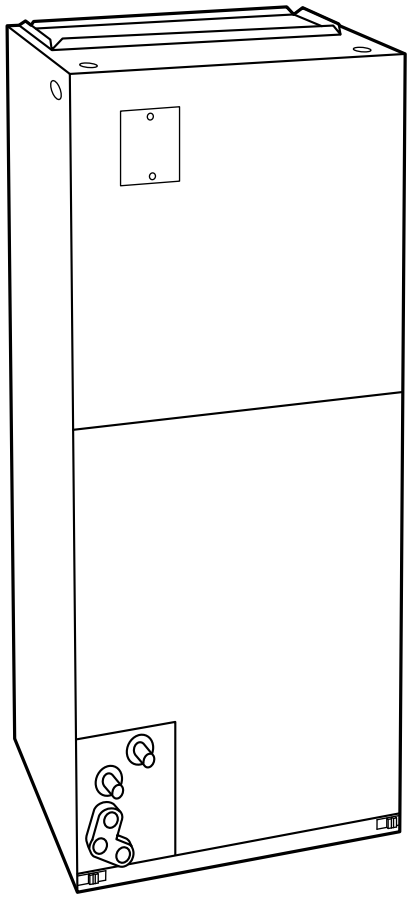
bryant
Heating & Cooling Systems

# DIRECT EXPANSION FAN COIL

# MODEL FK4C

Sizes 001 thru 006



**FK4C**
**Premium Air Handling Technology**

The FK4C is the latest in air handling technology. It is the perfect unit when you need a fan coil that can deliver high-tech performance, application versatility, easy installation, and high efficiency.

The FK4C achieves all this by taking full advantage of its programmable integrated controls and motor (ICM2). This versatile motor is completely static independent, meaning the motor will deliver the selected CFM regardless of the duct system, making it the perfect choice for both high and low static applications. Other features homeowners will appreciate are the FK4C's soft ramp up when the unit is turned on, and its soft ramp down after the thermostat is satisfied. These features increase efficiency and eliminate the annoying sounds associated with sudden changes in airflow. When the ICM2 is used in conjunction with specific indoor controls (such as the Thermidistat™ Control), the HVAC system can operate in comfort control modes like Super Dehumidify. This combination of Bryant products can offer unmatched comfort.

The FK4C also features Bryant's 'Easy Select™ Board.' This board streamlines installation and helps the installer to select the correct airflow. The Easy Select Board combined with the ICM2 truly allows dealers to customize the heating and cooling system to each home.

The FK4C is also loaded with the most advanced components, so you know it will perform like a premium fan coil should. Inside you will find grooved copper tubing and lanced sine wave aluminum fins, which contribute to the FK4C's high SEER and HSPF ratings. Bryant technology also incorporates factory washed coils for superior condensate control, dedicated refrigerant circuitry, and state-of-the-art Thermostatic Expansion Valve (TXV) refrigerant metering. These units are designed with a high-impact Lexan© condensate pan. The primary and secondary drain connections include brass inserts. All of this is packed in a rugged, prepainted metal cabinet that is lined with super-thick, high-density insulation. Obviously a unit built to last!

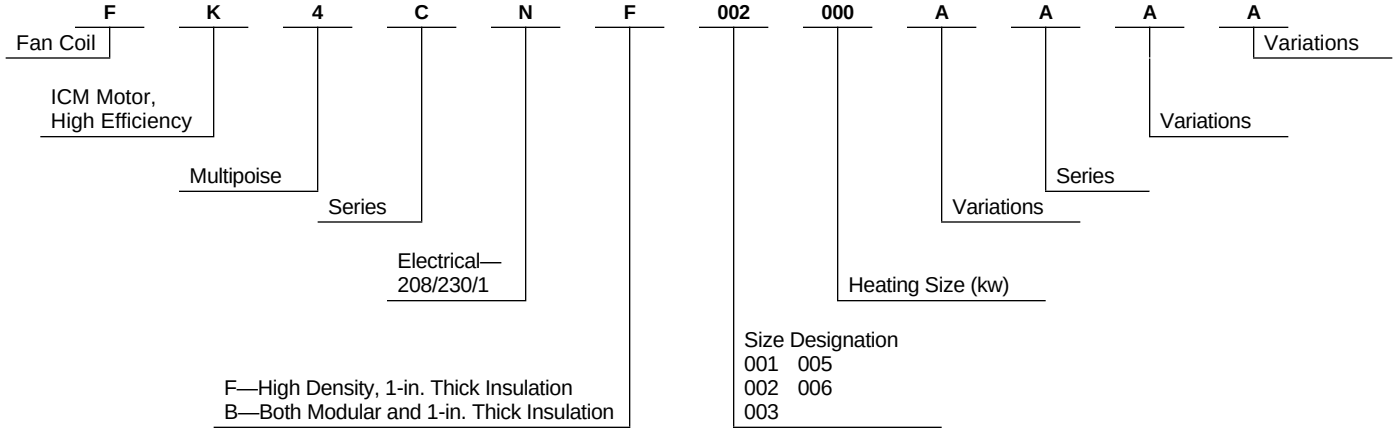
In addition to superior quality, the FK4C also offers the ultimate in versatility. Compact and designed for upflow, downflow, and horizontal applications, the FK4C fits right where it is needed. It is equipped with sweat connections and has multiple electric entries for fast, simple installations. Bryant also offers the FK4C with factory- or field-installed electric resistance heater kits in sizes 5- to 30-kw. When the ultimate in efficiency, flexibility, comfort, and durability is needed, the FK4C is the fan coil to use.

Form No. PDS FK4C.01.3

## FEATURES

- Programmable ICM2 blower motor
- Easy Select™ Board
- Grooved copper tube
- Lanced sine wave aluminum fin
- Discreet refrigerant circuits
- Prepainted galvanized sheet metal cabinet
- Cooling control in every unit
- Static independent airflow
- Logarithmic spiral blower housings for blower efficiency
- High impact Lexan© condensate pans
- All units multipoise
- Provision made for suspending from roof or ceiling joists
- Modular cabinet design on 006 size
- Factory-supplied, cleanable, permanent framed filter
- Easy access filter — no tools required
- Field-installed heater packages 5- to 30-kw, fused, circuit breaker, non-fused (10-kw and down)
- Low-voltage terminal block
- AMP plug connection provided for accessory heater packages
- Connections for humidistat/humidifier
- Connections for air cleaner relay
- Blower on/off-delay time selections
- Extra thick 1-in., R 4.2 high-density insulation
- Tested for condensate disposal at conditions much more severe than those required by ARI
- Sweat connections
- Bi-flow hard shut-off TXV
- Multiple electrical entry
- Primary and secondary drain connections with brass inserts
- Inspection plate on A-coil models
- 1-1/2 – 5 ton application
- HUD approved for manufactured housing
- Replaceable 5-amp blade-type auto fuse protects against transformer secondary short
- 40 va, 208/230-v transformer
- All models listed with UL, c-UL, ARI, and RADCO
- Independent fan only selections

## MODEL NUMBER NOMENCLATURE




RADCO • CERTIFICATION • LISTING • TESTING • INSPECTION ®

c UL ® US

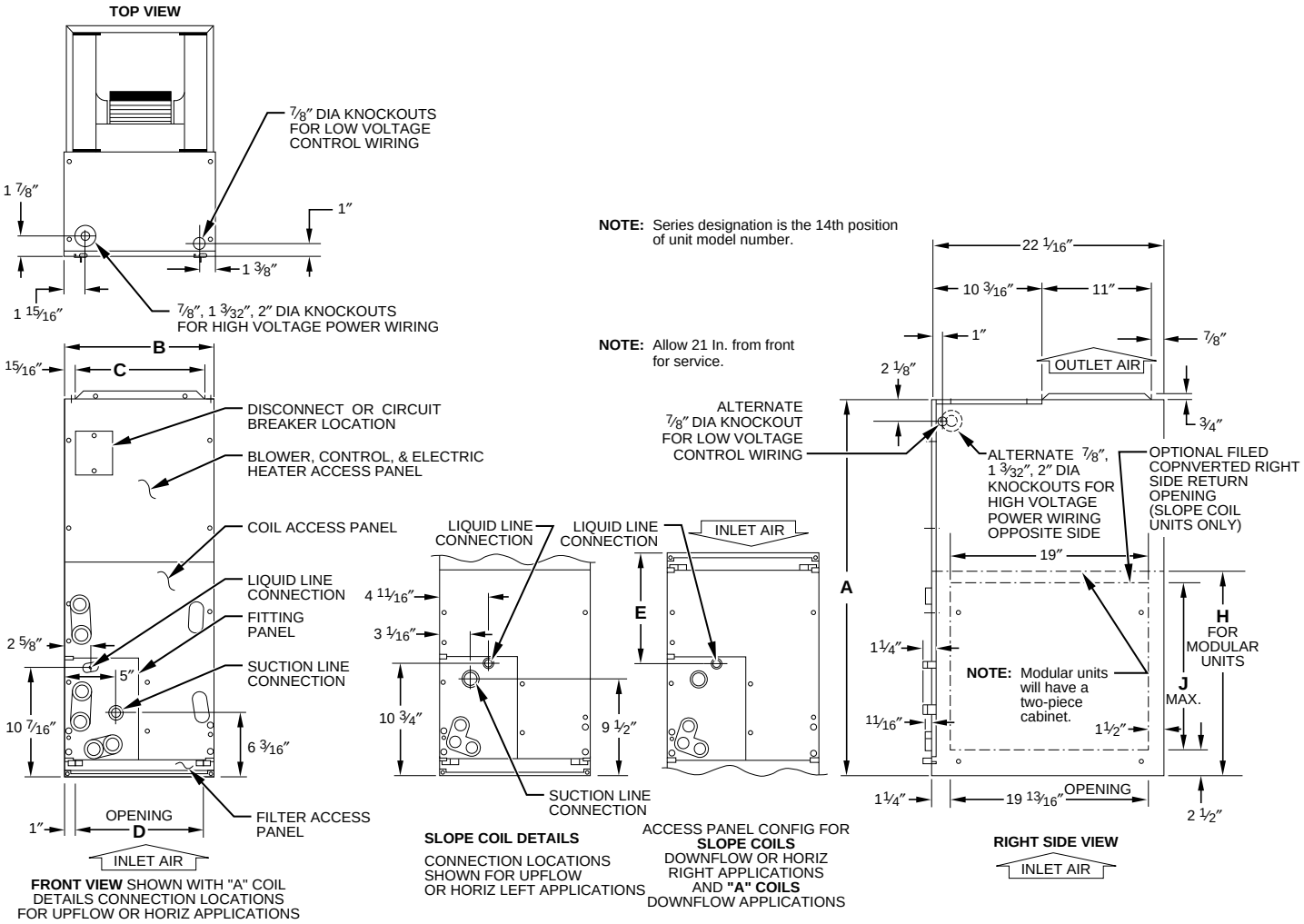
Carrier Corporation UL ® REGISTERED FIRM ISO 9001 #A2883

REGISTRATION QUALITY SYSTEM

MANUFACTURER CERTIFIED TO ARI AS COMPLYING WITH ARI STANDARD 210

CERTIFICATION APPLIES ONLY WHEN THE COMPLETE SYSTEM IS LISTED WITH ARI.

# DIMENSIONS

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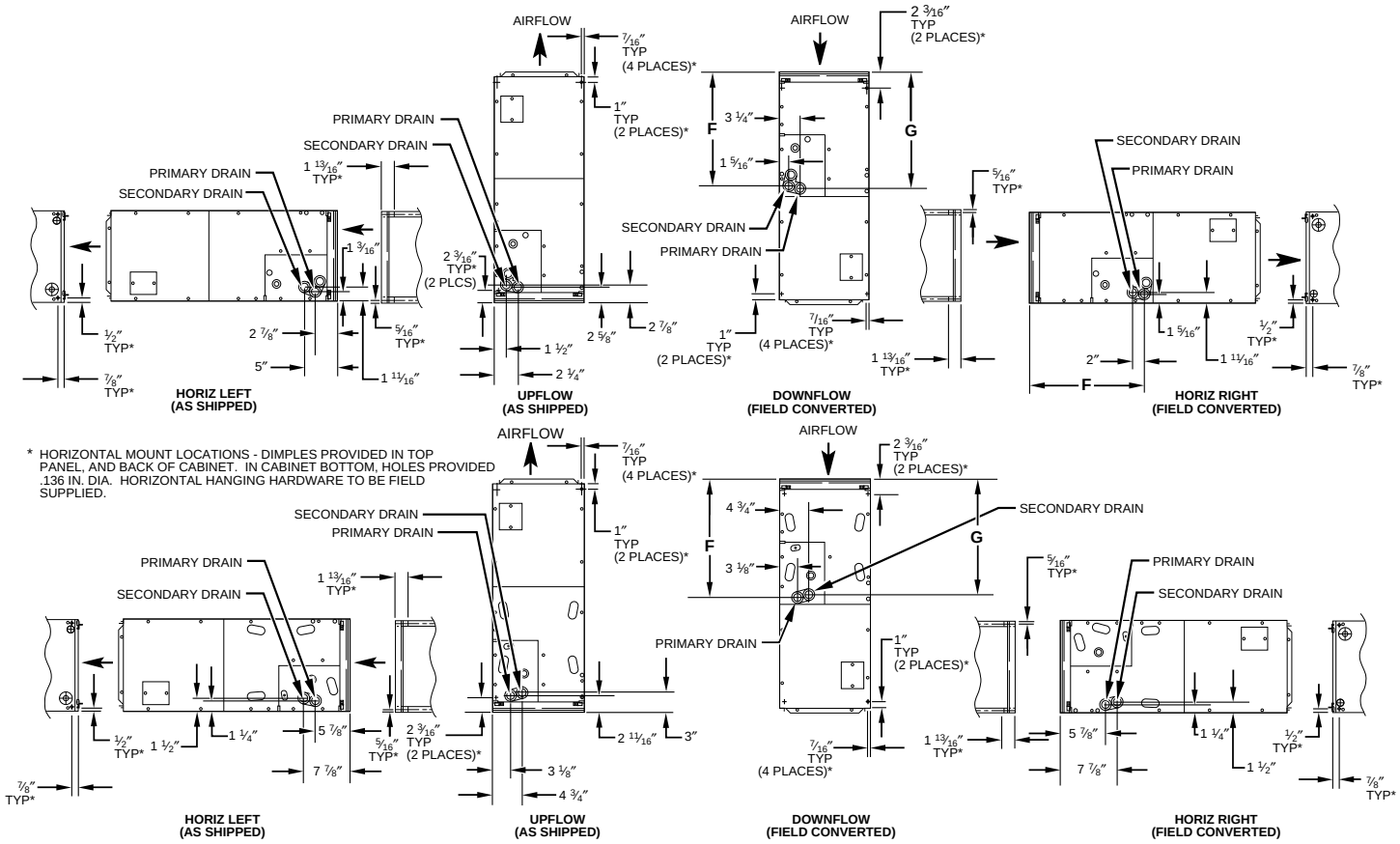
| UNIT | SIZE | A In. | B In. | C In. | D In. | E In. |
|---|---|---|---|---|---|---|
| FK4C | 001 | 47-5/8 | 17-5/8 | 15-3/4 | 15-5/8 | 15-3/8 |
| | 002 | 42-11/16 | 17-5/8 | 15-3/4 | 15-5/8 | 10-3/4 |
| | 003 | 53-7/16 | 21-1/8 | 19-1/4 | 19-1/8 | 19-3/16 |
| | 005 | 53-7/16 | 21-1/8 | 19-1/4 | 19-1/8 | 19-1/2 |
| | 006 | 59-3/16 | 24-11/16 | 22-3/4 | 22-11/16 | 25-1/4 |

# DIMENSIONS Continued

**SLOPE COIL**




**A–COIL**

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| UNIT | SIZE | F | G | H | J | COIL CONFIGURATION | | SHIPPING WEIGHT |
|---|---|---|---|---|---|---|---|---|
| | | In. | In. | In. | In. | SLOPE | "A" | Lb |
| FK4C | 001 | 23-1/8 | 23-5/8 | — | 17 | Yes | — | 115 |
| | 002 | 18-9/16 | 18-1/4 | — | — | — | Yes | 130 |
| | 003 | 26-15/16 | 27-1/2 | — | 19 | Yes | — | 149 |
| | 005 | 27-1/4 | 26-15/16 | — | — | — | Yes | 167 |
| | 006 | 32-15/16 | 32-5/8 | 34-1/16 | — | — | Yes | 202 |

# SPECIFICATIONS

## MODEL FK4C

| SIZE | 001 | 002 | 003 | 005 | 006* |
|---|---|---|---|---|---|
| SHIPPING WEIGHT (Lb) | 117 | 130 | 149 | 167 | 202 |
| REFRIGERANT | | | R-22 | | |
| Refr. Metering Device | | | TXV | | |
| Size | 3 Ton | 3 Ton | 5 Ton | 5 Ton | 5 Ton |
| COIL | | | | | |
| Type | Slope | A | Slope | A | A |
| Rows - Fins/In. | | | 3 - 14.5 | | |
| Face Area (sq-ft) | 2.97 | 3.46 | 3.46 | 5.93 | 7.42 |
| FAN | | | | | |
| Air Discharge | | | Upflow, Downflow, Horizontal | | |
| CFM (Nominal Clg/Htg) | 525 / 470<br>700 / 630<br>875 / 785<br>1050 / 945 | 525 / 470<br>700 / 630<br>875 / 785<br>1050 / 945 | 700 / 630<br>875 / 785<br>1050 / 945<br>1225 / 1100 | 875 / 785<br>1050 / 945<br>1225 / 1100<br>1400 / 1260 | 1050 / 945<br>1225 / 1100<br>1400 / 1260<br>1750 / 1575 |
| MOTOR HP (ECM) | 1/2 | 1/2 | 1/2 | 1/2 | 3/4 |
| FILTER | 21-1/2 x 16-3/8 | 21-1/2 x 16-3/8 | 21-1/2 x 19-7/8 | 21-1/2 x 19-7/8 | 21-1/2 x 23-5/16 |

* Modular Units
† Fan coil units with TXV must have a start capacitor and relay for single-phase outdoor (non-scroll) units.

# PERFORMANCE DATA

## FK4C ADVANCED FAN COIL AIRFLOW DELIVERY CHART

| UNIT SIZE | OUTDOOR UNIT CAPACITY | OPERATING MODE—COOLING | | | | | | FAN ONLY |
|---|---|---|---|---|---|---|---|---|
| | | Single-Speed Application | | Two-Speed Application | | | | |
| | | | | High Speed | | Low Speed | | |
| | | Nominal A/C Cooling | A/C Cooling Dehumidify | Nominal A/C Cooling | A/C Cooling Dehumifidy | Nominal A/C Cooling | A/C Cooling Dehumidify | Lo/Med/Hi |
| 001 | 018 | 525 | 420 | — | — | — | — | 350 / 350 / 525 |
| | 024 | 700 | 560 | — | — | — | — | 350 / 455 / 700 |
| | 030 | 875 | 700 | — | — | — | — | 440 / 570 / 875 |
| | 036 | 1050 | 840 | 1100 | 880 | 680 | 545 | 525 / 680 / 1050 |
| 002 | 018 | 525 | 420 | — | — | — | — | 350 / 350 / 525 |
| | 024 | 700 | 560 | — | — | — | — | 350 / 455 / 700 |
| | 030 | 875 | 700 | — | — | — | — | 440 / 570 / 875 |
| | 036 | 1050 | 840 | 1100 | 880 | 680 | 545 | 525 / 680 / 1050 |
| 003 | 024 | 700 | 560 | — | — | — | — | 415 / 455 / 700 |
| | 030 | 875 | 700 | — | — | — | — | 440 / 570 / 875 |
| | 036 | 1050 | 840 | 1100 | 880 | 680 | 545 | 525 / 680 / 1050 |
| | 042 | 1225 | 980 | — | — | — | — | 610 / 795 / 1225 |
| 005 | 030 | 875 | 700 | — | — | — | — | 440 / 570 / 875 |
| | 036 | 1050 | 840 | 1100 | 880 | 680 | 545 | 525 / 680 / 1050 |
| | 042 | 1225 | 980 | — | — | — | — | 610 / 795 / 1225 |
| | 048 | 1400 | 1120 | 1470 | 1175 | 910 | 725 | 700 / 910 / 1400 |
| 006 | 036 | 1050 | 840 | 1100 | 880 | 745 | 595 | 525 / 745 / 1050 |
| | 042 | 1225 | 980 | — | — | — | — | 610 / 870 / 1225 |
| | 048 | 1400 | 1120 | 1470 | 1175 | 995 | 795 | 700 / 995 / 1400 |
| | 060 | 1750 | 1400 | 1835 | 1470 | 1240 | 995 | 875 / 1240 / 1750 |

**NOTE:** 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 10-kw heater and filter installed.
4. Airflows shown are at standard air conditions.

## FK4C ADVANCED FAN COIL AIRFLOW DELIVERY CHART

| UNIT SIZE | OUTDOOR UNIT CAPACITY | OPERATING MODE—HEAT PUMP ONLY HEATING | | | | | | FAN ONLY |
|---|---|---|---|---|---|---|---|---|
| | | Single-Speed Application | | Two-Speed Application | | | | |
| | | | | High Speed | | Low Speed | | |
| | | Heat Pump Comfort | Heat Pump Efficiency | Heat Pump Comfort | Heat Pump Efficiency | Heat Pump Comfort | Heat Pump Efficiency | Lo/Med/Hi |
| 001 | 018 | 470 | 525 | — | — | — | — | 350 / 350 / 470 |
| | 024 | 630 | 700 | — | — | — | — | 350 / 410 / 630 |
| | 030 | 785 | 875 | — | — | — | — | 440 / 510 / 785 |
| | 036 | 945 | 1050 | 990 | 1100 | 615 | 680 | 525 / 615 / 945 |
| 002 | 018 | 470 | 525 | — | — | — | — | 350 / 350 / 470 |
| | 024 | 630 | 700 | — | — | — | — | 350 / 410 / 630 |
| | 030 | 785 | 875 | — | — | — | — | 440 / 510 / 785 |
| | 036 | 945 | 1050 | 990 | 1100 | 615 | 680 | 525 / 615 / 945 |
| 003 | 024 | 630 | 700 | — | — | — | — | 415 / 415 / 630 |
| | 030 | 785 | 875 | — | — | — | — | 440 / 510 / 785 |
| | 036 | 945 | 1050 | 990 | 1100 | 615 | 680 | 525 / 615 / 945 |
| | 042 | 1100 | 1225 | — | — | — | — | 610 / 715 / 1100 |
| 005 | 030 | 785 | 875 | — | — | — | — | 440 / 510 / 785 |
| | 036 | 945 | 1050 | 990 | 1100 | 615 | 680 | 525 / 615 / 945 |
| | 042 | 1100 | 1225 | — | — | — | — | 610 / 715 / 1100 |
| | 048 | 1260 | 1400 | 1320 | 1470 | 820 | 910 | 700 / 820 / 1260 |
| 006 | 036 | 945 | 1050 | 990 | 1100 | 670 | 745 | 540 / 670 / 945 |
| | 042 | 1100 | 1225 | — | — | — | — | 610 / 780 / 1100 |
| | 048 | 1260 | 1400 | 1325 | 1470 | 895 | 995 | 700 / 895 / 1260 |
| | 060 | 1575 | 1750 | 1655 | 1835 | 1120 | 1240 | 875 / 1120 / 1575 |

**NOTE:** 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.
3. Dry coil at 230 volts and with 10-kw heater and filter installed.
4. Airflows shown are at standard air conditions.

# PERFORMANCE DATA Continued

## AIRFLOW DELIVERY CHART (CFM)—ELECTRIC HEATING MODES

| UNIT SIZE | OUTDOOR UNIT CAPACITY BtuH | ELECTRIC HEATER KW RANGE | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0–5 | | | 0–10 | | | 0–15 | | | 0–20 | | |
| | | Lo | Nom | Hi | Lo | Nom | Hi | Lo | Nom | Hi | Lo | Nom | Hi |
| 001, 002 | 18,000 | 625 | 625 | 625 | 675 | 675 | 675 | — | — | — | — | — | — |
| | 24,000 | 650 | 725 | 835 | — | 725 | 835 | 875 | 875 | — | — | — | — |
| | 30,000 | 815 | 905 | 1040 | — | 905 | 1040 | 900 | 900 | 1040 | 1100 | 1100 | 1100 |
| | 36,000 | 980 | 1085 | 1250 | 980 | 1085 | 1250 | 980 | 1085 | 1250 | 1100 | 1100 | 1250 |
| 003 | 24,000 | 675 | 725 | 835 | 875 | 875 | 875 | — | — | — | — | — | — |
| | 30,000 | 815 | 905 | 1040 | 875 | 905 | 1040 | 1100 | 1100 | 1100 | — | — | — |
| | 36,000 | 980 | 1085 | 1250 | 980 | 1085 | 1250 | 1100 | 1100 | 1250 | 1225 | 1225 | 1250 |
| | 42,000 | 1140 | 1270 | 1460 | 1140 | 1270 | 1460 | 1140 | 1270 | 1460 | 1225 | 1270 | 1460 |

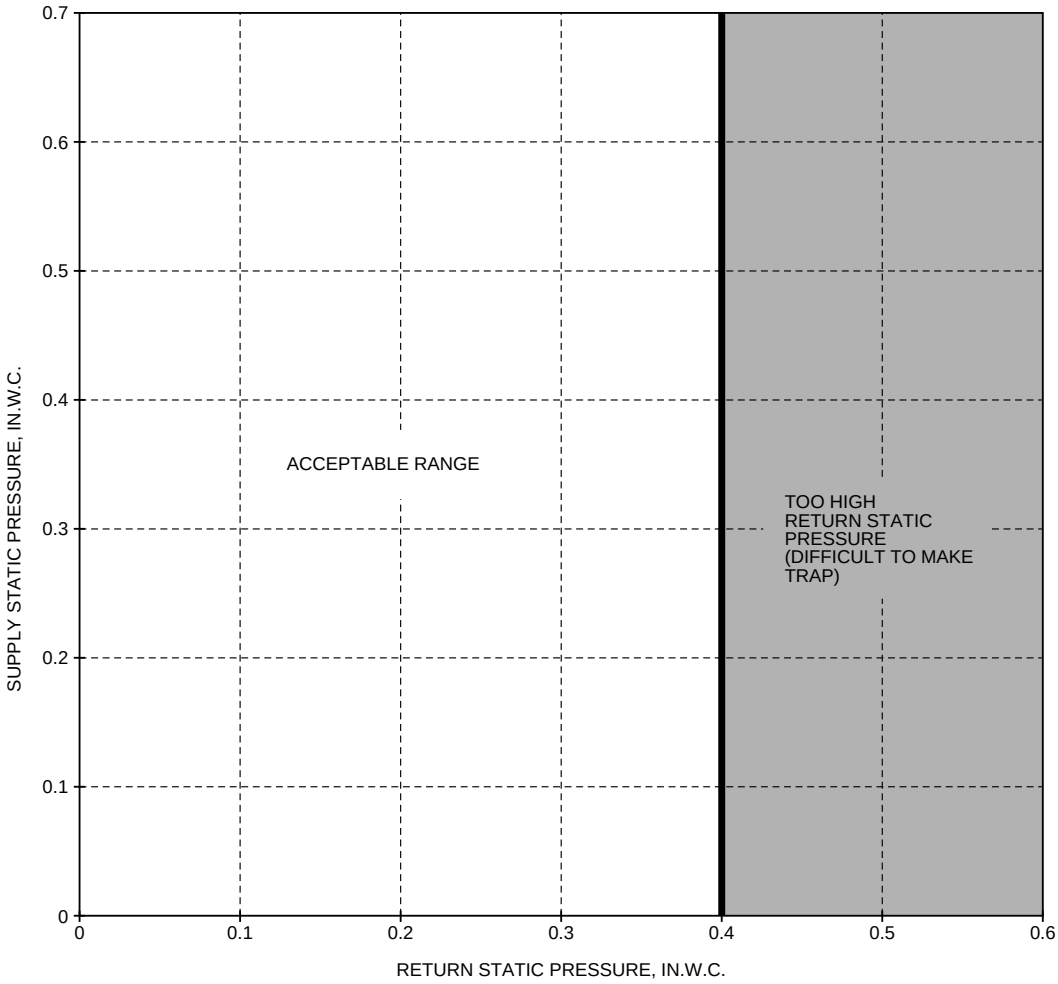
| UNIT SIZE | OUTDOOR UNIT CAPACITY BtuH | ELECTRIC HEATER KW RANGE | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0–10 | | | 0–15 | | | 0–20 | | | 0–30 | | |
| | | Lo | Nom | Hi | Lo | Nom | Hi | Lo | Nom | Hi | Lo | Nom | Hi |
| 005 | 30,000 | 975 | 975 | 1040 | 1100 | 1100 | 1100 | — | — | — | — | — | — |
| | 36,000 | 980 | 1085 | 1250 | 1100 | 1100 | 1250 | 1250 | 1250 | 1250 | — | — | — |
| | 42,000 | 1140 | 1270 | 1460 | 1140 | 1270 | 1460 | 1250 | 1270 | 1460 | 1500 | 1500 | 1500 |
| | 48,000 | 1305 | 1450 | 1665 | 1305 | 1450 | 1665 | 1305 | 1450 | 1665 | 1500 | 1500 | 1665 |
| 006 | 36,000 | 1100 | 1100 | 1250 | 1350 | 1350 | 1350 | — | — | — | — | — | — |
| | 42,000 | 1140 | 1270 | 1460 | 1350 | 1350 | 1460 | 1525 | 1525 | 1525 | — | — | — |
| | 48,000 | 1305 | 1450 | 1665 | 1350 | 1450 | 1665 | 1525 | 1525 | 1665 | 1750 | 1750 | 1750 |
| | 60,000 | 1630 | 1810 | 2085 | 1630 | 1810 | 2085 | 1630 | 1810 | 2085 | 1750 | 1810 | 2085 |

Where dash (—) appears indicates airflow not recommended for heater/system size.
**NOTE:** LO, NOM and HI refer to the AC/HP CFM ADJUST selection.

## MINIMUM CFM FOR ELECTRIC HEATER APPLICATION

| UNIT SIZE | HEAT PUMP UNIT SIZE | CFM | | | | |
|---|---|---|---|---|---|---|
| | | Heater Size KW | | | | |
| | | 5 | 8, 9, 10 | 15 | 18, 20 | 24, 30 |
| 001, 002 | Heater Only | 625 | 625 | 725 | 875 | — |
| | 018 | 625 | 625 | — | — | — |
| | 024 | 650 | 725 | 875 | — | — |
| | 030 | 800 | 875 | 875 | 1040 | — |
| | 036 | 970 | 970 | 970 | 1040 | — |
| 003 | Heater Only | 675 | 700 | 1050 | 1050 | — |
| | 024 | 675 | 875 | 1050 | — | — |
| | 030 | 800 | 875 | 1100 | — | — |
| | 036 | 975 | 975 | 1100 | 1225 | — |
| | 042 | 1125 | 1125 | 1125 | 1225 | — |
| 005 | Heater Only | 675 | 700 | 1050 | 1050 | 1400 |
| | 030 | 800 | 875 | 1100 | — | — |
| | 036 | 975 | 975 | 1100 | 1225 | — |
| | 042 | 1125 | 1125 | 1125 | 1225 | — |
| | 048 | 1305 | 1305 | 1305 | 1305 | 1400 |
| 006 | Heater Only | 1050 | 1050 | 1050 | 1050 | 1750 |
| | 036 | 1100 | 1100 | 1350 | 1350 | — |
| | 042 | 1125 | 1125 | 1350 | 1350 | — |
| | 048 | 1300 | 1300 | 1350 | 1465 | 1750 |
| | 060 | 1625 | 1625 | 1625 | 1750 | 1750 |

**NOTE:** Heater Only—Air conditioner with electric heater application.
These airflows are the minimum acceptable air flows as U.L. listed.
Actual airflow delivered will be per the airflow delivery chart for Electric Heating Modes.

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## Acceptable Duct Conditions

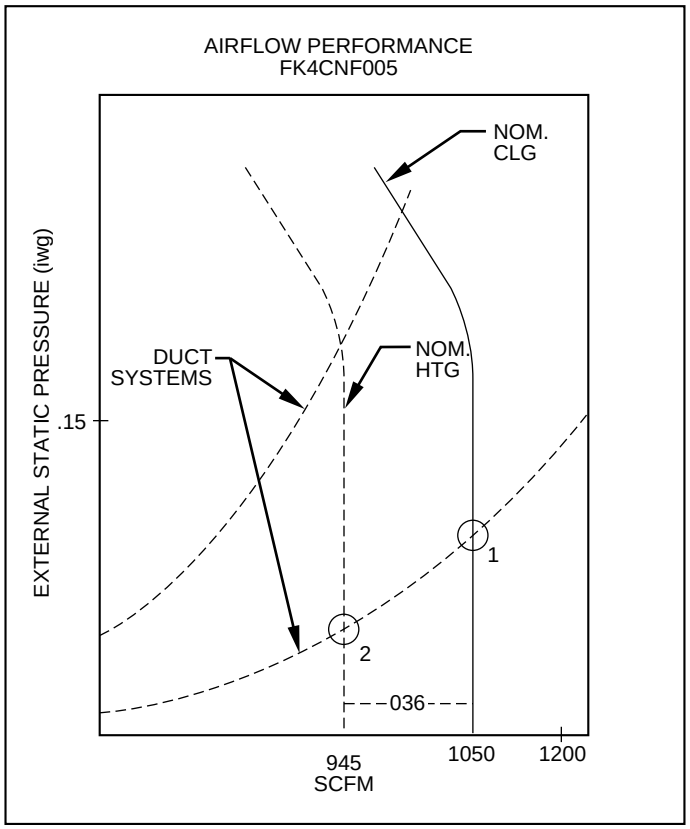
For satisfactory operation (specifically making dry secondary trap), subject fan coils must be installed with duct systems which fall within the “Acceptable Range” illustrated above.

The airflow performance charts for the FK4C 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 inches water gage (iwg) drop at 1200 CFM. The FK4CNF005 operating at nominal cooling airflow would deliver 1050 CFM with a duct system drop of 0.11 iwg. (See point 1.) The FK4CNF005 operating at nominal heating airflow would deliver 945 CFM with a duct system drop of 0.09 iwg. (See point 2.)

This example is but one of many possible duct system designs. The FK4CNF005 will deliver the above airflows against much higher static pressures.

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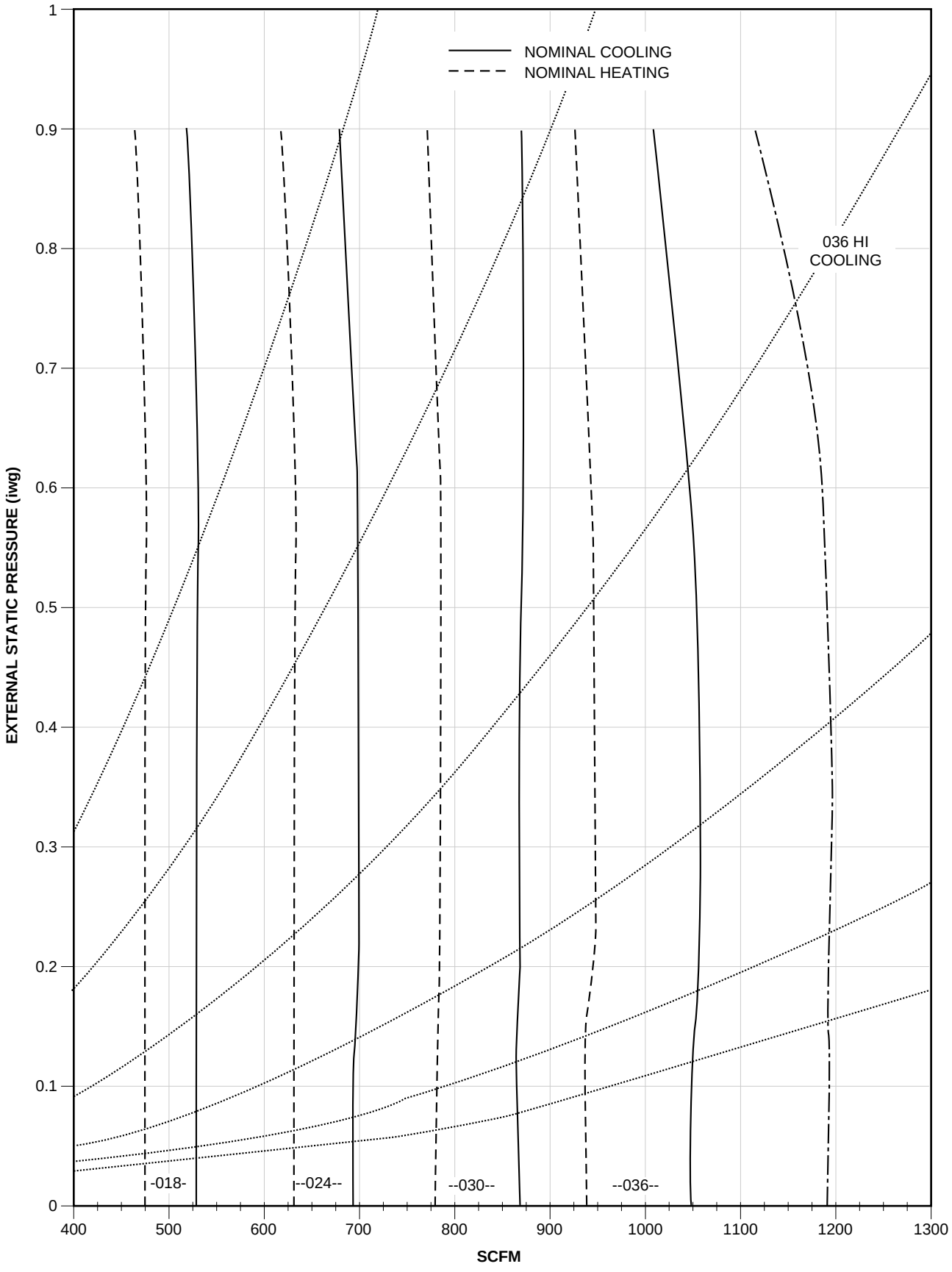
## AIRFLOW PERFORMANCE
## FK4CNF001

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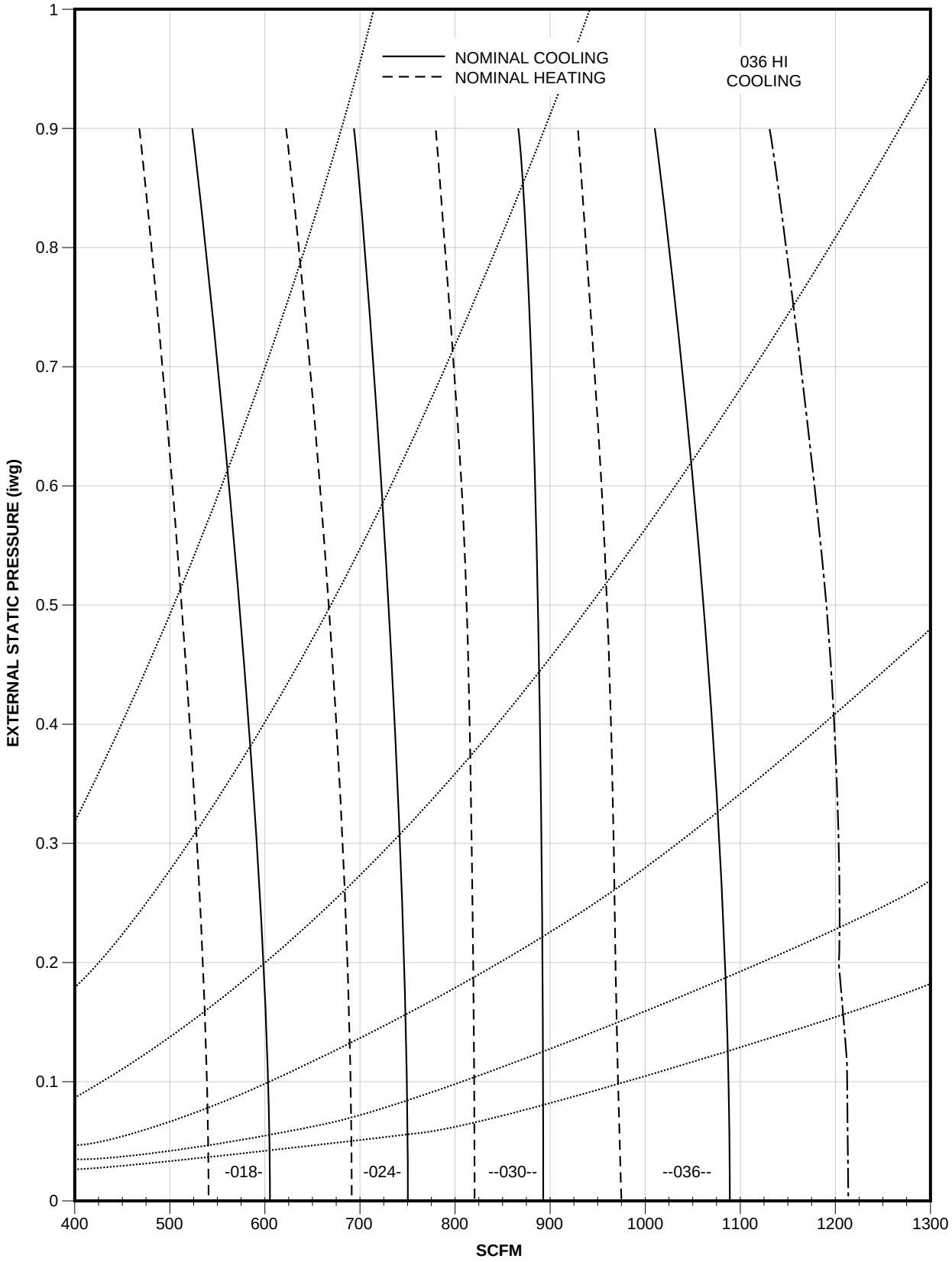
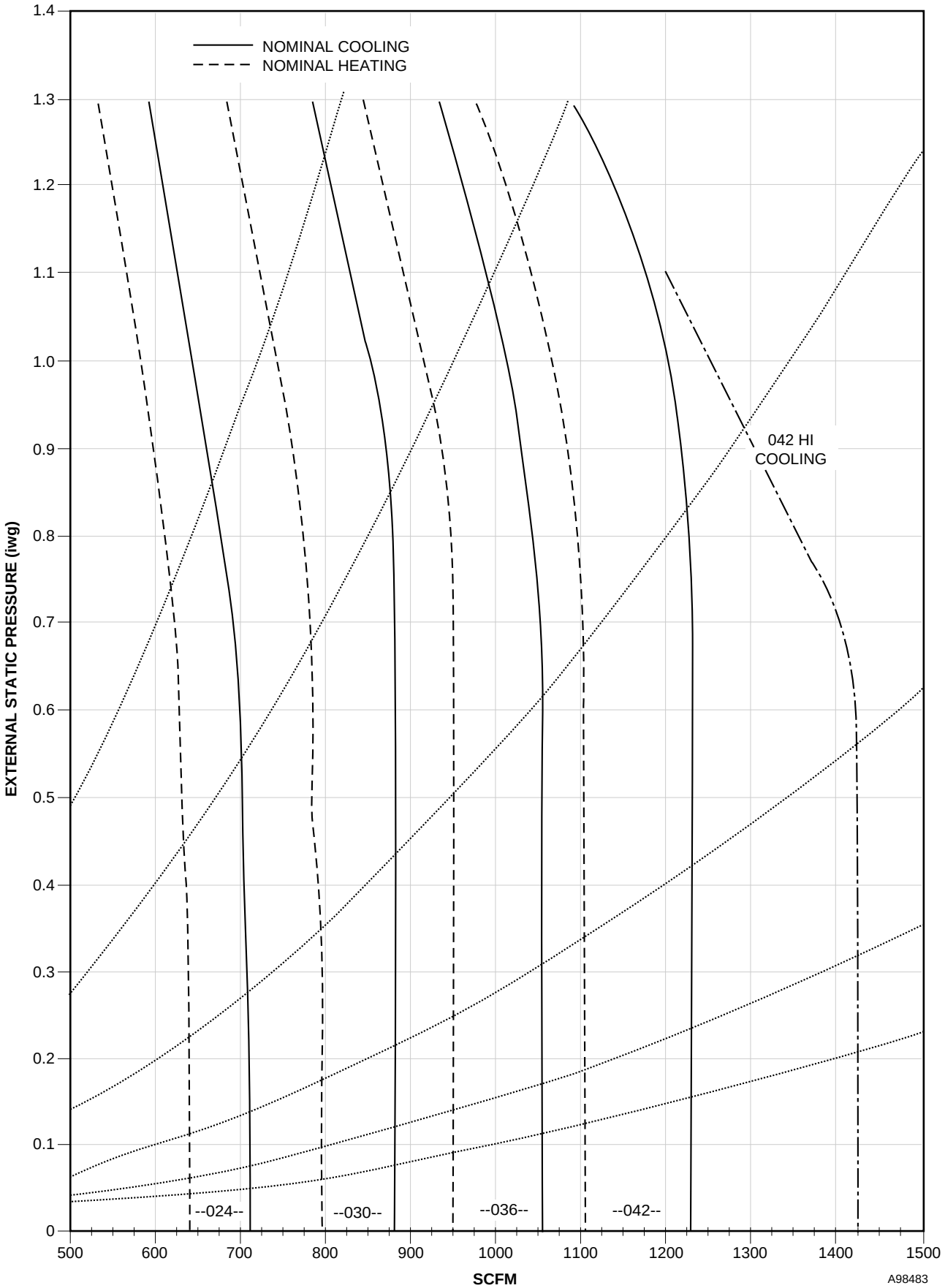
## AIRFLOW PERFORMANCE
## FK4CNF002

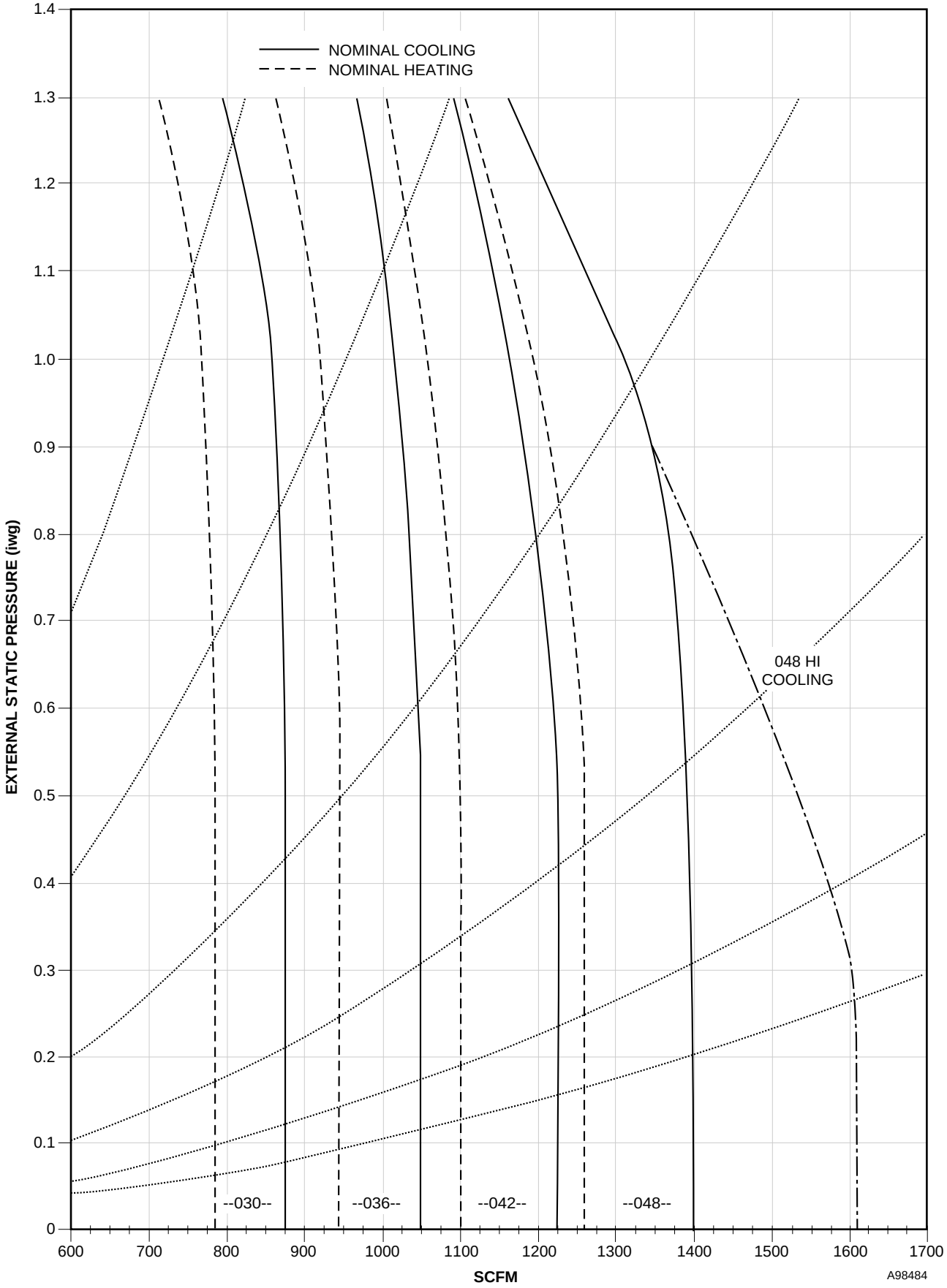



A95324

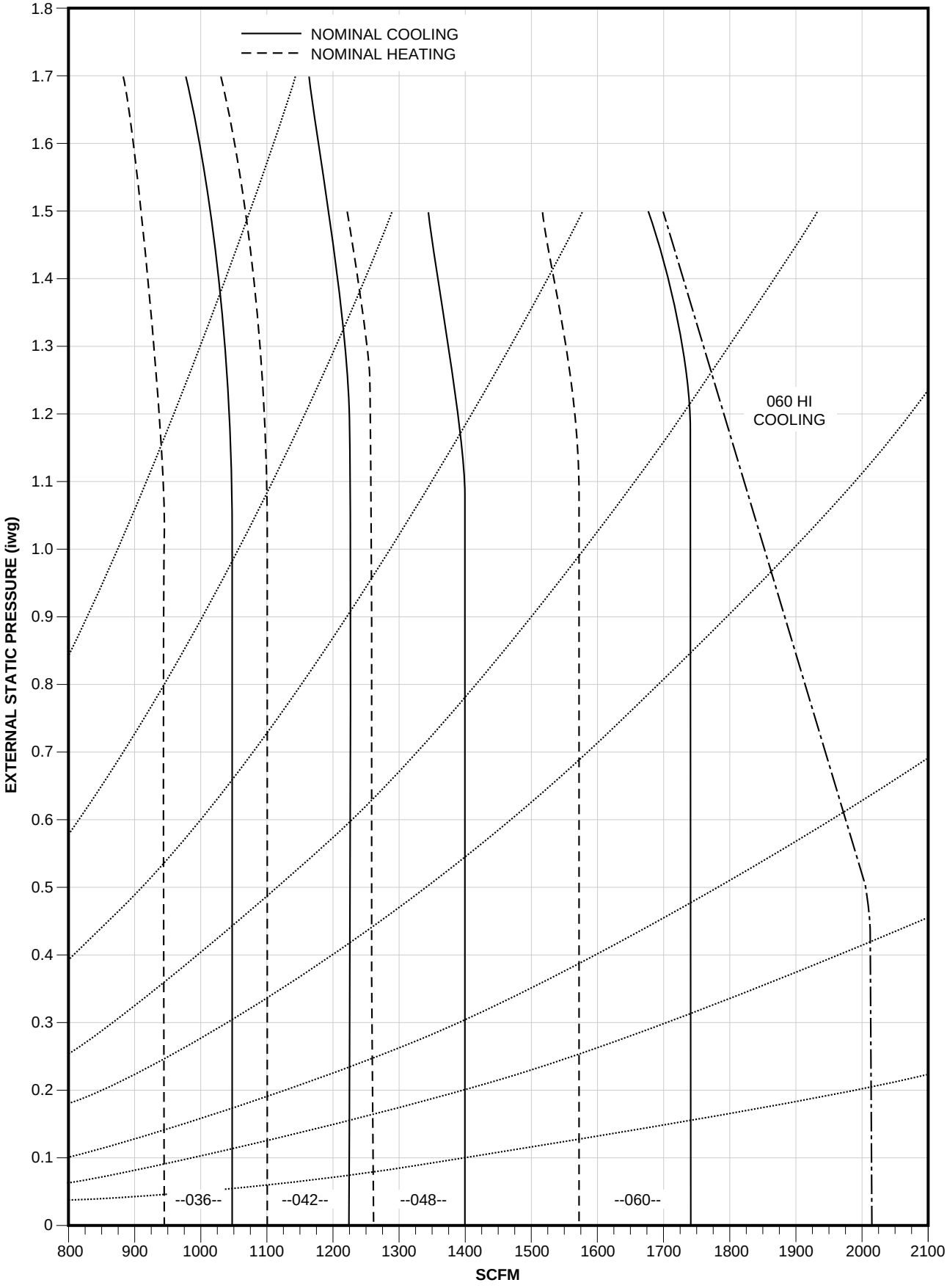
## AIRFLOW PERFORMANCE
## FK4CNF003



## AIRFLOW PERFORMANCE
## FK4CNF005



## AIRFLOW PERFORMANCE
## FK4CNB006

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# PERFORMANCE DATA Continued

## COOLING CAPACITIES (MBH)

| UNIT SIZE | EVAPORATOR AIR *Cfm* *BF* | COIL REFRIGERANT TEMPERATURE (°F)* | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 35 | | | 40 | | | 45 | | | 50 | | | 55 | | |
| | | Evaporator Air — Entering Wet-Bulb Temperature (°F) | | | | | | | | | | | | | | |
| | | 72 | 67 | 62 | 72 | 67 | 62 | 72 | 67 | 62 | 72 | 67 | 62 | 72 | 67 | 62 |
| 001 | 600 | 43 | 34 | 27 | 38 | 30 | 23 | 33 | 25 | 19 | 28 | 20 | 14 | 22 | 14 | 12 |
| | 0.03 | 19 | 20 | 21 | 17 | 18 | 19 | 15 | 16 | 16 | 13 | 14 | 13 | 11 | 11 | 12 |
| | 800 | 52 | 42 | 34 | 46 | 37 | 28 | 40 | 30 | 22 | 33 | 24 | 17 | 26 | 17 | 14 |
| | 0.05 | 24 | 26 | 27 | 22 | 23 | 24 | 19 | 20 | 21 | 16 | 17 | 17 | 14 | 15 | 14 |
| | 900 | 56 | 46 | 37 | 50 | 40 | 31 | 44 | 33 | 24 | 36 | 26 | 19 | 28 | 18 | 15 |
| | 0.06 | 26 | 28 | 30 | 24 | 25 | 27 | 21 | 22 | 23 | 18 | 19 | 19 | 15 | 16 | 15 |
| | 1100 | 64 | 52 | 42 | 57 | 45 | 35 | 49 | 38 | 28 | 41 | 29 | 22 | 32 | 21 | 18 |
| | 0.07 | 30 | 33 | 35 | 27 | 29 | 31 | 24 | 26 | 27 | 21 | 23 | 22 | 17 | 19 | 18 |
| | 1300 | 70 | 57 | 46 | 62 | 50 | 39 | 54 | 42 | 31 | 45 | 33 | 25 | 35 | 23 | 20 |
| | 0.09 | 32 | 36 | 39 | 29 | 33 | 35 | 26 | 29 | 31 | 23 | 26 | 25 | 19 | 21 | 20 |
| 002 | 500 | 40 | 32 | 26 | 36 | 28 | 22 | 32 | 24 | 18 | 27 | 19 | 14 | 21 | 13 | 11 |
| | 0.04 | 18 | 18 | 19 | 16 | 16 | 17 | 14 | 14 | 15 | 12 | 12 | 13 | 10 | 10 | 11 |
| | 650 | 50 | 40 | 32 | 45 | 36 | 27 | 39 | 30 | 22 | 33 | 24 | 18 | 26 | 17 | 14 |
| | 0.07 | 21 | 22 | 23 | 19 | 20 | 21 | 16 | 17 | 18 | 14 | 15 | 16 | 12 | 13 | 14 |
| | 875 | 58 | 49 | 38 | 53 | 42 | 32 | 46 | 35 | 27 | 39 | 28 | 22 | 31 | 20 | 18 |
| | 0.10 | 24 | 26 | 28 | 22 | 24 | 25 | 19 | 21 | 22 | 17 | 19 | 19 | 15 | 16 | 18 |
| | 1000 | 62 | 51 | 41 | 56 | 45 | 35 | 50 | 38 | 29 | 42 | 30 | 24 | 33 | 22 | 20 |
| | 0.11 | 26 | 28 | 31 | 23 | 26 | 28 | 21 | 23 | 25 | 18 | 20 | 21 | 16 | 18 | 20 |
| | 1250 | 67 | 55 | 45 | 61 | 49 | 39 | 54 | 42 | 33 | 46 | 34 | 28 | 37 | 25 | 24 |
| | 0.13 | 29 | 33 | 36 | 27 | 30 | 33 | 24 | 27 | 30 | 22 | 24 | 26 | 19 | 21 | 24 |
| 003 | 800 | 56 | 46 | 36 | 50 | 40 | 31 | 44 | 34 | 25 | 37 | 27 | 19 | 29 | 19 | 16 |
| | 0.04 | 27 | 29 | 30 | 24 | 26 | 27 | 21 | 22 | 23 | 18 | 19 | 19 | 15 | 16 | 16 |
| | 1000 | 68 | 56 | 44 | 61 | 48 | 37 | 53 | 40 | 30 | 44 | 31 | 23 | 34 | 22 | 19 |
| | 0.05 | 31 | 34 | 36 | 28 | 30 | 32 | 25 | 27 | 28 | 21 | 23 | 23 | 18 | 19 | 19 |
| | 1200 | 75 | 62 | 50 | 68 | 54 | 42 | 59 | 45 | 34 | 49 | 35 | 27 | 38 | 25 | 22 |
| | 0.07 | 35 | 38 | 41 | 32 | 34 | 37 | 28 | 31 | 32 | 24 | 26 | 27 | 20 | 22 | 22 |
| | 1350 | 80 | 66 | 53 | 72 | 58 | 45 | 63 | 48 | 36 | 53 | 38 | 30 | 41 | 27 | 24 |
| | 0.08 | 37 | 41 | 44 | 34 | 37 | 40 | 30 | 33 | 35 | 26 | 29 | 30 | 22 | 24 | 24 |
| | 1530 | 85 | 70 | 57 | 77 | 62 | 48 | 68 | 51 | 39 | 57 | 40 | 32 | 44 | 29 | 26 |
| | 0.09 | 39 | 44 | 48 | 36 | 40 | 43 | 32 | 36 | 38 | 28 | 31 | 32 | 24 | 26 | 26 |
| 005 | 750 | 61 | 49 | 39 | 55 | 43 | 33 | 48 | 37 | 27 | 41 | 29 | 20 | 33 | 21 | 17 |
| | 0.04 | 27 | 27 | 28 | 24 | 25 | 25 | 21 | 22 | 22 | 18 | 18 | 18 | 15 | 15 | 15 |
| | 950 | 74 | 60 | 48 | 67 | 53 | 40 | 59 | 45 | 33 | 50 | 35 | 25 | 39 | 24 | 21 |
| | 0.06 | 32 | 34 | 35 | 29 | 30 | 31 | 25 | 26 | 27 | 22 | 23 | 23 | 18 | 18 | 19 |
| | 1150 | 89 | 72 | 57 | 79 | 63 | 48 | 69 | 52 | 38 | 58 | 41 | 31 | 44 | 29 | 25 |
| | 0.07 | 37 | 39 | 41 | 33 | 35 | 36 | 29 | 31 | 32 | 25 | 26 | 27 | 20 | 22 | 22 |
| | 1500 | 103 | 84 | 66 | 92 | 73 | 56 | 81 | 61 | 46 | 67 | 48 | 39 | 52 | 34 | 31 |
| | 0.10 | 43 | 46 | 49 | 38 | 41 | 44 | 34 | 37 | 39 | 29 | 32 | 33 | 25 | 27 | 27 |
| | 1700 | 110 | 89 | 71 | 99 | 78 | 60 | 86 | 65 | 49 | 72 | 51 | 42 | 56 | 37 | 35 |
| | 0.11 | 45 | 50 | 53 | 41 | 45 | 48 | 36 | 39 | 42 | 31 | 34 | 36 | 27 | 29 | 30 |
| 006 | 1050 | 77 | 62 | 50 | 69 | 55 | 43 | 61 | 47 | 35 | 52 | 38 | 27 | 41 | 27 | 22 |
| | 0.01 | 34 | 36 | 37 | 31 | 32 | 33 | 27 | 28 | 29 | 23 | 25 | 24 | 20 | 20 | 20 |
| | 1300 | 100 | 82 | 65 | 90 | 71 | 55 | 79 | 60 | 45 | 66 | 47 | 37 | 49 | 32 | 27 |
| | 0.02 | 42 | 45 | 47 | 37 | 40 | 42 | 33 | 35 | 37 | 29 | 31 | 32 | 23 | 25 | 24 |
| | 1750 | 117 | 96 | 77 | 106 | 84 | 65 | 93 | 71 | 53 | 78 | 56 | 46 | 60 | 40 | 34 |
| | 0.04 | 48 | 53 | 57 | 44 | 48 | 52 | 39 | 43 | 46 | 34 | 38 | 39 | 29 | 31 | 31 |
| | 2050 | 126 | 103 | 83 | 114 | 91 | 71 | 99 | 76 | 59 | 84 | 60 | 50 | 65 | 44 | 39 |
| | 0.05 | 52 | 58 | 63 | 48 | 53 | 57 | 43 | 47 | 51 | 37 | 42 | 43 | 33 | 35 | 35 |
| | 2300 | 132 | 108 | 87 | 119 | 95 | 75 | 105 | 80 | 63 | 88 | 63 | 54 | 70 | 47 | 42 |
| | 0.06 | 55 | 62 | 68 | 50 | 57 | 61 | 45 | 51 | 54 | 40 | 45 | 46 | 35 | 39 | 38 |

See notes on page 16.

* Saturated suction leaving evaporator coil.

Sensible Heat Capacity (1000 Btuh)

Gross Cooling Capacity (1000 Btuh)

BF—Bypass Factor

**NOTES:**
1. Net capacities shown include a deduction for evaporator fan motor heat.
2. Contact manufacturer for cooling capacities at conditions other than shown in table.
3. Formulas:

$$\text{Leaving db} = \text{entering db} - \frac{\text{sensible heat cap.}}{1.09 \times \text{CFM}}$$

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.

4. Direct interpolation is permissible. Do not extrapolate.
5. SHC is based on 80°F db temperature of air entering coil. Below 80°F subtract (corr factor x CFM) from SHC. Above 80°F db, add (corr factor x CFM) to SHC.

## SHC CORRECTION FACTOR

| BYPASS FACTOR | ENTERING AIR DRY-BULB TEMP (°F) | | | | | |
|---|---|---|---|---|---|---|
| | 79 | 78 | 77 | 76 | 75 | Under 75 |
| | *81* | *82* | *83* | *84* | *85* | *Over 85* |
| | Correction Factor | | | | | |
| 0.10 | 0.98 | 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 x (1 – BF) x (db – 80)

# PERFORMANCE DATA Continued

## ESTIMATED SOUND POWER LEVEL (dBA)*

| UNIT SIZE | CONDITIONS | | | OCTAVE BAND CENTER FREQUENCY | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | CFM | ESP | RPM | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 |
| 001 | 400 | 0.25 | 680 | 61 | 57 | 53 | 52 | 48 | 46 | 42 |
| | 600 | 0.25 | 750 | 63 | 59 | 55 | 54 | 50 | 48 | 44 |
| | 800 | 0.25 | 845 | 64 | 60 | 56 | 55 | 51 | 49 | 45 |
| | 1000 | 0.25 | 955 | 65 | 61 | 57 | 56 | 52 | 50 | 46 |
| | 1200 | 0.25 | 1080 | 66 | 62 | 58 | 55 | 55 | 51 | 47 |
| | 1400 | 0.25 | 1210 | 66 | 62 | 58 | 55 | 55 | 51 | 47 |
| 002 | 400 | 0.25 | 680 | 61 | 57 | 53 | 52 | 48 | 46 | 42 |
| | 600 | 0.25 | 750 | 63 | 59 | 55 | 54 | 50 | 48 | 44 |
| | 800 | 0.25 | 845 | 64 | 60 | 56 | 55 | 51 | 49 | 45 |
| | 1000 | 0.25 | 955 | 65 | 61 | 57 | 56 | 52 | 50 | 46 |
| | 1200 | 0.25 | 1080 | 66 | 62 | 58 | 55 | 55 | 51 | 47 |
| | 1400 | 0.25 | 1210 | 66 | 62 | 58 | 55 | 55 | 51 | 47 |
| 003 | 400 | 0.25 | 555 | 61 | 57 | 53 | 52 | 48 | 46 | 42 |
| | 600 | 0.25 | 600 | 63 | 59 | 55 | 54 | 50 | 48 | 44 |
| | 800 | 0.25 | 660 | 64 | 60 | 56 | 55 | 51 | 49 | 45 |
| | 1000 | 0.25 | 725 | 65 | 61 | 57 | 56 | 52 | 50 | 46 |
| | 1200 | 0.25 | 800 | 66 | 62 | 58 | 57 | 53 | 51 | 47 |
| | 1400 | 0.25 | 885 | 66 | 62 | 58 | 57 | 53 | 51 | 47 |
| | 1600 | 0.25 | 975 | 67 | 63 | 59 | 56 | 56 | 52 | 48 |
| 005 | 400 | 0.25 | 555 | 61 | 57 | 53 | 52 | 48 | 46 | 42 |
| | 600 | 0.25 | 600 | 63 | 59 | 55 | 54 | 50 | 48 | 44 |
| | 800 | 0.25 | 660 | 64 | 60 | 56 | 55 | 51 | 49 | 45 |
| | 1000 | 0.25 | 725 | 65 | 61 | 57 | 56 | 52 | 50 | 46 |
| | 1200 | 0.25 | 800 | 66 | 62 | 58 | 57 | 53 | 51 | 47 |
| | 1400 | 0.25 | 885 | 66 | 62 | 58 | 57 | 53 | 51 | 47 |
| | 1600 | 0.25 | 975 | 67 | 63 | 59 | 56 | 56 | 52 | 48 |
| 006 | 600 | 0.25 | 575 | 63 | 59 | 55 | 54 | 50 | 48 | 44 |
| | 800 | 0.25 | 610 | 64 | 60 | 56 | 55 | 51 | 49 | 45 |
| | 1000 | 0.25 | 655 | 65 | 61 | 57 | 56 | 52 | 50 | 46 |
| | 1200 | 0.25 | 720 | 66 | 62 | 58 | 57 | 53 | 51 | 47 |
| | 1400 | 0.25 | 785 | 66 | 62 | 58 | 57 | 53 | 51 | 47 |
| | 1600 | 0.25 | 860 | 67 | 63 | 59 | 58 | 54 | 52 | 48 |
| | 1800 | 0.25 | 935 | 68 | 64 | 60 | 57 | 57 | 53 | 49 |
| | 2000 | 0.25 | 1020 | 68 | 64 | 60 | 57 | 57 | 53 | 49 |
| | 2150 | 0.25 | 1090 | 68 | 64 | 60 | 57 | 57 | 53 | 49 |

* Estimated sound power levels have been derived using the method described in the 1987 ASHRAE Systems & Applications Handbook, chapter 52, p. 52.7.
CFM — Cubic Ft per Minute
ESP — External Static Pressure
RPM — Revolutions per Minute

# PERFORMANCE DATA Continued

## AIRFLOW PERFORMANCE CORRECTION FACTORS

The FK4C 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 correction.

| HEATER KW | ELEMENTS | STATIC PRESSURE CORRECTION (in. wc) | |
|---|---|---|---|
| | | Sizes 001–005 | Size 006 |
| 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 |

## FILTER STATIC PRESSURE DROP (In. wc)

| MODEL FK4C | CFM | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 400 | 600 | 800 | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 |
| 001 | 0.020 | 0.044 | 0.048 | 0.072 | 0.100 | — | — | — | — |
| 002 | 0.020 | 0.044 | 0.048 | 0.072 | 0.100 | — | — | — | — |
| 003 | — | 0.020 | 0.035 | 0.051 | 0.070 | 0.092 | — | — | — |
| 005 | — | — | 0.035 | 0.051 | 0.070 | 0.092 | 0.120 | — | — |
| 006 | — | — | — | — | 0.070 | 0.092 | 0.120 | 0.152 | 0.187 |

## AIR DELIVERY PERFORMANCE CORRECTION COMPONENT PRESSURE DROP (IN. WC) AT INDICATED AIRFLOW (DRY TO WET COIL)

| MODEL FK4C | CFM | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 |
| 001 | 0.031 | 0.040 | 0.051 | 0.063 | 0.073 | 0.081 | 0.092 | — | — | — | — |
| 002 | 0.012 | 0.016 | 0.022 | 0.028 | 0.034 | 0.040 | 0.049 | — | — | — | — |
| 003 | — | 0.026 | 0.034 | 0.042 | 0.052 | 0.063 | 0.075 | 0.083 | 0.091 | 0.098 | 0.110 |
| 005 | — | 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 |
| 006 | 0.013 | 0.016 | 0.018 | 0.020 | 0.023 | 0.027 | 0.030 | 0.034 | 0.039 | 0.044 | 0.048 |

**NOTE:** Subtract the above pressure drop corrections from unit airflow data when that component or condition is used. The remaining external static pressure will be available for the duct system.

# ELECTRICAL DATA

## UNITS WITHOUT ELECTRIC HEATER

| UNIT SIZE | VOLTS-PHASE | FLA | MIN CKT AMPS | BRANCH CIRCUIT | |
|---|---|---|---|---|---|
| | | | | Min Wire Size Awg* | Fuse Amps |
| 001 | 208/230-1 | 4.3 | 5.4 | 14 | 15 |
| 002 | 208/230-1 | 4.3 | 5.4 | 14 | 15 |
| 003 | 208/230-1 | 4.3 | 5.4 | 14 | 15 |
| 005 | 208/230-1 | 4.3 | 5.4 | 14 | 15 |
| 006 | 208/230-1 | 6.8 | 8.5 | 14 | 15 |

* Use copper wire only to connect unit. If other than uncoated (nonplated) 75°F 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).

**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

# ACCESSORY ELECTRIC HEATERS

## ELECTRIC HEATERS

| HEATER PART NO. | | KW @ 240V | VOLTS/PHASE | KW/ STAGE | INTERNAL CIRCUIT PROTECTION | FAN COIL SIZE USED WITH | HEATING CAP. @ 230V‡ | INTELLIGENT HEAT CAPABLE†† |
|---|---|---|---|---|---|---|---|---|
| KFAEH0201N05 | KFCEH0501N05 | 5 | 230/1 | 5 | None | All | 15,700 | No |
| KFAEH0301N08 | KFCEH0801N08 | 8 | 230/1 | 8 | None | All | 25,100 | No |
| KFAEH2501N09 | KFCEH1401N09 | 9 | 230/1* | 3, 6 | None | All | 28,300 | Yes |
| KFAEH0401N10 | KFCEH0901N10 | 10 | 230/1 | 10 | None | All | 31,400 | No |
| KFAEH2601F15 | KFCEH1501F15 | 15 | 230/1 | 5, 10 | Fuses** | All | 47,100 | Yes |
| KFAEH0601F20 | KFCEH1801F20 | 20 | 230/1 | 10, 10 | Fuses** | All | 62,800 | Yes (KFCEH) |
| KFAEH0801315 | KFCEH1601315 | 15 | 230/3 | 5, 10 | None | All | 47,100 | No |
| KFAEH0901318 | KFCEH2001318 | 18 | 230/3 | 6, 6, 6 | None | 003, 005, 006 | 56,500 | No |
| KFAEH1001F24 | KFCEH2101F24 | 24 | 230/3† | 8, 8, 8 | Fuses | 005, 006 | 78,500 | Yes |
| KFAEH1101F30 | KFCEH2201F30 | 30 | 230/3† | 10, 10, 10 | Fuses | 005, 006 | 94,200 | Yes |
| KFAEH1301C05 | KFCEH0601C05 | 5 | 230/1 | 5 | Ckt Bkr | All | 15,700 | No |
| KFAEH1401C08 | KFCEH1001C08 | 8 | 230/1 | 8 | Ckt Bkr | All | 25,100 | No |
| KFAEH1501C10 | KFCEH1101C10 | 10 | 230/1 | 10 | Ckt Bkr | All | 31,400 | No |
| KFAEH2801C15 | KFCEH1701C15 | 15 | 230/1 | 5, 10 | Ckt Bkr | All | 47,100 | Yes |
| KFAEH1701C20 | KFCEH1901C20 | 20 | 230/1 | 10, 10 | Ckt Bkr | All | 62,800 | Yes (KFCEH) |

* KFAEH2501N09 is field convertable to 3 phase.

† These heaters field convertable to single phase.

‡ Blower motor heat not included.

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

†† Heaters designated with yes are Intelligent Heat capable when used with corporate 2-speed programmable thermostat (TSTATCCP2S01-A), or Thermidistat™ Control (TSTATCCPRH01-B).

## ELECTRIC HEATER INTERNAL PROTECTION

| HEATER KW | PHASE | FUSES 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 | 3/1 | 6/60 | — |
| 30 | 3/1 | 6/60 | — |

* KFCEH1401N09 is single phase only.

** All circuit breakers are 2 pole.

# 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)‡‡ | | |
| | | | | | | Single Circuit | Dual Circuit | | Single Circuit | Dual Circuit | | Single Circuit | Dual Circuit | | Single Circuit | Dual Circuit | | Single Circuit | Dual Circuit | | Single Circuit | Dual Circuit | |
| | | 240v | 208v | | | | L1,L2 | L3,L4 | | L1,L2 | L3,L4 | | L1,L2 | L3,L4 | | L1,L2 | L3,L4 | | L1,L2 | L3,L4 | | L1,L2 | L3,L4 |
| KFAEH0101N03 | KFCEH0401N03 | 3 | 2.3 | 1 | None | 10.9/12.0 | — | — | 15.9/17.3 | — | — | 12/12 | — | — | 12/12 | — | — | 20/20 | — | — | 67/68 | — | — |
| KFAEH0201N051 | KFCEH0501N051 | 5 | 3.8 | 1 | None | 18.1/20.0 | — | — | 26.0/28.4 | — | — | 10/10 | — | — | 10/10 | — | — | 30/30 | — | — | 66/66 | — | — |
| KFAEH0201N052 | KFCEH0501N052 | 5 | 3.8 | 1 | None | 18.1/20.0 | — | — | 31.2/33.5 | — | — | 8/8 | — | — | 10/10 | — | — | 35/35 | — | — | 85/88 | — | — |
| KFAEH1301C051 | KFCEH0601C051 | 5 | 3.8 | 1 | Ckt Bkr | 18.1/20.0 | — | — | 26.0/28.4 | — | — | 10/10 | — | — | 10/10 | — | — | 30/30 | — | — | 66/66 | — | — |
| KFAEH1301C052 | KFCEH0601C052 | 5 | 3.8 | 1 | Ckt Bkr | 18.1/20.0 | — | — | 31.2/33.5 | — | — | 8/8 | — | — | 10/10 | — | — | 35/35 | — | — | 85/88 | — | — |
| KFAEH0301N08 | KFCEH0801N08 | 8 | 6.0 | 1 | None | 28.9/32.0 | — | — | 44.7/48.5 | — | — | 8/8 | — | — | 10/10 | — | — | 45/50 | — | — | 59/60 | — | — |
| KFAEH1401C08 | KFCEH1001C08 | 8 | 6.0 | 1 | Ckt Bkr | 28.9/32.0 | — | — | 44.7/48.5 | — | — | 8/8 | — | — | 10/10 | — | — | 45/50 | — | — | 59/60 | — | — |
| KFAEH2501N09‡*** | KFCEH1401N09*** | 9 | 6.8 | 1 | None | 32.8/36.0 | — | — | 49.5/53.5 | — | — | 8/6 | — | — | 10/10 | — | — | 50/60 | — | — | 54/87 | — | — |
| | — | 9 | 6.8 | 3 | None | 18.8/20.8 | — | — | 32.0/34.5 | — | — | 8/8 | — | — | 10/10 | — | — | 35/35 | — | — | 83/85 | — | — |
| KFAEH0401N10 | KFCEH0901N10 | 10 | 7.5 | 1 | None | 36.2/40.0 | — | — | 53.8/58.5 | — | — | 6/6 | — | — | 10/10 | — | — | 60/60 | — | — | 78/80 | — | — |
| KFAEH1501C10 | KFCEH1101C10 | 10 | 7.5 | 1 | Ckt Bkr | 36.2/40.0 | — | — | 53.8/58.5 | — | — | 6/6 | — | — | 10/10 | — | — | 60/60 | — | — | 78/80 | — | — |
| KFAEH2601F15*** | KFCEH1501F15*** | 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 |
| KFAEH2801C15*** | KFCEH1701C15*** | 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 |
| KFAEH0801315 | KFCEH1601315 | 15 | 11.3 | 3 | None | 31.3/34.6 | — | — | 47.7/51.8 | — | — | 8/6 | — | — | 10/10 | — | — | 50/60 | — | — | 56/90 | — | — |
| KFAEH0901318 | KFCEH2001318 | 18 | 13.5 | 3 | None | 37.6/41.5 | — | — | 55.5/60.4 | — | — | 6/6 | — | — | 10/8 | — | — | 60/70 | — | — | 76/77 | — | — |
| KFAEH0601F20 | KFCEH1801F20*** | 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 |
| KFAEH1701C20 | KFCEH1901C20*** | 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 |
| KFAEH1001F24†*** | KFCEH2101F24†*** | 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 | — | — |
| KFAEH1101F30†*** | KFCEH2201F30†*** | 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 |
| KFAEH1001F24† | KFCEH2101F24† | 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 |
| KFAEH1101F30† | KFCEH2201F30† | 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 |

† Field convertible to 1 phase, single or multiple supply circuit.
‡ Field convertible to 3 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 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%.
*** Heaters are Intelligent Heat capable when used with the FK, FV fan coils and corporate 2-speed programmable thermostat (TSTATXXP2S01-A), or Thermidistat™ Control (TSTATXXPRH01-B).

A96086

**NOTES:** 1. For fan coil sizes 018-036.
2. For fan coil sizes 042-060 and all FK4C, FV4A sizes.
3. Single circuit application of F15 and F20 heaters requires single-point wiring kit accessory.

## ACCESSORY LIST

| ITEM | ACCESSORY PART NO. | FAN COIL SIZE USED WITH FK4C |
|---|---|---|
| Disconnect Kit | KFADK0101DSC | Cooling controls and heaters through 10-kw |
| Downflow Conversion Kit (Slope) | KFADC0201SLP | 001, 003 |
| Downflow Conversion Kit (A-coil) | KFADC0401ACL | 002, 005, 006 |
| Downflow Base Kit | KFACB0201CFB | 001, 002 |
| Downflow Base Kit | KFACB0301CFB | 003, 005 |
| Downflow Base Kit | KFACB0401CFB | 006 |
| Filter Kit (12 Pack) | KFAFK0212MED | 001, 002 |
| Filter Kit (12 Pack) | KFAFK0312LRG | 003, 005 |
| Filter Kit (12 Pack) | KFAFK0412XXL | 006 |
| Single-Point Wiring Kit | KFASP0101SPK | Only with 15- and 20-kw fused heaters |
| Airflow Sensor Kit (Air Cleaner) | KEAAC0101AAA | All |
| Air Cleaner Relay Kit | KFAIR0201ACR | All |

## 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: FK4 units for 3- through 10-kw electric resistance heaters and cooling controls.

2. **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 FK4 fan coils are used in downflow applications.

3. **Downflow Base Kit**
   This kit is designed to provide a 1-in. 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 FK4 fan coils are used in downflow applications.

4. **Single-Point Wiring Kit**
   The single-point wiring kit acts as a jumper between L1 and L3 lugs, and between L2 and L4 lugs. This allows the installer to run 2 heavy-gage, high-voltage wires into the fan coil rather than 4 light-gage, high-voltage wires.

SUGGESTED USE: FK4 fan coils with 15- and 20-kw fused heaters only.

5. **Air Cleaner Relay**
   The electronic air cleaner relay ensures the FK4 fan coil and electronic air cleaner work as a system.

**REQUIRED USE:** This relay is required whenever an electronic air cleaner is used with an FK4 fan coil.

6. **Airflow Sensor Kit (Air Cleaner)**
   The airflow sensor kit ensures the FK4C fan coil and electronic air cleaner work as a system.

**REQUIRED USE:** This kit is required whenever an electronic air cleaner is used with an FK4C fan coil.

7. **Fan Coil Filter**
   These filters collect large dust particles from the return air entering the fan coil and prevent 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 the filters in FK4 fan coils.

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SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

UNIT MUST BE INSTALLED IN ACCORDANCE
WITH INSTALLATION INSTRUCTIONS

Cancels: PDS FK4C.01.3





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