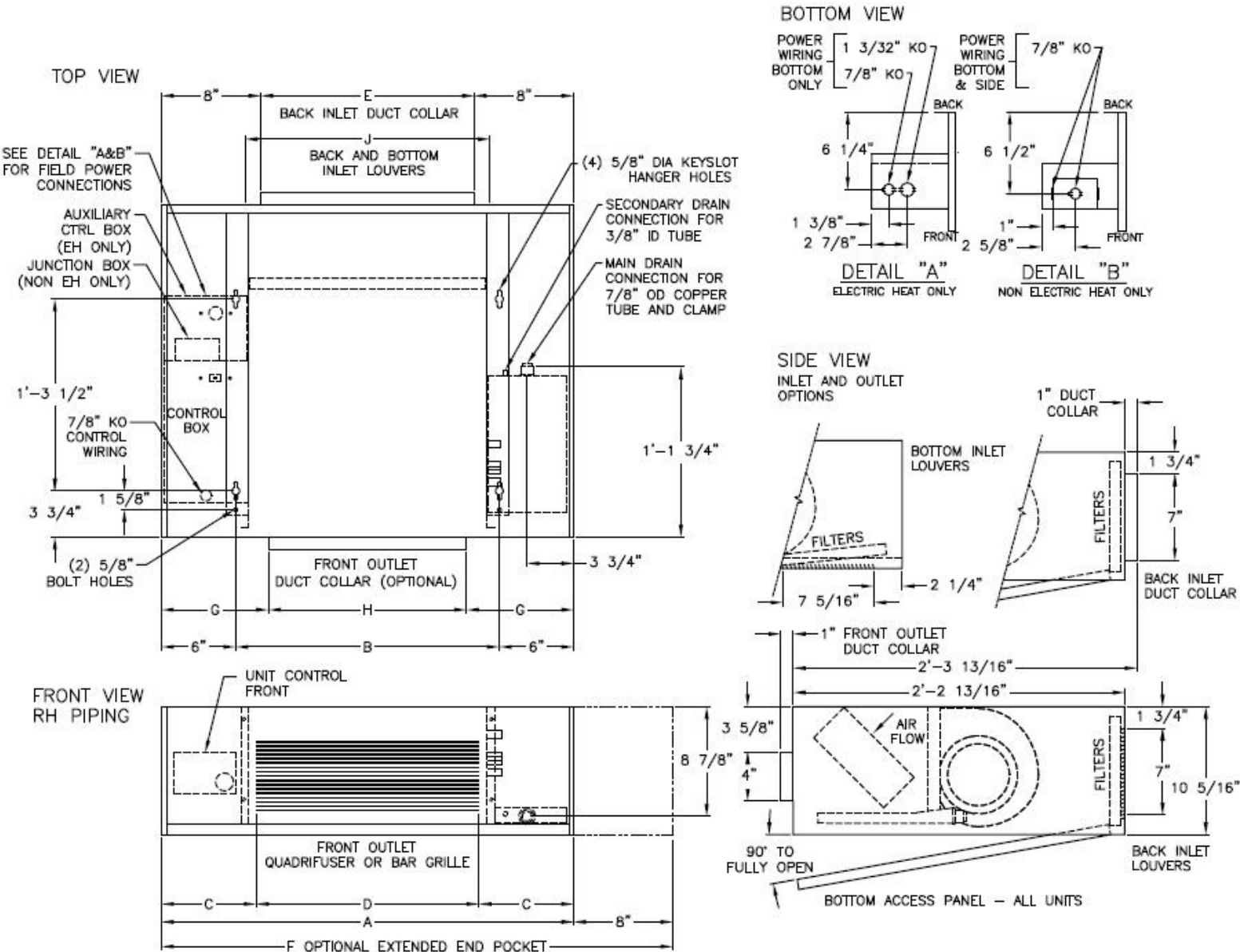
Dimensional Drawings - Fan Coil Air Conditioning Units

Item: A1 Qty: 3 Tag(s): FCU-123, FCU-226, FCU-326



BIM VIEW

Dimensional Drawings - Fan Coil Air Conditioning Units
Item: A1 Qty: 3 Tag(s): FCU-123, FCU-226, FCU-326

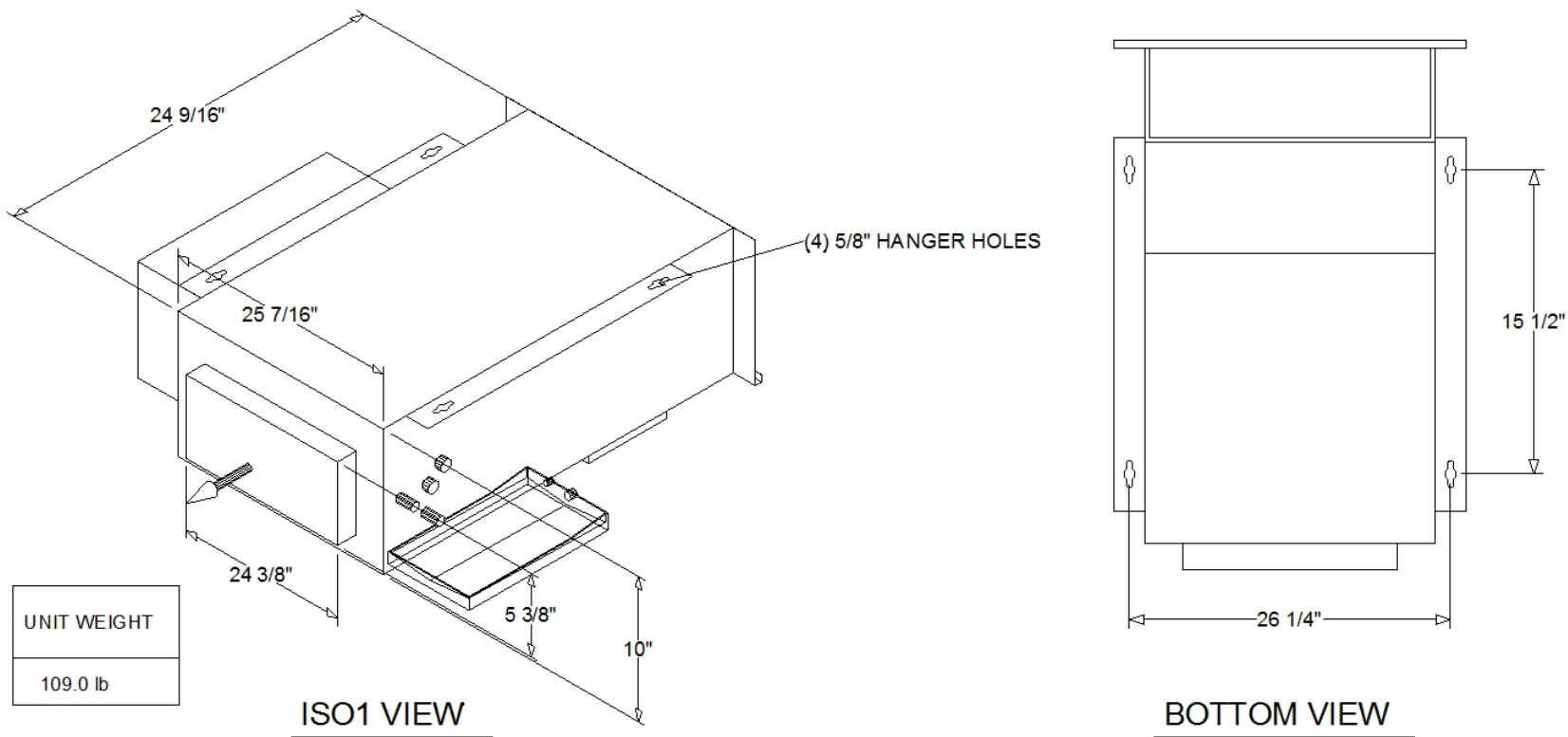


UNIT SIZE	200-300	400	600	800	1000-1200
NO. OF FANS	1	1	2	2	3
NO. OF MOTORS	1	1	1	1	2
A	2'-9 5/16"	3'-2 5/16"	3'-11 3/16"	4'-8 5/16"	6'-3 5/16"
B	1'-9 5/16"	2'-2 5/16"	2'-11 13/16"	3'-8 5/16"	5'-3 5/16"
C	7 5/8"	7 1/8"	8 7/8"	7 1/8"	7 5/8"
D	1'-6"	2'-0"	2'-6"	3'-6"	5'-0"
E	1'-5 1/4"	1'-10 1/4"	2'-7 3/4"	3'-4 1/4"	4'-11 1/4"
F	3'-5 5/16"	3'-10 5/16"	4'-7 3/16"	5'-4 5/16"	6'-11 5/16"
G	8 5/8"	8 1/8"	9 7/8"	8 1/8"	8 5/8"
H	1'-4"	1'-10"	2'-4"	3'-4"	4'-10"
J	1'-7 3/4"	1'-11 3/4"	2'-7 3/4"	3'-3 3/4"	4'-11 3/4"

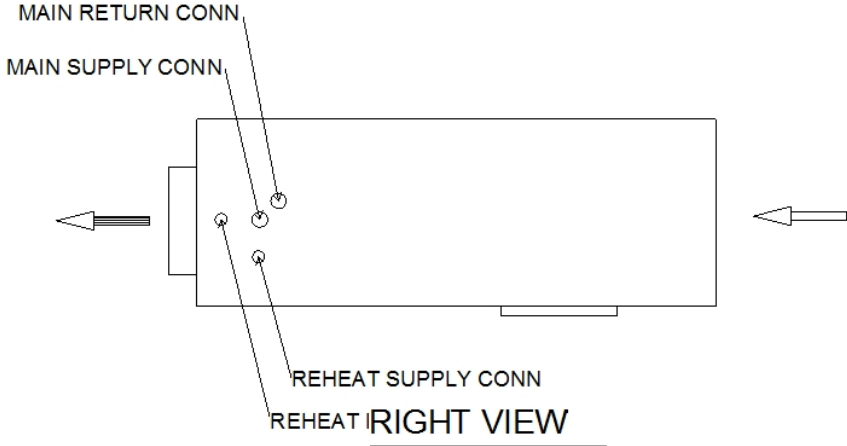
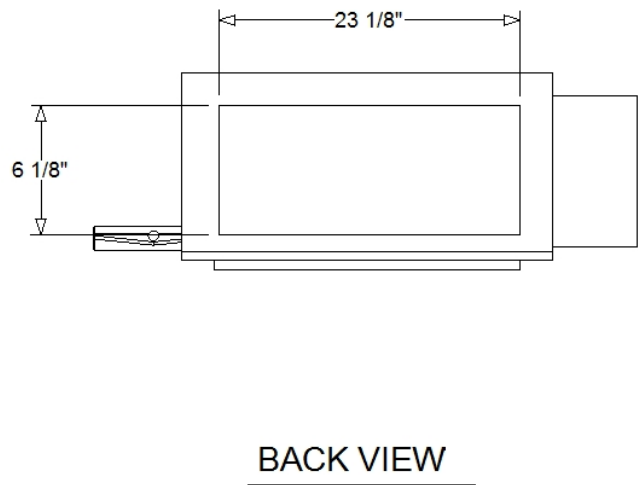
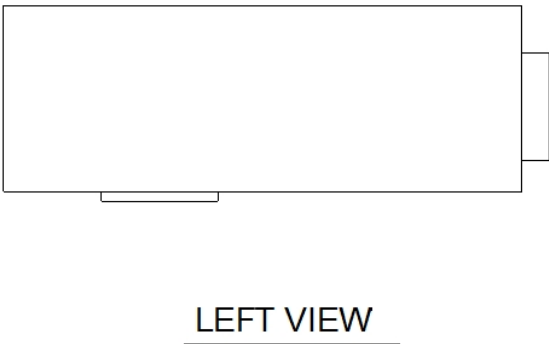
- NOTE:
1. COIL CONNECTIONS ARE ALWAYS ON THE DRAIN PAN SIDE AND OPPOSITE THE CONTROL BOX.
 2. COIL CONNECTIONS ARE 5/8" O.D. SWEAT. SEE PAGES XXXXX FOR LOCATIONS.
 3. ALL DUCT COLLAR DIMENSIONS ARE TO THE OUTSIDE OF THE COLLAR.
 4. SEE PAGES XXXXXX FOR DIMENSIONS FOR OUTSIDE AIR OPENINGS.

Dimensional Drawings - Fan Coil Air Conditioning Units

Item: A2 Qty: 72 Tag(s): FCU-101, FCU-102, FCU-103, FCU-104, FCU-105, FCU-106, FCU-107, FCU-108, FCU-109, FCU-110, FCU-111, FCU-112, FCU-113, FCU-114, FCU-115, FCU-116, FCU-117, FCU-118, FCU-119, FCU-120, FCU-121, FCU-122, FCU-201, FCU-202, FCU-203, FCU-204, FCU-205, FCU-206, FCU-207, FCU-208, FCU-209, FCU-210, FCU-211, FCU-212, FCU-213, FCU-214, FCU-215, FCU-216, FCU-217, FCU-218, FCU-219, ...

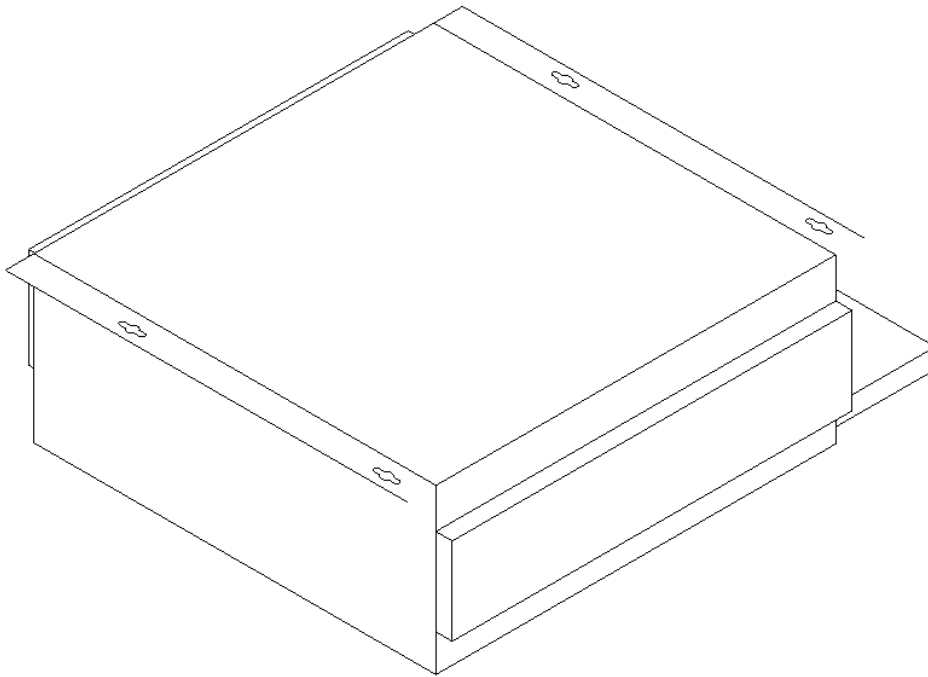


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- 1. ARROW(S) INDICATE THE DIRECTION OF AIRFLOW.
 - 2. FILTERS ARE ACCESSED THROUGH THE BOTTOM OF UNIT.
 - 3. CONTROL WIRES SHOULD ENTER CONTROL BOX THROUGH TOP FRONT KNOCKOUT.
 - 4. POWER WIRES ARE TO ENTER CONTROL BOX THROUGH FRONT BOTTOM CONDUIT ENTRANCE KNOCKOUTS.
 - 5. PIPING CONNECTIONS ARE 5/8" OD COPPER.
 - 6. AUXILIARY DRAIN PAN CONN:
MAIN: 7/8" OD TUBE & CLAMP
SECONDARY: 3/8" ID TUBE
 - 7. STANDARD ENDPOCKET WIDTH IS 8".



Dimensional Drawings - Fan Coil Air Conditioning Units

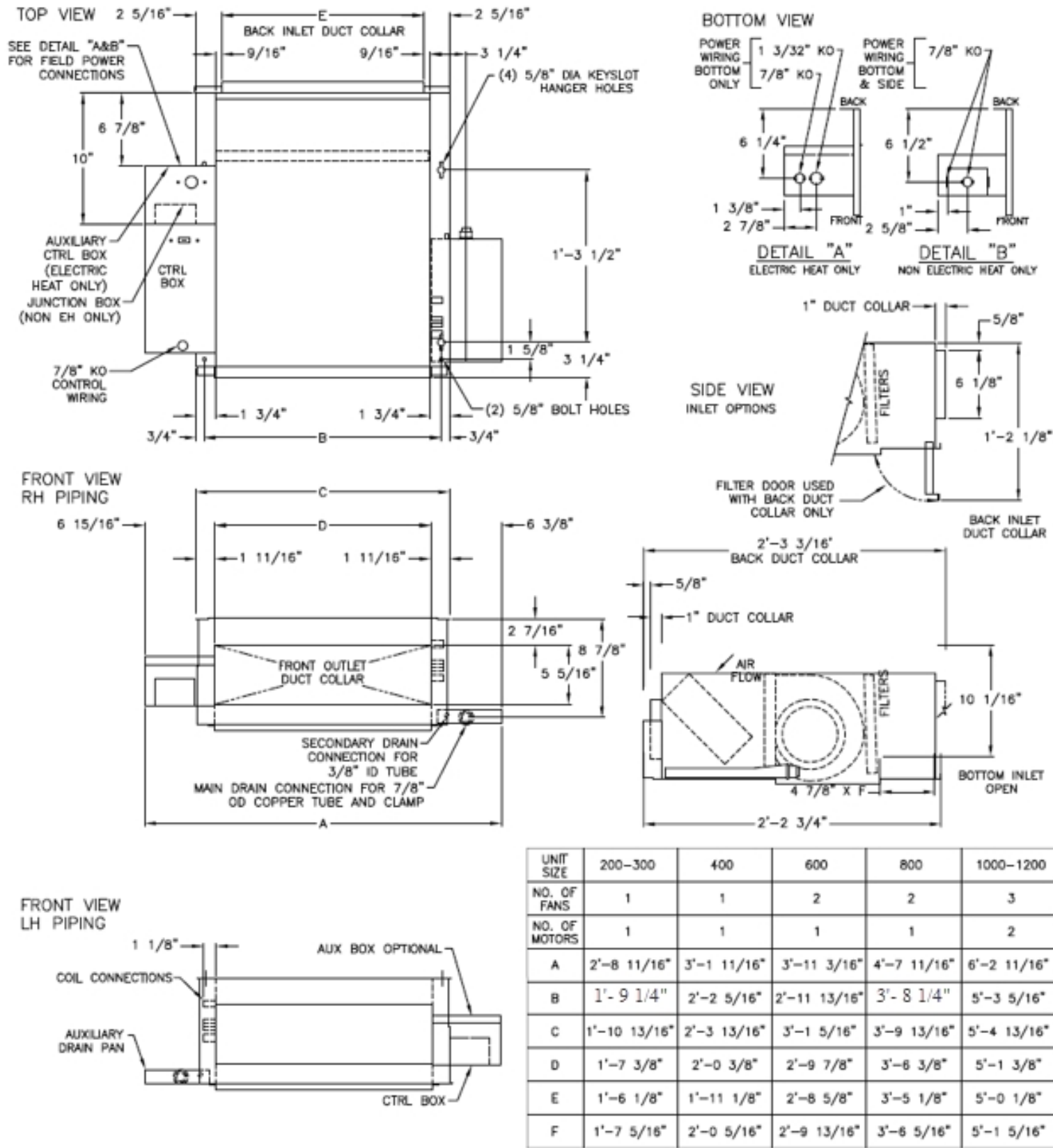
Item: A2 Qty: 72 Tag(s): FCU-101, FCU-102, FCU-103, FCU-104, FCU-105, FCU-106, FCU-107, FCU-108, FCU-109, FCU-110, FCU-111, FCU-112, FCU-113, FCU-114, FCU-115, FCU-116, FCU-117, FCU-118, FCU-119, FCU-120, FCU-121, FCU-122, FCU-201, FCU-202, FCU-203, FCU-204, FCU-205, FCU-206, FCU-207, FCU-208, FCU-209, FCU-210, FCU-211, FCU-212, FCU-213, FCU-214, FCU-215, FCU-216, FCU-217, FCU-218, FCU-219, ...



BIM VIEW

Dimensional Drawings - Fan Coil Air Conditioning Units

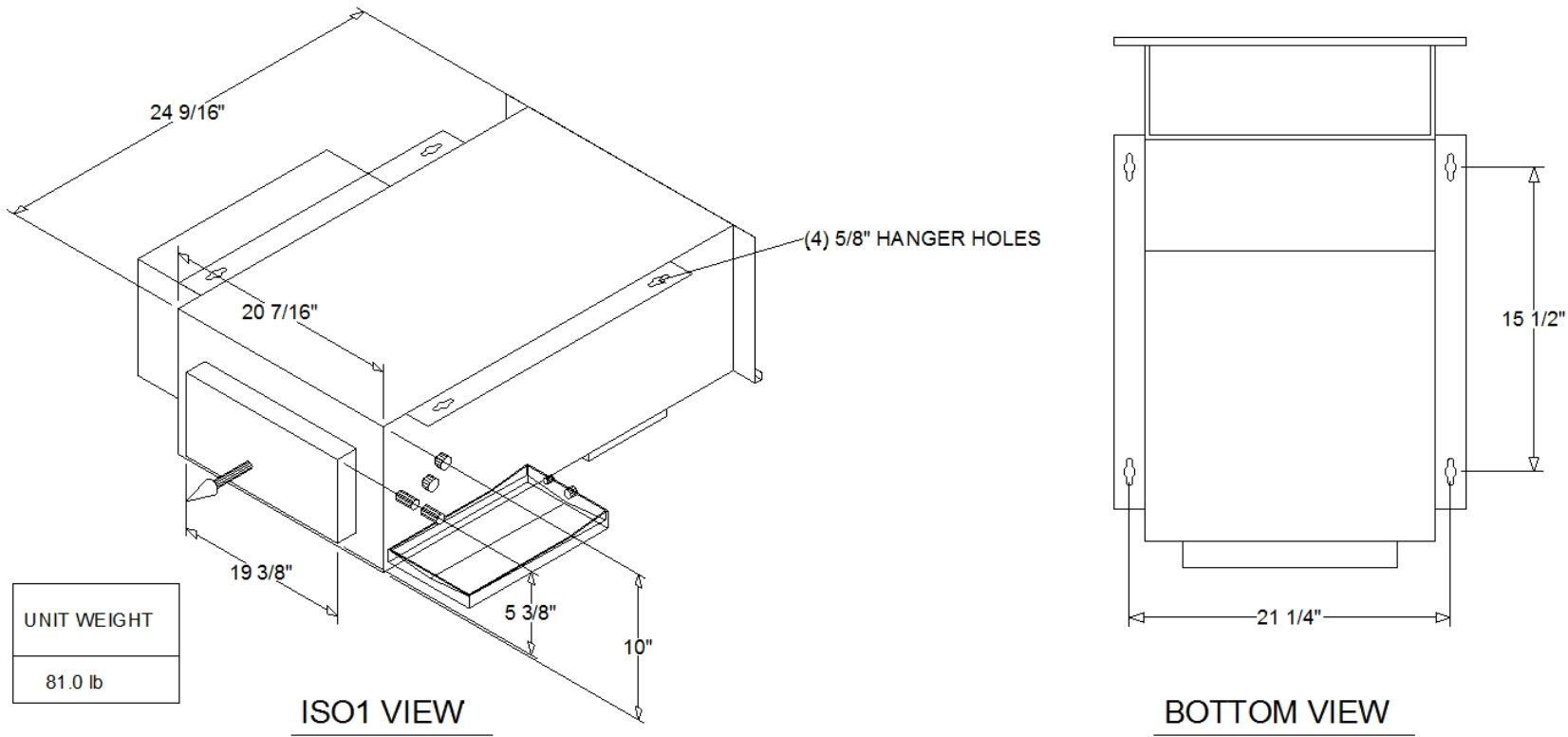
Item: A2, A3 Qty: 75 Tag(s): FCU-101, FCU-102, FCU-103, FCU-104, FCU-105, FCU-106, FCU-107, FCU-108, FCU-109, FCU-110, FCU-111, FCU-112, FCU-113, FCU-114, FCU-115, FCU-116, FCU-117, FCU-118, FCU-119, FCU-120, FCU-121, FCU-122, FCU-201, FCU-202, FCU-203, FCU-204, FCU-205, FCU-206, FCU-207, FCU-208, FCU-209, FCU-210, FCU-211, FCU-212, FCU-213, FCU-214, FCU-215, FCU-216, FCU-217, FCU-218, FCU-219, ...



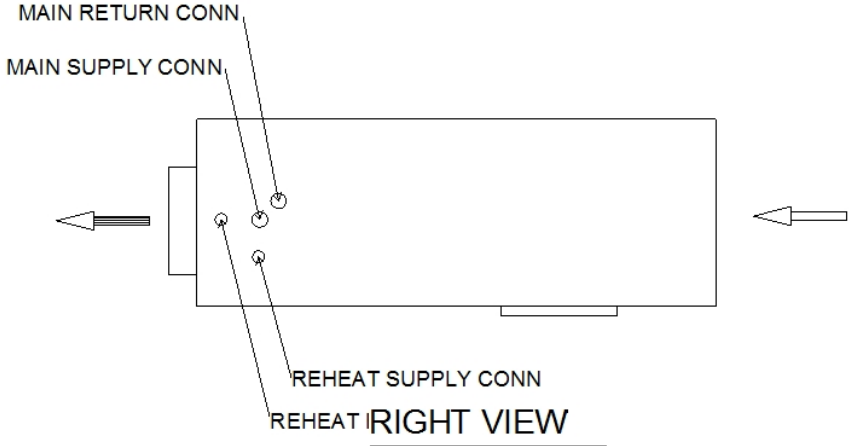
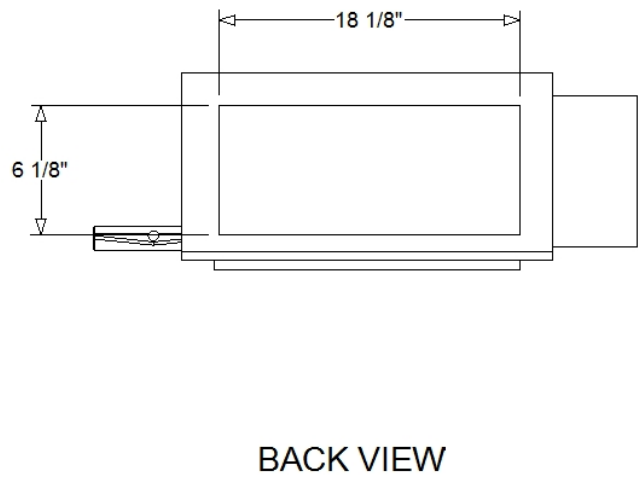
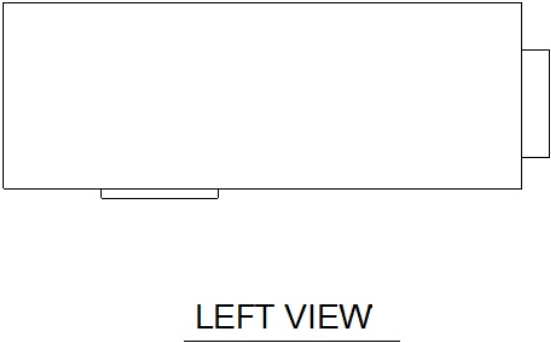
NOTE:

1. COIL CONNECTIONS ARE ALWAYS ON THE DRAIN PAN SIDE AND OPPOSITE THE CONTROL BOX.
2. COIL CONNECTIONS ARE 5/8" O.D. SWEAT. SEE PAGES XXXXX FOR LOCATIONS.
3. ALL DUCT COLLAR DIMENSIONS ARE TO THE OUTSIDE OF THE COLLAR.
4. SEE PAGES XXXXXX FOR DIMENSIONS FOR OUTSIDE AIR OPENINGS.

Dimensional Drawings - Fan Coil Air Conditioning Units
Item: A3 Qty: 3 Tag(s): FCU-124, FCU-227, FCU-327

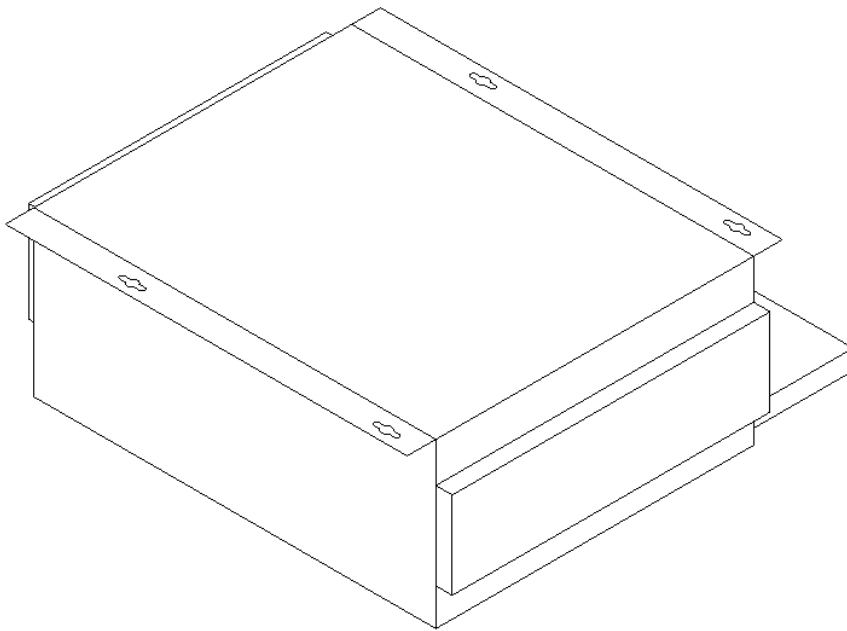


- NOTES:
1. ARROW(S) INDICATE THE DIRECTION OF AIRFLOW.
 2. FILTERS ARE ACCESSED THROUGH THE BOTTOM OF UNIT.
 3. CONTROL WIRES SHOULD ENTER CONTROL BOX THROUGH TOP FRONT KNOCKOUT.
 4. POWER WIRES ARE TO ENTER CONTROL BOX THROUGH FRONT BOTTOM CONDUIT ENTRANCE KNOCKOUTS.
 5. PIPING CONNECTIONS ARE 5/8" OD COPPER.
 6. AUXILIARY DRAIN PAN CONN:
MAIN: 7/8" OD TUBE & CLAMP
SECONDARY: 3/8" ID TUBE
 7. STANDARD ENDPOCKET WIDTH IS 8".



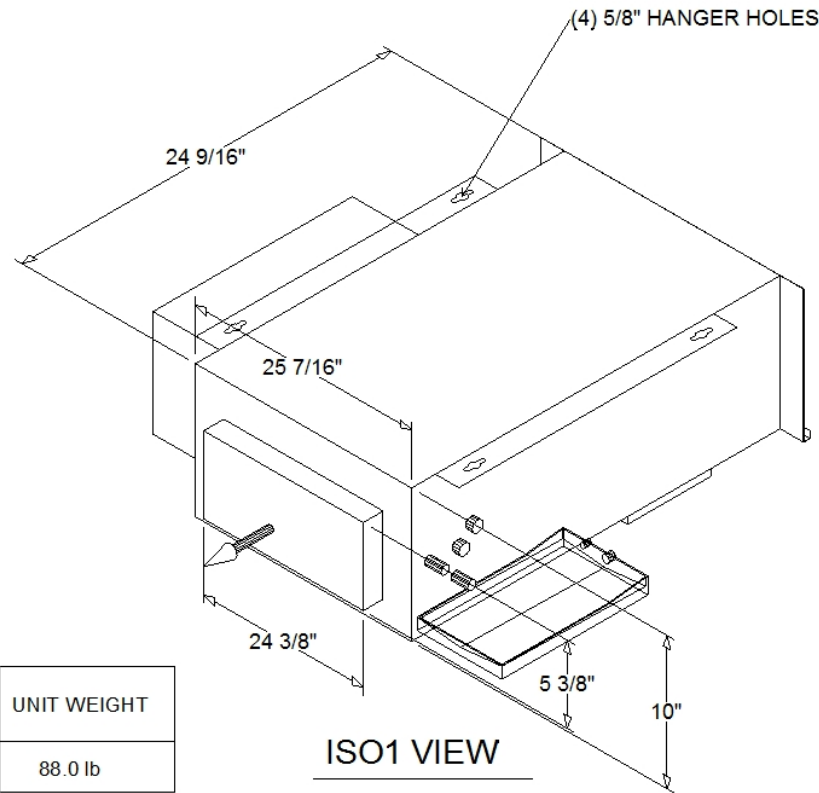
Dimensional Drawings - Fan Coil Air Conditioning Units

Item: A3 Qty: 3 Tag(s): FCU-124, FCU-227, FCU-327

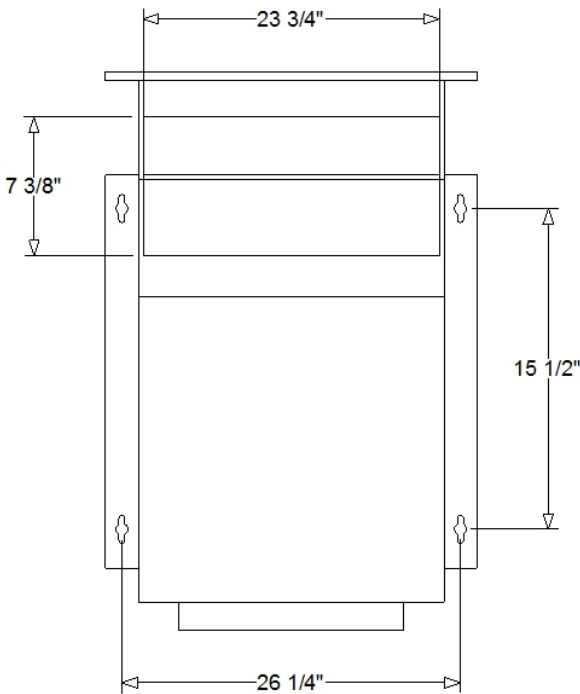
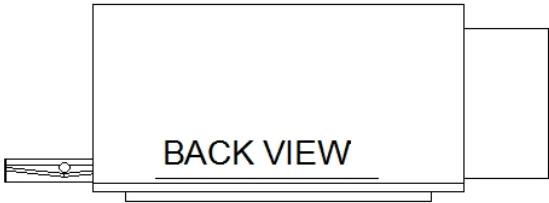


BIM VIEW

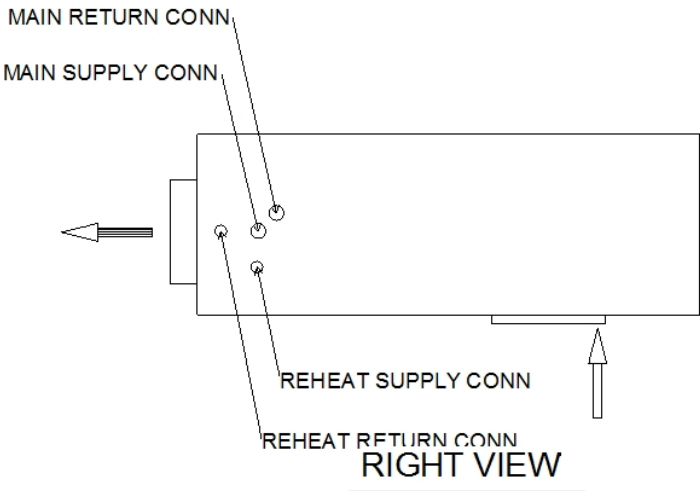
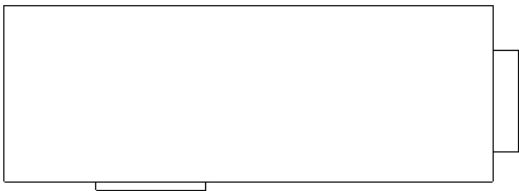
Dimensional Drawings - Fan Coil Air Conditioning Units
Item: A4 Qty: 3 Tag(s): FCU-125, FCU-228, FCU-328



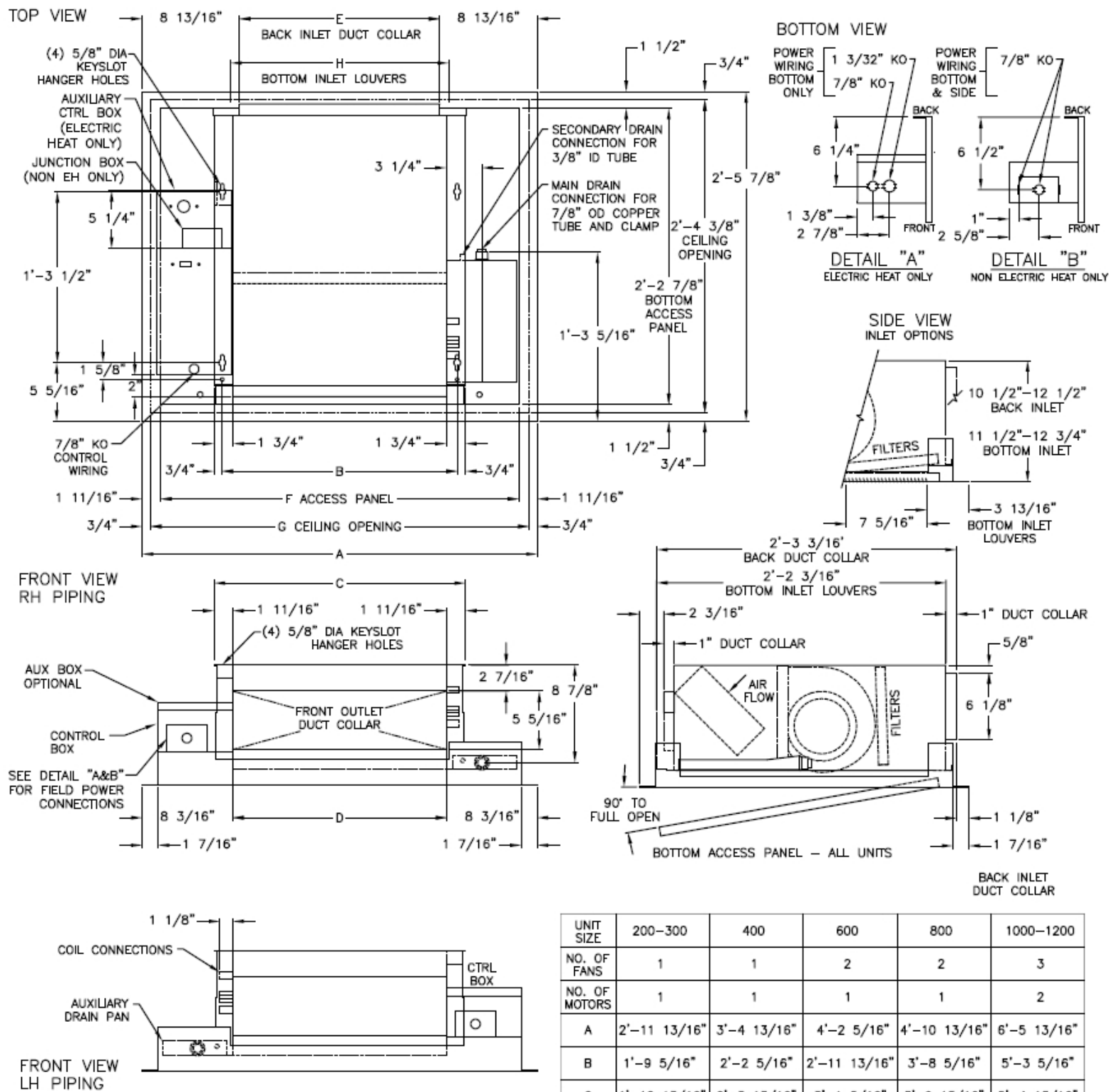
- NOTES:
1. ARROW(S) INDICATE THE DIRECTION OF AIRFLOW.
 2. FILTERS ARE ACCESSED THROUGH THE BOTTOM OF UNIT.
 3. RECESSED UNIT CEILING CUTOUT OPENING IS 28 3/8" X 39 1/8". RECESSING TRIM RING IS CENTERED IN THE OPENING.
 4. CONTROL WIRES SHOULD ENTER CONTROL BOX THROUGH TOP FRONT KNOCKOUT.
 5. POWER WIRES ARE TO ENTER CONTROL BOX THROUGH FRONT BOTTOM CONDUIT ENTRANCE KNOCKOUTS.
 6. AUXILIARY DRAIN PAN CONN:
MAIN: 7/8" OD TUBE & CLAMP
SECONDARY: 3/8" ID TUBE
 7. PIPING CONNECTIONS ARE 5/8" OD COPPER.



BOTTOM VIEW



Dimensional Drawings - Fan Coil Air Conditioning Units
Item: A4 Qty: 3 Tag(s): FCU-125, FCU-228, FCU-328

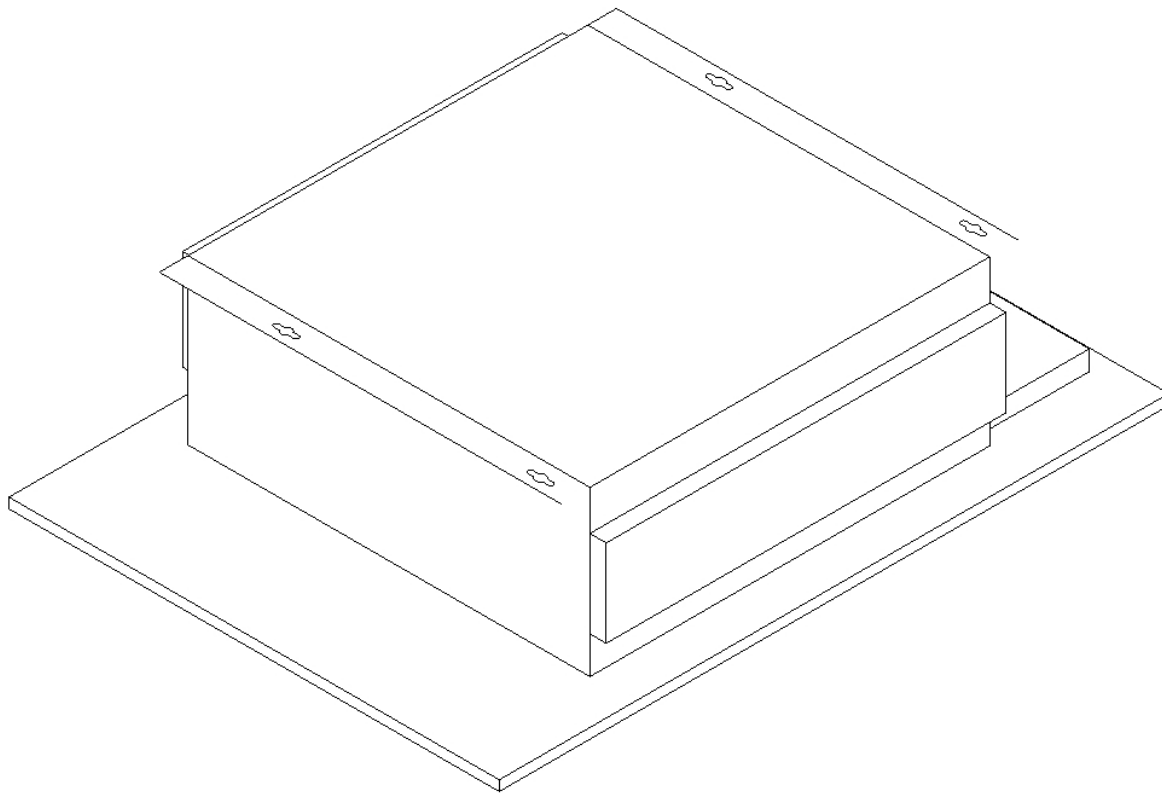


- NOTE:
1. COIL CONNECTIONS ARE ALWAYS ON THE DRAIN PAN SIDE AND OPPOSITE THE CONTROL BOX.
 2. COIL CONNECTIONS ARE 5/8" O.D. SWEAT. SEE PAGES XXXXX FOR LOCATIONS.
 3. ALL DUCT COLLAR DIMENSIONS ARE TO THE OUTSIDE OF THE COLLAR.
 4. SEE PAGES XXXXXX FOR DIMENSIONS FOR OUTSIDE AIR OPENINGS.

UNIT SIZE	200-300	400	600	800	1000-1200
NO. OF FANS	1	1	2	2	3
NO. OF MOTORS	1	1	1	1	2
A	2'-11 13/16"	3'-4 13/16"	4'-2 5/16"	4'-10 13/16"	6'-5 13/16"
B	1'-9 5/16"	2'-2 5/16"	2'-11 13/16"	3'-8 5/16"	5'-3 5/16"
C	1'-10 13/16"	2'-3 13/16"	3'-1 5/16"	3'-9 13/16"	5'-4 13/16"
D	1'-7 3/8"	2'-0 3/8"	2'-9 7/8"	3'-6 3/8"	5'-1 3/8"
E	1'-6 1/8"	1'-11 1/8"	2'-8 5/8"	3'-5 1/8"	5'-0 1/8"
F	2'-8 7/16"	3'-1 7/16"	3'-10 15/16"	4'-7 7/16"	6'-2 7/16"
G	2'-10 5/16"	3'-3 5/16"	4'-0 13/16"	4'-9 5/16"	6'-4 5/16"
H	1'-7 3/4"	1'-11 3/4"	2'-7 3/4"	3'-3 3/4"	4'-11 3/4"

Dimensional Drawings - Fan Coil Air Conditioning Units

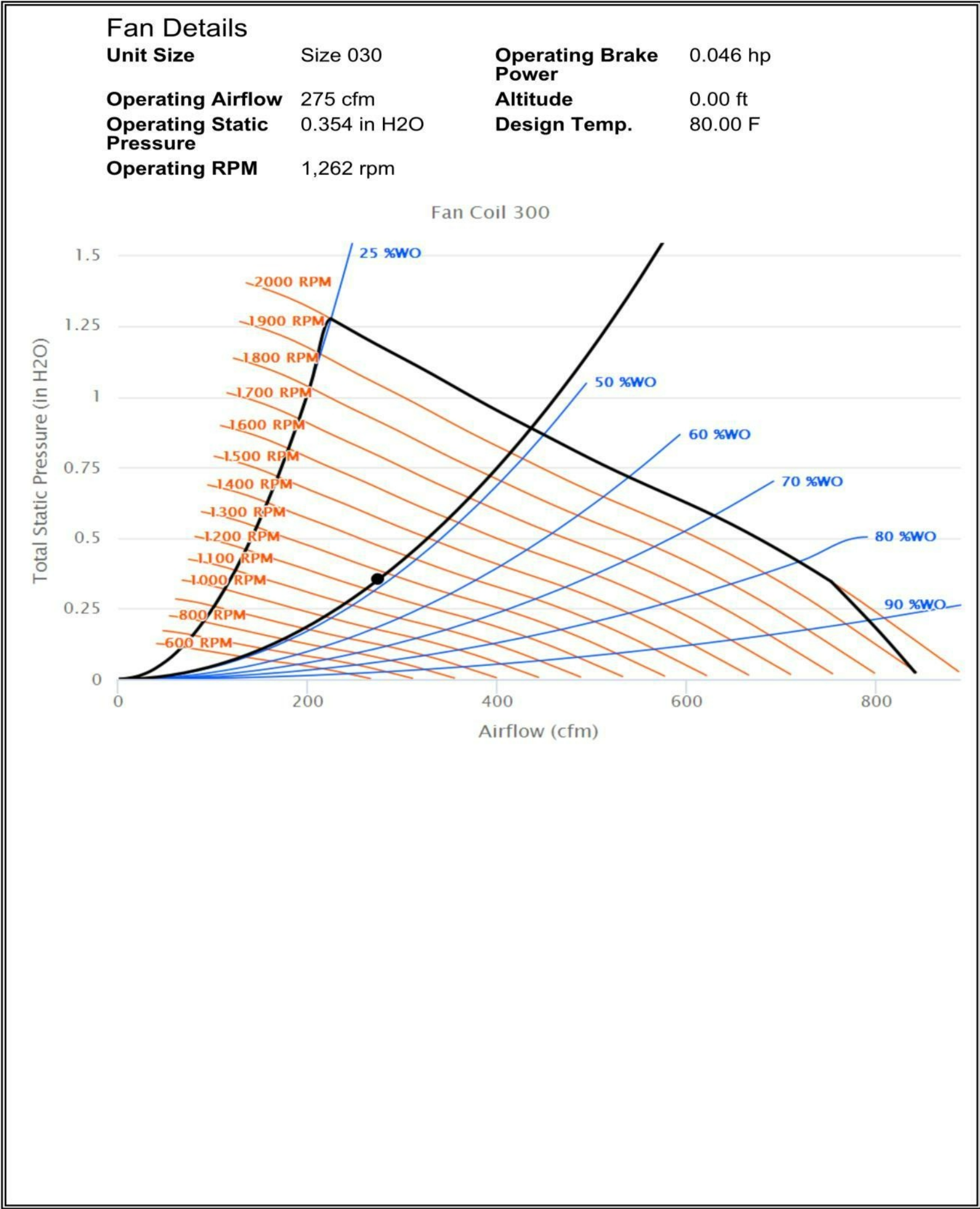
Item: A4 Qty: 3 Tag(s): FCU-125, FCU-228, FCU-328



BIM VIEW

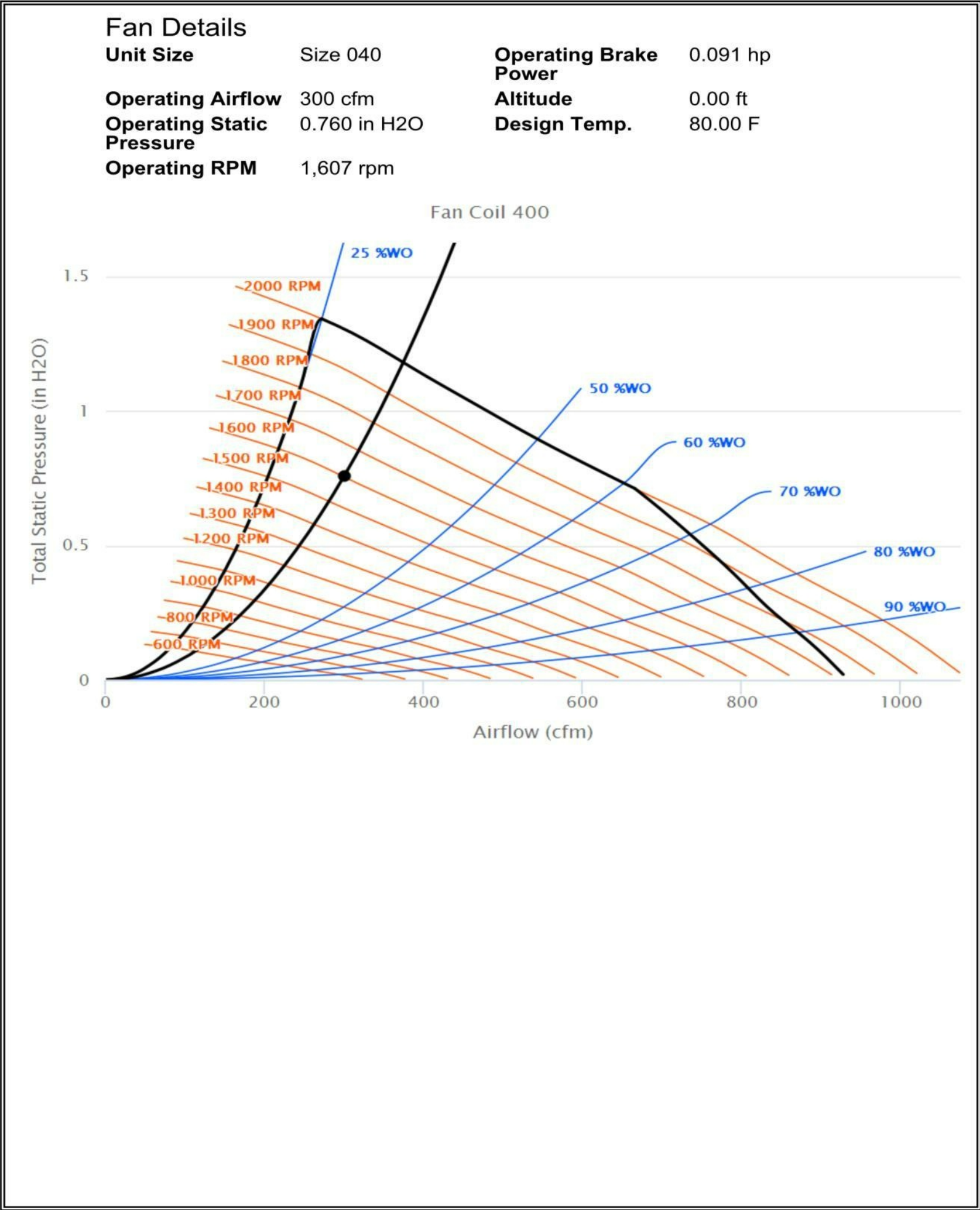
Fan Curve - Fan Coil Air Conditioning Units

Item: A1 Qty: 3 Tag(s): FCU-123, FCU-226, FCU-326

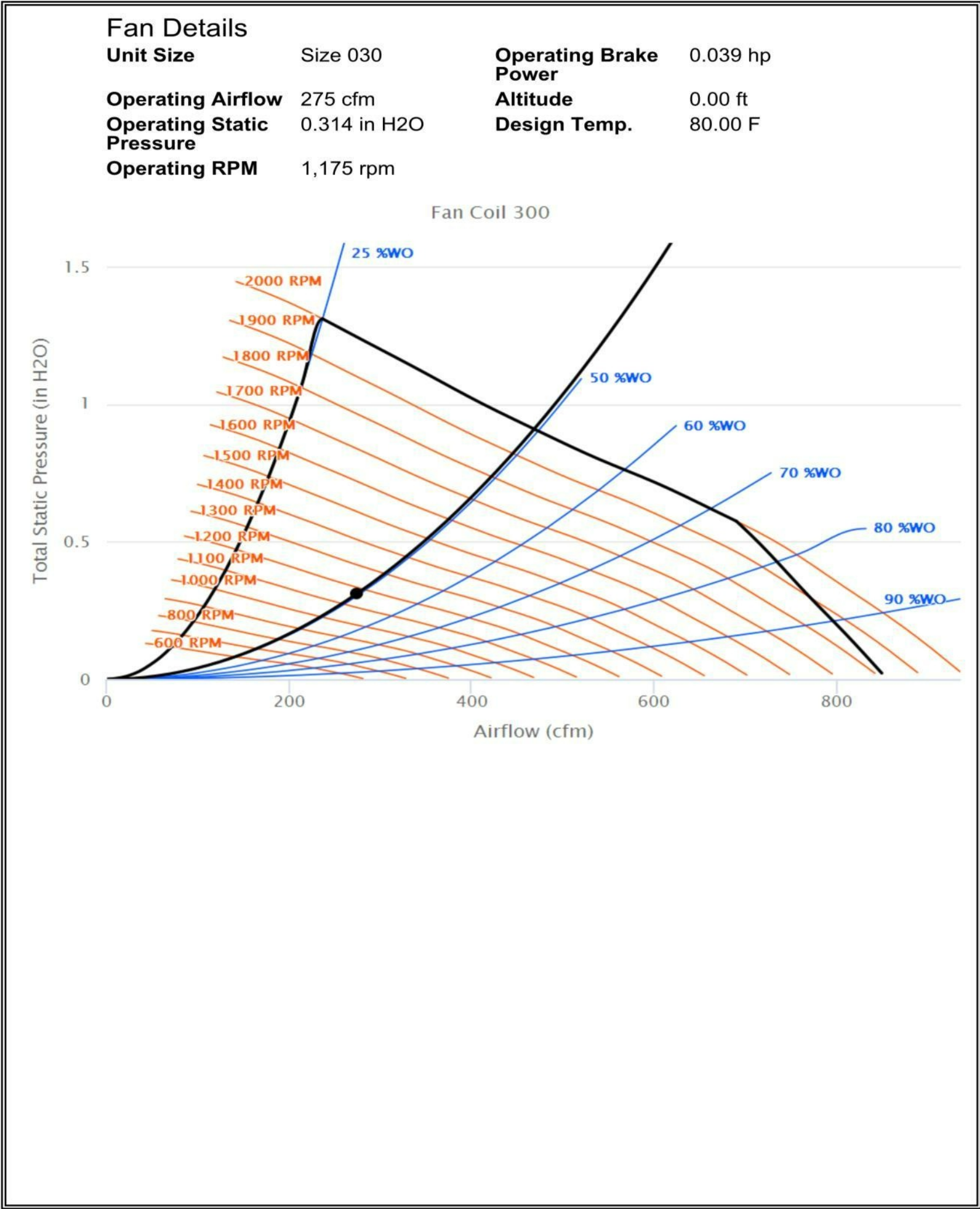


Fan Curve - Fan Coil Air Conditioning Units

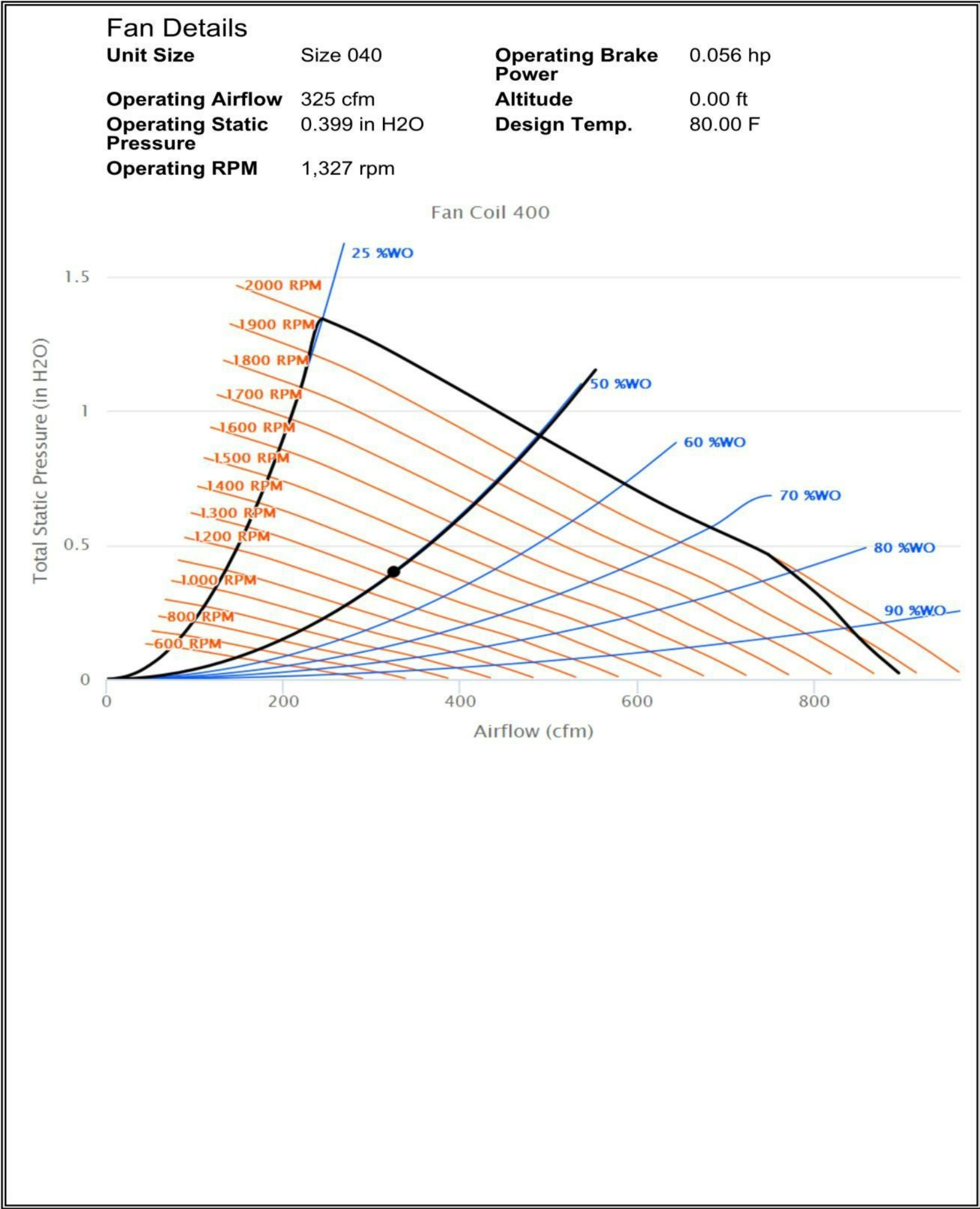
Item: A2 Qty: 72 Tag(s): FCU-101, FCU-102, FCU-103, FCU-104, FCU-105, FCU-106, FCU-107, FCU-108, FCU-109, FCU-110, FCU-111, FCU-112, FCU-113, FCU-114, FCU-115, FCU-116, FCU-117, FCU-118, FCU-119, FCU-120, FCU-121, FCU-122, FCU-201, FCU-202, FCU-203, FCU-204, FCU-205, FCU-206, FCU-207, FCU-208, FCU-209, FCU-210, FCU-211, FCU-212, FCU-213, FCU-214, FCU-215, FCU-216, FCU-217, FCU-218, FCU-219, ...



Fan Curve - Fan Coil Air Conditioning Units
Item: A3 Qty: 3 Tag(s): FCU-124, FCU-227, FCU-327



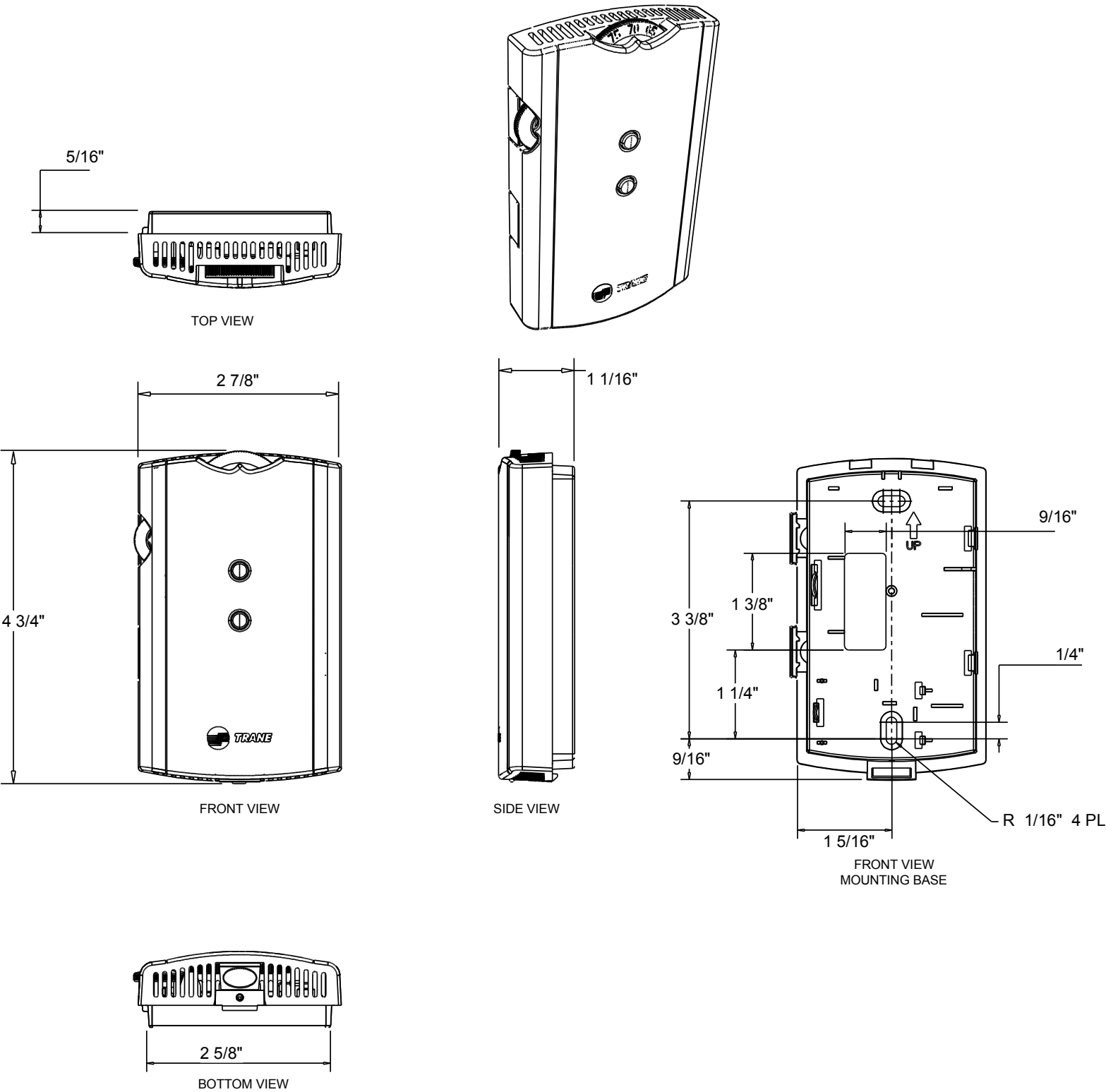
Fan Curve - Fan Coil Air Conditioning Units
Item: A4 Qty: 3 Tag(s): FCU-125, FCU-228, FCU-328



Accessory - Fan Coil Air Conditioning Units

Item: A1 - A4 Qty: 81 Tag(s): FCU-123, FCU-226, FCU-326, FCU-101, FCU-102, FCU-103, FCU-104, FCU-105, FCU-106, FCU-107, FCU-108, FCU-109, FCU-110, FCU-111, FCU-112, FCU-113, FCU-114, FCU-115, FCU-116,

X1379084201-Zone Sen Set TOV 3SpFan



FCU-117, FCU-118, FCU-119, FCU-120, FCU-121, FCU-122, FCU-201, FCU-202, FCU-203, FCU-204, FCU-205, FCU-206, FCU-207, FCU-208, FCU-209, FCU-210, FCU-211, FCU-212, FCU-213, FCU-214, FCU-215, FCU-216, ...

Accessory - Fan Coil Air Conditioning Units

Item: A1 - A4 Qty: 81 Tag(s): FCU-123, FCU-226, FCU-326, FCU-101, FCU-102, FCU-103, FCU-104, FCU-105, FCU-106, FCU-107, FCU-108, FCU-109, FCU-110, FCU-111, FCU-112, FCU-113, FCU-114, FCU-115, FCU-116, FCU-117, FCU-118, FCU-119, FCU-120, FCU-121, FCU-122, FCU-201, FCU-202, FCU-203, FCU-204, FCU-205, FCU-206, FCU-207, FCU-208, FCU-209, FCU-210, FCU-211, FCU-212, FCU-213, FCU-214, FCU-215, FCU-216, ...

Table 1. UniTrane® Fan-Coil general data

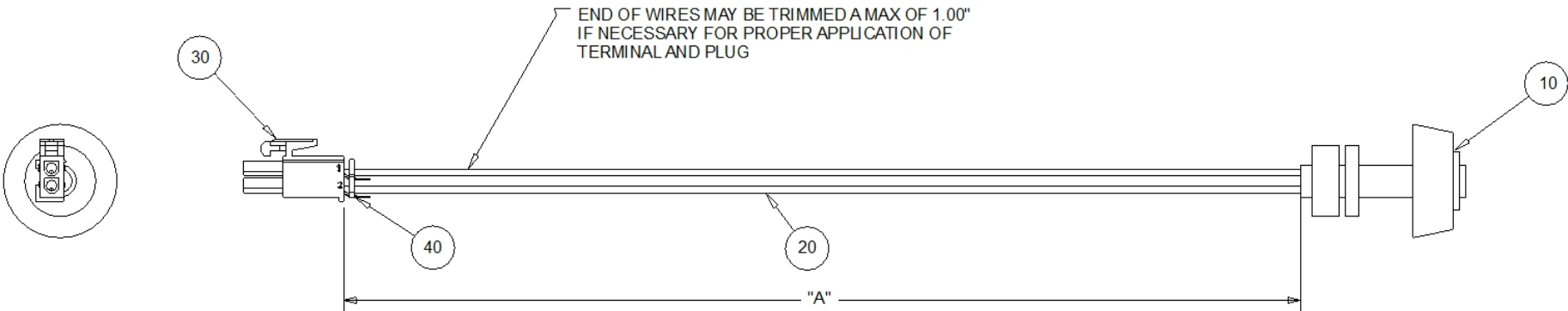
Unit Size	02	03	04	06	08	10	12
Coil Data							
Face Area—ft ² (cm ²)	0.8 (743)	0.8 (743)	1.1 (1020)	1.6 (1490)	2.1 (1950)	3.2 (2970)	3.2 (2970)
L x D x H—in. (cm)							
2-Row	15 x 1.7 x 8 (38 x 4 x 20)	15 x 1.7 x 8 (38 x 4 x 20)	20 x 1.7 x 8 (51 x 4 x 20)	29.5 x 1.7 x 8 (75 x 4 x 20)	38 x 1.7 x 8 (97 x 4 x 20)	57 x 1.7 x 8 (145 x 4 x 20)	57 x 1.7 x 8 (145 x 4 x 20)
3-Row	15 x 2.6 x 8 (38 x 7 x 20)	15 x 2.6 x 8 (38 x 7 x 20)	20 x 2.6 x 8 (51 x 7 x 20)	29.5 x 2.6 x 8 (75 x 7 x 20)	38 x 2.6 x 8 (97 x 7 x 20)	57 x 2.6 x 8 (145 x 7 x 20)	57 x 2.6 x 8 (145 x 7 x 20)
4-Row	15 x 3.5 x 8 (38 x 9 x 20)	15 x 3.5 x 8 (38 x 9 x 20)	20 x 3.5 x 8 (51 x 9 x 20)	29.5 x 3.5 x 8 (75 x 9 x 20)	38 x 3.5 x 8 (97 x 9 x 20)	57 x 3.5 x 8 (145 x 9 x 20)	57 x 3.5 x 8 (145 x 9 x 20)
Volume—gal (L)							
1-Row (Heat)	0.06 (0.23)	0.06 (0.23)	0.08 (0.30)	0.11 (0.42)	0.14 (0.53)	0.21 (0.79)	0.21 (0.79)
2-Row	0.12 (0.45)	0.12 (0.45)	0.15 (0.57)	0.22 (0.83)	0.28 (1.06)	0.42 (1.59)	0.42 (1.59)
3-Row	0.18 (0.68)	0.18 (0.68)	0.23 (0.87)	0.33 (1.25)	0.42 (1.59)	0.62 (2.35)	0.62 (2.35)
4-Row	0.24 (0.91)	0.24 (0.91)	0.30 (1.14)	0.44 (1.67)	0.56 (2.12)	0.83 (3.14)	0.83 (3.14)
Fins/ft (cm)							
2-Row	144 (4.7)	144 (4.7)	144 (4.7)	144 (4.7)	144 (4.7)	144 (4.7)	144 (4.7)
3-Row	144 (4.7)	144 (4.7)	144 (4.7)	144 (4.7)	144 (4.7)	144 (4.7)	144 (4.7)
4-Row	144 (4.7)	144 (4.7)	144 (4.7)	144 (4.7)	144 (4.7)	144 (4.7)	144 (4.7)
Reheat Coil Data (1-Row)							
Hot Water or Steam							
Face Area—ft ² (cm ²)	0.6 (557)	0.6 (557)	0.8 (743)	1.2 (1120)	1.6 (1490)	2.4 (2230)	2.4 (2230)
L x D x H—in. (cm)	15 x 1.5 x 6 (38 x 4 x 15)	15 x 1.5 x 6 (38 x 4 x 15)	20 x 1.5 x 6 (51 x 4 x 15)	29.5 x 1.5 x 6 (75 x 4 x 15)	38 x 1.5 x 6 (97 x 4 x 15)	57 x 1.5 x 6 (145 x 4 x 15)	57 x 1.5 x 6 (145 x 4 x 15)
Volume—gal (L)	0.12 (0.45)	0.12 (0.45)	0.15 (0.57)	0.22 (0.83)	0.28 (1.06)	0.42 (1.59)	0.42 (1.59)
Fins/ft (cm)	48 (1.6)	48 (1.6)	48 (1.6)	48 (1.6)	48 (1.6)	48 (1.6)	48 (1.6)
Fan/Motor Data							
Fan Quantity	1	1	1	2	2	3	3
Size—Dia" x Width" (cm)	6.31 x 4 (16 x 10)	6.31 x 6.5 (16 x 17)	6.31 x 7.5 (16 x 19)	6.31 x 6.5 (16 x 17)	6.31 x 7.5 (16 x 19)	(1) 6.31 x 7.5 (16 x 19)	6.31 x 7.5 (16 x 19)
Size—Dia" x Width" (cm)						(2) 6.31x6.5 (16 x 6.5)	
Motor Quantity	1	1	1	1	1	2	2
Filter Data							
1" (cm) TA and PI. Media							
Quantity	1	1	1	1	1	1	1
Size—in. (cm)	8-7/8 x 19-1/8 (23 x 49)	8-7/8 x 19-1/8 (23 x 49)	8-7/8 x 24-1/8 (23 x 61)	8-7/8 x 33-5/8 (23 x 85)	8-7/8 x 42-1/8 (23 x 107)	8-7/8 x 61-1/8 (23 x 155)	8-7/8 x 61-1/8 (23 x 155)
1" Fresh Air Filter (only on cabinet styles D, E, and H with bottom return and fresh air opening)							
Quantity	1	1	1	1	1	1	1
Size—in. (cm)	5-1/2 x 19-1/8 (14 x 49)	5-1/2 x 19-1/8 (14 x 49)	5-1/2 x 24-1/8 (14 x 61)	5-1/2 x 33-5/8 (14 x 85)	5-1/2 x 42-1/8 (14 x 107)	5-1/2 x 61-1/8 (14 x 156)	5-1/2 x 61-1/8 (14 x 156)

Accessory - Fan Coil Air Conditioning Units
Item: A1 Qty: 3 Tag(s): FCU-123, FCU-226, FCU-326

CONDENSATE OVERFLOW

EXT	A (IN)	ITEM			
		10	20	30	40
		FLOAT SWITCH	WIRE	PLUG (GREEN)	TERMINAL PIN
X13470527010	9.0	X13470484010	AWM (20 AWG)	AMP #1-172165-5	AMP #171638-1
X13470527020	50.0	X13470484010	AWM (20 AWG)	AMP #1-172165-5	AMP #171638-1

X13470527



Accessory - Fan Coil Air Conditioning Units
Item: A1 - A4 Qty: 81 Tag(s): FCU-123, FCU-226, FCU-326, FCU-101, FCU-102, FCU-103, FCU-104, FCU-105, FCU-106, FCU-107, FCU-108, FCU-109, FCU-110, FCU-111, FCU-112, FCU-113, FCU-114, FCU-115, FCU-116, FCU-117, FCU-118, FCU-119, FCU-120, FCU-121, FCU-122, FCU-201, FCU-202, FCU-203, FCU-204, FCU-205, FCU-206, FCU-207, FCU-208, FCU-209, FCU-210, FCU-211, FCU-212, FCU-213, FCU-214, FCU-215, FCU-216, ...

Motor Information

DRIVER FUNCTION

1. Speed Control - PWM (Pulse Width Modulation) Mode

1-1. The Connector of driver, Pin 4 PWM & Pin 3 EXT.GND

1-2. Input circuitry as Fig. 1. Use photocoupler and voltage isolation

1-3. Please input the PWM Voltage +5V, PWM Frequency 100Hz (Period 10mS)

1-4. When PWM responsibility cycle < 15 %, motor stops

When PWM responsibility cycle = 100 %, motor rotates to highest speed

Responsibility cycle = (PWM Duty / PWM Period)

2. Speed Feedback

2-1. The Connector of driver, Pin 8 FG & Pin 3 EXT.GND

2-2. Output circuitry as Fig.2 use open collector output, it needs the external voltage under DC24V/6mA supply voltage, Please accord to the supply voltage adding limiting resistor B, see Table.1. When FG OUT is no need either connection

2-3. Recommend to use RC filter circuit for FG output signal and capacitor should be 0.01uF(103). Please refer to Fig.2.

2-4. The motor pole is 8P. One turn output 12 pulse waves signal.

3. Attention:

3-1. When the voltage select Pin 2, Pin 6 short-circuit, the voltage is set to AC 115V, input AC 208-230V if the drive will result in damage.

3-2. When the motor no-load test, the PWM requested less than 40 % otherwise it will result in motor damage.

3-3. Motor ON sequence

3-3-1. Always supply AC IN to motor driver as first step.

3-3-2. After power supply, speed command can be inputted.

3-4. Motor OFF sequence

3-4-1. Always shut down speed command as first step.

3-4-2. After shut down speed command, motor and driver's power can be shut down.

4. Locked Rotor and Overload Protection and Reset

4-1. When motor reaching the 200 percent overload condition, the overload protection will operate the locked rotor function prior than it, see the description as below:

4-2. When motor locked, driver will shut down speed command after 15 sec.

4-3. After motor locked, please stop speed command, remove defect causes, reset speed command and then motor will restart. If defect causes do not remove, motor will be locked again when reset.

Fig 1

Fig 2

EXT.	VOLT (AC)	POLE (P)	Color	RATED POWER	RATED SPEED	Vendor Part Number	
010	115/230 ~ 10 % 50/60 HZ	8	A	Green	95W	1800 (RPM)	HMF16503

Top View Dimensions:

- Height: 103±1.5 (4.055)
- Width: 118±1.5 (4.65)
- Base Width: 100.3±0.5 (3.95)
- Mounting Holes: 4-Ø5.2 (Ø0.204)
- Rotation: CCW

Side View Dimensions:

- Height: 212±1.5 (8.35)
- Total Width: 313±1.5 (12.32)
- Width: 101 (3.98)
- Height: 11.5±0.1 (0.453)
- Base Width: 60 (2.36)
- Height: 12.7 (0.5)
- Clearance: 0.01 (0.0003)

Front View Dimensions:

- Height: 57 (2.244)
- Width: 72±0.5 (2.83)
- Width: 45.2±0.5 (1.78)
- Height: 13.4 (0.53)
- Width: 37.4 (1.47)
- Width: 120±0.5 (4.72)
- Height: 53.1 (2.090)

Terminal Block Diagram:

- EXT.GND
- PWM
- F.G
- GROUND(PE)
- G01(115/208-230V)

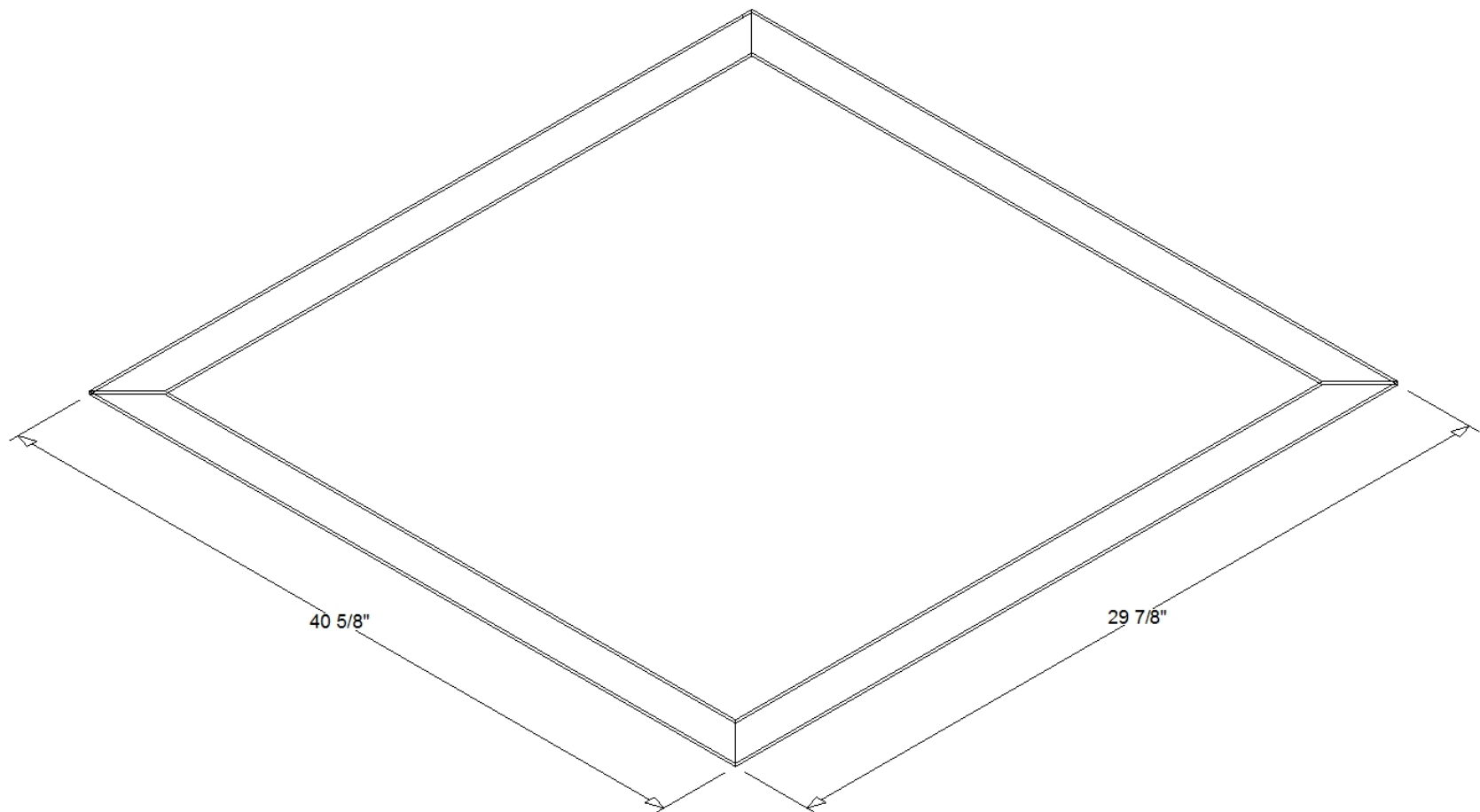
Nameplate Diagram:

- JST-YLR-08V
- YLS-08V RETAINER
- NAMEPLATE

Accessory - Fan Coil Air Conditioning Units

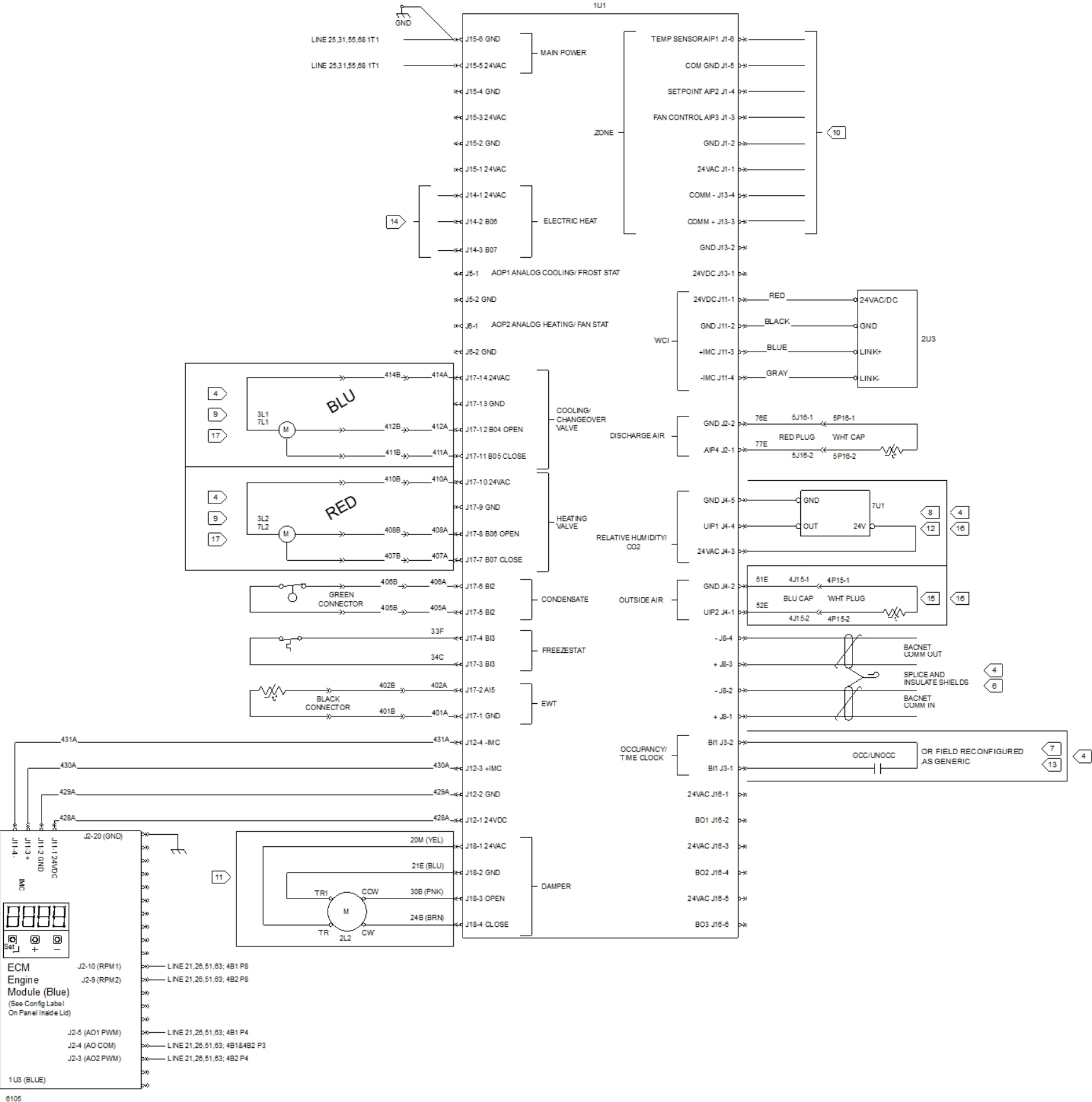
Item: A4 Qty: 3 Tag(s): FCU-125, FCU-228, FCU-328

HORIZONTAL RECESSED PANEL



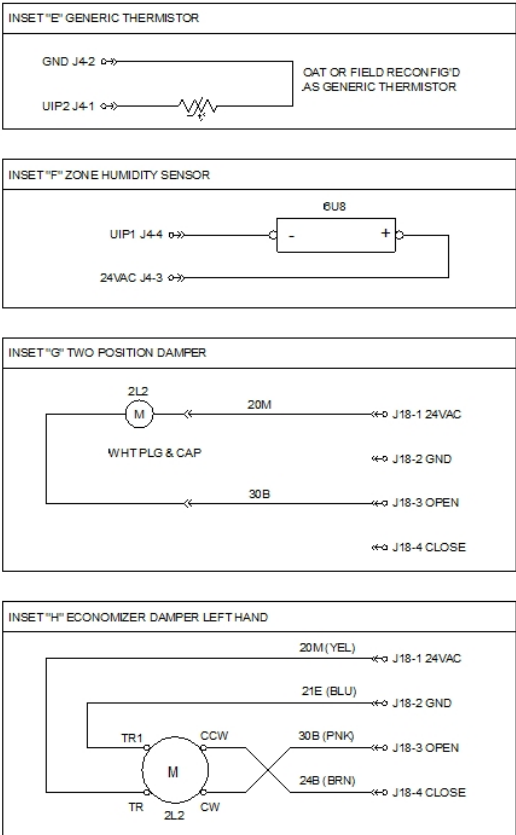
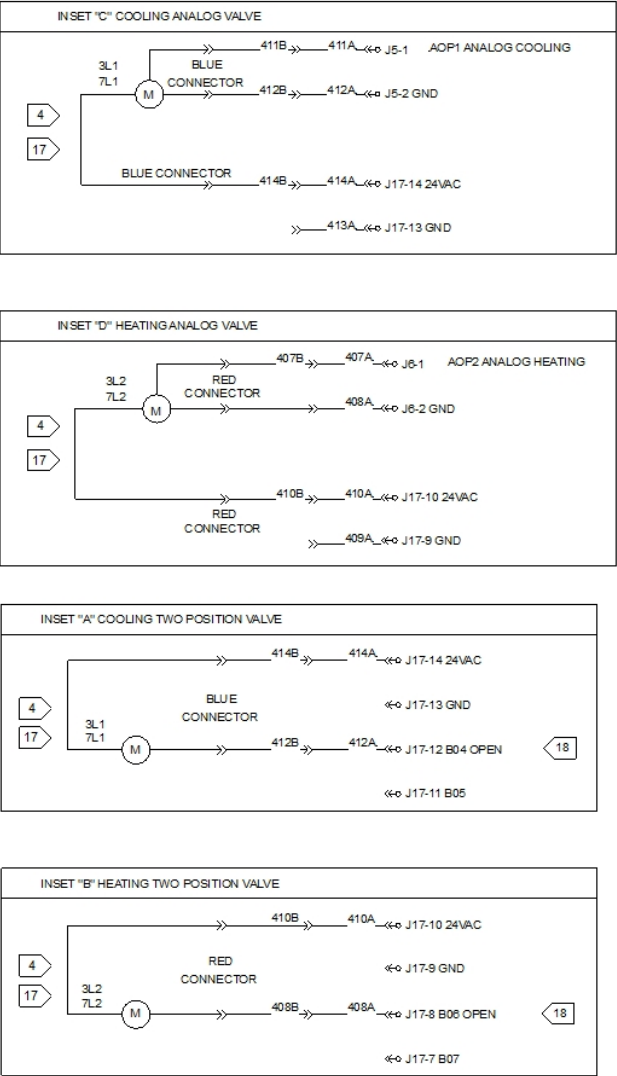
Field Wiring - Fan Coil Air Conditioning Units

Item: A1 - A4 Qty: 81 Tag(s): FCU-123, FCU-226, FCU-326, FCU-101, FCU-102, FCU-103, FCU-104, FCU-105, FCU-106, FCU-107, FCU-108, FCU-109, FCU-110, FCU-111, FCU-112, FCU-113, FCU-114, FCU-115, FCU-116, FCU-117, FCU-118, FCU-119, FCU-120, FCU-121, FCU-122, FCU-201, FCU-202, FCU-203, FCU-204, FCU-205, FCU-206, FCU-207, FCU-208, FCU-209, FCU-210, FCU-211, FCU-212, FCU-213, FCU-214, FCU-215, FCU-216, ...



Field Wiring - Fan Coil Air Conditioning Units

Item: A1 - A4 Qty: 81 Tag(s): FCU-123, FCU-226, FCU-326, FCU-101, FCU-102, FCU-103, FCU-104, FCU-105, FCU-106, FCU-107, FCU-108, FCU-109, FCU-110, FCU-111, FCU-112, FCU-113, FCU-114, FCU-115, FCU-116, FCU-117, FCU-118, FCU-119, FCU-120, FCU-121, FCU-122, FCU-201, FCU-202, FCU-203, FCU-204, FCU-205, FCU-206, FCU-207, FCU-208, FCU-209, FCU-210, FCU-211, FCU-212, FCU-213, FCU-214, FCU-215, FCU-216, ...



NOTES:

- UNLESS OTHERWISE NOTED, ALL SWITCHES ARE SHOWN AT 25 °C (77 °F), AT ATMOSPHERIC PRESSURE, AT 50% RELATIVE HUMIDITY, WITH ALL UTILITIES TURNED OFF, AND AFTER A NORMAL SHUTDOWN HAS OCCURRED.
- DASHED LINES INDICATE RECOMMENDED FIELD WIRING BY OTHERS. DASHED LINE ENCLOSURES AND/OR DASHED DEVICE OUTLINES INDICATE COMPONENTS PROVIDED BY THE FIELD. SOLID LINES INDICATE WIRING BY TRANE CO.
- ALL FIELD WIRING MUST BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC), STATE AND LOCAL REQUIREMENTS. ALL FIELD WIRING MUST HAVE AN INSULATION VOLTAGE RATING THAT EQUALS OR EXCEEDS UNIT RATED VOLTAGE
- USE CLASS 2 WIRING.
- FIELD POWER SUPPLY CONDUCTORS MUST HAVE MINIMUM 90C INSULATION.
- COMMUNICATION WIRE MUST BE TRANE PART NO. 400-20-28, OR WINDY CITY OR CONNECT AIR "LEVEL 4" CABLE. MAXIMUM OF 4500 FOOT AGGREGATE RUN. CAUTION! DO NOT RUN POWER IN THE SAME CONDUIT OR WIRE BUNDLE WITH COMMUNICATION LINK. FOR ADDITIONAL INFORMATION REFER TO EMTX-EB-68.
- 1U1'S GENERIC BINARY OUTPUT IS RATED 24VAC, 12VA, PILOT DUTY.
- CONFIGURE THE CO2 SENSOR FOR 4-20mA OPERATION USING THE OUT2 JUMPER SUPPLIED WITH SENSOR.
- WIRING SHOWN IS FOR MODULATING VALVE SECTION. FOR TWO POSITION VALVES SEE INSET "A" FOR COOLING AND INSET "B" FOR HEATING. FOR ANALOG VALVES SEE INSET "C" FOR COOLING AND INSET "D" FOR HEATING.

- SEE SHEET 2311-4676 FOR ZONE SENSOR CONNECTIONS.
- WIRING SHOWN IS FOR ECONOMIZER DAMPER RH SELECTION SEE INSET "G" FOR TWO POSITION DAMPER AND INSET "H" FOR ECONOMIZER DAMPER LH WIRING.
- WIRING SHOWN IS FOR CO2 SENSOR. SEE INSET "F" FOR RELATIVE HUMIDITY SENSOR.
- WIRING SHOWN IS FOR OCCUPIED/ UNOCCUPIED.
- ELECTRIC HEAT WIRING IS SHOWN ON SHEETS 23114699 THRU 23114714.
- WIRING SHOWN IS FOR OUTSIDE AIR SENSOR (AIRD=G,H,J). SEE INSET "E" FOR GENERIC THERMISTOR WIRING (AIRD #G,H,J).
- OPTION NOT AVAILABLE ON LOW VERTICAL (MOD=L,K,L).
- FIELD SUPPLIED ACTUATOR WIRING UTILIZES THE SAME CONNECTION POINTS AS FACTORY ACTUATOR WIRING.
- VALVES SHOWN IN NORMALLY CLOSED POSITION. FOR NORMALLY OPEN POSITION, THE VALVE SIGNAL BECOMES CLOSE.

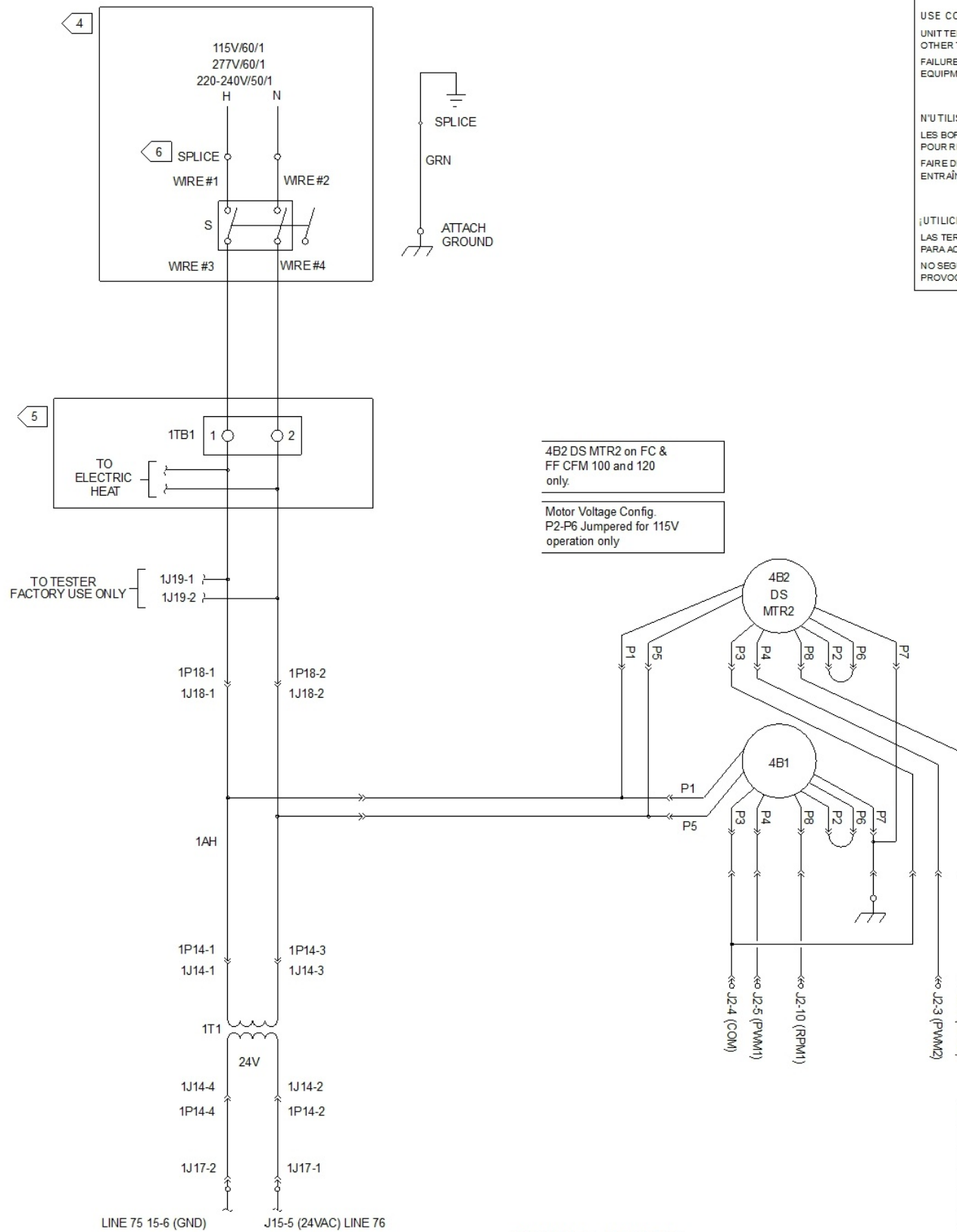
6105

DEVICE PREFIX LOCATION CODE	
AREA	LOCATION
1	CONTROL PANEL
2	CONTROL END
3	PIPING END
4	FAN SECTION
5	COIL SECTION
6	CUSTOMER INSTALLED
7	FIELD SUPPLIED DEVICE

LEGEND		
DEVICE DESIGNATION	DESCRIPTION	LINE NUMBER
1U1	UC400-B MODULE	74
1U3	ECM ENGINE BOARD	106
2U3	WIRELESS COM INTERFACE	85
3L1	COOLING/ CHANGEOVER VALVE	90,119,122
7L1	COOLING/ CHANGEOVER VALVE	90,119,122
3L2	HEATING COIL VALVE	94,126,128
7L2	HEATING COIL VALVE	94,126,128
5RT5	DISCHARGE AIR TEMP SNSR	91
7U1	CO2 SENSOR	93
3S8	CONDENSATE OVERFLOW SWITCH	96
4RT4	OUTSIDE AIR TEMP SENSOR	97
1S9	FREEZE-STAT	98
3RT1	AUTOCHG TEMP SENSOR\ BH LO	100
2L2	ECON DMFR RH/LH, DMFR ACTUATOR	108,120,127
7RT4	GENERIC THERMISTOR	113
6U8	ZONE HUMIDITY SENSOR	116

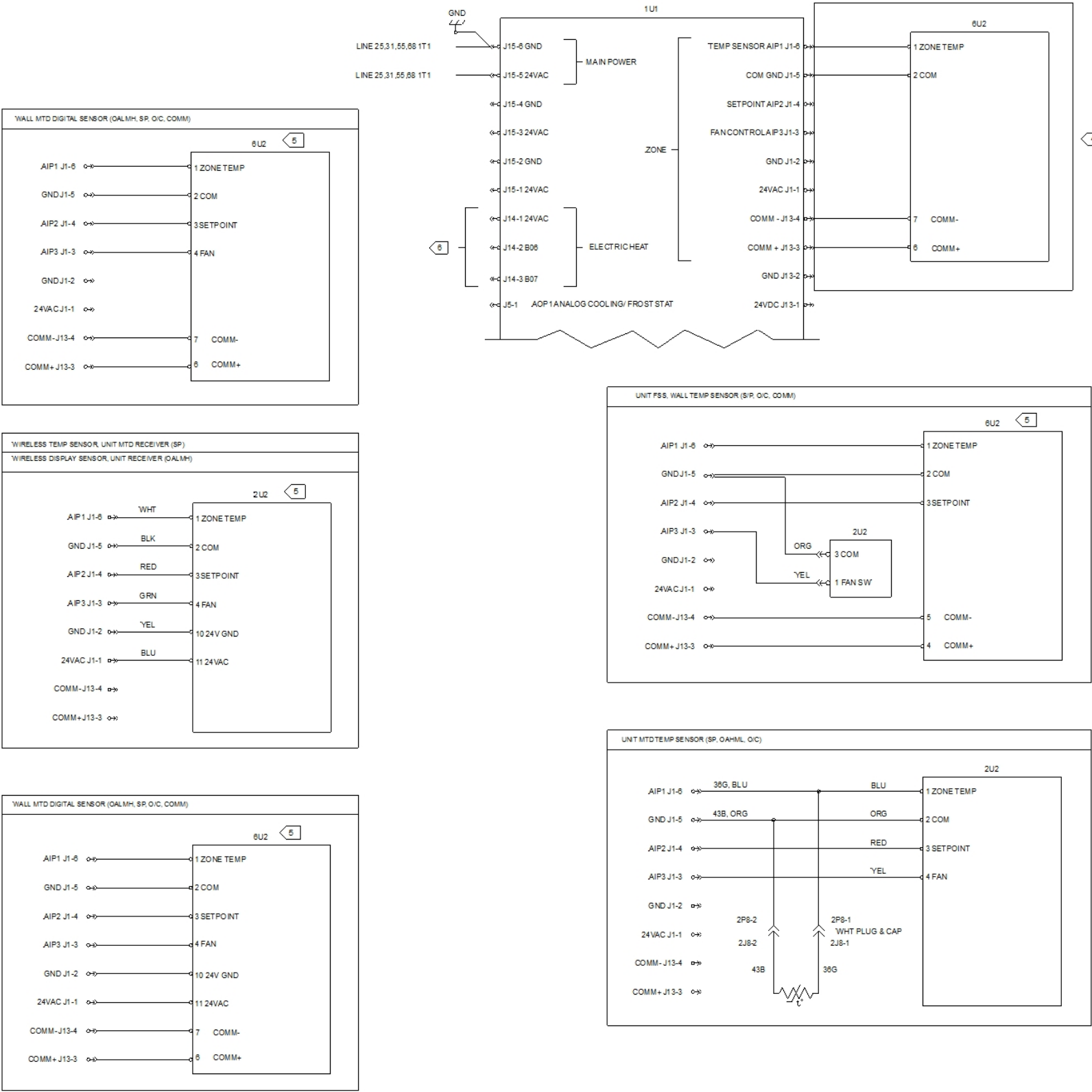
Field Wiring - Fan Coil Air Conditioning Units

Item: A1 - A4 Qty: 81 Tag(s): FCU-123, FCU-226, FCU-326, FCU-101, FCU-102, FCU-103, FCU-104, FCU-105, FCU-106, FCU-107, FCU-108, FCU-109, FCU-110, FCU-111, FCU-112, FCU-113, FCU-114, FCU-115, FCU-116, FCU-117, FCU-118, FCU-119, FCU-120, FCU-121, FCU-122, FCU-201, FCU-202, FCU-203, FCU-204, FCU-205, FCU-206, FCU-207, FCU-208, FCU-209, FCU-210, FCU-211, FCU-212, FCU-213, FCU-214, FCU-215, FCU-216, ...



Field Wiring - Fan Coil Air Conditioning Units

Item: A1 - A4 Qty: 81 Tag(s): FCU-123, FCU-226, FCU-326, FCU-101, FCU-102, FCU-103, FCU-104, FCU-105, FCU-106, FCU-107, FCU-108, FCU-109, FCU-110, FCU-111, FCU-112, FCU-113, FCU-114, FCU-115, FCU-116, FCU-117, FCU-118, FCU-119, FCU-120, FCU-121, FCU-122, FCU-201, FCU-202, FCU-203, FCU-204, FCU-205, FCU-206, FCU-207, FCU-208, FCU-209, FCU-210, FCU-211, FCU-212, FCU-213, FCU-214, FCU-215, FCU-216, ...



- NOTES (SHEET TWO):
- 1. UNLESS OTHERWISE NOTED, ALL SWITCHES ARE SHOWN AT 25° C (77° F), AT ATMOSPHERIC PRESSURE, AT 50 % RELATIVE HUMIDITY, WITH ALL UTILITIES TURNED OFF, AND AFTER A NORMAL SHUTDOWN HAS OCCURRED.
 - 2. DASHED LINES INDICATE RECOMMENDED FIELD WIRING BY OTHERS. DASHED LINED ENCLOSURES AND/OR DASHED DEVICE OUTLINES INDICATE COMPONENTS PROVIDED BY THE FIELD. PHANTOM LINE ENCLOSURES INDICATE ALTERNATE CIRCUITRY OR AVAILABLE SALES OPTIONS. SOLID LINES INDICATE WIRING BY TRANE.
 - 3. ALL FIELD WIRING MUST BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC), STATE AND LOCAL REQUIREMENTS. ALL FIELD WIRING MUST HAVE AN INSULATION VOLTAGE RATING THAT EQUALS OR EXCEEDS UNIT RATED VOLTAGE.

- 4. WIRING SHOWN IS FOR WALL MOUNTED ZONE SENSOR FOR OTHER CTRL OPTIONS SEE INSET'S "D" THRU "H".
- 5. USE CLASS 2 WIRING.
- 6. ELECTRIC HEAT WIRING IS SHOWN ON SHEETS 23114699 THRU 23114714.
- 7. OPTION NOT AVAILABLE ON LOW VERTICAL.

23 114 676

DEVICE PREFIX LOCATION CODE	
AREA	LOCATION
1	CONTROL PANEL
2	CONTROL END
3	PIPING END
4	FAN SECTION
5	COIL SECTION
6	CUSTOMER INSTALLED
7	FIELD SUPPLIED DEVICE

LEGEND		
DEVICE DESIGNATION	DESCRIPTION	LINE NUMBER
1U1	UC400-BMODULE	147
6U2	ZONE SENSORMODULE	147,161,165
2U2	FAN SWITCH	165,173
4RT2	RETURN AIR SENSOR	181

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 - Fan Coil Air Conditioning Units

Item	Tag(s)	Qty	Description	Model Number
A1	FCU-123, FCU-226, FCU-326	3	Fan Coil Air Conditioners (UniTrane) (FA	FCDB0301CAYD0B10AJ3 M000DD3000L200BL0L
A2	FCU-101, FCU-102, FCU-103, FCU-104, FCU-105, FCU-106, FCU-107, FCU-108, FCU-109, FCU-110, FCU-111, FCU-112, FCU-113, FCU-114, FCU-115, FCU-116, FCU-117, FCU-118, FCU-119, FCU-120, FCU-121, FCU-122, FCU-201, FCU-202, FCU-203, FCU-204, FCU-205, FCU-206, FCU-207, FCU-208, FCU-209, FCU-210, FCU-211, FCU-212, FCU-213, FCU-214, FCU-215, FCU-216, FCU-217, FCU-218, FCU-219, FCU-220, FCU-221, FCU-222, FCU-223, FCU-224, FCU-225, FCU-301, FCU-302, FCU-303, FCU-304,	72	Fan Coil Air Conditioners (UniTrane) (FA	FCCB0402CAYF0A00BJ3 M000DD3000L200CL0L

	FCU-305, FCU-306, FCU-307, FCU-308, FCU-309, FCU-310, FCU-311, FCU-312, FCU-313, FCU-314, FCU-315, FCU-316, FCU-317, FCU-318, FCU-319, FCU-320, FCU-321, FCU-322, FCU-323, FCU-324, FCU-325			
A3	FCU-124, FCU-227, FCU-327	3	Fan Coil Air Conditioners (UniTrane) (FA	FCCB0301CAYF0A00AJ3 M000DD3000L200BL0L

Field Installed Option Description	Part/Ordering Number
1" throwaway filter + 1 extra	FC_FILT3_1
Wall mounted zone sensor module (OALMH, sp dial, on/cnc buttons, comm. jack)	
Without projection panel	

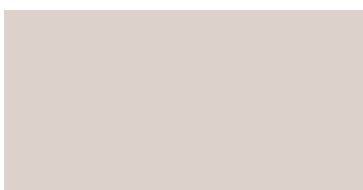
Item	Tag(s)	Qty	Description	Model Number
A4	FCU-125, FCU-228, FCU-328	3	Fan Coil Air Conditioners (UniTrane) (FA	FCEB0401CAYD0A10BJ3M000DD3000L 200BL0L

Field Installed Option Description	Part/Ordering Number
1" throwaway filter + 1 extra	FC_FILT3_1
Wall mounted zone sensor module (OALMH, sp dial, on/cnc buttons, comm. jack)	
Without projection panel	FC_HORZ_REC

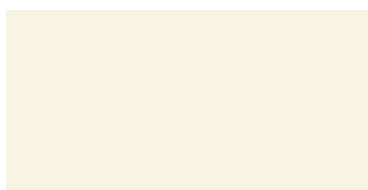
Attractive finishes by Trane ...



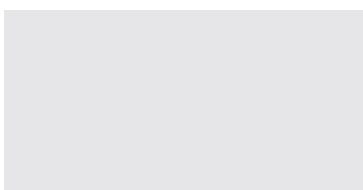
Deluxe Beige*



Soft Dove*



Cameo White*



Driftwood Grey



Stone Grey/ Slate Grey



Rose Mauve available
on fan-coils and cabinet
heaters

Note: These brochure color swatches are simulations of unit paint color, and will not exactly match unit paint color. Actual unit paint color will vary due to differences in the absorption of metal vs. paper and digital print variations.



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