

**FB4C
Base Series Fan Coil
Sizes 018 - 061**



Product Data

AIR HANDLER TECHNOLOGY AT ITS FINEST



The FB4C fan coil has the proven technology of Payne fan coil units with R-410A refrigerant as well as vertical and horizontal applications. The design features contoured condensate pans with rugged drain connections, ensuring that little water is left in the unit at the end of the cooling duty cycle. The lack of standing condensate and corrosion free pans improves IAQ and product life, features homeowners appreciate.

Standard features include grooved tubing and louvered fins. Coil circuiting has also been updated to make the most of all Payne heat pumps and air conditioners. Units come with solid state fan controls, 1-inch (25mm) thick insulation with R-value of 4.2, multi-speed motors, and fully-wettable coils. Units can accommodate factory- and/or field-installed heaters from 3 to 30 kW.

Assembled at the factory compliant with low leak requirements of less than 2% cabinet leakage rate at 0.5 inches W.C. and 1.4% cabinet leakage rate at 0.5 inches W.C. when tested in accordance with ASHRAE 193 standard.

The FB4C fan coil design is loaded with popular features. These fan coils utilize the latest in electronic commutation motor (ECM) technology through the use of high efficiency, multi-tap ECM motors allowing reliable air delivery with increased static pressure. It comes in a pre-painted (taupe metallic) galvanized steel casing and a factory-supplied power plug for ease of installation. The FB4C unit is shipped with a factory-installed Teflon-ring piston FB4CNF(018-048) or a R-410A refrigerant TXV FB4CNP (018-061).

STANDARD FEATURES

- Multi-tap ECM (electronic commutating motor) motors - all sizes
- Integrated motor controls, with 90-sec off TDR function, have replaced integrated circuit board
- Five available speed tags to meet a wide range of applications
- Large, grooved tube, louvered fin coils
- Efficient, quiet, time-tested blower housings and diffusers
- Sturdy, drainable condensate pans
- Cabinet construction features innovations designed to prevent cabinet sweating
- Tested for condensate disposal in much tougher conditions than Air Conditioning and Refrigeration Institute requirements
- Super-thick R-4.2 insulation with vapor barrier
- Pre-painted galvanized steel cabinet (taupe metallic)
- Design meets stringent regulations for cabinet air leakage of less than 2% when tested at 0.5 inches W.C., and cabinet air leakage less than 1.4% at 0.5 inches W.C. when tested in accordance with ASHRAE 193 standard.
- Installation-flexible, multipoise units
- Horizontal hanging provisions on cabinet
- No tools required to access filter
- Newly improved filter rack area filter door insulation added for improved air seal
- Factory-installed heater packages available on select models (5- through 15-kW)
- 3- through 30-kW accessory heaters - field installed
- Factory-supplied power plug
- Easy plug-in provisions for heater installation
- Entry options for high and low voltage wiring hook-up
- Leak-preventing sweat connections
- R-410A refrigeration factory-installed Teflon-ring pistons on FB4CNF (018-048) coils
- Thermostatic expansion valve, TXV, on all FB4CNP coils
- Designed for manufactured housing applications.

MODEL NUMBER NOMENCLATURE

1
2
3
4
5
6
7
8
9
10
11
12

F
B
4
C
N
F
0
1
8
0
0
0

Product

F = Fan Coil

Type

B = Base, R-410A

Position

4 = Multipoise

Series

C

Electrical

N = 208/230v, 1 ph, 60 Hz

Cabinet Style

F = Single Piece with piston

P = TXV

Heating Size

00 = No Heat

05 = 5 kW

75 = 7.5 kW

08 = 8 kW

10 = 10 kW

11 = 11 kW

15 = 15 kW

Coil Type

0 = Copper

T = Tin-plate

L = Aluminum

Capacity

018 = 18,000

024 = 24,000

025 = 24,000

030 = 30,000

036 = 36,000

042 = 42,000

048 = 48,000

060 = 60,000

061 = 60,000



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahrirectory.org.



ISO 9001
QMI-SAI Global



DIMENSIONS

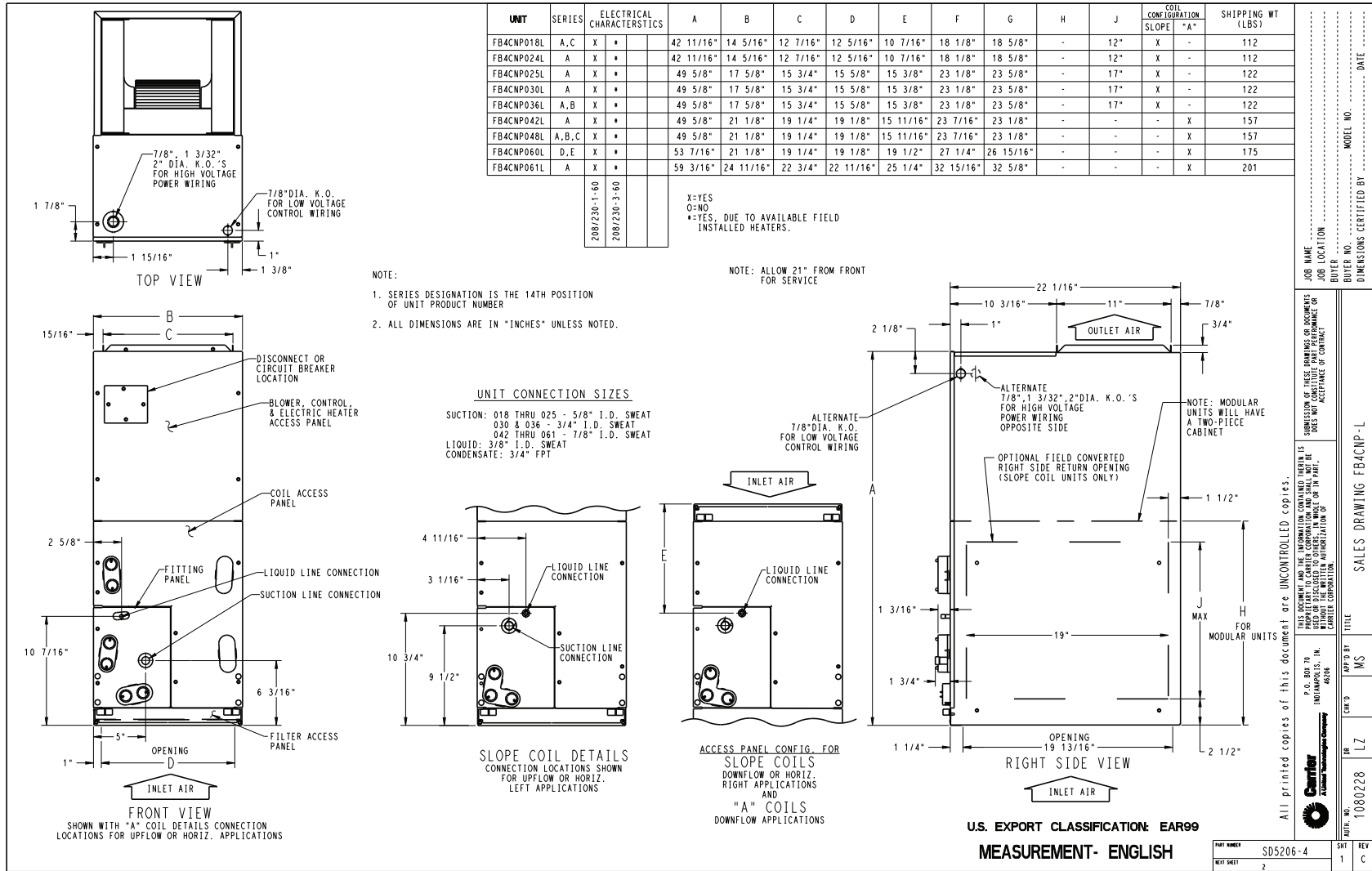
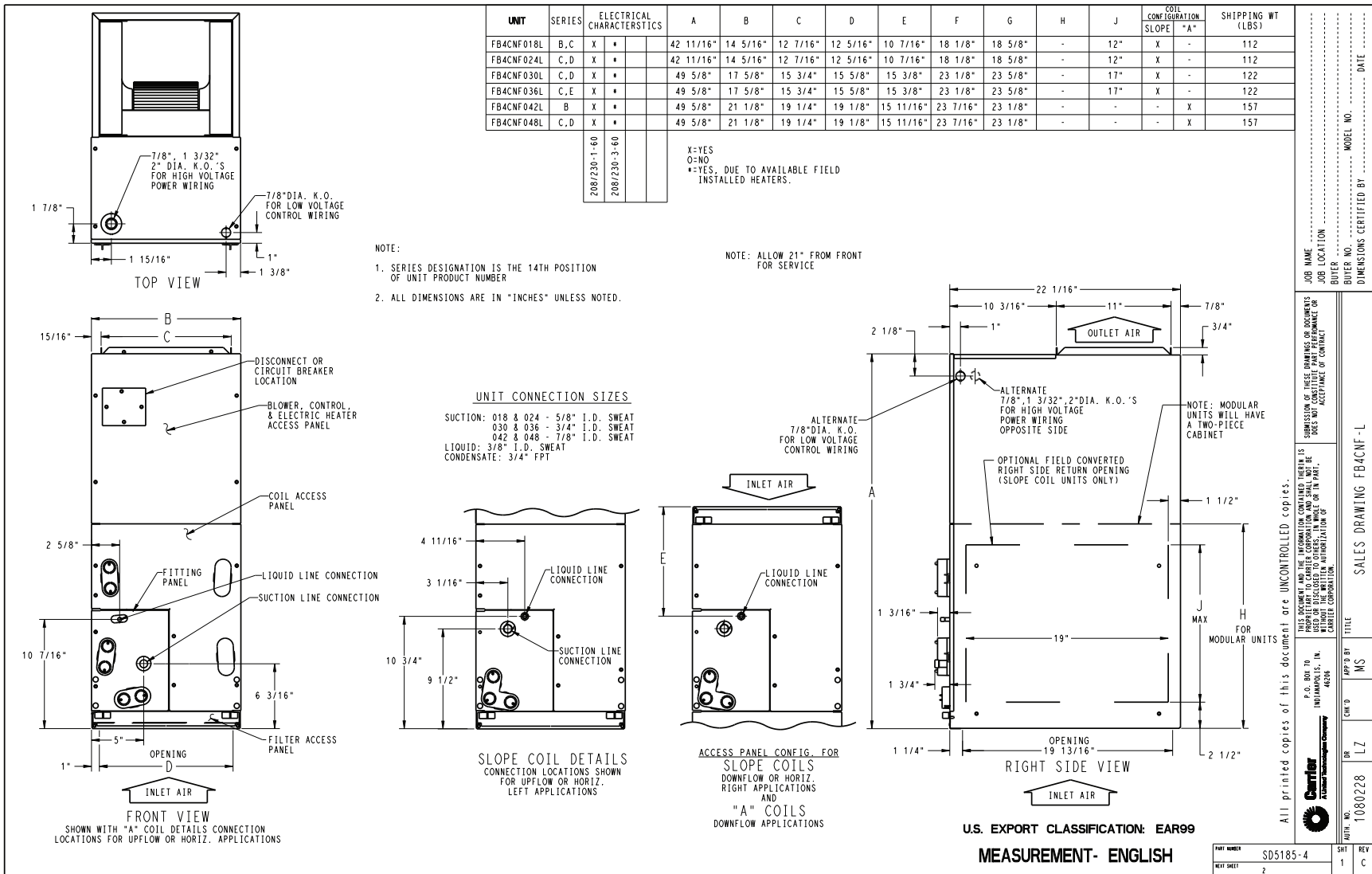


Fig. 1 - B4CNP - English

DIMENSIONS (cont.)



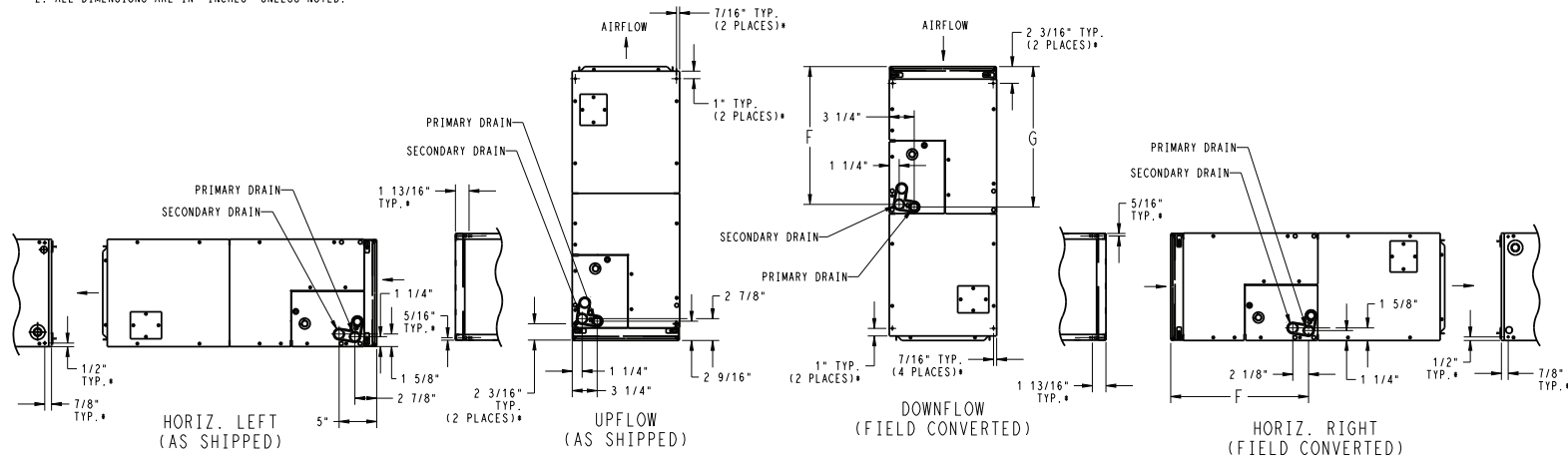
Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

Fig. 2 – FB4CNF - English

DIMENSIONS (cont.)

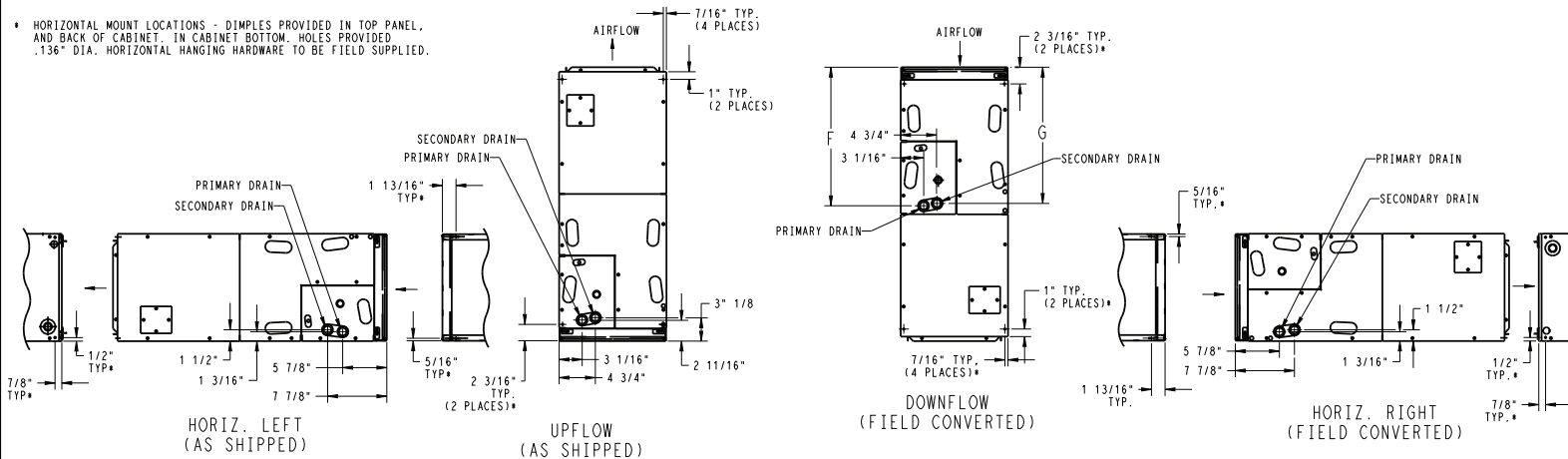
NOTES:
 1. CONDENSATE PAN DRAIN CAPS NOT SHOWN FOR CLARITY.
 2. ALL DIMENSIONS ARE IN "INCHES" UNLESS NOTED.

SLOPE COIL



* HORIZONTAL MOUNT LOCATIONS - DIMPLES PROVIDED IN TOP PANEL AND BACK OF CABINET. IN CABINET BOTTOM, HOLES PROVIDED .136" DIA. HORIZONTAL HANGING HARDWARE TO BE FIELD SUPPLIED.

A-COIL



U.S. EXPORT CLASSIFICATION: EAR99
 MEASUREMENT- ENGLISH

| | | | | | |
|-------------|----------|-----|---|-----|---|
| PART NUMBER | SD5206-4 | SHT | 2 | REV | C |
| NEXT SHEET | 3 | | | | |

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Carrier
 A Carrier Corporation

JOB NAME
 JOB LOCATION
 BUYER
 BUYER NO.
 MODEL NO.
 DATE

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TITLE
 SALES DRAWING FB4CNP-L

APPROVED BY
 MS

CHK'D
 LZ

DRW. NO.
 1080228

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

Fig. 3 – FB4CNF and FB4CNP - English

DIMENSIONS (cont.)

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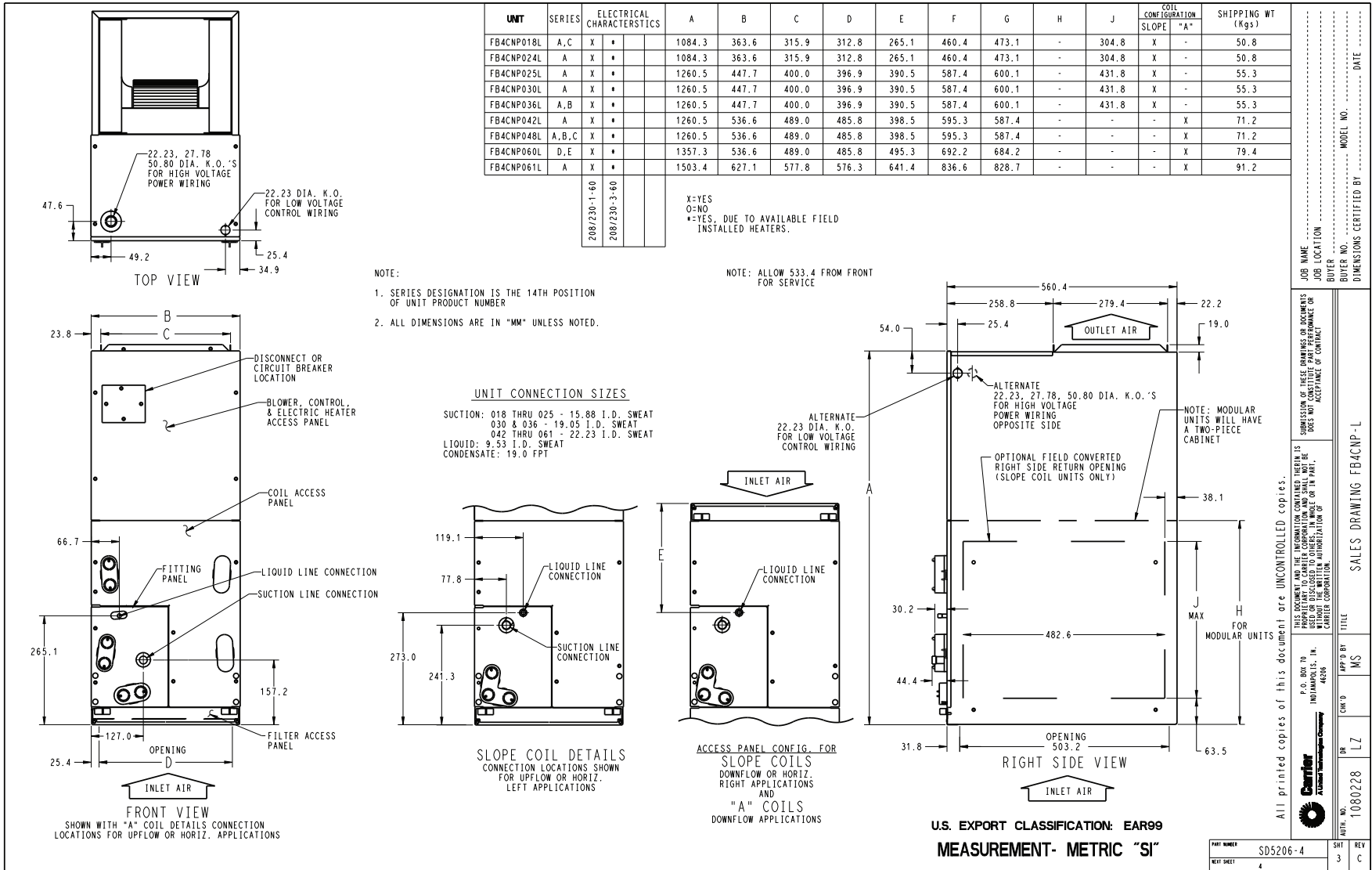


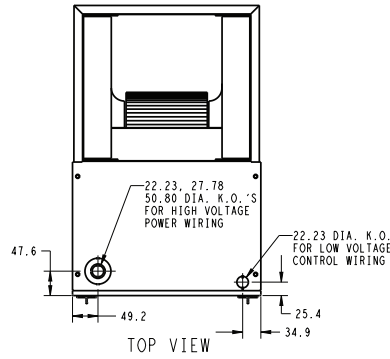
Fig. 4 – FB4CNP - Metric

DIMENSIONS (cont.)

| UNIT | SERIES | ELECTRICAL CHARACTERISTICS | A | B | C | D | E | F | G | H | J | COIL CONFIGURATION | | SHIPPING WT (Kgs) |
|------------|--------|----------------------------|--------|-------|-------|-------|-------|-------|-------|---|-------|--------------------|-----|-------------------|
| | | | | | | | | | | | | SLOPE | "A" | |
| FB4CNF018L | B,C | X * | 1084.3 | 363.6 | 315.9 | 312.8 | 265.1 | 460.4 | 473.1 | - | 304.8 | X | - | 50.8 |
| FB4CNF024L | C,D | X * | 1084.3 | 363.6 | 315.9 | 312.8 | 265.1 | 460.4 | 473.1 | - | 304.8 | X | - | 50.8 |
| FB4CNF030L | C,D | X * | 1260.5 | 447.7 | 400.0 | 396.9 | 390.5 | 587.4 | 600.1 | - | 431.8 | X | - | 55.3 |
| FB4CNF036L | C,E | X * | 1260.5 | 447.7 | 400.0 | 396.9 | 390.5 | 587.4 | 600.1 | - | 431.8 | X | - | 55.3 |
| FB4CNF042L | B | X * | 1260.5 | 536.6 | 489.0 | 485.8 | 398.5 | 595.3 | 587.4 | - | - | - | X | 71.2 |
| FB4CNF048L | C,D | X * | 1260.5 | 536.6 | 489.0 | 485.8 | 398.5 | 595.3 | 587.4 | - | - | - | X | 71.2 |

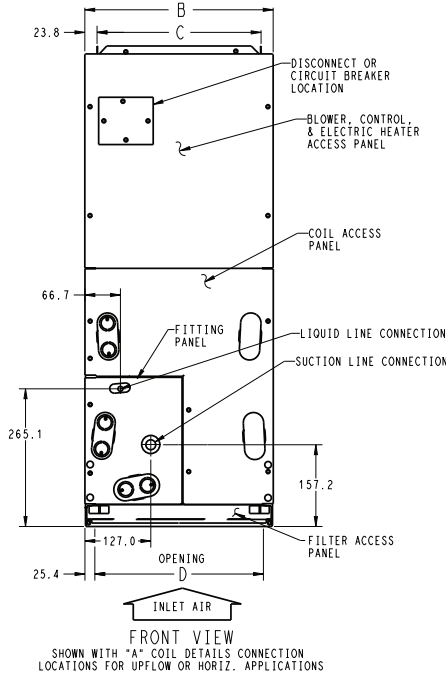
| | |
|--------------|--|
| 206/230-1-60 | |
| 206/230-3-60 | |

X=YES
O=NO
*=YES, DUE TO AVAILABLE FIELD INSTALLED HEATERS.



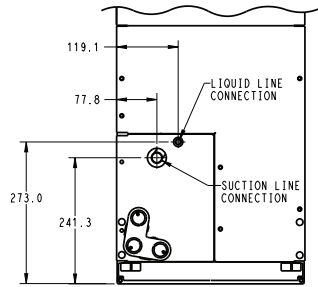
- NOTE:
- SERIES DESIGNATION IS THE 14TH POSITION OF UNIT PRODUCT NUMBER
 - ALL DIMENSIONS ARE IN "MM" UNLESS NOTED.

NOTE: ALLOW 533.4 FROM FRONT FOR SERVICE

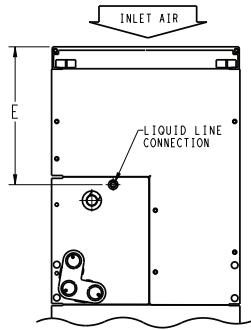


UNIT CONNECTION SIZES

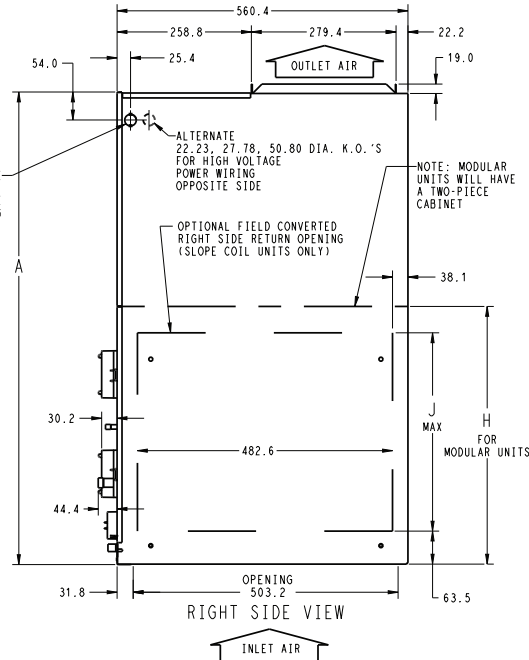
SUCTION: 018 & 024 - 15.88 I.D. SWEAT
030 & 036 - 19.05 I.D. SWEAT
042 & 048 - 22.23 I.D. SWEAT
LIQUID: 9.53 I.D. SWEAT
CONDENSATE: 19.0 FPT



SLOPE COIL DETAILS
CONNECTION LOCATIONS SHOWN FOR UPFLOW OR HORIZ. LEFT APPLICATIONS



ACCESS PANEL CONFIG. FOR SLOPE COILS
DOWNFLOW OR HORIZ. RIGHT APPLICATIONS AND "A" COILS
DOWNFLOW APPLICATIONS



U.S. EXPORT CLASSIFICATION: EAR99
MEASUREMENT- METRIC "SI"

| | | | | | |
|-------------|----------|-----|---|-----|---|
| PART NUMBER | SD5185-4 | SHT | 3 | REV | C |
| NEXT SHEET | 4 | | | | |

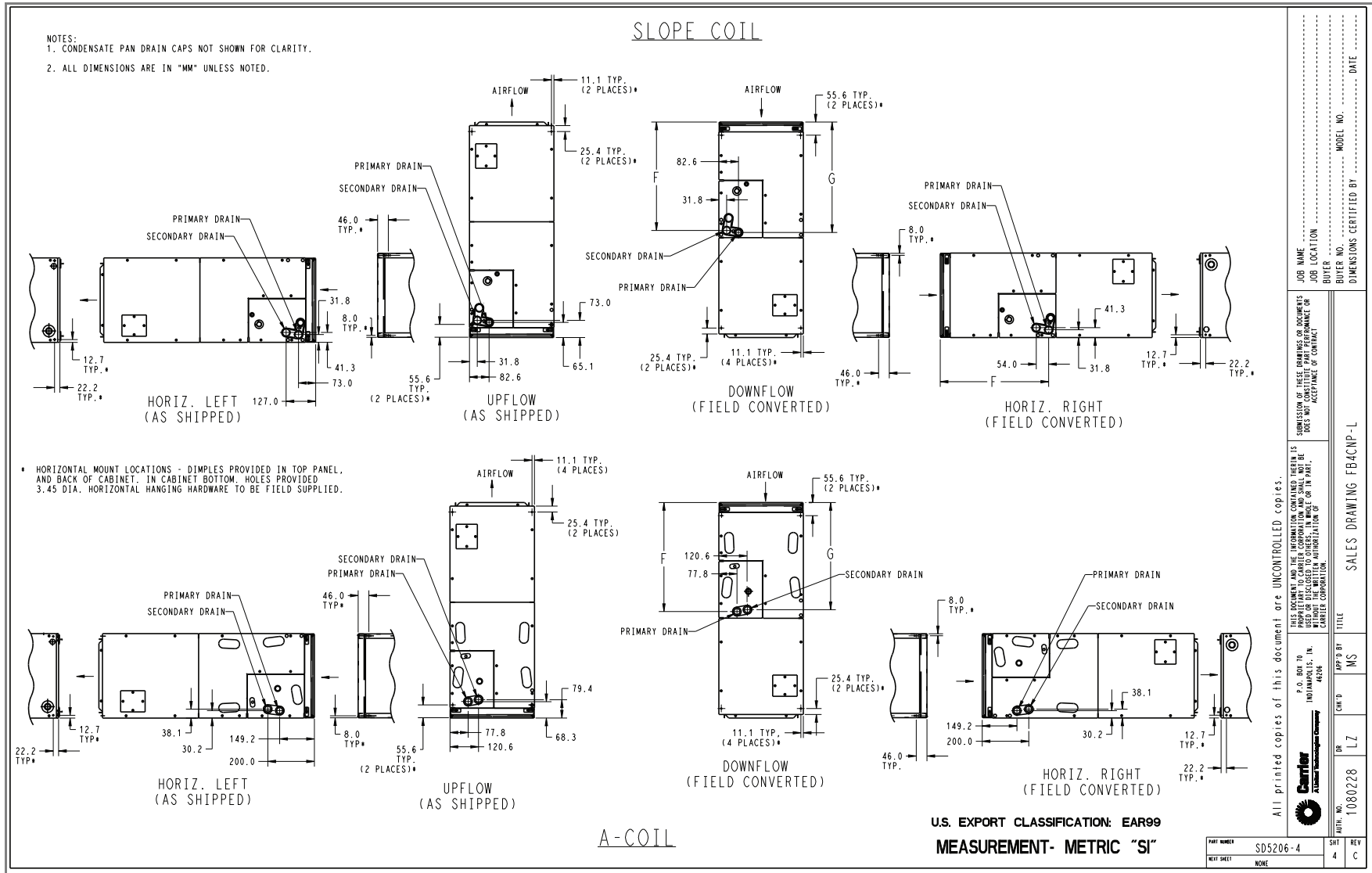
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 Carrier Corporation

JOB NAME _____
 JOB LOCATION _____
 BUYER _____
 BUYER NO. _____
 MODEL NO. _____
 DATE _____
 DIMENSIONS CERTIFIED BY _____
 SALES DRAWING FB4CNF-L
 TITLE _____
 APP'D BY _____
 MS
 CK'D BY _____
 LZ
 BR NO. 1080228

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

Fig. 5 – FB4CNF - Metric

DIMENSIONS (cont.)



Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

PHYSICAL DATA

| ORDERING NO. | NOMINAL COOLING CAPACITY (Btuh) | DIMENSIONS | | | SHIPPING WEIGHT |
|----------------|---------------------------------|------------------------|-----------------------|----------------------|-----------------|
| | | Height | Width | Depth | |
| FB4CN(F,P)018L | 18,000 | 42-11/16 in. 1084mm | 14-5/16 in. 363mm | 22-1/16 in. 560mm | 112 lb 51 kg |
| FB4CNF024L | 24,000 | 42-11/16 in. 1084mm | 14-5/16 in. 363mm | 22-1/16 in. 560mm | 112 lb 51 kg |
| FB4CNP025L | 24,000 | 49-5/8 in. 1260mm | 17-5/8 in. 447mm | 22-1/16 in. 560mm | 122 lb 55 kg |
| FB4CN(F,P)030L | 30,000 | 49-5/8 in. 1260mm | 17-5/8 in. 447mm | 22-1/16 in. 560mm | 122 lb 55 kg |
| FB4CN(F,P)036L | 36,000 | 49-5/8 in. 1260mm | 17-5/8 in. 447mm | 22-1/16 in. 560mm | 122 lb 55 kg |
| FB4CN(F,P)042L | 42,000 | 49-5/8 in. 1260mm | 21-1/8 in. 536mm | 22-1/16 in. 560mm | 157 lb 71 kg |
| FB4CN(F,P)048L | 48,000 | 49-5/8 in. 1260mm | 21-1/8 in. 536mm | 22-1/16 in. 560mm | 157 lb 71 kg |
| FB4CNP060L | 60,000 | 53-7/16 in. 1357mm | 21-1/8 in. 536mm | 22-1/16 in. 560mm | 175 lb 79 kg |
| FB4CNP061L | 60,000 | 59-3/16 in. 1503mm | 24-11/16 in. 447mm | 22-1/16 in. 560mm | 201 lb 91 kg |

SPECIFICATIONS

| FB4C | 18 | 24 | 25 | 30 | 36 | 42 | 48 | 60 | 61 |
|---|-------------------|-----------|-----------------------|-----------------------|-----------|-----------------------|-----------|------------------------|------|
| EVAPORATOR COIL | | | | | | | | | |
| Face Area (sq. ft) | 2.23 | | 2.97 | 2.97 | | 4.45 | | 5.93 | 7.42 |
| Configuration | Slope | | | | | A | | | |
| FB4CNF Metering Device (Teflon-ring piston) R-410A Refrigerant | EA52PT049 | EA52PT055 | N/A | EA52PT061 | EA52PT067 | EA52PT076 | EA52PT080 | N/A | N/A |
| FB4CNP Metering Device R-410A Refrigerant | TXV | TXV | TXV | TXV | TXV | TXV | TXV | TXV | TXV |
| FILTER* | | | | | | | | | |
| 21-1/2-in (546 mm) X | 13-in (330 mm) | | 16-3/8-in (417 mm) | 16-3/8-in (417 mm) | | 19-7/8-in (505 mm) | | 23-5/16-in (585 mm) | |
| BLOWER ASSEMBLY | | | | | | | | | |
| Motor Type (ECM) | Multi-tap ECM | | | | | | | | |
| Motor HP | 1/3 | 1/3 | 1/3 | 1/3 | 1/2 | 1/2 | 3/4 | 3/4 | 3/4 |
| CFM | 600 | 800 | 800 | 1000 | 1200 | 1400 | 1600 | 1750 | 2000 |

* Filter must be field-supplied for FB4C units.

PERFORMANCE DATA

FB4C AIRFLOW PERFORMANCE (CFM)

| Model & Size | Blower Speed | 0.10 | 0.20 | 0.30 | 0.40 | 0.50 | 0.60 |
|----------------|--------------|------|------|------|------|------|------|
| FB4C 018 | Tap 5 | 767 | 739 | 702 | 669 | 620 | 565 |
| | Tap 4 | 614 | 569 | 534 | 486 | 436 | 398 |
| | Tap 3 | 701 | 660 | 616 | 581 | 537 | 499 |
| | Tap 2 | 614 | 569 | 534 | 486 | 436 | 398 |
| | Tap 1 | 410 | 350 | 304 | 261 | 228 | 203 |
| FB4C 024 & 025 | Tap 5 | 969 | 936 | 892 | 835 | 763 | 676 |
| | Tap 4 | 826 | 795 | 766 | 743 | 706 | 660 |
| | Tap 3 | 826 | 795 | 766 | 743 | 706 | 660 |
| | Tap 2 | 701 | 660 | 616 | 581 | 537 | 499 |
| | Tap 1 | 617 | 592 | 552 | 507 | 472 | 420 |
| FB4C 030 | Tap 5 | 1108 | 1090 | 1065 | 1034 | 1009 | 974 |
| | Tap 4 | 1026 | 1000 | 969 | 938 | 899 | 865 |
| | Tap 3 | 1026 | 1000 | 969 | 938 | 899 | 865 |
| | Tap 2 | 909 | 873 | 842 | 799 | 762 | 724 |
| | Tap 1 | 825 | 795 | 757 | 722 | 674 | 634 |
| FB4C 036 | Tap 5 | 1301 | 1276 | 1245 | 1218 | 1176 | 1121 |
| | Tap 4 | 1227 | 1191 | 1169 | 1143 | 1105 | 1074 |
| | Tap 3 | 1227 | 1191 | 1169 | 1143 | 1105 | 1074 |
| | Tap 2 | 1087 | 1062 | 1030 | 1001 | 966 | 930 |
| | Tap 1 | 1026 | 1000 | 969 | 938 | 899 | 865 |
| FB4C 042 | Tap 5 | 1560 | 1544 | 1507 | 1464 | 1424 | 1358 |
| | Tap 4 | 1419 | 1397 | 1358 | 1320 | 1279 | 1239 |
| | Tap 3 | 1419 | 1397 | 1358 | 1320 | 1279 | 1239 |
| | Tap 2 | 1249 | 1220 | 1184 | 1142 | 1093 | 1052 |
| | Tap 1 | 1242 | 1205 | 1158 | 1110 | 1069 | 1026 |
| FB4C 048 | Tap 5 | 1743 | 1712 | 1679 | 1642 | 1610 | 1574 |
| | Tap 4 | 1669 | 1634 | 1599 | 1564 | 1531 | 1499 |
| | Tap 3 | 1669 | 1634 | 1599 | 1564 | 1531 | 1499 |
| | Tap 2 | 1452 | 1413 | 1377 | 1339 | 1308 | 1271 |
| | Tap 1 | 1300 | 1256 | 1221 | 1182 | 1142 | 1101 |
| FB4C 060 | Tap 5 | 1897 | 1867 | 1836 | 1808 | 1774 | 1736 |
| | Tap 4 | 1817 | 1785 | 1757 | 1724 | 1693 | 1655 |
| | Tap 3 | 1817 | 1785 | 1757 | 1724 | 1693 | 1655 |
| | Tap 2 | 1657 | 1621 | 1589 | 1557 | 1518 | 1474 |
| | Tap 1 | 1443 | 1412 | 1377 | 1332 | 1286 | 1243 |
| FB4C 061 | Tap 5 | 2030 | 1995 | 1961 | 1927 | 1888 | 1842 |
| | Tap 4 | 1811 | 1775 | 1740 | 1703 | 1664 | 1613 |
| | Tap 3 | 1811 | 1775 | 1740 | 1703 | 1664 | 1613 |
| | Tap 2 | 1665 | 1632 | 1593 | 1556 | 1507 | 1453 |
| | Tap 1 | 1462 | 1418 | 1371 | 1327 | 1278 | 1228 |

■ - Airflow above 450 cfm/ton.

NOTES:

- Airflow based upon dry coil at 230v with factory-approved filter and electric heater (2 element heater sizes 018 through 036, 3 element heater sizes 042 through 061). For FB4C models, airflow at 208 volts is approximately the same as 230 volts because the multi-tap ECM motor is a constant torque motor. The torque doesn't drop off at the speeds the motor operates.
- To avoid potential for condensate blowing out of drain pan prior to making drain trap:
Return static pressure must be less than 0.40 in. wc. Horizontal applications of 042 - 061 sizes must have supply static greater than 0.20 in. wc.
- Airflow above 400 cfm/ton on 048-061 size could result in condensate blowing off coil or splashing out of drain pan.

PERFORMANCE DATA (cont.)

GROSS COOLING CAPACITIES (MBH) - R-410A REFRIGERANT

| FB4C Unit Size | INDOOR COIL AIR | | SATURATED TEMPERATURE LEAVING EVAPORATOR (°F / °C) | | | | | | | | | | | | | | |
|----------------------|--------------------|---------|--|-----|------|--------|-----|------|--------|-----|------|---------|-----|------|---------|-----|------|
| | | | 35 / 2 | | | 40 / 4 | | | 45 / 7 | | | 50 / 10 | | | 55 / 13 | | |
| | | | TC | SHC | BF | TC | SHC | BF | TC | SHC | BF | TC | SHC | BF | TC | SHC | BF |
| 018 | 525 | 72 / 22 | 41 | 20 | 0.00 | 37 | 17 | 0.00 | 32 | 15 | 0.00 | 27 | 13 | 0.02 | 21 | 11 | 0.03 |
| | | 67 / 19 | 33 | 20 | 0.03 | 29 | 18 | 0.03 | 24 | 16 | 0.03 | 19 | 13 | 0.03 | 13 | 11 | 0.04 |
| | | 62 / 17 | 26 | 20 | 0.03 | 22 | 18 | 0.03 | 18 | 16 | 0.04 | 14 | 14 | 0.10 | 11 | 11 | 0.26 |
| | 600 | 72 / 22 | 45 | 22 | 0.00 | 40 | 19 | 0.00 | 35 | 17 | 0.01 | 30 | 15 | 0.03 | 23 | 12 | 0.04 |
| | | 67 / 19 | 37 | 22 | 0.04 | 32 | 20 | 0.04 | 27 | 17 | 0.04 | 21 | 15 | 0.04 | 15 | 12 | 0.05 |
| | | 62 / 17 | 29 | 22 | 0.04 | 24 | 20 | 0.04 | 19 | 18 | 0.05 | 15 | 15 | 0.12 | 13 | 13 | 0.28 |
| | 675 | 72 / 22 | 49 | 24 | 0.00 | 44 | 21 | 0.00 | 38 | 19 | 0.03 | 32 | 16 | 0.04 | 25 | 13 | 0.05 |
| | | 67 / 19 | 40 | 24 | 0.05 | 35 | 22 | 0.05 | 29 | 19 | 0.05 | 23 | 16 | 0.05 | 16 | 14 | 0.06 |
| | | 62 / 17 | 32 | 25 | 0.05 | 27 | 22 | 0.05 | 21 | 19 | 0.06 | 17 | 17 | 0.14 | 14 | 14 | 0.29 |
| 024 | 700 | 72 / 22 | 43 | 22 | 0.00 | 38 | 20 | 0.00 | 33 | 17 | 0.03 | 28 | 15 | 0.04 | 22 | 12 | 0.05 |
| | | 67 / 19 | 35 | 23 | 0.05 | 30 | 20 | 0.05 | 25 | 18 | 0.05 | 20 | 15 | 0.05 | 14 | 13 | 0.06 |
| | | 62 / 17 | 28 | 23 | 0.06 | 23 | 21 | 0.06 | 18 | 18 | 0.06 | 15 | 15 | 0.14 | 12 | 12 | 0.29 |
| | 800 | 72 / 22 | 47 | 24 | 0.00 | 42 | 22 | 0.01 | 36 | 19 | 0.04 | 31 | 17 | 0.06 | 24 | 14 | 0.06 |
| | | 67 / 19 | 38 | 25 | 0.06 | 33 | 22 | 0.06 | 28 | 20 | 0.07 | 22 | 17 | 0.07 | 15 | 14 | 0.08 |
| | | 62 / 17 | 30 | 26 | 0.07 | 25 | 23 | 0.07 | 20 | 20 | 0.08 | 16 | 16 | 0.17 | 13 | 13 | 0.31 |
| | 900 | 72 / 22 | 51 | 26 | 0.00 | 45 | 24 | 0.03 | 40 | 21 | 0.06 | 33 | 18 | 0.07 | 26 | 15 | 0.07 |
| | | 67 / 19 | 41 | 27 | 0.07 | 36 | 25 | 0.08 | 30 | 22 | 0.08 | 24 | 19 | 0.08 | 17 | 16 | 0.09 |
| | | 62 / 17 | 33 | 28 | 0.08 | 28 | 25 | 0.08 | 22 | 22 | 0.09 | 18 | 18 | 0.19 | 15 | 15 | 0.33 |
| 025 | 700 | 72 / 22 | 53 | 26 | 0.00 | 47 | 23 | 0.00 | 41 | 21 | 0.00 | 35 | 18 | 0.02 | 27 | 15 | 0.03 |
| | | 67 / 19 | 43 | 27 | 0.03 | 37 | 24 | 0.03 | 31 | 21 | 0.03 | 25 | 18 | 0.03 | 17 | 15 | 0.04 |
| | | 62 / 17 | 34 | 27 | 0.03 | 28 | 24 | 0.03 | 23 | 21 | 0.04 | 18 | 18 | 0.10 | 14 | 14 | 0.26 |
| | 800 | 72 / 22 | 58 | 29 | 0.00 | 52 | 26 | 0.00 | 46 | 23 | 0.01 | 38 | 20 | 0.03 | 30 | 16 | 0.04 |
| | | 67 / 19 | 47 | 30 | 0.04 | 41 | 26 | 0.04 | 35 | 23 | 0.04 | 27 | 20 | 0.04 | 19 | 17 | 0.05 |
| | | 62 / 17 | 38 | 30 | 0.04 | 32 | 27 | 0.04 | 25 | 24 | 0.05 | 20 | 20 | 0.12 | 16 | 16 | 0.28 |
| | 900 | 72 / 22 | 63 | 32 | 0.00 | 57 | 28 | 0.00 | 50 | 25 | 0.03 | 41 | 21 | 0.04 | 33 | 18 | 0.05 |
| | | 67 / 19 | 52 | 32 | 0.05 | 45 | 29 | 0.05 | 38 | 25 | 0.05 | 30 | 22 | 0.05 | 21 | 18 | 0.06 |
| | | 62 / 17 | 41 | 33 | 0.05 | 34 | 29 | 0.05 | 27 | 26 | 0.06 | 22 | 22 | 0.14 | 18 | 18 | 0.29 |
| 030 | 875 | 72 / 22 | 62 | 31 | 0.00 | 56 | 28 | 0.00 | 49 | 24 | 0.02 | 41 | 21 | 0.04 | 32 | 17 | 0.04 |
| | | 67 / 19 | 51 | 32 | 0.04 | 44 | 28 | 0.05 | 37 | 25 | 0.05 | 29 | 21 | 0.05 | 21 | 18 | 0.05 |
| | | 62 / 17 | 40 | 32 | 0.05 | 34 | 29 | 0.05 | 27 | 25 | 0.06 | 21 | 21 | 0.13 | 18 | 18 | 0.28 |
| | 1000 | 72 / 22 | 68 | 34 | 0.00 | 61 | 31 | 0.00 | 53 | 27 | 0.04 | 45 | 23 | 0.05 | 35 | 19 | 0.06 |
| | | 67 / 19 | 56 | 35 | 0.06 | 49 | 31 | 0.06 | 41 | 28 | 0.06 | 32 | 24 | 0.06 | 22 | 20 | 0.07 |
| | | 62 / 17 | 44 | 36 | 0.06 | 37 | 32 | 0.06 | 29 | 28 | 0.07 | 24 | 24 | 0.16 | 20 | 20 | 0.30 |
| | 1125 | 72 / 22 | 74 | 37 | 0.00 | 66 | 33 | 0.02 | 58 | 29 | 0.05 | 48 | 25 | 0.06 | 38 | 21 | 0.07 |
| | | 67 / 19 | 60 | 38 | 0.07 | 53 | 34 | 0.07 | 44 | 30 | 0.07 | 35 | 26 | 0.07 | 24 | 22 | 0.08 |
| | | 62 / 17 | 48 | 39 | 0.07 | 40 | 35 | 0.07 | 32 | 31 | 0.09 | 26 | 26 | 0.18 | 21 | 21 | 0.32 |
| 036 | 1050 | 72 / 22 | 68 | 34 | 0.00 | 61 | 31 | 0.00 | 53 | 27 | 0.04 | 45 | 23 | 0.05 | 35 | 20 | 0.06 |
| | | 67 / 19 | 56 | 36 | 0.06 | 49 | 32 | 0.06 | 41 | 28 | 0.06 | 32 | 24 | 0.07 | 22 | 20 | 0.07 |
| | | 62 / 17 | 44 | 36 | 0.07 | 37 | 33 | 0.07 | 30 | 29 | 0.08 | 24 | 24 | 0.17 | 20 | 20 | 0.31 |
| | 1200 | 72 / 22 | 75 | 38 | 0.00 | 67 | 34 | 0.03 | 58 | 30 | 0.06 | 49 | 26 | 0.07 | 38 | 22 | 0.07 |
| | | 67 / 19 | 61 | 39 | 0.07 | 53 | 35 | 0.08 | 45 | 31 | 0.08 | 35 | 27 | 0.08 | 25 | 22 | 0.09 |
| | | 62 / 17 | 49 | 40 | 0.08 | 41 | 36 | 0.08 | 32 | 32 | 0.09 | 26 | 26 | 0.19 | 22 | 22 | 0.33 |
| | 1350 | 72 / 22 | 81 | 41 | 0.00 | 72 | 37 | 0.05 | 63 | 32 | 0.07 | 53 | 28 | 0.08 | 41 | 23 | 0.09 |
| | | 67 / 19 | 66 | 43 | 0.08 | 58 | 38 | 0.09 | 48 | 34 | 0.09 | 38 | 29 | 0.09 | 27 | 25 | 0.10 |
| | | 62 / 17 | 53 | 44 | 0.09 | 44 | 40 | 0.09 | 35 | 35 | 0.11 | 29 | 29 | 0.22 | 24 | 24 | 0.35 |
| 042 | 1225 | 72 / 22 | 89 | 44 | 0.00 | 80 | 40 | 0.00 | 70 | 35 | 0.02 | 58 | 30 | 0.03 | 46 | 25 | 0.04 |
| | | 67 / 19 | 73 | 45 | 0.04 | 63 | 41 | 0.04 | 53 | 36 | 0.04 | 42 | 31 | 0.04 | 29 | 25 | 0.05 |
| | | 62 / 17 | 58 | 46 | 0.04 | 48 | 41 | 0.04 | 38 | 36 | 0.05 | 30 | 30 | 0.12 | 25 | 25 | 0.28 |
| | 1400 | 72 / 22 | 98 | 49 | 0.00 | 88 | 44 | 0.00 | 77 | 39 | 0.03 | 64 | 33 | 0.04 | 50 | 28 | 0.05 |
| | | 67 / 19 | 80 | 50 | 0.05 | 70 | 45 | 0.05 | 58 | 39 | 0.05 | 46 | 34 | 0.05 | 32 | 28 | 0.06 |
| | | 62 / 17 | 64 | 51 | 0.06 | 53 | 46 | 0.06 | 42 | 40 | 0.06 | 34 | 34 | 0.14 | 28 | 28 | 0.29 |
| | 1575 | 72 / 22 | 106 | 53 | 0.00 | 95 | 48 | 0.00 | 83 | 42 | 0.04 | 69 | 36 | 0.05 | 54 | 30 | 0.06 |
| | | 67 / 19 | 87 | 55 | 0.06 | 76 | 49 | 0.06 | 63 | 43 | 0.06 | 50 | 37 | 0.07 | 35 | 31 | 0.07 |
| | | 62 / 17 | 69 | 56 | 0.07 | 58 | 50 | 0.07 | 46 | 44 | 0.08 | 37 | 37 | 0.17 | 31 | 31 | 0.31 |

GROSS COOLING CAPACITIES (MBH) - R-410A REFRIGERANT (Continued)

| FB4C Unit Size | INDOOR COIL AIR | | SATURATED TEMPERATURE LEAVING EVAPORATOR (°F / °C) | | | | | | | | | | | | | | |
|----------------|-----------------|---------|--|-----|------|--------|-----|------|--------|-----|------|---------|-----|------|---------|-----|------|
| | | | 35 / 2 | | | 40 / 4 | | | 45 / 7 | | | 50 / 10 | | | 55 / 13 | | |
| | | | TC | SHC | BF | TC | SHC | BF | TC | SHC | BF | TC | SHC | BF | TC | SHC | BF |
| 048 | 1400 | 72 / 22 | 88 | 46 | 0.00 | 79 | 42 | 0.00 | 69 | 37 | 0.03 | 58 | 31 | 0.04 | 45 | 26 | 0.05 |
| | | 67 / 19 | 72 | 48 | 0.05 | 63 | 43 | 0.05 | 52 | 37 | 0.05 | 41 | 32 | 0.05 | 29 | 27 | 0.06 |
| | | 62 / 17 | 57 | 49 | 0.06 | 48 | 43 | 0.06 | 38 | 38 | 0.06 | 30 | 30 | 0.14 | 25 | 25 | 0.29 |
| | 1600 | 72 / 22 | 97 | 51 | 0.00 | 87 | 46 | 0.01 | 75 | 40 | 0.04 | 63 | 35 | 0.06 | 49 | 29 | 0.06 |
| | | 67 / 19 | 79 | 52 | 0.06 | 69 | 47 | 0.06 | 57 | 41 | 0.07 | 45 | 36 | 0.07 | 32 | 30 | 0.08 |
| | | 62 / 17 | 63 | 54 | 0.07 | 53 | 48 | 0.07 | 42 | 42 | 0.08 | 34 | 34 | 0.17 | 28 | 28 | 0.31 |
| | 1800 | 72 / 22 | 105 | 55 | 0.00 | 94 | 50 | 0.03 | 82 | 44 | 0.06 | 68 | 38 | 0.07 | 54 | 31 | 0.07 |
| | | 67 / 19 | 86 | 57 | 0.07 | 75 | 51 | 0.08 | 62 | 45 | 0.08 | 49 | 39 | 0.08 | 34 | 33 | 0.09 |
| | | 62 / 17 | 68 | 59 | 0.08 | 57 | 53 | 0.08 | 45 | 47 | 0.09 | 37 | 37 | 0.19 | 30 | 30 | 0.33 |
| 060 | 1600 | 72 / 22 | 106 | 54 | 0.00 | 95 | 49 | 0.00 | 82 | 43 | 0.01 | 69 | 37 | 0.03 | 54 | 31 | 0.04 |
| | | 67 / 19 | 86 | 56 | 0.04 | 75 | 50 | 0.04 | 63 | 44 | 0.04 | 49 | 37 | 0.04 | 35 | 31 | 0.05 |
| | | 62 / 17 | 68 | 56 | 0.04 | 57 | 50 | 0.04 | 45 | 44 | 0.05 | 36 | 36 | 0.12 | 29 | 29 | 0.28 |
| | 1750 | 72 / 22 | 113 | 58 | 0.00 | 101 | 52 | 0.00 | 88 | 46 | 0.02 | 74 | 39 | 0.04 | 58 | 33 | 0.04 |
| | | 67 / 19 | 92 | 59 | 0.04 | 80 | 53 | 0.05 | 67 | 47 | 0.05 | 53 | 40 | 0.05 | 37 | 33 | 0.05 |
| | | 62 / 17 | 73 | 61 | 0.05 | 61 | 54 | 0.05 | 49 | 48 | 0.06 | 39 | 39 | 0.13 | 32 | 32 | 0.28 |
| | 2000 | 72 / 22 | 124 | 64 | 0.00 | 111 | 57 | 0.00 | 97 | 50 | 0.04 | 81 | 43 | 0.05 | 63 | 36 | 0.06 |
| | | 67 / 19 | 101 | 66 | 0.06 | 88 | 59 | 0.06 | 74 | 52 | 0.06 | 58 | 44 | 0.06 | 41 | 37 | 0.07 |
| | | 62 / 17 | 80 | 67 | 0.06 | 67 | 60 | 0.06 | 53 | 53 | 0.07 | 43 | 43 | 0.16 | 35 | 35 | 0.30 |
| 061 | 1600 | 72 / 22 | 109 | 57 | 0.00 | 98 | 51 | 0.00 | 86 | 45 | 0.00 | 73 | 39 | 0.01 | 58 | 32 | 0.02 |
| | | 67 / 19 | 89 | 58 | 0.02 | 78 | 52 | 0.02 | 66 | 46 | 0.02 | 52 | 39 | 0.03 | 37 | 33 | 0.03 |
| | | 62 / 17 | 71 | 59 | 0.03 | 60 | 52 | 0.03 | 48 | 46 | 0.03 | 37 | 37 | 0.09 | 31 | 31 | 0.24 |
| | 1750 | 72 / 22 | 117 | 61 | 0.00 | 105 | 55 | 0.00 | 92 | 48 | 0.01 | 78 | 41 | 0.02 | 62 | 35 | 0.02 |
| | | 67 / 19 | 95 | 62 | 0.03 | 84 | 56 | 0.03 | 70 | 49 | 0.03 | 56 | 42 | 0.03 | 40 | 35 | 0.03 |
| | | 62 / 17 | 76 | 63 | 0.03 | 64 | 56 | 0.03 | 51 | 50 | 0.04 | 40 | 40 | 0.10 | 33 | 33 | 0.25 |
| | 2000 | 72 / 22 | 129 | 67 | 0.00 | 116 | 60 | 0.00 | 102 | 53 | 0.02 | 86 | 46 | 0.03 | 68 | 38 | 0.03 |
| | | 67 / 19 | 105 | 69 | 0.04 | 92 | 62 | 0.04 | 78 | 54 | 0.04 | 62 | 47 | 0.04 | 44 | 39 | 0.05 |
| | | 62 / 17 | 84 | 70 | 0.04 | 71 | 63 | 0.04 | 57 | 55 | 0.05 | 45 | 45 | 0.12 | 37 | 37 | 0.27 |

CFM - Cubic Ft per Minute EWB - Entering Wet Bulb °F (°C) LWB - Leaving Wet Bulb °F (°C) TC - Gross Cooling Capacity 1000 Btuh

SHC - Gross Sensible Capacity 1000 Btuh BF - Bypass Factor MBH - 1000 Btuh

NOTES:

- Contact manufacturer for cooling capacities at conditions other than shown in table.
- Formulas:
 Leaving db = entering db - $\frac{\text{sensible heat cap.}}{1.09 \times \text{CFM}}$
 Leaving wb = wb corresponding to enthalpy of air leaving coil (h_{lwb})
 $h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{CFM}}$
 where h_{ewb} = enthalpy of air entering coil. Direct interpolation is permissible. Do not extrapolate.
- SHC is based on 80°F (27°C) db temperature of air entering coil. Below 80°F (27°C) db, subtract (Correction Factor x CFM) from SHC. Above 80°F (27°C) db, add (Correction Factor x CFM) to SHC.
- Bypass Factor = 0 indicates no psychometric solution. Use bypass factor of next lower EWB for approximation.

SHC CORRECTION FACTOR

| BYPASS FACTOR | ENTERING AIR DRY-BULB TEMPERATURE (°F) | | | | | |
|---------------|--|------|------|------|------|-------------------------|
| | 79 | 78 | 77 | 76 | 75 | Under 75 |
| | 81 | 82 | 83 | 84 | 85 | Over 85 |
| | ENTERING AIR DRY-BULB TEMPERATURE (°C) | | | | | |
| | 26 | 25 | 25 | 24 | 24 | Under 75 |
| | 27 | 28 | 28 | 29 | 29 | Over 85 |
| | Correction Factor | | | | | |
| 0.10 | .098 | 1.96 | 2.94 | 3.92 | 4.91 | Use formula shown below |
| 0.20 | 0.87 | 1.74 | 2.62 | 3.49 | 4.36 | |
| 0.30 | 0.76 | 1.53 | 2.29 | 3.05 | 3.82 | |

Interpolation is permissible.
 Correction Factor = $1.09 \times (1 - \text{BF}) \times (\text{db} - 80)$

PERFORMANCE DATA (cont.)

FB4C AIR DELIVERY PERFORMANCE CORRECTION COMPONENT PRESSURE DROP (in wc) AT INDICATED AIRFLOW (DRY TO WET COIL)

| UNIT SIZE | CFM | | | | | | | | | | | | | | | |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 |
| 018 | 0.034 | 0.049 | 0.063 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 024 | 0.034 | 0.049 | 0.063 | 0.076 | 0.089 | — | — | — | — | — | — | — | — | — | — | — |
| 025 | 0.015 | 0.026 | 0.038 | 0.049 | 0.059 | — | — | — | — | — | — | — | — | — | — | — |
| 030 | — | — | — | 0.049 | 0.059 | 0.070 | 0.080 | — | — | — | — | — | — | — | — | — |
| 036 | — | — | — | — | — | 0.070 | 0.080 | 0.090 | 0.099 | — | — | — | — | — | — | — |
| 042 | — | — | — | — | — | — | — | 0.049 | 0.056 | 0.063 | 0.070 | — | — | — | — | — |
| 048 | — | — | — | — | — | — | — | — | — | 0.063 | 0.070 | 0.076 | 0.083 | 0.090 | — | — |
| 060 | — | — | — | — | — | — | — | — | — | — | — | 0.049 | 0.054 | 0.059 | 0.065 | 0.070 |
| 061 | — | — | — | — | — | — | — | — | — | — | — | 0.027 | 0.031 | 0.035 | 0.039 | 0.043 |

ELECTRIC HEATER STATIC PRESSURE DROP (in wc)

| FB4C 018 - 036 | | | FB4C 042 - 061 | | |
|-------------------|-------|-------------------------------------|-------------------|------------|-------------------------------------|
| HEATER ELEMENTS | kW | EXTERNAL STATIC PRESSURE CORRECTION | HEATER ELEMENTS | kW | EXTERNAL STATIC PRESSURE CORRECTION |
| 0 | 0 | +02 | 0 | 0 | +04 |
| 1 | 3, 5 | +01 | 2 | 8, 10 | +02 |
| 2 | 8, 10 | 0 | 3 | 9, 15 | 0 |
| 3 | 9, 15 | -02 | 4 | 20 | -02 |
| 4 | 20 | -04 | 6 | 18, 24, 30 | -10 |

The airflow performance data was developed using fan coils with 10-kW electric heaters (2 elements) in the 018 through 036 size units and 15-kW heaters (3 elements) in the 042 through 061 size units. For fan coils with heaters of a different number of elements, the external available static at a given CFM from the curve may be corrected by adding or subtracting available external static pressure as indicated above.

MINIMUM CFM AND MOTOR SPEED SELECTION

| FB4C | HEATER kW | | | | | | | | | |
|-----------|-----------|------|------|------|------|------|------|------|------|------|
| | 3 | 5 | 8 | 9 | 10 | 15 | 18 | 20 | 24 | 30 |
| 018 | 525 | 525 | 525 | — | 600 | — | — | — | — | — |
| 024 & 025 | 700 | 700 | 700 | — | 700 | 775 | — | — | — | — |
| 030 | — | 875 | 875 | — | 875 | 875 | — | 1060 | — | — |
| 036 | — | 1050 | 970 | 970 | 970 | 920 | — | 1040 | — | — |
| 042 | — | — | 1225 | 1225 | 1225 | 1225 | 1225 | 1225 | — | — |
| 048 | — | — | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| 060 & 061 | — | — | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 | 1750 |

Speed Tap 4 (white wire) is used for electric heat only. White wire must remain on tap 4.

PERFORMANCE DATA (cont.)

ACCESSORY ELECTRIC HEATERS

| HEATER PART NO. | kW @ 240V | VOLTS/PH | STAGES (kW OPERATING) | INTERNAL CIRCUIT PROTECTION | FAN COIL SIZE USED WITH | HEATING CAP.** @ 230V |
|-----------------|-----------|----------|-----------------------|-----------------------------|-------------------------|-----------------------|
| KFCEH0401N03 | 3 | 230/1 | 3 | None | 018-025 | 9,400 |
| KFCEH0501N05 | 5 | 230/1 | 5 | None | 018-061 | 15,700 |
| KFCEH0801N08 | 8 | 230/1 | 8 | None | 018-061 | 25,100 |
| KFCEH0901N10 | 10 | 230/1 | 10 | None | 018-061 | 31,400 |
| KFCEH3201F20 | 20 | 230/1 | 5, 20 | Fuse} | 030-061 | 62,800 |
| KFCEH1601315 | 15 | 230/3 | 5, 15 | None | 036-061 | 47,100 |
| KFCEH2001318 | 18 | 230/3 | 6, 12, 18 | None | 042-061 | 56,500 |
| KFCEH3401F24 | 24 | 230/3* | 8, 16, 24 | Fuse | 048, 061 | 78,300 |
| KFCEH3501F30 | 30 | 230/3* | 10, 20, 30 | Fuse | 048, 061 | 94,100 |
| KFCEH2401C05 | 5 | 230/1 | 5 | Circuit Breaker | 018-061 | 15,700 |
| KFCEH2501C08 | 8 | 230/1 | 8 | Circuit Breaker | 018-061 | 25,100 |
| KFCEH2601C10 | 10 | 230/1 | 10 | Circuit Breaker | 018-061 | 31,400 |
| KFCEH3301C20 | 20 | 230/1 | 5, 20 | Circuit Breaker | 030-061 | 62,800 |
| KFCEH2901N09 | 9 | 230/1 † | 3, 9 | None | 036-061 | 28,200 |
| KFCEH3001F15 | 15 | 230/1 | 5, 15 | Fuse ‡ | 024-061 | 47,100 |
| KFCEH3101C15 | 15 | 230/1 | 5, 15 | Circuit Breaker | 024-061 | 47,100 |

* Field convertible to 1 phase.

† Field convertible to 3 phase.

‡ Single point wiring kit required for these heaters in Canada.

** Blower Motor heat not included.

PERFORMANCE DATA (cont.)

ESTIMATED SOUND POWER LEVEL (dBA)

| FB4C | CONDITIONS | | OCTAVE BAND CENTER FREQUENCY* | | | | | | |
|---------|------------|---------------------|-------------------------------|------|------|------|------|------|------|
| | CFM | Ext Static Pressure | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 |
| 018 | 600 | 0.25 | 64.7 | 60.7 | 56.7 | 53.7 | 51.7 | 49.7 | 45.7 |
| 024/025 | 800 | 0.25 | 66.0 | 62.0 | 58.0 | 55.0 | 53.0 | 51.0 | 47.0 |
| 030 | 1000 | 0.25 | 67.0 | 63.0 | 59.0 | 56.0 | 54.0 | 52.0 | 48.0 |
| 036 | 1200 | 0.25 | 67.8 | 63.8 | 59.8 | 56.8 | 54.8 | 52.8 | 48.8 |
| 042 | 1400 | 0.25 | 68.4 | 64.4 | 60.4 | 57.4 | 55.4 | 53.4 | 49.4 |
| 048 | 1600 | 0.25 | 69.0 | 65.0 | 61.0 | 58.0 | 56.0 | 54.0 | 50.0 |
| 060/061 | 2000 | 0.25 | 70.0 | 66.0 | 62.0 | 59.0 | 57.0 | 55.0 | 51.0 |

* Estimated sound power levels have been derived using the method described in the 1987 ASHRAE HVAC Systems & Applications Handbook, Chapter 52, p. 52.7.

ELECTRICAL DATA FOR UNITS WITH FACTORY-INSTALLED HEAT

| FB4C | MTR HP | MTR FLA | VOLTS / PH/ HZ | HEAT PACK INSTALLED | SINGLE CIRCUIT | | | DUAL CIRCUIT | | | | | | | |
|--------|--------|---------|----------------|---------------------|----------------|-----------|-------|--------------|-----------|-------|-----------|-----------|-------|-------|-----|
| | | | | | HEATER AMPS | MCA | MOCP | HTR. AMPS | MCA | MOCP | HTR. AMPS | MCA | MOCP | | |
| | | | | | | | | L1/L2 | L1/L2 | L1/L2 | L3/L4 | L3/L4 | L3/L4 | | |
| 018L05 | 1/3 | 2.8 | 208/230/1/60 | MKFCEH0501N05 | 18.1/20.0 | 26.1/28.5 | 30/30 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 018L08 | 1/3 | 2.8 | 208/230/1/60 | MKFCEH0801N08 | 28.9/32.0 | 39.6/43.5 | 40/45 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 024L05 | 1/3 | 2.8 | 208/230/1/60 | MKFCEH0501N05 | 18.1/20.0 | 27.8/30.0 | 30/30 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 024L10 | 1/3 | 2.8 | 208/230/1/60 | MKFCEH0901N10 | 36.2/40.0 | 48.8/53.5 | 50/60 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 025L05 | 1/3 | 2.8 | 208/230/1/60 | MKFCEH0501N05 | 18.1/20.0 | 27.8/30.0 | 30/30 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 025L10 | 1/3 | 2.8 | 208/230/1/60 | MKFCEH0901N10 | 36.2/40.0 | 48.8/53.5 | 50/60 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 030L08 | 1/3 | 2.8 | 208/230/1/60 | MKFCEH0801N08 | 28.9/32.0 | 39.6/43.5 | 40/45 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 030L10 | 1/3 | 2.8 | 208/230/1/60 | MKFCEH0901N10 | 36.2/40.0 | 48.8/53.5 | 50/60 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 036L10 | 1/2 | 4.1 | 208/230/1/60 | MKFCEH0901N10 | 36.2/40.0 | 50.4/55.1 | 60/60 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 036L15 | 1/2 | 4.1 | 208/230/1/60 | MKFCEH1501F15 | 54.2/59.9 | 72.9/80.0 | 80/80 | 36.2/40.0 | 50.4/55.2 | 50/60 | 18.1/20.0 | 22.6/25.0 | 25/25 | 25/25 | |
| 042L10 | 1/2 | 4.1 | 208/230/1/60 | MKFCEH0901N10 | 36.2/40.0 | 50.4/55.1 | 60/60 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 042L15 | 1/2 | 4.1 | 208/230/1/60 | MKFCEH1501F15 | 54.2/59.9 | 72.9/80.0 | 80/80 | 36.2/40.0 | 50.4/55.2 | 50/60 | 18.1/20.0 | 22.6/25.0 | 25/25 | 25/25 | |
| 048L10 | 3/4 | 6.0 | 208/230/1/60 | MKFCEH0901N10 | 36.2/40.0 | 52.8/57.5 | 60/60 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 048L15 | 3/4 | 6.0 | 208/230/1/60 | MKFCEH1501F15 | 54.2/59.9 | 75.3/82.4 | 80/90 | 36.2/40.0 | 52.8/57.5 | 60/60 | 18.1/20.0 | 22.6/25.0 | 25/25 | 25/25 | |

ELECTRICAL DATA FOR UNITS WITHOUT ELECTRICAL HEAT

| MODEL NO. | MTR HP | MTR FLA | VOLTS/PH/HZ | SINGLE CIRCUIT | | BRANCH CIRCUIT MIN WIRE SIZE* AWG |
|------------------|--------|---------|--------------|----------------|--------------------------------|-----------------------------------|
| | | | | MCA | MAXIMUM OVERCURRENT PROTECTION | |
| FB4CN(F,P)018L00 | 1/3 | 2.8 | 208/230/1/60 | 3.5 | 15 | 14 |
| FB4CNF024L00 | 1/3 | 2.8 | 208/230/1/60 | 3.5 | 15 | 14 |
| FB4CNP025L00 | 1/3 | 2.8 | 208/230/1/60 | 3.5 | 15 | 14 |
| FB4CN(F,P)030L00 | 1/3 | 2.8 | 208/230/1/60 | 3.5 | 15 | 14 |
| FB4CN(F,P)036L00 | 1/2 | 4.1 | 208/230/1/60 | 5.1 | 15 | 14 |
| FB4CN(F,P)042L00 | 1/2 | 4.1 | 208/230/1/60 | 5.1 | 15 | 14 |
| FB4CN(F,P)048L00 | 3/4 | 6.0 | 208/230/1/60 | 7.5 | 15 | 14 |
| FB4CNP060L00 | 3/4 | 6.0 | 208/230/1/60 | 7.5 | 15 | 14 |
| FB4CNP061L00 | 3/4 | 6.0 | 208/230/1/60 | 7.5 | 15 | 14 |

* Use copper wire only. Use 75 °C only in this application. When using non-metallic (NM) sheathed cable, wire size required should be based on that of 60 °C conductors, instead of wire sizes shown in table above per NEC Article 336-26.

NOTE: If branch circuit wire length exceeds 100 ft (30 m), consult NEC 215-2 to determine maximum wire length. Use 2% voltage drop.

FLA - Full Load Amps

PERFORMANCE DATA (cont.)

ACCESSORY ELECTRIC HEATER ELECTRICAL DATA

| HEATER PART NO. | kW | | PHASE | INTERNAL CIRCUIT PROTECTION | HEATER AMPS 208/230V | | BRANCH CIRCUIT | | | | | | | | | | | | | | | |
|---------------------------|------|------|-------|-----------------------------|----------------------|--------------|------------------------|----------------|--------------|-------------------------------|----------------|--------------|----------------------------|----------------|--------------|--------------------------------|----------------|--------------|--------------------------------|----------------|--------------|--------|
| | | | | | | | Min Ampacity 208/230V* | | | Min Wire Size (AWG) 208/230V† | | | Min Gnd Wire Size 208/230V | | | Max Fuse/Ckt Bkr Amps 208/230V | | | Max Wire Length 208/230V (Ft)‡ | | | |
| | 240v | 208v | | | Single Circuit | Dual Circuit | | Single Circuit | Dual Circuit | | Single Circuit | Dual Circuit | | Single Circuit | Dual Circuit | | Single Circuit | Dual Circuit | | Single Circuit | Dual Circuit | |
| | | | | | | L1,L2 | L3,L4 | | L1,L2 | L3,L4 | | L1, L2 | L3, L4 | | L1, L2 | L3, L4 | | L1, L2 | L3, L4 | | L1, L2 | L3, L4 |
| KFCEH0401N03 | 3 | 2.3 | 1 | None | 10.9/12.0 | — | — | 15.9/17.3 | — | — | 12/12 | — | — | 12/12 | — | — | 20/20 | — | — | 67/68 | — | — |
| KFCEH0501N05 ¹ | 5 | 3.8 | 1 | None | 18.1/20.0 | — | — | 26.0/28.4 | — | — | 10/10 | — | — | 10/10 | — | — | 30/30 | — | — | 66/66 | — | — |
| KFCEH0501N05 ² | 5 | 3.8 | 1 | None | 18.1/20.0 | — | — | 31.2/33.5 | — | — | 8/8 | — | — | 10/10 | — | — | 35/35 | — | — | 85/88 | — | — |
| KFCEH2401C05 ¹ | 5 | 3.8 | 1 | Ckt Bkr | 18.1/20.0 | — | — | 26.0/28.4 | — | — | 10/10 | — | — | 10/10 | — | — | 30/30 | — | — | 66/66 | — | — |
| KFCEH2401C05 ² | 5 | 3.8 | 1 | Ckt Bkr | 18.1/20.0 | — | — | 31.2/33.5 | — | — | 8/8 | — | — | 10/10 | — | — | 35/35 | — | — | 85/88 | — | — |
| KFCEH0801N08 | 8 | 6.0 | 1 | None | 28.9/32.0 | — | — | 44.7/48.5 | — | — | 8/8 | — | — | 10/10 | — | — | 45/50 | — | — | 59/60 | — | — |
| KFCEH2501C08 | 8 | 6.0 | 1 | Ckt Bkr | 28.9/32.0 | — | — | 44.7/48.5 | — | — | 8/8 | — | — | 10/10 | — | — | 45/50 | — | — | 59/60 | — | — |
| KFCEH2901N09 | 9 | 6.8 | 1 | None | 32.8/36.0 | — | — | 49.5/53.5 | — | — | 8/6 | — | — | 10/10 | — | — | 50/60 | — | — | 54/87 | — | — |
| KFCEH2901N09** | 9 | 6.8 | 3 | None | 18.8/20.8 | — | — | 32.0/34.5 | — | — | 8/8 | — | — | 10/10 | — | — | 35/35 | — | — | 83/85 | — | — |
| KFCEH0901N10 | 10 | 7.5 | 1 | None | 36.2/40.0 | — | — | 53.8/58.5 | — | — | 6/6 | — | — | 10/10 | — | — | 60/60 | — | — | 78/80 | — | — |
| KFCEH2601C10 | 10 | 7.5 | 1 | Ckt Bkr | 36.2/40.0 | — | — | 53.8/58.5 | — | — | 6/6 | — | — | 10/10 | — | — | 60/60 | — | — | 78/80 | — | — |
| KFCEH3001F15 | 15 | 11.3 | 1 | Fuse | 54.2/59.9 | 36.2/40.0 | 18.1/20.0 | 76.3/83.4 | 53.8/58.5 | 22.7/25.0 | 4/4 | 6/6 | 10/10 | 8/8 | 10/10 | 10/10 | 80/90 | 60/60 | 25/25 | 88/89 | 78/80 | 75/76 |
| KFCEH3101C15 | 15 | 11.3 | 1 | Ckt Bkr | — | 36.2/40.0 | 18.1/20.0 | — | 53.8/58.5 | 22.7/25.0 | — | 6/6 | 10/10 | — | 10/10 | 10/10 | — | 60/60 | 25/25 | — | 78/80 | 75/76 |
| KFCEH1601315 | 15 | 11.3 | 3 | None | 31.3/34.6 | — | — | 47.7/51.8 | — | — | 8/6 | — | — | 10/10 | — | — | 50/60 | — | — | 56/90 | — | — |
| KFCEH2001318 | 18 | 13.5 | 3 | None | 37.6/41.5 | — | — | 55.5/60.4 | — | — | 6/6 | — | — | 10/8 | — | — | 60/70 | — | — | 76/77 | — | — |
| KFCEH3201F20 | 20 | 15.0 | 1 | Fuse | 72.3/79.9 | 36.2/40.0 | 36.2/40.0 | 98.9/108.4 | 53.8/58.5 | 45.3/50.0 | 3/2 | 6/6 | 8/8 | 8/6 | 10/10 | 10/10 | 100/110 | 60/60 | 50/50 | 85/109 | 78/80 | 59/59 |
| KFCEH3301C20 | 20 | 15.0 | 1 | Ckt Bkr | — | 36.2/40.0 | 36.2/40.0 | — | 53.8/58.5 | 45.3/50.0 | — | 6/6 | 8/8 | — | 10/10 | 10/10 | — | 60/60 | 50/50 | — | 78/80 | 59/59 |
| KFCEH3401F24†† | 24 | 18.0 | 3 | Fuse | 50.1/55.4 | — | — | 71.2/77.8 | — | — | 4/4 | — | — | 8/8 | — | — | 80/80 | — | — | 94/95 | — | — |
| | 24 | 18.0 | 1 | Fuse | 86.7/95.5 | — | — | 116.9/127.9 | — | — | 1/1 | — | — | 6/6 | — | — | 125/150 | — | — | 115/116 | — | — |
| KFCEH3501F30†† | 30 | 22.5 | 3 | Fuse | 62.6/69.2 | — | — | 86.8/95.0 | — | — | 3/3 | — | — | 8/8 | — | — | 90/100 | — | — | 97/98 | — | — |
| | 30 | 22.5 | 1 | Fuse | 109.0/120.0 | — | — | 144.8/158.5 | — | — | 0/00 | — | — | 6/6 | — | — | 150/175 | — | — | 117/150 | — | — |

FIELD MULTIPOINT WIRING OF 24-AND 30-kW SINGLE PHASE

| HEATER PART NO. | kW | | PHASE | HEATER AMPS 208/230V | | | MIN AMPACITY 208/230V* | | | MIN WIRE SIZE (AWG) 208/230V† | | | MIN GND WIRE SIZE 208/230V | MAX FUSE/CKT BKR AMPS 208/230V | | | MAX WIRE LENGTH 208/230V (FT)‡ | | |
|-----------------|------|------|-------|----------------------|-----------|-----------|------------------------|-----------|-----------|-------------------------------|--------|--------|----------------------------|--------------------------------|--------|--------|--------------------------------|--------|--------|
| | 240V | 208V | | L1, L2 | L3, L4 | L5, L6 | L1, L2 | L3, L4 | L5, L6 | L1, L2 | L3, L4 | L5, L6 | | L1, L2 | L3, L4 | L5, L6 | L1, L2 | L3, L4 | L5, L6 |
| KFCEH3401F24†† | 24 | 18.0 | 1 | 28.9/32.0 | 28.9/32.0 | 28.9/32.0 | 44.7/48.5 | 36.2/40.0 | 36.2/40.0 | 8/8 | 8/8 | 8/8 | 10/10 | 45/50 | 40/40 | 40/40 | 59/60 | 73/73 | 73/73 |
| KFCEH3501F30†† | 30 | 22.5 | 1 | 36.2/40.0 | 36.2/40.0 | 36.2/40.0 | 53.8/58.5 | 45.3/50.0 | 45.3/50.0 | 6/6 | 8/8 | 8/8 | 10/10 | 60/60 | 50/50 | 50/50 | 78/80 | 59/59 | 59/59 |

* Includes blower motor amps of largest fan coil used with heater.

† Copper wire must be used. If other than uncoated (non-plated), 75°C ambient, copper wire (solid wire for 10 AWG and smaller, stranded wire for larger than 10 AWG) is used, consult applicable tables of the National Electric Code (ANSI/NFPA 70).

‡ Length shown is as measured 1 way along wire path between unit and service panel for a voltage drop not to exceed 2%.

** Field convertible to 3 phase.

†† Field convertible to 1 phase, single or multiple supply circuit.

NOTES:

1. For fan coil sizes 018-036.
2. For fan coil sizes 042-061.
3. Single circuit application of F15 and F20 heaters requires single-point wiring kit accessory.

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

HEATER ELECTRICAL DATA

ELECTRIC HEATER INTERNAL PROTECTION

| HEATER kW | PHASE | FUSE QTY/SIZE | CKT BKR* QTY/SIZE |
|-----------|-------|---------------|-------------------|
| 5 | 1 | — | 1/60 |
| 8 | 1 | — | 1/60 |
| 9 | 1/3 | — | — |
| 10 | 1 | — | 1/60 |
| 15 | 1 | 2/30–2/60 | 2/60 |
| 15 | 3 | — | — |
| 18 | 3 | — | — |
| 20 | 1 | 4/60 | 2/60 |
| 24 | 1/3 | 6/60 | — |
| 30 | 1/3 | 6/60 | — |

* All circuit breakers are 2 pole.

When using units with 20-, 24-, and 30-kW electric heaters, maintain a 1-in. (25mm) clearance from combustible materials to discharge plenum and ductwork and maintain a distance of 36-in (914mm) from the unit. Use an accessory downflow base to maintain proper clearance on downflow installations. Use flexible connectors between ductwork and unit to prevent transmission of vibration. When electric heater is installed, use heat resistant material for flexible connector between ductwork and unit at discharge connection. Ductwork passing through unconditioned space must be insulated and covered with vapor barrier.

ACCESSORIES

| ITEM | ACCESSORY PART NO.* | FAN COIL SIZE USED WITH |
|--|-----------------------------|---------------------------------------|
| 1. Disconnect Kit | KFADK0201DSC | All single phase 3kW - 10kW heaters |
| 2. Downflow Base Kit | KFACB0101CFB | 018, 024 |
| | KFACB0201CFB | 025, 030, 036 |
| | KFACB0301CFB | 042, 048, 060 |
| | KFACB0401CFB | 061 |
| 3. Downflow Conversion Kit † | KFADC0201SLP | Slope Coil Units—018, 024, 030, 036 |
| | KFADC0401ACL | A-Coil Units—042, 048, 060, 061 |
| 4. Downflow/Horizontal Conversion Gasket Kit | KFAHD0101SLP | All |
| 5. Horizontal Water Management Kit (25 pack) ‡ | KFAHC0125AAA | A-Coil Units—042, 048, 060, 061 |
| 6. Single-Point Wiring Kit | KFASP0101SPK | Only with 15- and 20-kW Fused Heaters |
| 7. Filter Kit (12 Pack) | KFAFK0112SML | 018, 024 |
| | KFAFK0212MED | 025, 030, 036 |
| | KFAFK0312LRG | 042, 048, 060 |
| | KFAFK0412XXL | 061 |
| 8. Fan Coil Filter Cabinet (Fan Coil Filter Media) | FNCCABCC0014 (FILXXFNC0014) | 018, 024 |
| | FNCCABCC0017 (FILXXFNC0017) | 030, 036 |
| | FNCCABCC0021 (FILXXFNC0021) | 042, 048, 060 |
| 9. PVC Condensate Trap Kit (50 pack) | KFAET0150ETK | All |
| 10. Air Cleaner 240-volt Conversion Kit | KEAVC0201240 | All |
| 11. Standard Filter Rack Kit | KFAFR0101FRM | 018, 024 |
| | KFAFR0201FRM | 025, 030, 036 |
| | KFAFR0301FRM | 042, 048, 060 |
| | KFAFR0401FRM | 061 |
| 12. TXV Kit R-410A, Copper and Tin Coils Only | KSATX0201PUR | 018, 024, 025, 030 |
| | KSATX0301PUR | 036, 042 |
| | KSATX0401PUR | 048 |
| 13. TXV Kit R-22, Copper and Tin Coils Only | KSATX0601HSO | 018, 024, 025, 030, 036, 042 |
| | KSATX0701HSO | 048 |
| | KSATX1001HSO | 060, 061 |
| 14. TXV Kit, R-410A, Aluminum Coils Only | KSBTX0201PUR | 018L, 024L, 025L, 030L |
| | KSBTX0301PUR | 036L, 042L |
| | KSBTX0401PUR | 048L |
| 15. TXV Kit R-22, Aluminum Coils Only | KSBTX0601HSO | 018L, 024L, 030L, 036L, 042L |
| | KSBTX0701HSO | 048L |
| | KSBTX1001HSO | 060L, 061L |
| 16. Door Gasket Kit ** | 344994-751 | All |

* Factory authorized and listed, field-installed.

** This kit is for replacement of factory installed gaskets if they are damaged or removed from the fan coil.

† KFAHD0101SLP must also be purchased for down flow applications.

‡ KFAHD0101SLP must also be purchased for down flow or horizontal applications.

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ACCESSORY KITS DESCRIPTION SUGGESTED AND REQUIRED USE

1. **Disconnect Kit**
The kit is used to disconnect electrical power to the fan coil so service or maintenance may be performed safely.
SUGGESTED USE: Units for 3- through 10-kW electric resistance heaters and cooling controls.
2. **Downflow Base Kit**
This kit is designed to provide a 1-in. (25mm) minimum clearance between unit discharge plenum, ductwork, and combustible materials. It also provides a gap-free seal with the floor.
REQUIRED USE: This kit must be used whenever fan coils are used in downflow applications.
3. **Downflow Conversion Kit**
Fan coils are shipped from the factory for upflow or horizontal-left applications. Downflow conversion kits provide proper condensate water drainage and support for the coil when used in downflow applications. Separate kits are available for slope coils and A-coils.
REQUIRED USE: This kit must be used whenever fan coils are used in downflow applications.
4. **Downflow/Horizontal Conversion Gasket Kit**
This kit provides the proper gasketing of units when applied in either a downflow or horizontal application.
REQUIRED USE: Fan coils in either downflow or horizontal applications.
5. **Horizontal Applications - Water Management Kit**
This kit provides proper installation of fan coils under conditions of high static pressure and high relative humidity.
SUGGESTED USE: All fan coils.
6. **Single Point Wiring Kit**
The single point wiring kit acts as a jumper between L1 and L3 lugs, and between the L2 and L4 lugs. This allows the installer to run two heavy-gauge, high-voltage wires into the fan coil rather than 4 light-gauge, high-voltage wires.
SUGGESTED USE: Fan coils with 15- and 20-kW fused heaters only.
7. **Filter Kit (12 pack)**
The kit consists of 12 fan coil framed filters. These filters collect large dust particles from the return air entering the fan coil and prevents them from collecting on the coil. This process helps to keep the coil clean, which increases heat transfer and, in turn, the efficiency of the system.
SUGGESTED USE: To replace filters in fan coils.
REQUIRED USE: All units unless a filter grille is used.
8. **Fan Coil Filter Cabinet**
This cabinet is mounted to the fan coil on the return air end and designed to slip over the outer fan coil casing. The cabinets are insulated using the same insulation as production fan coils. They are designed for the removal of particulates from indoor air using FILXXFNC00(14, 17, 21, 24) media filter cartridges. These fan coil media filter cartridge kits are designed for the removal of particles from indoor air. The cartridge is installed in the return air duct next to the air handler or further upstream.
SUGGESTED USE: All fan coils.
9. **PVC Condensate Drain Trap Kit**
This kit consists of 50 PVC condensate traps. Each trap is pre-formed and ready for field installation. This deep trap helps the system make and hold proper condensate flow even during blower initiation.
SUGGESTED USE: All fan coils.
10. **Air Cleaner 240-volt Conversion Kit**
The AIRA electronic air cleaner comes ready for 115-v operation.
REQUIRED USE: This kit is required when running 240-volt circuit to air cleaner.
11. **Standard Filter Rack Kit**
This kit mounts in fan coil filter rack area and modifies the existing filter rack to support standard 1-in. filter sizes.
SUGGESTED USE: Fan coils using standard filter sizes.
12. **- 15 TXV Kit**
These kits are designed to add TXVs to piston fan coils or convert R-410A fan coils to R-22 TXVs.
16. **Door Gasket Kit**
This kit consists of specific adhesive-backed foam strips which are applied to the unit door and frame, limiting air leakage.

