# PF4T Two Stage Fan Coil with Variable Speed Constant Airflow Motor — R-410A Refrigerant — Sizes 24 – 60



A230450

**Product Data** 

## PREMIUM ENVIRONMENTALLY RESPONSIBLE FAN COIL

The PF4T is the premium air handler combining the proven technology of Payne fan coils with environmentally balanced R-410A refrigerant. The PF4T achieves an operational advantage when the variable speed ECM (Electronically Commutated Motor) is combined with a heat pump with R-410A refrigerant.

With attention to quiet, efficient, and comfortable operation, Payne has developed a new benchmark for superior indoor comfort and control.

Payne's heat pump and air conditioning systems feature R-410A refrigerant, the chlorine-free refrigerant that is the future for the residential heating and cooling industry. The PF4T using R-410A refrigerant maximizes performance for environmentally balanced systems. In addition to environmental safety, these systems are 30 to 40% more efficient than standard heating and cooling systems, thereby combining excellence in efficiency and environmental responsibility.

The PF4T provides these benefits due to Payne's command of ECM technology. These motors are extremely efficient at all speeds, and enable the PF4T to operate at the correct speed to deliver airflow precisely, ensuring proper performance across a wide range of duct static pressures. This adaptive efficiency also makes installation quality easier to achieve for today's demanding homeowner.

Payne's command of ECM technology may be most evident in the comfort advantages that ECM can deliver. Operation set up steps on the Easy Select<sup>TM</sup> Board provide the installing technician with alternatives to maximize comfort and efficiency. For true indoor comfort, the homeowner can achieve command of both temperature and humidity in cooling and heating modes.

Another feature which sets the PF4T apart is the factory-installed TXV, which enhances efficiency and provides compressor protecting operation at all recommended conditions. Grooved tubing, louvered aluminum fins, and the large face areas of the PF4T refrigerant coils also provide

superior efficiency, for high SEER and HSPF performance. Payne leads the way in condensate control, a hallmark of these multipoise fan coils. All of these featured components are protected within a rugged, prepainted metal cabinet lined with super thick, high density insulation. For neat, high quality installations the unit exterior features sweat refrigerant connections for simple leak free performance, and multiple electrical entry for both high and low voltage service.

Assembled at the factory compliant with low leak requirements of less than 2% cabinet leakage rate at 1.0 inches W.C. and 1.4% cabinet leakage rate at 0.5 inches W.C. when tested in accordance with ASHRAE 193 standard.

# FEATURES

# Environmentally Balanced Refrigerant Technology

- R-410A, chlorine-free, non-ozone depleting refrigerant
- Thermostatic Expansion Valve (TXV) designed to maximize performance with R-410A refrigerant

## **Energy Efficient Operation**

- Variable Speed Constant Airflow ECM (Electronically Commutating Motor) operates efficiently at all speeds
- · Maximizes efficiency of heating and cooling systems
- Ultra low power consumption during fan only operation

## **Indoor Weather Control**

- Warm, comfortable heating air temperatures
- Unmatched humidity control, especially with Payne's thermostat with relative humidity controls

## Airflow and Sound Technology

- Diffuser air discharge section for high airflow efficiency and quiet, smooth operation
- High duct static capability
- Design meets stringent regulations for cabinet air leakage of less than 2% when tested at 1.0 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.

## **Condensate Control and Disposal Technology**

- Minimal standing waterless microbial growth for improved IAQ and reduced condensate line clogging and related condensate leakage
- Condensate fittings relocated away from turbulent airflow patterns at the blower entrance for improved condensate control performance
- Overflow feature for slope coil units allows condensate to exit the unit without damage to product under clogged primary and secondary line conditions
- Tested for condensate disposal at conditions much more severe than those required by AHRI
- · Primary and secondary drain connections to comply with HUD
- All pans constructed of an injection molded glass-filled polycarbonate engineered resin material, with brass drain connections.
- · High density, super thick cabinetry insulation with vapor barrier
- Pre-painted galvanized sheet metal cabinet

## Heat Transfer Technology

• Grooved tubing

#### PF4T: Product Data

- Lanced sine wave aluminum fins
- Discreet refined counter-flow refrigerant circuitry
- Bi-flow hard shut-off TXV metering device with mechanical fittings

# Quality Assisting, Ease of Installation and Service Features

- All units multipoise
- · Provision made for suspending from roof or ceiling joints
- Modular cabinet on 36 thru 60 size units
- Sweat connections for leak free service
- Multiple electrical entries for install flexibility (high & low voltage)
- Low voltage terminal strip to safely hold connections within cabinet
- Cabinet construction features innovations designed to prevent cabinet sweating

## **Controls and Electrical Features**

- Easy Select<sup>™</sup> Board to maximize comfort, efficiency, and safe heater airflow operation
- Easy plug connection provided for quick installation of accessory heater packages

- 40VA 208/230V transformer
- Replaceable 5A blade-type auto fuse protects against transformer secondary short

## **Filter Features**

- · Factory supplied filter
- New standard sized filter rack fits most common size replacement filters

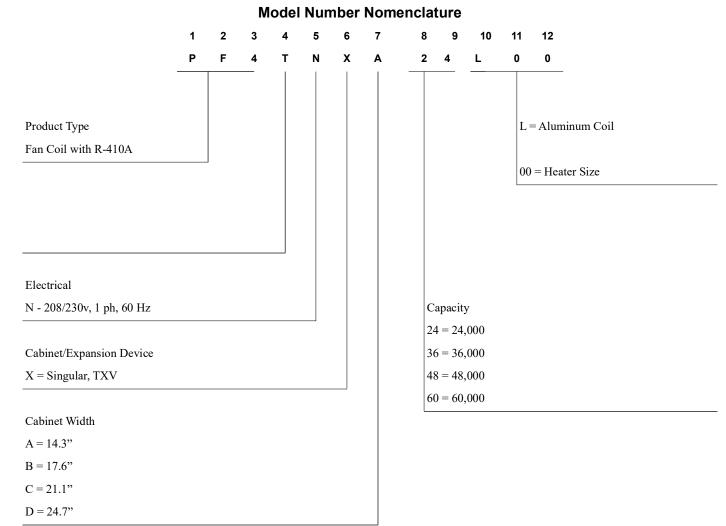
## **Limited Warranty**

- Default 5-year parts limited warranty:
  - 5-year parts limited warranty; 10 years with timely registration\*.
     Equipment must be registered within 90 days of original installation, except in jurisdictions where warranty benefits cannot be conditioned on registration.

\* Applies to original purchaser/homeowner and not available to subsequent owners, except in jurisdictions where laws dictate otherwise

## See Warranty certificate for complete details and restrictions.





## Table 1 – Models Available

| 2 Ton        | 3 Ton        | 4 Ton        | 5 Ton        |
|--------------|--------------|--------------|--------------|
| PF4TNXB24L00 | PF4TNXC36L00 | PF4TNXC48L00 | PF4TNBD60L00 |

|  | Table 2 – Specifica       | itions                     |                             |                              |
|--|---------------------------|----------------------------|-----------------------------|------------------------------|
|  | EVAPORATOR C              | OIL                        |                             |                              |
|  | 2 Ton                     | 3 Ton                      | 4 Ton                       | 5 Ton                        |
| Face Area (sq ft)                                  | 3.4                       | 46                         | 5.93                        | 7.42                         |
| Configuration                                      | A                         | Slope                      |                             | A                            |
| Metering Device Puron®                             |                           |                            | TXV                         |                              |
| Refrigerant Sweat Liquid Line Connection, in (mm)  |                           | 3/8                        | (9.5) ID                    |                              |
| Refrigerant Sweat Suction Line Connection, in (mm) | 3/4 (19                   | 9.1) ID                    | 7/8                         | (22.2) ID                    |
| TXV Size   |                           |                            |                             |                              |
| Rows/Fins per Inch                                 |                           | 3                          | / 14.5                      | 1                            |
|  |                           |                            |                             |                              |
|  |                           |                            |                             |                              |
|  | BLOWER & MOT              | OR                         |                             |                              |
| Air Discharge                                      |                           | Upflow, Dow                | nflow, Horizontal           |                              |
| CFM (Nominal Clg/Htg)                              | 525<br>700<br>875<br>1050 | 700<br>875<br>1050<br>1225 | 875<br>1050<br>1225<br>1400 | 1050<br>1225<br>1400<br>1750 |
| Motor HP (ECM)                                     | 1/                        | 2                          |                             | 3/4                          |
| The fan coil filter rad                            | FILTERS                   | e most common size         | filters.                    |                              |
| L x W in, (mm)                                     | 16 x 20 (406 x 508)       | 20 x 20 (5                 | 08 x 508)                   | 24 x 20 (610 x 508)          |
| CABI   | NET CONFIGURATIO          | ON OPTIONS                 |                             | 1                            |
|  | Singular (1-piece)        |                            | Modular                     |                              |

## DIMENSIONS

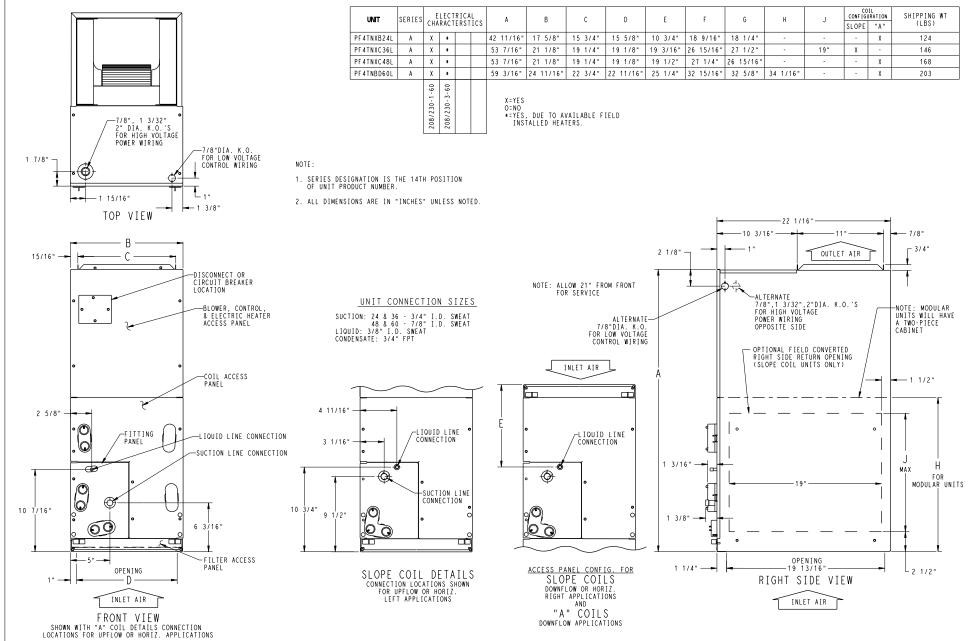
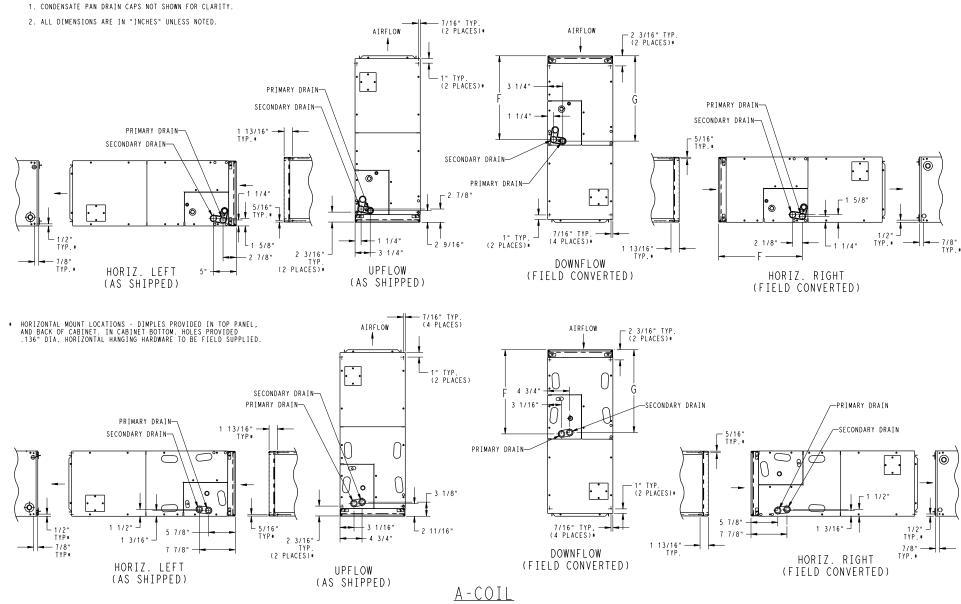


Fig. 1 – Dimensions, sheet 1

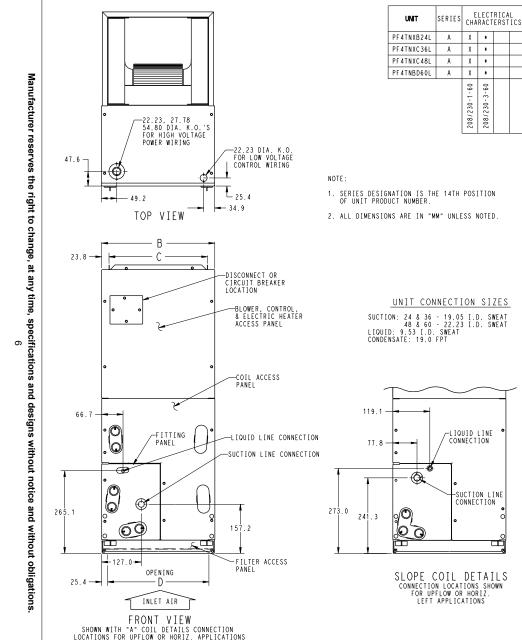
# **DIMENSIONS (CONT.)**

NOTES:

# SLOPE COIL



# **DIMENSIONS (CONT.)**



|    | SERIES | E<br>Cha    | L E C T<br>R A C T | RICA | L<br>ICS | A      | В         | С                    | D     | E     | F     | G     | н     | J     | CONFIGU<br>SLOPE | IL<br>JRATION<br>"A" | SHIPPING WT<br>(Kgs) |
|----|--------|-------------|--------------------|------|----------|--------|-----------|----------------------|-------|-------|-------|-------|-------|-------|------------------|----------------------|----------------------|
| 4L | A      | X           | +                  |      |          | 1084.3 | 447.7     | 400.0                | 396.9 | 273.0 | 471.5 | 463.6 | -     | -     | -                | Х                    | 56.3                 |
| 6L | A      | X           | +                  |      |          | 1357.3 | 536.6     | 489.0                | 485.8 | 487.4 | 684.2 | 698.5 | -     | 482.6 | Х                | -                    | 66.3                 |
| 8L | A      | X           |                    |      |          | 1357.3 | 536.6     | 489.0                | 485.8 | 495.3 | 692.2 | 684.2 |       |       |                  | Х                    | 76.3                 |
| 0L | A      | X           | +                  |      |          | 1503.4 | 627.1     | 577.8                | 576.3 | 641.4 | 836.6 | 828.7 | 865.2 | -     | -                | Х                    | 92.2                 |
|    |        | 18/230-1-60 | 18/230-3-60        |      |          |        | DUE TO AV | /AILABLE FI<br>Ters. | IELD  |       |       |       |       |       |                  |                      |                      |

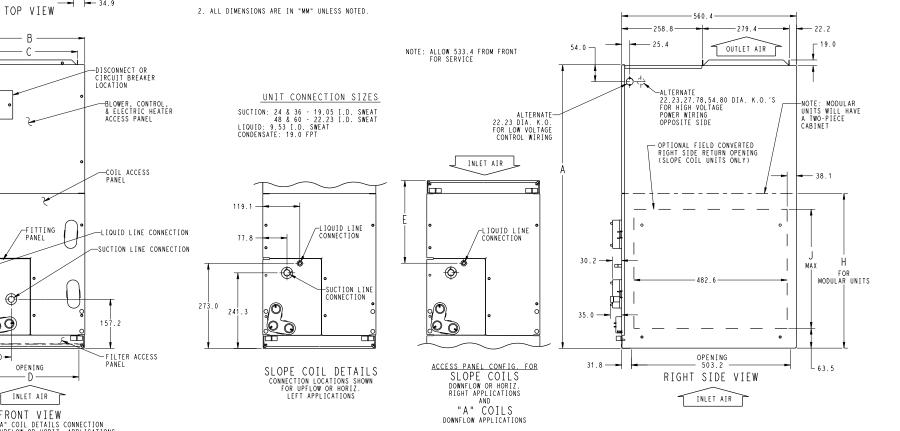


Fig. 3 – Dimensions, sheet 3

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# **DIMENSIONS (CONT.)**

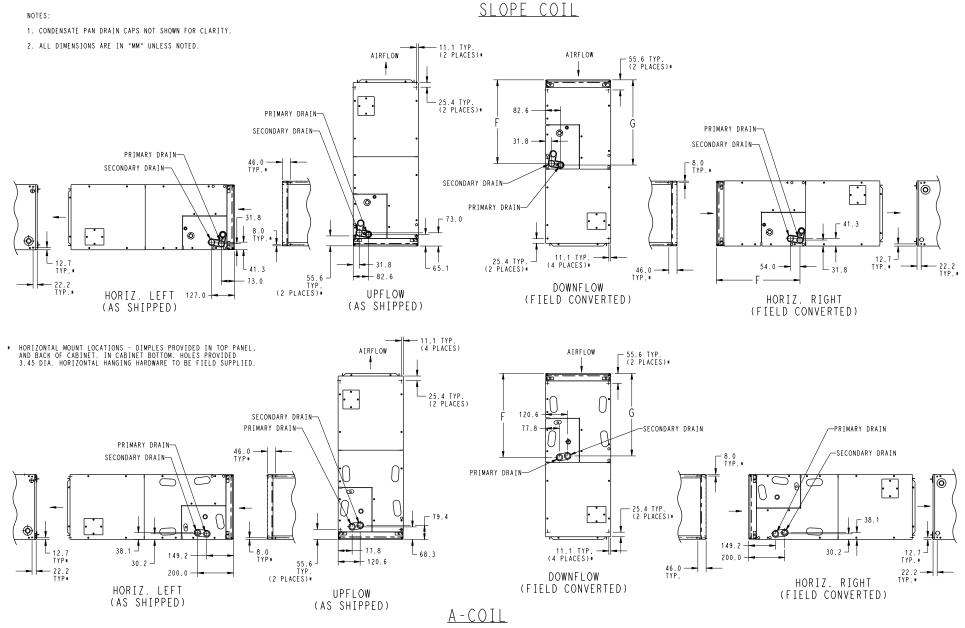


Fig. 4 – Dimensions, sheet 4

# PERFORMANCE DATA

|              |          |                   |                  | O                   | PERATING MODE     |                     |                   |     |          |      |
|--------------|----------|-------------------|------------------|---------------------|-------------------|---------------------|-------------------|-----|----------|------|
|              | OUTDOOR  | SINGLE-<br>APPLIC | -SPEED<br>CATION |                     | TWO—SPEED         | APPLICATION         |                   |     | FAN ONLY | ,    |
| UNIT<br>SIZE | UNIT     | Nominal           | A/C              | High                | Speed             | Low                 | Speed             |     |          |      |
| OILL         | CAPACITY | A/C<br>Cooling    | Cooling<br>Dehum | Nominal<br>A/C Cool | A/C<br>Cool Dehum | Nominal<br>A/C Cool | A/C<br>Cool Dehum | Lo  | Med      | High |
|              | 018      | 525               | 420              | _                   | —                 | _                   | —                 | 350 | 420      | 525  |
| 24           | 024      | 700               | 560              | 700                 | 560               | 560                 | 450               | 350 | 560      | 700  |
| 24           | 030      | 875               | 700              | _                   |                   | _                   |                   | 435 | 700      | 875  |
|              | 036      | 1050              | 840              | 1050                | 840               | 840                 | 670               | 525 | 840      | 1050 |
|              | 024      | 700               | 560              | 700                 | 560               | 560                 | 450               | 350 | 560      | 700  |
| 36           | 030      | 875               | 700              | _                   |                   | _                   | _                 | 435 | 700      | 875  |
| 30           | 036      | 1050              | 840              | 1050                | 840               | 840                 | 670               | 525 | 840      | 1050 |
|              | 042      | 1225              | 980              |                     |                   | —                   | _                 | 610 | 980      | 1225 |
|              | 030      | 875               | 700              | _                   | —                 | _                   | _                 | 435 | 700      | 875  |
| 48           | 036      | 1050              | 840              | 1050                | 840               | 840                 | 670               | 525 | 840      | 1050 |
| 48           | 042      | 1225              | 980              | _                   | _                 | _                   | _                 | 610 | 980      | 1225 |
|              | 048      | 1400              | 1120             | 1400                | 1120              | 1120                | 895               | 700 | 1120     | 1400 |
|              | 036      | 1050              | 840              | 1050                | 840               | 840                 | 670               | 525 | 840      | 1050 |
| 60           | 042      | 1225              | 980              | _                   |                   | _                   | _                 | 610 | 980      | 1225 |
| 60           | 048      | 1400              | 1120             | 1400                | 1120              | 1120                | 895               | 700 | 1120     | 1400 |
|              | 060      | 1750              | 1400             | 1750                | 1400              | 1400                | 1120              | 875 | 1400     | 1750 |

#### Table 3 - Airflow Delivery Chart - (CFM) in Cooling Mode\*

NOTES:

\*Consult ARI ratings before matching outdoor unit with fan coil.

1. The above airflows result with the AC, HP CFM ADJUST select jumper set on NOM.

2.Air flow can be adjusted +15% or -10% by selecting HI or LO respectively for all modes except fan only.

3.Dry coil at 230 volts and with 10kW heater and filter installed.

4. Airflows shown are at standard air conditions.

#### Table 4 - Airflow Delivery Chart - (CFM) in Heat Pump Only Heating Mode

|           | OUTDOOR  |                      | -SPEED<br>CATION        | т                    | WO—SPEED                | APPLICATIO           | N                       |     | FAN ONLY |      |
|-----------|----------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|-----|----------|------|
| UNIT SIZE | UNIT     |                      |                         | High                 | Speed                   | Low S                | Speed                   |     |          |      |
|           | CAPACITY | Heat Pump<br>Comfort | Heat Pump<br>Efficiency | Heat Pump<br>Comfort | Heat Pump<br>Efficiency | Heat Pump<br>Comfort | Heat Pump<br>Efficiency | Lo  | Med      | High |
|           | 018      | 470                  | 525                     | _                    | _                       | _                    | _                       | 350 | 420      | 525  |
| 24        | 024      | 630                  | 700                     | 630                  | 700                     | 505                  | 560                     | 350 | 560      | 700  |
| 24        | 030      | 785                  | 875                     | _                    | —                       | —                    | —                       | 435 | 700      | 875  |
|           | 036      | 945                  | 1050                    | 945                  | 1050                    | 755                  | 840                     | 525 | 840      | 1050 |
|           | 024      | 630                  | 700                     | 630                  | 700                     | 505                  | 560                     | 350 | 560      | 700  |
| 36        | 030      | 785                  | 875                     | _                    | —                       | —                    | _                       | 435 | 700      | 875  |
| 30        | 036      | 945                  | 1050                    | 945                  | 1050                    | 755                  | 840                     | 525 | 840      | 1050 |
|           | 042      | 1100                 | 1225                    | _                    | —                       | —                    | _                       | 610 | 980      | 1225 |
|           | 030      | 785                  | 875                     | _                    | _                       | _                    | _                       | 435 | 700      | 875  |
| 48        | 036      | 945                  | 1050                    | 945                  | 1050                    | 755                  | 840                     | 525 | 840      | 1050 |
| 40        | 042      | 1100                 | 1225                    | _                    | —                       | _                    | _                       | 610 | 980      | 1225 |
|           | 048      | 1260                 | 1400                    | 1260                 | 1400                    | 1010                 | 1120                    | 700 | 1120     | 1400 |
|           | 036      | 945                  | 1050                    | 945                  | 1050                    | 755                  | 840                     | 525 | 840      | 1050 |
| 60        | 60 042   |                      | 1225                    | _                    | —                       | —                    | _                       | 610 | 980      | 1225 |
| 00        | 048      | 1260                 | 1400                    | 1260                 | 1400                    | 1010                 | 1120                    | 700 | 1120     | 1400 |
|           | 060      | 1575                 | 1750                    | 1575                 | 1750                    | 1260                 | 1400                    | 875 | 1400     | 1750 |

NOTES:

The above airflows result with the AC, HP CFM ADJUST select jumper set on NOM.
 Air flow can be adjusted +15% or -10% by selecting HI or LO respectively for all modes except fan only.

3.Dry coil at 230 volts and with 10kW heater and filter installed.

4. Airflows shown are at standard air conditions.

|                  | OUTDOOR          |      |      |      | Denvery |       | ,    | TER kW R | 0    |      |      |      |      |
|------------------|------------------|------|------|------|---------|-------|------|----------|------|------|------|------|------|
| FAN<br>UNIT SIZE | UNIT<br>CAPACITY |      | 0-5  |      |         | 0-10  |      |          | 0-15 |      |      | 0-20 |      |
|                  | BTUH             | Lo   | Nom  | High | Lo      | Nom   | High | Lo       | Nom  | High | Lo   | Nom  | High |
|                  | 18,000           | 700  | 700  | 805  | 750     | 750   | 863  | _        |      | _    |      | _    | -    |
| 24               | 24,000           | 700  | 700  | 805  | 750     | 750   | 863  | 1050     | 1050 | 1208 | —    | —    | -    |
| 24               | 30,000           | 875  | 875  | 1006 | 875     | 875   | 1006 | 1050     | 1050 | 1208 | 1200 | 1200 | 1380 |
|                  | 36,000           | 1050 | 1050 | 1208 | 1050    | 1050  | 1208 | 1050     | 1050 | 1208 | 1200 | 1200 | 1380 |
|                  | 24,000           | 700  | 700  | 805  | 750     | 750   | 863  | 1050     | 1050 | 1208 | 1225 | _    | -    |
| 26               | 30,000           | 875  | 875  | 1006 | 875     | 875   | 1006 | 1050     | 1050 | 1208 | 1225 | —    | -    |
| 36               | 36,000           | 1050 | 1050 | 1208 | 1050    | 1050  | 1208 | 1050     | 1050 | 1208 | 1225 | 1225 | 1409 |
|                  | 42,000           | 1225 | 1225 | 1409 | 1225    | 1225  | 1409 | 1225     | 1225 | 1409 | 1225 | 1225 | 1409 |
|                  | OUTDOOR          |      |      |      |         | ELEC  |      | TER kW R | ANGE |      |      |      |      |
| FAN<br>UNIT SIZE | UNIT<br>CAPACITY |      | 0-10 |      |         | 0-15  |      |          | 0-20 |      |      | 0-30 |      |
|                  | BTUH             | Lo   | Nom  | High | Lo      | Nom   | High | Lo       | Nom  | High | Lo   | Nom  | High |
|                  | 30,000           | 1000 | 1000 | 1150 | 1200    | 1200  | 1380 | —        |      | _    |      | _    | _    |
| 48               | 36,000           | 1100 | 1100 | 1265 | 1200    | 1200  | 1380 | 1300     | 1300 | 1495 | _    | _    | _    |
| 40               | 42,000           | 1225 | 1225 | 1409 | 1225    | 1225  | 1409 | 1350     | 1350 | 1553 | —    | —    | _    |
|                  | 48,000           | 1400 | 1400 | 1610 | 1400    | 1400  | 1610 | 1400     | 1400 | 1610 | 1500 | 1500 | 1725 |
|                  | 36,000           | 1200 | 1200 | 1380 | 1250    | 1250  | 1438 | 1350     | 1350 | 1553 | —    | —    | —    |
| 60               | 42,000           | 1225 | 1225 | 1409 | 1300    | 1300  | 1495 | 1350     | 1350 | 1553 | —    | —    | _    |
| 00               | 48,000           | 1400 | 1400 | 1610 | 14000   | 14000 | 1610 | 1400     | 1400 | 1610 | 1750 | 1750 | 2013 |
|                  | 60,000           | 1750 | 1750 | 2013 | 1750    | 1750  | 2013 | 1750     | 1750 | 2013 | 1750 | 1750 | 2013 |

### Table 5 - Airflow Delivery Chart (CFM) - Electric Heating Modes

NOTE: Lo, NOM, and HI refer to AC, HP CFM ADJUST selection.

— Airflow not recommended for heater/system size.

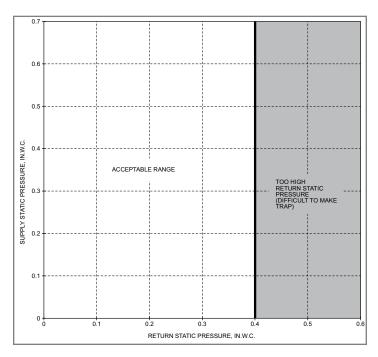
## Table 6 – Minimum CFM for Electric Heater Application

|               |      |      |          | CFM            |        |        |
|---------------|------|------|----------|----------------|--------|--------|
| FAN COIL UNIT |      |      |          | HEATER SIZE kW |        |        |
| SIZE          | SIZE | 5    | 8, 9, 10 | 12, 15         | 18, 20 | 24, 30 |
|               | 018  | 700  | 750      | _              |        |        |
|               | 024  | 700  | 750      | 1050           | _      | _      |
| 24            | 030  | 875  | 875      | 1050           | 1200   | _      |
|               | 036  | 1050 | 1050     | 1050           | 1200   | _      |
|               | 024  | 700  | 700      | 1050           | _      | _      |
| 36            | 030  | 875  | 875      | 1050           | _      |        |
|               | 036  | 1050 | 1050     | 1050           | 1225   | _      |
|               | 042  | 1225 | 1225     | 1225           | 1225   |        |
|               | 018  | _    | 1000     | 1120           |        |        |
| 48            | 036  | _    | 1100     | 1200           | 1300   | _      |
|               | 042  | _    | 1225     | 1225           | 1350   | _      |
|               | 048  | _    | 1400     | 1400           | 1400   | 1500   |
|               | 018  | _    | 1200     | 1250           | 1350   | _      |
| 60            | 042  | _    | 1225     | 1300           | 1350   | —      |
|               | 048  | —    | 1400     | 1400           | 1400   | 1750   |
|               | 060  | _    | 1750     | 1750           | 1750   | 1750   |

NOTES:

1. These airflows are minimum acceptable airflows as UL listed. Actual airflow delivered

will be per airflow delivery chart for Electric Heating Modes.



Acceptable Duct Conditions

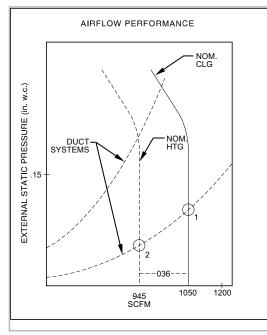
For satisfactory operation (specifically making dry secondary trap), subject fan coils must be installed with duct systems which fall within the "Acceptable Range" illustrated above.

The airflow performance charts for the fan coil depict nominal airflow delivery for heating and cooling mode operation versus duct system static pressure drop. Cooling mode operation is shown as solid vertical lines for all 4 system size selections. Heating mode operation for the 4 system size selections are shown as dashed vertical lines.

The dotted curved lines are static pressure drop characteristics for several fixed-duct systems. These lines can be used to predict the system static pressure drop at any airflow given the actual drop at 1 known point. For example, a duct system is designed for 0.15 in. water column (in. w.c.) drop at 1200 CFM. The FV4CNF005 operating at nominal cooling airflow would deliver 1050 CFM with a duct system drop of 0.11 in. w.c.. (See point 1 in the Airflow Performance/Static Pressure figure below.) On the same duct system, the FV4CNF005 operating at nominal heating airflow would deliver 945 CFM with a duct system drop of 0.09 in. w.c. (See point 2.)

This example is but one of many possible duct system designs. The FV4CNF005 will deliver the above airflows against much higher static pressures.

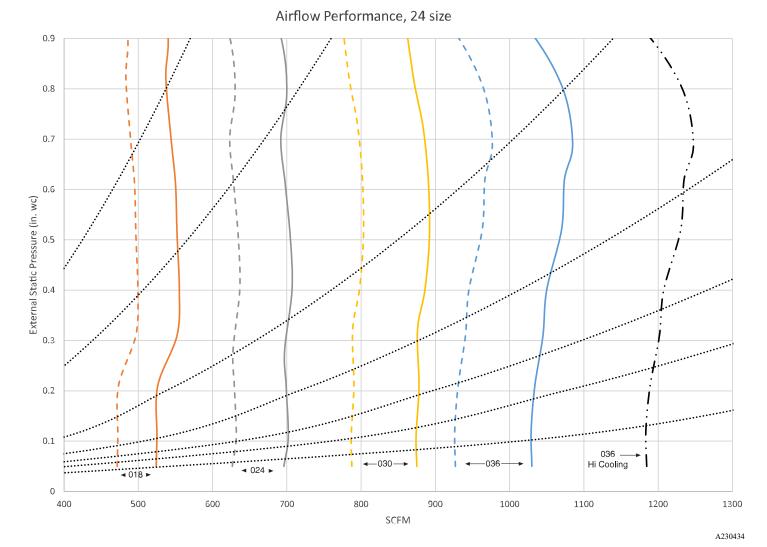
The following airflow performance data was measured using the standard metal filter as shipped from the factory.



A09339

A02296

10



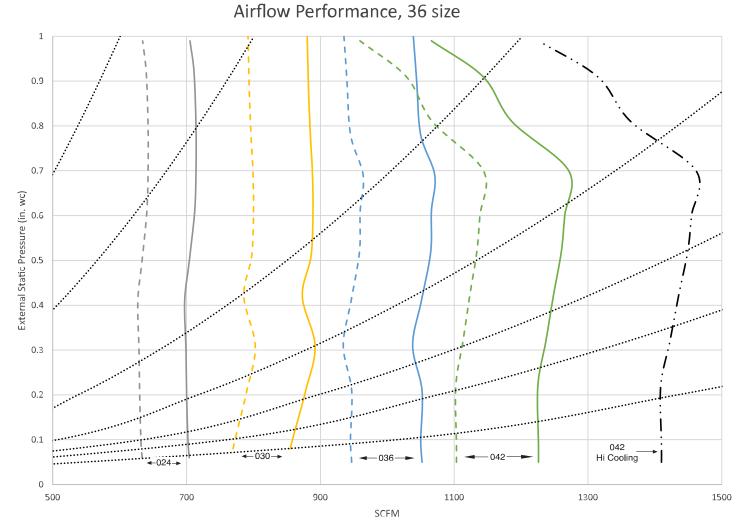
# **2 TON**

 
 Nominal Cooling and Heat Pump Efficiency airflow for each size selection.

 Airflow can be adjusted +15% to -10%.

 ---- Nominal Heat Pump Comfort airflow for each size selection. Airflow can be
 adjusted +15% to -10%.

Maximum cooling airflow for largest size selection. Adjusted +15% from nominal. Fixed Duct Systems (See description under Acceptable Duct Conditions.)



## **3 TON**

 Nominal Cooling and Heat Pump Efficiency airflow for each size selection.

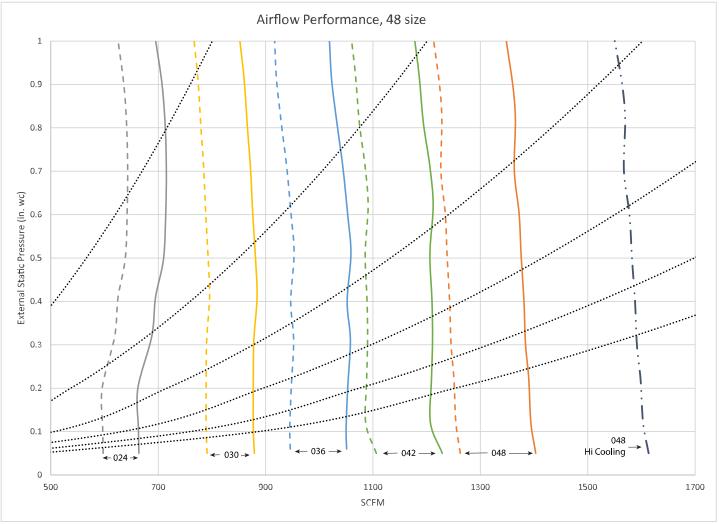
 Airflow can be adjusted +15% to -10%.

 Nominal Heat Pump Comfort airflow for each size selection. Airflow can be

adjusted +15% to -10%.

Maximum cooling airflow for largest size selection. Adjusted +15% from nominal.

Fixed Duct Systems (See description under Acceptable Duct Conditions.)

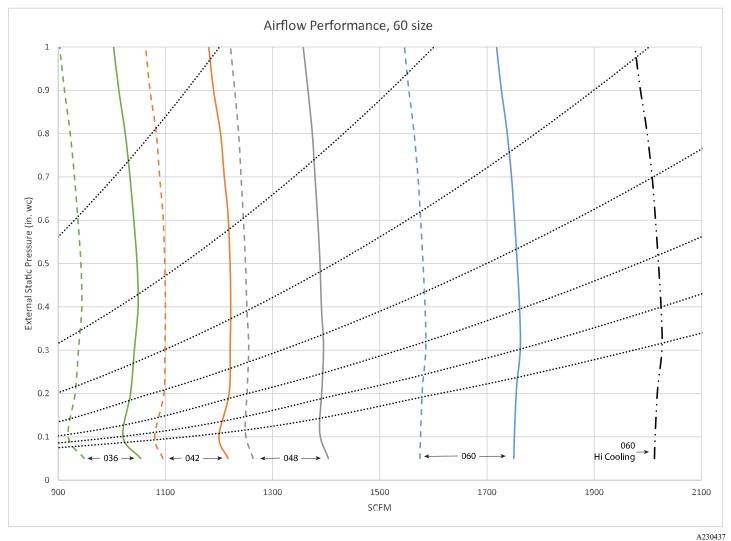


## 4 TON

Airnow can be adjusted +15% to -10%. ---- Nominal Heat Pump Comfort airflow for each size selection. Airflow can be adjusted +15% to -10%.

---- Maximum cooling airflow for largest size selection. Adjusted +15% from nominal.

Fixed Duct Systems (See description under Acceptable Duct Conditions.)



# **5 TON**

 Nominal Cooling and Heat Pump Efficiency airflow for each size selection.

 Airflow can be adjusted +15% to -10%.

 Nominal Heat Pump Comfort airflow for each size selection. Airflow can be

- adjusted +15% to -10%.
- Maximum cooling airflow for largest size selection. Adjusted +15% from nominal.
- Fixed Duct Systems (See description under Acceptable Duct Conditions.)

|      | OR  |       |       |      | SA    | TURATED | D TEMP | ERATUR | E LEAVI | NG EVA | PORATO | OR (deg F | =)   |       |       |      |
|------|-----|-------|-------|------|-------|---------|--------|--------|---------|--------|--------|-----------|------|-------|-------|------|
| COIL | AIR |       | 35    |      |       | 40      |        |        | 45      |        |        | 50        |      |       | 55    |      |
| CFM  | EWB | TC    | SHC   | BF   | тс    | SHC     | BF     | TC     | SHC     | BF     | TC     | SHC       | BF   | тс    | SHC   | BF   |
|      |     | 1     | 1     |      |       |         | S      | IZE 24 |         |        |        |           |      |       |       |      |
|      | 72  | 37.50 | 19.04 | 0.00 | 33.96 | 17.17   | 0.00   | 29.95  | 15.18   | 0.00   | 25.35  | 13.07     | 0.00 | 20.11 | 10.83 | 0.00 |
| 525  | 67  | 30.71 | 19.50 | 0.00 | 27.01 | 17.49   | 0.00   | 22.82  | 15.38   | 0.00   | 18.08  | 13.17     | 0.00 | 12.92 | 10.93 | 0.00 |
|      | 62  | 24.45 | 19.79 | 0.00 | 20.62 | 17.68   | 0.00   | 16.51  | 15.56   | 0.01   | 12.74  | 12.74     | 0.05 | 10.53 | 10.53 | 0.21 |
|      | 72  | 46.28 | 23.46 | 0.00 | 42.01 | 21.31   | 0.00   | 37.11  | 18.99   | 0.00   | 31.54  | 16.50     | 0.00 | 25.10 | 13.80 | 0.01 |
| 700  | 67  | 38.08 | 24.46 | 0.01 | 33.62 | 22.14   | 0.01   | 28.52  | 19.62   | 0.01   | 22.62  | 16.92     | 0.01 | 16.16 | 14.14 | 0.01 |
|      | 62  | 30.57 | 25.26 | 0.01 | 25.94 | 22.75   | 0.01   | 20.81  | 20.13   | 0.02   | 16.58  | 16.58     | 0.08 | 13.73 | 13.73 | 0.23 |
|      | 72  | 53.42 | 27.14 | 0.00 | 48.58 | 24.80   | 0.00   | 42.99  | 22.24   | 0.00   | 36.57  | 19.46     | 0.00 | 29.26 | 16.44 | 0.01 |
| 875  | 67  | 44.14 | 28.75 | 0.02 | 39.07 | 26.18   | 0.02   | 33.23  | 23.40   | 0.01   | 26.53  | 20.34     | 0.02 | 19.00 | 17.14 | 0.02 |
|      | 62  | 35.64 | 30.11 | 0.02 | 30.44 | 27.37   | 0.02   | 24.72  | 24.45   | 0.03   | 20.16  | 20.16     | 0.11 | 16.72 | 16.72 | 0.26 |
|      | 72  | 59.25 | 30.25 | 0.00 | 54.00 | 27.79   | 0.01   | 47.91  | 25.05   | 0.02   | 40.85  | 22.05     | 0.02 | 32.69 | 18.77 | 0.02 |
| 1050 | 67  | 49.16 | 32.52 | 0.02 | 43.60 | 29.78   | 0.03   | 37.18  | 26.76   | 0.03   | 29.81  | 23.50     | 0.03 | 21.58 | 19.97 | 0.04 |
|      | 62  | 39.88 | 34.49 | 0.03 | 34.24 | 31.56   | 0.03   | 28.13  | 28.41   | 0.04   | 23.44  | 23.44     | 0.14 | 19.43 | 19.43 | 0.28 |
|      | 72  | 64.10 | 32.93 | 0.02 | 58.53 | 30.39   | 0.02   | 52.02  | 27.54   | 0.03   | 44.44  | 24.38     | 0.03 | 35.61 | 20.89 | 0.03 |
| 1225 | 67  | 53.37 | 35.88 | 0.04 | 47.43 | 33.02   | 0.04   | 40.52  | 29.84   | 0.04   | 32.58  | 26.37     | 0.04 | 23.87 | 22.63 | 0.05 |
|      | 62  | 43.50 | 38.51 | 0.04 | 37.52 | 35.42   | 0.04   | 31.22  | 32.09   | 0.06   | 26.46  | 26.46     | 0.17 | 21.98 | 21.98 | 0.31 |
|      |     |       |       |      |       |         | S      | IZE 36 |         |        |        |           |      |       |       |      |
|      | 72  | 46.73 | 23.71 | 0.00 | 42.21 | 21.42   | 0.00   | 37.03  | 18.95   | 0.00   | 31.12  | 16.32     | 0.00 | 24.47 | 13.58 | 0.00 |
| 700  | 67  | 38.23 | 24.55 | 0.01 | 33.46 | 22.07   | 0.00   | 28.13  | 19.46   | 0.00   | 22.20  | 16.73     | 0.01 | 15.77 | 13.96 | 0.01 |
|      | 62  | 30.47 | 25.19 | 0.01 | 25.73 | 22.64   | 0.01   | 20.64  | 20.02   | 0.02   | 16.45  | 16.45     | 0.08 | 13.57 | 13.57 | 0.24 |
|      | 72  | 54.14 | 27.50 | 0.00 | 49.01 | 25.01   | 0.00   | 43.08  | 22.29   | 0.00   | 36.32  | 19.31     | 0.01 | 28.48 | 16.14 | 0.01 |
| 875  | 67  | 44.54 | 28.96 | 0.01 | 39.13 | 26.21   | 0.02   | 32.90  | 23.21   | 0.02   | 25.90  | 20.10     | 0.01 | 18.55 | 16.94 | 0.02 |
|      | 62  | 35.68 | 30.12 | 0.02 | 30.20 | 27.22   | 0.02   | 24.46  | 24.28   | 0.03   | 20.00  | 20.00     | 0.11 | 16.52 | 16.52 | 0.26 |
|      | 72  | 60.23 | 30.73 | 0.00 | 54.65 | 28.07   | 0.02   | 48.16  | 25.17   | 0.01   | 40.65  | 21.97     | 0.02 | 31.96 | 18.47 | 0.02 |
| 1050 | 67  | 49.80 | 32.84 | 0.02 | 43.85 | 29.89   | 0.03   | 36.97  | 26.66   | 0.03   | 29.12  | 23.18     | 0.03 | 21.00 | 19.69 | 0.04 |
|      | 62  | 40.12 | 34.60 | 0.03 | 34.09 | 31.45   | 0.03   | 27.83  | 28.19   | 0.04   | 23.19  | 23.19     | 0.14 | 19.17 | 19.17 | 0.29 |
|      | 72  | 65.33 | 33.52 | 0.01 | 59.35 | 30.77   | 0.02   | 52.41  | 27.71   | 0.03   | 44.36  | 24.34     | 0.03 | 34.94 | 20.62 | 0.03 |
| 1225 | 67  | 54.19 | 36.28 | 0.04 | 47.86 | 33.21   | 0.04   | 40.43  | 29.78   | 0.04   | 31.95  | 26.07     | 0.04 | 23.18 | 22.28 | 0.05 |
|      | 62  | 43.93 | 38.70 | 0.04 | 37.54 | 35.38   | 0.04   | 30.91  | 31.83   | 0.06   | 26.14  | 26.14     | 0.17 | 21.63 | 21.63 | 0.31 |
|      | 72  | 69.64 | 35.98 | 0.03 | 63.37 | 33.15   | 0.04   | 56.04  | 29.99   | 0.04   | 47.51  | 26.47     | 0.04 | 37.51 | 22.57 | 0.04 |
| 1400 | 67  | 57.94 | 39.40 | 0.05 | 51.25 | 36.22   | 0.05   | 43.43  | 32.67   | 0.05   | 34.46  | 28.78     | 0.05 | 25.18 | 24.72 | 0.07 |
|      | 62  | 47.26 | 42.51 | 0.05 | 40.58 | 39.04   | 0.06   | 33.84  | 35.26   | 0.08   | 28.85  | 28.85     | 0.20 | 23.92 | 23.91 | 0.34 |
| I    |     | 1     | 1     |      |       |         | S      | IZE 48 |         |        | 1      |           |      | 1     |       |      |
|      | 72  | 55.50 | 29.11 | 0.00 | 50.59 | 26.54   | 0.00   | 44.88  | 23.71   | 0.00   | 38.24  | 20.63     | 0.00 | 30.68 | 17.36 | 0.00 |
| 875  | 67  | 45.72 | 30.33 | 0.00 | 40.45 | 27.50   | 0.00   | 34.52  | 24.46   | 0.00   | 27.67  | 21.20     | 0.00 | 19.98 | 17.78 | 0.00 |
| -    | 62  | 36.75 | 31.31 | 0.00 | 31.36 | 28.31   | 0.00   | 25.38  | 25.13   | 0.01   | 20.06  | 20.06     | 0.06 | 16.66 | 16.66 | 0.22 |
|      | 72  | 62.61 | 32.86 | 0.00 | 57.23 | 30.14   | 0.00   | 50.90  | 27.09   | 0.00   | 43.49  | 23.73     | 0.00 | 34.84 | 20.06 | 0.00 |
| 1050 | 67  | 51.82 | 34.75 | 0.00 | 45.98 | 31.70   | 0.00   | 39.25  | 28.31   | 0.00   | 31.53  | 24.69     | 0.01 | 22.90 | 20.87 | 0.01 |
| -    | 62  | 41.81 | 36.27 | 0.01 | 35.78 | 32.96   | 0.01   | 29.15  | 29.47   | 0.01   | 23.60  | 23.60     | 0.08 | 19.62 | 19.62 | 0.24 |
|      | 72  | 68.60 | 36.10 | 0.00 | 62.85 | 33.28   | 0.00   | 56.08  | 30.11   | 0.00   | 48.02  | 26.55     | 0.00 | 38.54 | 22.55 | 0.00 |
| 1225 | 67  | 57.05 | 38.72 | 0.01 | 50.81 | 35.50   | 0.01   | 43.41  | 31.92   | 0.00   | 34.94  | 27.95     | 0.01 | 25.54 | 23.82 | 0.01 |
| -    | 62  | 46.23 | 40.86 | 0.01 | 39.68 | 37.32   | 0.01   | 32.60  | 33.60   | 0.02   | 26.95  | 26.95     | 0.10 | 22.46 | 22.46 | 0.25 |

## Table 7 – Cooling Capacities (MBtuh)

Table 7 – Cooling Capacities (MBtuh)

|      |    |        |       |      |        |       |      |       |       | ,    |       |       |      |       |       |      |
|------|----|--------|-------|------|--------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
|      | 72 | 73.71  | 38.97 | 0.00 | 67.64  | 36.08 | 0.00 | 60.51 | 32.80 | 0.00 | 52.06 | 29.07 | 0.01 | 41.85 | 24.88 | 0.01 |
| 1400 | 67 | 61.55  | 42.32 | 0.01 | 54.96  | 38.99 | 0.01 | 47.17 | 35.23 | 0.01 | 37.95 | 31.04 | 0.01 | 27.97 | 26.64 | 0.02 |
|      | 62 | 50.14  | 45.16 | 0.02 | 43.27  | 41.48 | 0.02 | 35.80 | 37.53 | 0.03 | 30.14 | 30.14 | 0.12 | 25.15 | 25.15 | 0.27 |
|      | 72 | 78.67  | 41.89 | 0.00 | 72.30  | 38.96 | 0.00 | 64.83 | 35.58 | 0.01 | 55.92 | 31.76 | 0.01 | 45.16 | 27.34 | 0.02 |
| 1600 | 67 | 65.91  | 46.06 | 0.02 | 59.04  | 42.67 | 0.02 | 50.80 | 38.77 | 0.02 | 41.09 | 34.39 | 0.02 | 30.45 | 29.70 | 0.03 |
|      | 62 | 54.03  | 49.74 | 0.02 | 46.89  | 45.95 | 0.03 | 39.16 | 41.76 | 0.04 | 33.49 | 33.49 | 0.15 | 28.02 | 28.02 | 0.29 |
|      | 72 | 81.90  | 43.87 | 0.01 | 75.39  | 40.88 | 0.01 | 67.68 | 37.48 | 0.02 | 58.47 | 33.58 | 0.02 | 47.34 | 29.06 | 0.02 |
| 1750 | 67 | 68.76  | 48.66 | 0.02 | 61.68  | 45.22 | 0.02 | 53.22 | 41.25 | 0.02 | 43.19 | 36.78 | 0.02 | 32.18 | 31.88 | 0.04 |
|      | 62 | 56.62  | 52.98 | 0.03 | 49.32  | 49.11 | 0.03 | 41.57 | 41.19 | 0.05 | 35.82 | 35.82 | 0.17 | 30.02 | 30.02 | 0.30 |
|      |    |        |       |      |        |       | S    | ZE 60 |       |      |       |       |      |       |       |      |
|      | 72 | 79.55  | 38.39 | 0.00 | 72.99  | 35.30 | 0.00 | 65.21 | 31.82 | 0.00 | 56.07 | 27.96 | 0.00 | 45.28 | 23.69 | 0.00 |
| 1050 | 67 | 65.98  | 40.54 | 0.00 | 58.84  | 37.05 | 0.00 | 50.47 | 33.18 | 0.00 | 40.84 | 28.98 | 0.00 | 29.88 | 24.50 | 0.00 |
|      | 62 | 53.30  | 42.23 | 0.00 | 45.80  | 38.43 | 0.00 | 37.36 | 34.36 | 0.01 | 29.92 | 29.92 | 0.07 | 24.95 | 24.95 | 0.22 |
|      | 72 | 87.50  | 42.31 | 0.00 | 80.43  | 39.08 | 0.00 | 72.12 | 35.46 | 0.00 | 62.20 | 31.35 | 0.00 | 50.39 | 26.76 | 0.00 |
| 1225 | 67 | 72.90  | 45.29 | 0.00 | 65.20  | 41.61 | 0.00 | 56.12 | 37.49 | 0.00 | 45.43 | 32.88 | 0.00 | 33.42 | 28.01 | 0.01 |
|      | 62 | 59.18  | 47.71 | 0.01 | 50.98  | 43.61 | 0.01 | 41.86 | 39.23 | 0.01 | 34.26 | 34.26 | 0.08 | 28.63 | 28.63 | 0.23 |
|      | 72 | 94.29  | 45.76 | 0.00 | 86.84  | 42.45 | 0.00 | 78.04 | 38.71 | 0.00 | 67.56 | 34.46 | 0.00 | 54.92 | 29.60 | 0.00 |
| 1400 | 67 | 78.85  | 49.60 | 0.01 | 70.71  | 45.82 | 0.00 | 61.08 | 41.50 | 0.01 | 49.58 | 36.61 | 0.01 | 36.65 | 31.38 | 0.01 |
|      | 62 | 64.33  | 52.82 | 0.01 | 55.68  | 48.55 | 0.01 | 45.98 | 43.88 | 0.02 | 38.38 | 38.38 | 0.10 | 32.14 | 32.14 | 0.25 |
|      | 72 | 100.91 | 49.28 | 0.00 | 93.10  | 45.91 | 0.00 | 83.86 | 42.08 | 0.00 | 72.84 | 37.68 | 0.00 | 59.46 | 32.60 | 0.01 |
| 1600 | 67 | 84.67  | 54.09 | 0.01 | 76.18  | 50.22 | 0.01 | 66.02 | 45.76 | 0.01 | 53.86 | 40.66 | 0.01 | 40.02 | 35.07 | 0.02 |
|      | 62 | 69.49  | 58.29 | 0.01 | 60.49  | 53.89 | 0.01 | 50.41 | 49.00 | 0.02 | 42.85 | 42.85 | 0.13 | 35.97 | 35.97 | 0.26 |
|      | 72 | 105.21 | 51.67 | 0.00 | 97.24  | 48.25 | 0.01 | 87.70 | 44.38 | 0.01 | 76.28 | 39.90 | 0.01 | 62.50 | 34.70 | 0.01 |
| 1750 | 67 | 88.49  | 57.22 | 0.01 | 79.74  | 53.27 | 0.01 | 69.29 | 48.78 | 0.01 | 56.75 | 43.55 | 0.01 | 42.37 | 37.74 | 0.02 |
|      | 62 | 72.94  | 62.18 | 0.02 | 63.73  | 57.71 | 0.02 | 53.59 | 52.69 | 0.03 | 46.02 | 46.02 | 0.14 | 38.71 | 38.71 | 0.28 |
|      | 72 | 111.40 | 55.29 | 0.01 | 103.09 | 51.86 | 0.01 | 93.23 | 47.91 | 0.01 | 81.31 | 43.32 | 0.01 | 66.94 | 38.00 | 0.01 |
| 2000 | 67 | 93.99  | 62.07 | 0.02 | 84.88  | 58.05 | 0.02 | 74.05 | 53.44 | 0.02 | 61.00 | 48.09 | 0.02 | 46.00 | 41.99 | 0.03 |
|      | 62 | 77.95  | 68.26 | 0.02 | 68.57  | 63.72 | 0.03 | 58.99 | 58.28 | 0.06 | 51.02 | 51.02 | 0.17 | 42.96 | 42.96 | 0.30 |

NOTES:

1. Contact manufacturer for cooling capacities at conditions other than shown in table.

2. Formulas:

Leaving db = entering db -<u>sensible heat cap</u>.

1.09 x CFM

Leaving wb = wb corresponding to enthalpy of air leaving coil  $(h_{lwb})$ 

 $h_{lwb} = h_{ewb} - total capacity (Btuh)$ 

4.5 x CFM

where  $h_{ewb}$  = enthalpy of air entering coil. Direct interpolation is permissible. Do not extrapolate.

3. SHC is based on 80°F db temperature of air entering coil. Below 80°F db, subtract (Correction Factor x CFM) from SHC. Above 80°F db, add (Correction Factor x CFM) to SHC.

4. Bypass Factor = 0 indicates no psychometric solution. Use bypass factor of next lower EWB for approximation.

Correction Factor = 1.09 x (1 - BF) x (db - 80)

| ENTE    | RING AIR | DRY-BUL | B TEMPE | RATURE  | °F (°C) |
|---------|----------|---------|---------|---------|---------|
| 70 (00) | 70 (00)  | 77 (05) | 70 (04) | 75 (04) | Unde    |

SHC CORRECTION FACTOR

|   | BYPASS<br>FACTOR | 79 (26) | 78 (26) | 77 (25)   | 76 (24)   | 75 (24) | Under<br>75 (24) |
|---|------------------|---------|---------|-----------|-----------|---------|------------------|
|   | TAOTOR           | 81 (27) | 82 (28) | 83 (28)   | 84 (29)   | 85 (29) | Over 85          |
|   |                  |         |         | Correctio | on Factor |         |                  |
| Ī | 0.10             | .098    | 1.96    | 2.94      | 3.92      | 4.91    | Use              |
| Ī | 0.20             | 0.87    | 1.74    | 2.62      | 3.49      | 4.36    | formula          |
|   | 0.30             | 0.76    | 1.53    | 2.29      | 3.05      | 3.82    | shown<br>below   |

Interpolation is permissible.

| UNIT SIZE |      | CONDITIONS          |      |      | OCTAVE BA | ND CENTER F | REQUENCY* | •    |      |
|-----------|------|---------------------|------|------|-----------|-------------|-----------|------|------|
|           | CFM  | Ext Static Pressure | 63   | 125  | 250       | 500         | 1000      | 2000 | 4000 |
|           | 400  | 0.50                | 69.0 | 65.0 | 61.0      | 58.0        | 56.0      | 54.0 | 50.0 |
|           | 600  | 0.50                | 70.8 | 66.8 | 62.8      | 59.8        | 57.8      | 55.8 | 51.8 |
| 24        | 800  | 0.50                | 72.0 | 68.0 | 64.0      | 61.0        | 59.0      | 57.0 | 53.0 |
| 24        | 1000 | 0.50                | 73.0 | 69.0 | 65.0      | 62.0        | 60.0      | 58.0 | 54.0 |
|           | 1200 | 0.50                | 73.8 | 69.8 | 65.8      | 62.8        | 60.8      | 58.8 | 54.8 |
|           | 1400 | 0.50                | 74.4 | 70.4 | 66.4      | 63.4        | 61.4      | 59.4 | 55.4 |
|           | 400  | 0.50                | 69.0 | 65.0 | 61.0      | 58.0        | 56.0      | 54.0 | 50.0 |
|           | 600  | 0.50                | 70.8 | 66.8 | 62.8      | 59.8        | 57.8      | 55.8 | 51.8 |
|           | 800  | 0.50                | 72.0 | 68.0 | 64.0      | 61.0        | 59.0      | 57.0 | 53.0 |
| 36        | 1000 | 0.50                | 73.0 | 69.0 | 65.0      | 62.0        | 60.0      | 58.0 | 54.0 |
|           | 1200 | 0.50                | 73.8 | 69.8 | 65.8      | 62.8        | 60.8      | 58.8 | 54.8 |
|           | 1400 | 0.50                | 74.4 | 70.4 | 66.4      | 63.4        | 61.4      | 59.4 | 55.4 |
|           | 1600 | 0.50                | 75.0 | 71.0 | 67.0      | 64.0        | 62.0      | 60.0 | 56.0 |
|           | 400  | 0.50                | 69.0 | 65.0 | 61.0      | 58.0        | 56.0      | 54.0 | 50.0 |
|           | 600  | 0.50                | 70.8 | 66.8 | 62.8      | 59.8        | 57.8      | 55.8 | 51.8 |
|           | 800  | 0.50                | 72.0 | 68.0 | 64.0      | 61.0        | 59.0      | 57.0 | 53.0 |
| 48        | 1000 | 0.50                | 73.0 | 69.0 | 65.0      | 62.0        | 60.0      | 58.0 | 54.0 |
|           | 1200 | 0.50                | 73.8 | 69.8 | 65.8      | 62.8        | 60.8      | 58.8 | 54.8 |
|           | 1400 | 0.50                | 74.4 | 70.4 | 66.4      | 63.4        | 61.4      | 59.4 | 55.4 |
|           | 1600 | 0.50                | 75.0 | 71.0 | 67.0      | 64.0        | 62.0      | 60.0 | 56.0 |
|           | 600  | 0.50                | 70.8 | 66.8 | 62.8      | 59.8        | 57.8      | 55.8 | 51.8 |
|           | 800  | 0.50                | 72.0 | 68.0 | 64.0      | 61.0        | 59.0      | 57.0 | 53.0 |
|           | 1000 | 0.50                | 73.0 | 69.0 | 65.0      | 62.0        | 60.0      | 58.0 | 54.0 |
|           | 1200 | 0.50                | 73.8 | 69.8 | 65.8      | 62.8        | 60.8      | 58.8 | 54.8 |
| 60        | 1400 | 0.50                | 74.4 | 70.4 | 66.4      | 63.4        | 61.4      | 59.4 | 55.4 |
|           | 1600 | 0.50                | 75.0 | 71.0 | 67.0      | 64.0        | 62.0      | 60.0 | 56.0 |
|           | 1800 | 0.50                | 75.5 | 71.5 | 67.5      | 64.5        | 62.5      | 60.5 | 56.5 |
|           | 2000 | 0.50                | 76.0 | 72.0 | 68.0      | 65.0        | 63.0      | 61.0 | 57.0 |
|           | 2150 | 0.50                | 76.3 | 72.3 | 68.3      | 65.3        | 63.3      | 61.3 | 57.3 |

### Table 8 – Estimated Sound Power Level of Airflow from Duct (dB)

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

#### **Table 9 – Airflow Performance Correction Factors**

| HEATER kW  | ELEMENTS | STATIC PRESSURECORRECTION (in. wc) |         |  |  |  |  |  |
|------------|----------|------------------------------------|---------|--|--|--|--|--|
| HEATER KW  | ELEMENIS | Sizes 24–48                        | Size 60 |  |  |  |  |  |
| 0          | 0        | +.02                               | +.03    |  |  |  |  |  |
| 5          | 1        | +.01                               | +.02    |  |  |  |  |  |
| 8, 10      | 2        | 0                                  | 0       |  |  |  |  |  |
| 9, 15      | 3        | 02                                 | 03      |  |  |  |  |  |
| 20         | 4        | 04                                 | 06      |  |  |  |  |  |
| 18, 24, 30 | 6        | 06                                 | 10      |  |  |  |  |  |

The airflow performance table was developed using fan coils with 10-kW electric heaters (2 elements) in the units. For fan coils with heaters made up of a different number of elements, the external available static at a given CFM from the table may be corrected by adding or subtracting pressure. Use table for this correction.

## Table 10 - Air Delivery Performance Correction Component Pressure Drop (in. wc) at Indicated Airflow (Dry to Wet Coil)

|      | -     |       |       |       |       |       |       |       |       |       |       |  |  |  |  |  |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--|--|--|--|
| UNIT |       | CFM   |       |       |       |       |       |       |       |       |       |  |  |  |  |  |
| SIZE | 600   | 700   | 800   | 900   | 1000  | 1100  | 1200  | 1300  | 1400  | 1500  | 1600  |  |  |  |  |  |
| 24   | 0.012 | 0.016 | 0.022 | 0.028 | 0.034 | 0.040 | 0.049 | _     | _     | _     | _     |  |  |  |  |  |
| 36   | _     | 0.026 | 0.034 | 0.042 | 0.052 | 0.063 | 0.075 | 0.083 | 0.091 | 0.098 | 0.110 |  |  |  |  |  |
| 48   | _     | 0.006 | 0.008 | 0.010 | 0.012 | 0.015 | 0.017 | 0.020 | 0.023 | 0.027 | 0.030 |  |  |  |  |  |
|      |       |       |       |       |       | CFM   |       |       |       |       |       |  |  |  |  |  |
|      | 1100  | 1200  | 1300  | 1400  | 1500  | 1600  | 1700  | 1800  | 1900  | 2000  | 2100  |  |  |  |  |  |
| 60   | 0.013 | 0.016 | 0.018 | 0.020 | 0.023 | 0.027 | 0.030 | 0.034 | 0.039 | 0.044 | 0.048 |  |  |  |  |  |

#### Table 11 - Factory-Installed Filter Static Pressure Drop (in. wc)

| UNIT |       |       |       |       | CFM   |       |       |       |       |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| SIZE | 400   | 600   | 800   | 1000  | 1200  | 1400  | 1600  | 1800  | 2000  |
| 24   | 0.020 | 0.044 | 0.048 | 0.072 | 0.100 | —     | —     | —     |       |
| 36   | —     | 0.020 | 0.035 | 0.051 | 0.070 | 0.092 | _     | —     | —     |
| 48   |       |       | 0.035 | 0.051 | 0.070 | 0.092 | 0.120 | _     |       |
| 60   |       |       |       | 0.038 | 0.053 | 0.070 | 0.086 | 0.105 | 0.133 |

## Table 12 - Units without Electrical Heat

|           |        |              |         | S   | NGLE CIRCUIT | BRANCH CIRCUIT                    |  |
|-----------|--------|--------------|---------|-----|--------------|-----------------------------------|--|
| UNIT SIZE | MTR HP | VOLTS/PH/HZ  | MTR FLA | MCA | МОСР         | Min Wire<br>Size Awg <sup>*</sup> |  |
| 24        | 1/2    |              | 4.0     | 5.0 |              |                                   |  |
| 36        | - 1/2  | 208/230/1/60 | 4.0     | 5.0 | 15           | 14                                |  |
| 48        | 3/4    | 200/200/1/00 | 5.7     | 7.1 | 15           |                                   |  |
| 60        | 5/4    |              | 5.7     | /.1 |              |                                   |  |

\*. Use copper wire only to connect unit. If other than uncoated (non-plated) 75°C 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).

NOTE: If branch circuit wire length exceeds 100 ft, consult NEC 210-19a to determine maximum wire length. Use 2% voltage drop.

FLA = Full Load Amps; MCA = Minimum Circuit Ampacity; MOCP = Maximum Overcurrent Protection

Table 13 - Electrical Data for Units with Factory-Installed Heat

| HEATER PART NO. | kW @ 240 V | VOLTS/PH           | STAGES (kW<br>OPERATING) | INTERNAL CIRCUIT<br>PROTECTION | USED WITH<br>OUTDOOR<br>UNIT SIZE | HEATING<br>CAP. <sup>‡</sup> @ 230V | INTELLIGENT HEAT<br>CAPABLE <sup>*</sup> (kW) |
|-----------------|------------|--------------------|--------------------------|--------------------------------|-----------------------------------|-------------------------------------|---|
| KFFEH0401N03    | 3          | 230/1              | 3                        | None                           | 24                                | 9,600                               | -   |
| KFFEH0501N05    | 5          | 230/1              | 5                        | None                           | All                               | 15,700                              | -   |
| KFFEH0801N08    | 8          | 230/1              | 8                        | None                           | All                               | 25,100                              | -   |
| KFFEH0901N10    | 10         | 230/1              | 10                       | None                           | All                               | 31,400                              | -   |
| KFFEH3001F15    | 15         | 230/1              | 5, 15                    | Fuse <sup>†</sup>              | All                               | 47,100                              | 5, 10, 15                                     |
| KFFEH3201F20    | 20         | 230/1              | 5, 20                    | Fuse <sup>†</sup>              | 30 thru 60                        | 62,800                              | 5, 15, 20                                     |
| KFFEH2901N09    | 9          | 230/1 <sup>‡</sup> | 3, 9                     | None                           | 36 thru 60                        | 28,200                              | 3, 6, 9                                       |
| KFFEH1601315    | 15         | 230/3              | 5, 15                    | None                           | 36 thru 60                        | 47,100                              | -   |
| KFFEH2001318    | 18         | 230/3              | 6, 12, 18                | None                           | 42 thru 60                        | 56,500                              | -   |
| KFFEH3401F24    | 24         | 230/1**            | 8, 16, 24                | Fuse                           | 48, 60                            | 78,300                              | 8, 16, 24                                     |
| KFFEH3501F30    | 30         | 230/1**            | 10, 20, 30               | Fuse                           | 48, 60                            | 94,100                              | 10, 20, 30                                    |
| KFFEH2401C05    | 5          | 230/1              | 5                        | Circuit Breaker                | All                               | 15,700                              | -   |
| KFFEH2501C08    | 8          | 230/1              | 8                        | Circuit Breaker                | All                               | 25,100                              | -   |
| KFFEH2601C10    | 10         | 230/1              | 10                       | Circuit Breaker                | All                               | 31,400                              | -   |
| KFFEH3101C15    | 15         | 230/1              | 5, 15                    | Circuit Breaker                | All                               | 47,100                              | 5, 10, 15                                     |
| KFFEH3301C20    | 20         | 230/1              | 5, 20                    | Circuit Breaker                | 30 thru 60                        | 62,800                              | 5, 15, 20                                     |

Heaters designed with kW operating values are intelligent heat capable when used with compatible thermostat. \*.

Single circuit application of F15 and F20 heaters requires Single-point wiring kit accessory. **†**.

Field convertible to 3 phase.

Field convertible to 3 pnase.
 \*\*. These heaters are field convertible to 1 phase, single or multiple supply circuit.

NOTE: for 240 volts, multiply 230V heater amps by 1.04.

| HEATER kW | FUSES QTY/SIZE | CKT BKR QTY/SIZE (all are 2-pole) |
|-----------|----------------|-----------------------------------|
| 5         | —              | 1/60                              |
| 8         | _              | 1/60                              |
| 9         | _              | _                                 |
| 10        | —              | 1/60                              |
| 15        | 2/30, 2/60     | 2/60                              |
| 15        | _              | _                                 |
| 18        | _              | _                                 |
| 20        | 4/60           | 2/60                              |
| 24        | 6/60           | _                                 |
| 30        | 6/60           | _                                 |

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

| Table 15 - | - Electric | Heater | <b>Electrical Data</b> |
|------------|------------|--------|------------------------|
|------------|------------|--------|------------------------|

|            |              |                            |      |      | Р      |                     | UE          |           |           |                   |           | v         |         |                                    |       | BRA     |                    | CUIT  |         |                     |         |
|------------|--------------|----------------------------|------|------|--------|---------------------|-------------|-----------|-----------|-------------------|-----------|-----------|---------|------------------------------------|-------|---------|--------------------|-------|---------|---------------------|---------|
| FC<br>Size | Motor<br>FLA | HEATER PART NO.            | k    | w    | H<br>A | Internal<br>Circuit |             | 208/230V  | 5         |                   | 208/230V* | T         |         | ire Size (<br>08/230V <sup>1</sup> |       |         | nd Wire<br>08/230V |       |         | use/Ckt<br>s 208/23 |         |
| Size       | used         |                            |      |      | S      | Protection          | Single      | Dual C    | Circuit   | Single Dual Circu |           | Circuit   | Single  | Igle Dual Circuit                  |       | Single  |                    |       | Single  | Dual C              | Circuit |
|            |              |                            | 240V | 208V | E      |                     | Circuit     | L1,L2     | L3,L4     | Circuit           | L1,L2     | L3,L4     | Circuit | L1,L2                              | L3,L4 | Circuit | L1,L2              | L3,L4 | Circuit | L1,L2               | L3,L4   |
| 24         | 4.0          | KFFEH0401N03               | 3    | 2.3  | 1      | None                | 10.7/11.9   | —         | —         | 18.4/19.9         | —         | —         | 12/12   | —                                  | —     | 12/12   | —                  | —     | 20/20   | —                   | —       |
| 24-36      | 4.0          | KFFEH0501N05               | 5    | 3.8  | 1      | None                | 17.8/19.7   | —         | _         | 27.3/29.6         | —         | —         | 10/10   | —                                  | —     | 10/10   |                    | —     | 30/30   | —                   | —       |
| 24-36      | 4.0          | KFFEH2401C05               | 5    | 3.8  | 1      | Ckt Bkr             | 17.8/19.7   | —         | _         | 27.3/29.6         | —         | _         | 10/10   | _                                  | —     | 10/10   | _                  | —     | 30/30   | —                   | —       |
| 48-60      | 5.7          | KFFEH0501N05               | 5    | 3.8  | 1      | None                | 17.8/19.7   | —         | _         | 29.4/31.8         | —         | _         | 10/8    | _                                  | —     | 10/10   | _                  | —     | 30/35   | —                   | —       |
| 48-60      | 5.7          | KFFEH2401C05               | 5    | 3.8  | 1      | Ckt Bkr             | 17.8/19.7   | —         | _         | 29.4/31.8         | —         | _         | 10/8    | _                                  | _     | 10/10   | _                  | —     | 30/35   | —                   | —       |
| 24-36      | 4.0          | KFFEH0801N08               | 8    | 6.0  | 1      | None                | 28.5/31.5   | —         | _         | 40.6/44.4         | —         | —         | 8/8     | —                                  | —     | 10/10   | _                  | —     | 45/45   | —                   | —       |
| 24-36      | 4.0          | KFFEH2501C08               | 8    | 6.0  | 1      | Ckt Bkr             | 28.5/31.5   | —         | _         | 40.6/44.4         | —         | _         | 8/8     | _                                  | —     | 10/10   | _                  | —     | 45/45   | —                   | —       |
| 48-60      | 5.7          | KFFEH0801N08               | 8    | 6.0  | 1      | None                | 28.5/31.5   | —         | _         | 42.8/46.5         | —         | _         | 8/8     | _                                  | _     | 10/10   | _                  | —     | 45/50   | —                   |         |
| 48-60      | 5.7          | KFFEH2501C08               | 8    | 6.0  | 1      | Ckt Bkr             | 28.5/31.5   | —         | _         | 42.8/46.5         | -         | -         | 8/8     | _                                  | —     | 10/10   | _                  | —     | 45/50   | —                   | —       |
| 24-36      | 4.0          | KFFEH0901N10               | 10   | 7.5  | 1      | None                | 35.6/39.4   | —         | _         | 49.5/54.3         | —         | _         | 8/6     | _                                  | —     | 10/10   | _                  | —     | 50/60   | —                   | —       |
| 24-36      | 4.0          | KFFEH2601C10               | 10   | 7.5  | 1      | Ckt Bkr             | 35.6/39.4   | _         | _         | 49.5/54.3         | _         | _         | 8/6     | _                                  | —     | 10/10   | _                  | —     | 50/60   | —                   |         |
| 48-60      | 5.7          | KFFEH0901N10               | 10   | 7.5  | 1      | None                | 35.6/39.4   | —         | —         | 51.6/56.4         | —         | —         | 6/6     | —                                  | —     | 10/10   | _                  | —     | 60/60   | —                   | —       |
| 48-60      | 5.7          | KFFEH2601C10               | 10   | 7.5  | 1      | Ckt Bkr             | 35.6/39.4   | _         | _         | 51.6/56.4         | _         | _         | 6/6     | _                                  | _     | 10/10   | _                  | _     | 60/60   |                     | —       |
| 36         | 4.0          | KFFEH2901N09 <sup>‡</sup>  | 9    | 6.8  | 1      | None                | 32.2/35.6   | —         | —         | 45.3/49.5         | -         | -         | 8/6     | -                                  | —     | 10/10   | —                  | -     | 50/50   | -                   | -       |
| 36         | 4.0          | KFFEH2901N09               | 9    | 6.8  | 3      | None                | 18.6/20.6   | —         | -         | 28.3/30.8         | —         | —         | 8/8     | —                                  | —     | 10/10   |                    | —     | 30/35   | —                   | —       |
| 48-60      | 5.7          | KFFEH2901N09 <sup>‡</sup>  | 9    | 6.8  | 1      | None                | 32.2/35.6   | _         | _         | 47.4/51.6         | _         | _         | 8/6     | _                                  | _     | 10/10   |                    | —     | 50/60   | -                   | _       |
| 48-60      | 5.7          | KFFEH2901N09               | 9    | 6.8  | 3      | None                | 18.6/20.6   | _         | _         | 30.4/32.9         | _         | _         | 8/8     | _                                  | _     | 10/10   | _                  | _     | 35/35   | _                   | _       |
| 24-36      | 4.0          | KFFEH3001F15**             | 15   | 11.3 | 1      | Fuse                | 53.4/59.1   | 35.6/39.4 | 17.8/19.7 | 71.8/78.9         | 49.5/54.3 | 22.3/24.6 | 4/4     | 8/6                                | 10/10 | 8/8     | 10/10              | 10/10 | 80/80   | 50/60               | 25/25   |
| 24-36      | 4.0          | KFFEH3101C15               | 15   | 11.3 | 1      | Ckt Bkr             | 53.4/59.1   | 35.6/39.4 | 17.8/19.7 | 71.8/78.9         | 49.5/54.3 | 22.3/24.6 | 4/4     | 8/6                                | 10/10 | 8/8     | 10/10              | 10/10 | 80/80   | 50/60               | 25/25   |
| 48-60      | 5.7          | KFFEH3001F15**             | 15   | 11.3 | 1      | Fuse                | 53.4/59.1   | 35.6/39.4 | 17.8/19.7 | 73.9/81.0         | 51.6/56.4 | 22.3/24.6 | 4/4     | 6/6                                | 10/10 | 8/8     | 10/10              | 10/10 | 80/90   | 60/60               | 25/25   |
| 48-60      | 5.7          | KFFEH3101C15               | 15   | 11.3 | 1      | Ckt Bkr             | 53.4/59.1   | 35.6/39.4 | 17.8/19.7 | 73.9/81.0         | 51.6/56.4 | 22.3/24.6 | 4/4     | 6/6                                | 10/10 | 8/8     | 10/10              | 10/10 | 80/90   | 60/60               | 25/25   |
| 36         | 4.0          | KFFEH1601315               | 15   | 11.3 | 3      | None                | 30.8/34.1   | _         | _         | 43.5/47.6         | _         | _         | 8/6     | _                                  | —     | 10/10   | _                  | _     | 50/50   | _                   | _       |
| 48-60      | 5.7          | KFFEH1601315               | 15   | 11.3 | 3      | None                | 30.8/34.1   | _         | -         | 45.6/49.8         | _         | _         | 8/6     | _                                  | _     | 10/10   |                    | _     | 50/50   | _                   | _       |
| 48-60      | 5.7          | KFFEH2001318               | 18   | 13.5 | 3      | None                | 37.2/41.2   | _         | _         | 53.6/58.6         | _         | _         | 6/6     | —                                  | —     | 10/10   | _                  | —     | 60/60   | —                   | —       |
| 36         | 4.0          | KFFEH3201F20**             | 20   | 15.0 | 1      | Fuse                | 71.2/78.8   | 35.6/39.4 | 35.6/39.4 | 94.0/103.5        | 49.5/54.3 | 44.5/49.3 | 3/2     | 6/6                                | 8/8   | 8/6     | 10/10              | 10/10 | 100/110 | 50/60               | 45/50   |
| 36         | 4.0          | KFFEH3301C20               | 20   | 15.0 | 1      | Ckt Bkr             | 71.2/78.8   | 35.6/39.4 | 35.6/39.4 | 94.0/103.5        | 49.5/54.3 | 44.5/49.3 | 3/2     | 6/6                                | 8/8   | 8/6     | 10/10              | 10/10 | 100/110 | 50/60               | 45/50   |
| 48-60      | 5.7          | KFFEH3201F20**             | 20   | 15.0 | 1      | Fuse                | 71.2/78.8   | 35.6/39.4 | 35.6/39.4 | 96.3/105.6        | 51.6/56.4 | 44.5/49.3 | 3/2     | 6/6                                | 8/8   | 8/6     | 10/10              | 10/10 | 100/110 | 60/60               | 45/50   |
| 48-60      | 5.7          | KFFEH3301C20               | 20   | 15.0 | 1      | Ckt Bkr             | 71.2/78.8   | 35.6/39.4 | 35.6/39.4 | 96.3/105.6        | 51.6/56.4 | 44.5/49.3 | 3/2     | 6/6                                | 8/8   | 8/6     | 10/10              | 10/10 | 100/110 | 60/60               | 45/50   |
| 48-60      | 5.7          |                            | 24   | 18.0 | 3      | Fuse                | 49.3/54.6   | —         | _         | 68.8/75.4         | —         | _         | 4/4     | —                                  | —     | 8/8     | —                  | —     | 70/80   | —                   | —       |
| 48-60      | 5.7          | KFFEH3401F24 <sup>††</sup> | 24   | 18.0 | 1      | Fuse                | 85.5/94.5   | —         |           | 114.0/125.3       | —         | _         | 2/1     | —                                  | —     | 6/6     |                    | —     | 125/150 | —                   | —       |
| 48-60      | 5.7          |                            | 30   | 22.5 | 3      | Fuse                | 61.7/68.2   | —         | —         | 84.3/92.4         | —         | —         | 4/3     | —                                  | —     | 8/8     | _                  | —     | 90/100  | —                   | —       |
| 48-60      | 5.7          | KFFEH3501F30 <sup>††</sup> | 30   | 22.5 | 1      | Fuse                | 106.8/118.1 | _         |           | 140.6/154.8       | —         | _         | 0/00    | —                                  | —     | 6/6     |                    | —     | 150/175 | —                   | _       |

\*. For 240V, multiply 230V heater amps by 1.04. Wire sizing and over-current protection may need adjustment per local code requirements.
†. Copper wire must be used. If other than uncoated (non-plated), 75°C ambient, copper wire (solid wire for smaller, and stranded wire for larger than 10 AWG) is used, consult applicable tables of the National Electric Code (ANSI/NFPA 70).
‡. Field convertible to 3 phase.
\*\*. Single circuit application of F15 and F20 heaters requires single-point wiring kit accessory.

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

| FC<br>Size | Motor<br>FLA | KVV                       |      | w    | PHASE | HEATER AMPS 208/230V |           | MIN AMPACITY 208/230V* |           | MIN WIRE SIZE (AWG)<br>208/230V <sup>†</sup> |           |       | MIN GND<br>WIRE SIZE |       |          |       |       |       |
|------------|--------------|---------------------------|------|------|-------|----------------------|-----------|------------------------|-----------|--|-----------|-------|----------------------|-------|----------|-------|-------|-------|
| 0120       | used         |                           | 240V | 208V |       | L1,L2                | L3,L4     | L5,L6                  | L1,L2     | L3,L4  | L5,L6     | L1,L2 | L3,L4                | L5,L6 | 208/230V | L1,L2 | L3,L4 | L5,L6 |
| 48-60      | 5.7          | KFFEH3401F24 <sup>‡</sup> | 24   | 18.0 | 1     | 28.5/31.5            | 28.5/31.5 | 28.5/31.5              | 43.3/47.0 | 35.6/39.4                                    | 35.6/39.4 | 8/8   | 8/8                  | 8/8   | 10/10    | 50/50 | 40/40 | 40/40 |
| 48-60      | 5.7          | KFFEH3501F30 <sup>‡</sup> | 30   | 22.5 | 1     | 35.6/39.4            | 35.6/39.4 | 35.6/39.4              | 52.1/56.9 | 44.5/49.3                                    | 44.5/49.3 | 6/6   | 8/8                  | 8/8   | 10/10    | 60/60 | 45/50 | 45/50 |

Table 16 – Field Multipoint Wiring or 24- and 30-kW Single Phase

\*. 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 NEC (ANSI/NFPA 70).
‡. Field convertible to 1 phase, single or multiple supply circuit.

# ACCESSORIES

|     | ITEM   | ACCESSORY PART NO.*   | FAN COIL SIZE USED WITH                  |  |  |
|-----|--|---|--|--|--|
| 1.  | Disconnect Kit   | KFADK0301DSC  | All single phase 3kW - 10kW heaters      |  |  |
| 2.  | Downflow Base Kit                                      | KFACB0201CFB  | 24, 36                                   |  |  |
|     |  | KFACB0301CFB  | 48                                       |  |  |
|     |  | KFACB0401CFB  | 60                                       |  |  |
| 3.  |  | KFADC0201SLP  | Slope Coil Units—36                      |  |  |
| з.  | Downflow Conversion Kit <sup>†</sup>                   | KFADC0401ACL  | A-Coil Units—24, 48, 60                  |  |  |
| 4.  | Downflow/Horizontal Conversion Gasket Kit              | KFAHD0101SLP  | All                                      |  |  |
| 5.  | Horizontal Water Management Kit (25 pack) <sup>‡</sup> | KFAHC0125AAA  | A-Coil Units—36, 48, 60                  |  |  |
| 6.  | Single-Point Wiring Kit                                | KFASP0101SPK  | Only with 15- and 20-kW Fused<br>Heaters |  |  |
| 7.  | Filter   | See Table 2 for filte   | r dimensional details.                   |  |  |
| 8.  | Fan Coil Filter Cabinet<br>(Fan Coil Filter Media)     | FNCCABXX0017<br>(MERV 8—FILXXFNC0017)<br>(MERV 11—FILXXFNC0117)<br>(MERV 13—FILXXFNC0317) | 24, 36                                   |  |  |
|     |  | FNCCABXX0021<br>(MERV 8—FILXXFNC0021)<br>(MERV 11—FILXXFNC0121)<br>(MERV 13—FILXXFNC0321) | 48                                       |  |  |
|     |  | FNCCABXX0024<br>(MERV 8—FILXXFNC0024)<br>(MERV 11—FILXXFNC0124)<br>(MERV 13—FILXXFNC0324) | 60                                       |  |  |
| 10. | PVC Condensate Trap Kit (50 pack)                      | KFAET0150ETK  | All                                      |  |  |
|     | TXV Kit with Brazed Inlet Connection,                  | KSBTX0201PUR  | 24L, 36L                                 |  |  |
|     | Refrigerant,   | KSBTX0301PUR  | 48L                                      |  |  |
|     | Aluminum Coils Only                                    | KSBTX0401PUR  | 60L                                      |  |  |
| 11. |  | KSCTX0101PUR  | 24                                       |  |  |
|     | TXV Kit with Mechanical Fitting,                       | KSCTX0401PUR  | 36                                       |  |  |
|     | Refrigerant,<br>Aluminum Coils Only                    | KSCTX0501PUR  | 48                                       |  |  |
|     |  | KSCTX0601PUR  | 60                                       |  |  |
| 12. | Door Gasket Kit **                                     | 344994-751  | All                                      |  |  |
| 13. | Accessory Quick Connect Kit                            | KFAPS0110KIT  | All                                      |  |  |

#### Table 17 – Accessories

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.

t ‡

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

## 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 (FE4A or FE5A) or horizontal (FE4A only) application.

REQUIRED USE: Fan coils in either downflow or horizontal applications.

#### 5. Horizontal Water Management Kit

This kit provides proper installation of fan coils under conditions of high static pressure and high relative humidty.

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 2 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. 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 (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. 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. TXV Kit

These kits are designed to add TXVs to piston fan coils or convert R-22 fan coils to R-410A TXVs.

## 11. Door Gasket Kit

This kit consists of specific adhesive-backed foam strips which are applied to the unit door and frame, limiting air leakage.

## 12. Accessory Quick Connect Kit

This kit enables the installer to easily connect a 230V IAQ accessory (air purifier, electronic air cleaner, UV light, etc.) kit to a fan coil unit, eliminating the need to run a separate power supply to the accessory. Use of this kit may eliminate the requirement for a licensed electrician to complete the job (check local codes).

Replaces: