



## APARTMENT FAN COILS

### ALL MODELS

- 1-1/2, 2, 2-1/2, and 3 Tons
- Upflow application only
- Accessory field-installed electric heat kits available in 5, 7.5, or 10 kW
- 208/230-1-60 supply voltage
- Front return convertible to bottom return
- Cabinet exterior is galvanized sheet metal
- Sealed to meet 2% cabinet leakage when tested at 1.0 in. w.c. of static pressure
- Fully insulated for conditioned space (not to be installed in unconditioned spaces)
- Copper tube, aluminum fin coil

### FMA4P

- For use with R-410A refrigerant or R-22 with accessory R-22 TXV

### FMA4X

- R-410A refrigerant TXV standard or for use with R-22 with accessory R-22 TXV

### PERFORMANCE

- PSC motor on all FMA4P
- ECM motor on all FMA4X
- Motor suspended on rubber grommets for quieter operation
- Fresh air intake holes (capped from factory)

### EASY TO INSTALL AND SERVICE

- Units fits between standard stud spacings
- All service access is located in the front
- Primary and secondary drain connections exit from the bottom
- No return-air ductwork required in specific applications
- Wall hanging brackets included with the unit

### WARRANTY\*

- 5 year parts limited warranty

\* For residential applications only. See warranty certificate for complete details and restrictions, including warranty coverage for other applications.



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to [www.ahridirectory.org](http://www.ahridirectory.org).



| Model         | Size  | Tons  | Nominal BTU | CFM (L/s) |            | Dimensions H x W x D in. (mm)          | Filter Size in. (mm) | Ship Wt. lbs. (kg) |
|---------------|-------|-------|-------------|-----------|------------|--|----------------------|--------------------|
|               |       |       |             | Min       | Max        |  |                      |                    |
| FMA4P & FMA4X | 1800A | 1-1/2 | 18,000      | 450 (212) | 675 (319)  | 36-1/2 x 20-1/2 x 15 (928 x 521 x 381) | 16 x 20 (406 x 508)  | 99 (45)            |
|               | 2400A | 2     | 24,000      | 600 (283) | 900 (425)  |  |                      | 99 (45)            |
|               | 3000A | 2-1/2 | 30,000      | 750 (354) | 1125 (531) | 39-1/2 x 22 x 19 (1004 x 559 x 483)    | 20 x 20 (508 x 508)  | 121 (55)           |
|               | 3600A | 3     | 36,000      | 900 (425) | 1350 (637) |  |                      | 121 (55)           |

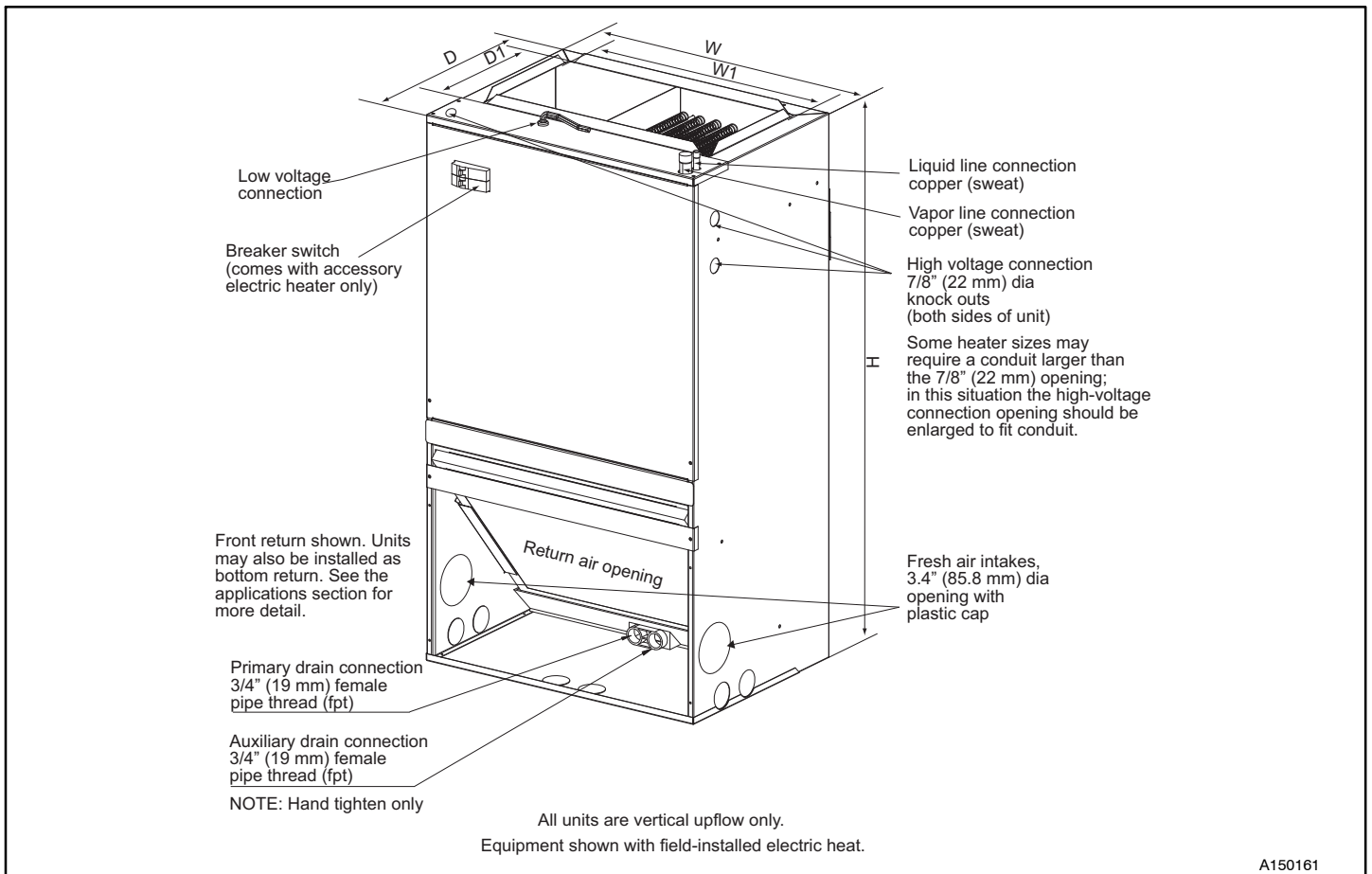
**FAN COIL MODEL NUMBER IDENTIFICATION GUIDE**

|                                  |          |          |                   |          |             |             |                       |
|----------------------------------|----------|----------|-------------------|----------|-------------|-------------|-----------------------|
|                                  | <b>F</b> | <b>M</b> | <b>A</b>          | <b>4</b> | <b>P</b>    | <b>2400</b> | <b>A</b>              |
| F = Fan Coil                     | TYPE     |          | INSTALLATION TYPE |          | REFRIGERANT |             | METERING DEVICE       |
| M = Multi-Family                 |          |          |                   |          |             |             |                       |
| A = Apartment Upflow             |          |          |                   |          |             |             | NOMINAL CAPACITY      |
| 4 = Environmentally Sound R-410A |          |          |                   |          |             |             |                       |
| P = R-410A Piston                |          |          |                   |          |             |             | SALES CODE / FEATURES |
| X = R-410A TXV Standard          |          |          |                   |          |             |             |                       |
| 1800 = 18,000 BTUH = 1-1/2 tons  |          |          |                   |          |             |             | NOMINAL CAPACITY      |
| 2400 = 24,000 BTUH = 2 tons      |          |          |                   |          |             |             |                       |
| 3000 = 30,000 BTUH = 2-1/2 tons  |          |          |                   |          |             |             |                       |
| 3600 = 36,000 BTUH = 3 tons      |          |          |                   |          |             |             | SALES CODE / FEATURES |
| A = Standard                     |          |          |                   |          |             |             |                       |

**ELECTRIC HEATER MODEL NUMBER IDENTIFICATION GUIDE**

|                           |            |          |           |          |
|---------------------------|------------|----------|-----------|----------|
|                           | <b>EHK</b> | <b>2</b> | <b>05</b> | <b>B</b> |
| EHK = Electric Heater Kit |            |          |           |          |
| Sales Code                |            |          |           |          |
| 05 = 5 kW                 |            |          |           |          |
| 08 = 7.5 kW               |            |          |           |          |
| 10 = 10 kW                |            |          |           |          |
| Engineering Code          |            |          |           |          |

**DIMENSIONS**



A150161

| DIMENSIONS |                        |                       |                          |                        |                         |                                    |
|------------|------------------------|-----------------------|--------------------------|------------------------|-------------------------|------------------------------------|
| Model Size | Height (H)<br>in. (mm) | Width (W)<br>in. (mm) | Width 1 (W1)<br>in. (mm) | Length (D)<br>in. (mm) | Length (D1)<br>in. (mm) | Unit/Shipping<br>Weight - lbs (kg) |
| 18         | 36-1/2 (928)           | 20-1/2 (521)          | 17-2/5 (442)             | 15 (381)               | 9-1/2 (242)             | 88/99 (40/45)                      |
| 24         | 36-1/2 (928)           | 20-1/2 (521)          | 17-2/5 (442)             | 15 (381)               | 9-1/2 (242)             | 88/99 (40/45)                      |
| 30         | 39-1/2 (1004)          | 22 (559)              | 18-4/5 (478)             | 19 (483)               | 9-1/2 (242)             | 110/121 (50/55)                    |
| 36         | 39-1/2 (1004)          | 22 (559)              | 18-4/5 (478)             | 19 (483)               | 9-1/2 (242)             | 110/121 (50/55)                    |

| REQUIRED CLEARANCES – ALL MODELS inches (mm) |                  |  |   |
|--|------------------|--|---|
| No Heaters                                   | All Sides        |  | 0 |
|  | From Supply Duct |  | 0 |
| With Heaters                                 | All Sides        |  | 0 |
|  | From Supply Duct |  | 0 |

PHYSICAL DATA

| FMA4P  | Unit Size               |                         |                         |                         |
|--|-------------------------|-------------------------|-------------------------|-------------------------|
|  | 18                      | 24                      | 30                      | 36                      |
| Nominal Cooling Capacity (BTUH)              | 18,000                  | 24,000                  | 30,000                  | 36,000                  |
| <b>COIL</b>                                  |                         |                         |                         |                         |
| R410—A - Refrigerant metering Device Piston* | 50 (1.27mm)             | 57 (1.45mm)             | 65 (1.65mm)             | 72 (1.83mm)             |
| Fins Per In.                                 | 17                      | 17                      | 17                      | 17                      |
| Face Area Ft <sup>2</sup>                    | 2.149                   | 2.149                   | 2.955                   | 2.955                   |
| Coil Configuration                           | Slope                   |                         |                         |                         |
| <b>BLOWER &amp; MOTOR</b>                    |                         |                         |                         |                         |
| Air Discharge                                | Upflow                  |                         |                         |                         |
| Blower Type                                  | Direct Drive            |                         |                         |                         |
| CFM (Nominal)                                | 600                     | 800                     | 1000                    | 1200                    |
| Motor Type                                   | PSC                     | PSC                     | PSC                     | PSC                     |
| Motor HP                                     | 1/6                     | 1/4                     | 1/3                     | 1/2                     |
| Rated RPM                                    | 1075                    | 1075                    | 1075                    | 1075                    |
| Motor Speeds                                 | 3                       | 3                       | 3                       | 3                       |
| <b>FILTER</b>                                |                         |                         |                         |                         |
| Field Installed – in (mm)                    | 16x20x1<br>(406x508x25) | 16x20x1<br>(406x508x25) | 20x20x1<br>(508x508x25) | 20x20x1<br>(508x508x25) |
| <b>CONNECTIONS (Sweat)</b>                   |                         |                         |                         |                         |
| Suction – in. (mm)                           | 3/4 In. (19 mm)         |                         |                         |                         |
| Liquid – in. (mm)                            | 3/8 In. (9.5 mm)        |                         |                         |                         |
| Condensate (FPT) – in. (mm)                  | 3/4 In. (19 mm)         |                         |                         |                         |
| <b>ELECTRICAL DATA</b>                       |                         |                         |                         |                         |
| Voltage                                      | 208/230                 | 208/230                 | 208/230                 | 208/230                 |
| Hertz  | 60                      | 60                      | 60                      | 60                      |
| Circuit Amps                                 | 0.8                     | 1.0                     | 1.28                    | 1.8                     |
| Minimum Circuit Ampacity                     | 1                       | 1.3                     | 1.6                     | 2.3                     |
| Maximum Circuit Protector                    | 15 (A)                  | 15 (A)                  | 15 (A)                  | 15 (A)                  |

\* The piston included with the fan coil is unique to this product and **CANNOT** be replaced with the piston shipped with outdoor unit. Refer to the AHRI ratings to check if your combination can use the piston shipped with the unit or requires an accessory TXV.

PERFORMANCE DATA

PSC – AIRFLOW PERFORMANCE (STANDARD CFM)

| MODEL<br>FMA4P | BLOWER<br>SPEEDS | EXTERNAL STATIC PRESSURE (in. w.c.) |      |      |      |      |      |     |     |
|----------------|------------------|-------------------------------------|------|------|------|------|------|-----|-----|
|                |                  | 0                                   | 0.1  | 0.2  | 0.3  | 0.4  | 0.5  | 0.6 | 0.7 |
| 18             | High             | 776                                 | 733  | 695  | 653  | 610  | 564  | 525 | 464 |
|                | Med              | 661                                 | 624  | 585  | 546  | 502  | 454  | 415 | 354 |
|                | Low              | 565                                 | 529  | 487  | 448  | 405  | 353  | 299 | 244 |
| 24             | High             | 917                                 | 881  | 830  | 790  | 739  | 687  | 631 | 564 |
|                | Med              | 819                                 | 785  | 745  | 703  | 654  | 604  | 544 | 480 |
|                | Low              | 668                                 | 631  | 591  | 551  | 506  | 464  | 403 | 343 |
| 30             | High             | 1236                                | 1176 | 1115 | 1064 | 1000 | 936  | 861 | 793 |
|                | Med              | 1113                                | 1065 | 1014 | 962  | 908  | 842  | 772 | 701 |
|                | Low              | 935                                 | 894  | 852  | 807  | 755  | 694  | 631 | 561 |
| 36             | High             | 1350                                | 1292 | 1228 | 1167 | 1108 | 1045 | 981 | 902 |
|                | Med              | 1266                                | 1198 | 1139 | 1088 | 1029 | 970  | 905 | 831 |
|                | Low              | 1115                                | 1066 | 1015 | 966  | 918  | 861  | 801 | 722 |

■ – Shaded boxes represent airflow outside the required 300-450 cfm/ton.

NOTES:

- Airflow data includes use with electric heat and standard 1" fiberglass filter, and is measured in standard cfm.
- Airflow data is with no return grill. When using a return grill on 18 & 24 sizes, decrease numbers above by approx. 10 cfm. For 30 & 36 sizes, decrease numbers above by approx. 50 cfm.
- Airflow is equivalent for front or bottom return configurations.

PHYSICAL DATA

| FMA4X                           | Unit Size               |                         |                         |                         |
|---------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|                                 | 18                      | 24                      | 30                      | 36                      |
| Nominal Cooling Capacity (BTUH) | 18,000                  | 24,000                  | 30,000                  | 36,000                  |
| <b>COIL</b>                     |                         |                         |                         |                         |
| Fins Per In.                    | 17                      | 17                      | 17                      | 17                      |
| Face Area Ft <sup>2</sup>       | 2.149                   | 2.149                   | 2.955                   | 2.955                   |
| Coil Configuration              | Slope                   |                         |                         |                         |
| <b>BLOWER &amp; MOTOR</b>       |                         |                         |                         |                         |
| Air Discharge                   | Upflow                  |                         |                         |                         |
| Blower Type                     | Direct Drive            |                         |                         |                         |
| CFM (Nominal)                   | 600                     | 800                     | 1000                    | 1200                    |
| Motor Type                      | ECM                     | ECM                     | ECM                     | ECM                     |
| Motor HP                        | 1/3                     | 1/3                     | 1/2                     | 1/2                     |
| Rated RPM                       | 1050                    | 1050                    | 1050                    | 1050                    |
| Motor Speeds                    | 5                       | 5                       | 5                       | 5                       |
| <b>FILTER</b>                   |                         |                         |                         |                         |
| Field Installed – in (mm)       | 16x20x1<br>(406x508x25) | 16x20x1<br>(406x508x25) | 20x20x1<br>(508x508x25) | 20x20x1<br>(508x508x25) |
| <b>CONNECTIONS (Sweat)</b>      |                         |                         |                         |                         |
| Suction – in. (mm)              | 3/4 In. (19 mm)         |                         |                         |                         |
| Liquid – in. (mm)               | 3/8 In. (9.5 mm)        |                         |                         |                         |
| Condensate (FPT) – in. (mm)     | 3/4 In. (19 mm)         |                         |                         |                         |
| <b>ELECTRICAL DATA</b>          |                         |                         |                         |                         |
| Voltage                         | 208/230                 | 208/230                 | 208/230                 | 208/230                 |
| Hertz                           | 60                      | 60                      | 60                      | 60                      |
| Circuit Amps                    | 1.9                     | 1.9                     | 2.7                     | 2.7                     |
| Minimum Circuit Ampacity        | 2.4                     | 2.4                     | 3.4                     | 3.4                     |
| Maximum Circuit Protector       | 15                      | 15                      | 15                      | 15                      |

PERFORMANCE DATA

ECM – AIRFLOW PERFORMANCE (STANDARD CFM)

| MODEL<br>FMA4X | BLOWER SPEEDS     | EXTERNAL STATIC PRESSURE (in w.c.) |      |      |      |      |      |      |      |      |
|----------------|-------------------|------------------------------------|------|------|------|------|------|------|------|------|
|                |                   | 0                                  | 0.1  | 0.2  | 0.3  | 0.4  | 0.5  | 0.6  | 0.7  | 0.8  |
| 18             | Tap (5)           | 884                                | 854  | 833  | 803  | 771  | 737  | 700  | 668  | 632  |
|                | Tap (4)           | 796                                | 767  | 737  | 709  | 675  | 645  | 612  | 579  | 538  |
|                | Tap (3)           | 714                                | 681  | 654  | 616  | 588  | 555  | 527  | 494  | 459  |
|                | Tap (2) - Factory | 653                                | 619  | 584  | 558  | 525  | 494  | 463  | 434  | 396  |
|                | Tap (1)           | 581                                | 545  | 511  | 472  | 440  | 407  | 374  | 344  | 329  |
| 24             | Tap (5)           | 884                                | 854  | 833  | 803  | 771  | 737  | 700  | 668  | 632  |
|                | Tap (4) - Factory | 796                                | 767  | 737  | 709  | 675  | 645  | 612  | 579  | 538  |
|                | Tap (3)           | 714                                | 681  | 654  | 616  | 588  | 555  | 527  | 494  | 459  |
|                | Tap (2)           | 653                                | 619  | 584  | 558  | 525  | 494  | 463  | 434  | 396  |
|                | Tap (1)           | 581                                | 545  | 511  | 472  | 440  | 407  | 374  | 344  | 329  |
| 30             | Tap (5)           | 1309                               | 1272 | 1236 | 1200 | 1164 | 1125 | 1088 | 1051 | 1010 |
|                | Tap (4)           | 1122                               | 1088 | 1056 | 1022 | 986  | 950  | 915  | 877  | 836  |
|                | Tap (3)           | 1109                               | 1073 | 1038 | 1003 | 973  | 937  | 901  | 867  | 828  |
|                | Tap (2) - Factory | 1010                               | 975  | 941  | 904  | 869  | 835  | 793  | 751  | 704  |
|                | Tap (1)           | 936                                | 899  | 862  | 833  | 793  | 755  | 710  | 664  | 619  |
| 36             | Tap (5)           | 1309                               | 1272 | 1236 | 1200 | 1164 | 1125 | 1088 | 1051 | 1010 |
|                | Tap (4) - Factory | 1122                               | 1088 | 1056 | 1022 | 986  | 950  | 915  | 877  | 836  |
|                | Tap (3)           | 1109                               | 1073 | 1038 | 1003 | 973  | 937  | 901  | 867  | 828  |
|                | Tap (2)           | 1010                               | 975  | 941  | 904  | 869  | 835  | 793  | 751  | 704  |
|                | Tap (1)           | 936                                | 899  | 862  | 833  | 793  | 755  | 710  | 664  | 619  |

■ – Shaded boxes represent airflow outside the required 300-450 cfm/ton.

NOTES:

- Airflow based upon dry coil at 230V with no electric heat and factory-approved filter. For FMA4X and WAXA, airflow at 208V is approximately the same as 230V because the multi-tap ECM motor is a constant torque motor. The torque doesn't drop off at the speeds in which the motor operates.
- Airflow is equivalent for front or bottom return configurations.

REQUIRED CFM RANGE

| Size | CFM |      |
|------|-----|------|
|      | Min | Max  |
| 18   | 450 | 675  |
| 24   | 600 | 900  |
| 30   | 750 | 1125 |
| 36   | 900 | 1350 |

PERFORMANCE DATA (cont.)

GROSS COOLING CAPACITIES (mbh)

| UNIT SIZE | INDOOR COIL AIR |         | SATURATED TEMPERATURE LEAVING EVAPORATOR °F (°C) |     |      |        |     |      |        |     |      |         |     |      |         |     |      |
|-----------|-----------------|---------|--|-----|------|--------|-----|------|--------|-----|------|---------|-----|------|---------|-----|------|
|           |                 |         | 35 (2)   |     |      | 40 (4) |     |      | 45 (7) |     |      | 50 (10) |     |      | 55 (13) |     |      |
|           | CFM             | EWB     | TC   | SHC | BF   | TC     | SHC | BF   | TC     | SHC | BF   | TC      | SHC | BF   | TC      | SHC | BF   |
| 18        | 525             | 72 (22) | 38   | 18  | 0.00 | 35     | 17  | 0.00 | 31     | 15  | 0.00 | 27      | 14  | 0.00 | 22      | 12  | 0.00 |
|           |                 | 67 (19) | 32   | 19  | 0.00 | 28     | 18  | 0.00 | 25     | 16  | 0.00 | 20      | 14  | 0.00 | 15      | 12  | 0.00 |
|           |                 | 62 (17) | 26   | 20  | 0.00 | 22     | 18  | 0.00 | 19     | 17  | 0.01 | 15      | 15  | 0.07 | 13      | 13  | 0.21 |
|           | 600             | 72 (22) | 42   | 20  | 0.00 | 38     | 18  | 0.00 | 34     | 17  | 0.00 | 30      | 15  | 0.00 | 24      | 13  | 0.00 |
|           |                 | 67 (19) | 34   | 21  | 0.00 | 31     | 19  | 0.00 | 26     | 17  | 0.00 | 22      | 16  | 0.00 | 17      | 14  | 0.01 |
|           |                 | 62 (17) | 28   | 22  | 0.01 | 24     | 20  | 0.01 | 20     | 19  | 0.01 | 17      | 17  | 0.08 | 14      | 14  | 0.22 |
|           | 675             | 72 (22) | 45   | 21  | 0.00 | 41     | 20  | 0.00 | 37     | 18  | 0.00 | 32      | 16  | 0.00 | 26      | 14  | 0.00 |
|           |                 | 67 (19) | 37   | 23  | 0.01 | 33     | 21  | 0.01 | 29     | 19  | 0.01 | 24      | 17  | 0.01 | 18      | 15  | 0.01 |
|           |                 | 62 (17) | 30   | 24  | 0.01 | 26     | 22  | 0.01 | 22     | 20  | 0.01 | 19      | 19  | 0.10 | 16      | 16  | 0.24 |
| 24        | 700             | 72 (22) | 46   | 22  | 0.00 | 43     | 20  | 0.00 | 38     | 19  | 0.00 | 33      | 17  | 0.00 | 27      | 15  | 0.00 |
|           |                 | 67 (19) | 38   | 24  | 0.01 | 35     | 22  | 0.01 | 30     | 20  | 0.01 | 25      | 18  | 0.01 | 19      | 16  | 0.01 |
|           |                 | 62 (17) | 31   | 25  | 0.01 | 27     | 24  | 0.01 | 23     | 22  | 0.02 | 20      | 20  | 0.11 | 17      | 17  | 0.24 |
|           | 800             | 72 (22) | 50   | 24  | 0.00 | 46     | 22  | 0.00 | 41     | 20  | 0.01 | 36      | 18  | 0.01 | 30      | 16  | 0.01 |
|           |                 | 67 (19) | 41   | 26  | 0.01 | 37     | 24  | 0.01 | 32     | 22  | 0.01 | 27      | 20  | 0.01 | 21      | 18  | 0.02 |
|           |                 | 62 (17) | 34   | 28  | 0.01 | 30     | 26  | 0.01 | 25     | 25  | 0.03 | 22      | 22  | 0.14 | 19      | 19  | 0.26 |
|           | 900             | 72 (22) | 53   | 25  | 0.01 | 48     | 24  | 0.01 | 44     | 22  | 0.01 | 38      | 20  | 0.01 | 32      | 17  | 0.01 |
|           |                 | 67 (19) | 44   | 28  | 0.01 | 39     | 26  | 0.01 | 34     | 24  | 0.01 | 29      | 22  | 0.02 | 22      | 19  | 0.02 |
|           |                 | 62 (17) | 36   | 30  | 0.02 | 32     | 28  | 0.02 | 27     | 27  | 0.05 | 24      | 24  | 0.16 | 21      | 21  | 0.28 |
| 30        | 875             | 72 (22) | 67   | 33  | 0.00 | 61     | 30  | 0.00 | 54     | 27  | 0.00 | 46      | 23  | 0.00 | 37      | 20  | 0.00 |
|           |                 | 67 (19) | 55   | 34  | 0.01 | 49     | 31  | 0.01 | 41     | 28  | 0.01 | 33      | 24  | 0.01 | 23      | 20  | 0.01 |
|           |                 | 62 (17) | 44   | 35  | 0.01 | 38     | 32  | 0.01 | 30     | 28  | 0.01 | 24      | 24  | 0.07 | 20      | 20  | 0.23 |
|           | 1000            | 72 (22) | 74   | 37  | 0.00 | 67     | 33  | 0.00 | 59     | 30  | 0.00 | 50      | 26  | 0.00 | 40      | 22  | 0.01 |
|           |                 | 67 (19) | 61   | 38  | 0.01 | 54     | 34  | 0.01 | 46     | 31  | 0.01 | 37      | 27  | 0.01 | 25      | 22  | 0.01 |
|           |                 | 62 (17) | 49   | 39  | 0.01 | 42     | 35  | 0.01 | 34     | 31  | 0.02 | 27      | 27  | 0.08 | 22      | 22  | 0.24 |
|           | 1100            | 72 (22) | 79   | 39  | 0.00 | 72     | 36  | 0.00 | 63     | 32  | 0.01 | 54      | 28  | 0.01 | 43      | 24  | 0.01 |
|           |                 | 67 (19) | 65   | 41  | 0.01 | 57     | 37  | 0.01 | 49     | 33  | 0.01 | 39      | 29  | 0.01 | 28      | 24  | 0.02 |
|           |                 | 62 (17) | 52   | 42  | 0.02 | 45     | 38  | 0.02 | 36     | 34  | 0.02 | 29      | 29  | 0.09 | 24      | 24  | 0.25 |
| 36        | 1050            | 72 (22) | 73   | 36  | 0.00 | 67     | 33  | 0.00 | 59     | 29  | 0.01 | 51      | 26  | 0.01 | 41      | 22  | 0.01 |
|           |                 | 67 (19) | 60   | 38  | 0.01 | 54     | 34  | 0.01 | 46     | 31  | 0.01 | 37      | 27  | 0.01 | 27      | 23  | 0.02 |
|           |                 | 62 (17) | 49   | 39  | 0.01 | 42     | 36  | 0.01 | 34     | 32  | 0.02 | 28      | 28  | 0.09 | 23      | 23  | 0.24 |
|           | 1200            | 72 (22) | 80   | 39  | 0.00 | 73     | 36  | 0.00 | 65     | 32  | 0.01 | 55      | 28  | 0.01 | 45      | 24  | 0.01 |
|           |                 | 67 (19) | 66   | 41  | 0.02 | 58     | 38  | 0.02 | 50     | 34  | 0.02 | 41      | 30  | 0.02 | 30      | 26  | 0.02 |
|           |                 | 62 (17) | 53   | 43  | 0.02 | 46     | 40  | 0.02 | 38     | 36  | 0.02 | 32      | 32  | 0.11 | 26      | 26  | 0.25 |
|           | 1350            | 72 (22) | 85   | 42  | 0.00 | 78     | 39  | 0.01 | 69     | 35  | 0.01 | 59      | 31  | 0.02 | 48      | 27  | 0.02 |
|           |                 | 67 (19) | 71   | 45  | 0.02 | 63     | 41  | 0.02 | 54     | 37  | 0.02 | 44      | 33  | 0.02 | 32      | 28  | 0.03 |
|           |                 | 62 (17) | 57   | 47  | 0.02 | 49     | 44  | 0.02 | 41     | 39  | 0.03 | 35      | 35  | 0.12 | 29      | 29  | 0.26 |

CFM – Cubic Ft per Minute      EWB – Entering Wet Bulb °F (°C)      LWB – Leaving Wet Bulb °F (°C)      TC – Gross Cooling Capacity 1000 Btuh  
 SHC – Gross Sensible Capacity 1000 Btuh      BF – Bypass Factor      MBH – 1000 Btuh

SENSIBLE CAPACITY (SHC) CORRECTION FACTOR

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

Interpolation is permissible.  
 Correction Factor = 1.09 x (1 - BF) x (db - 80)

**NOTES:**

- Contact manufacturer for cooling capacities at conditions other than shown in table.
- Formulas:  
 Leaving db = entering db -  $\frac{\text{sensible heat cap.}}{1.09 \times \text{CFM}}$   
 Leaving wb = wb corresponding to enthalpy of air leaving coil ( $h_{lwb}$ )  
 $h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{CFM}}$   
 where  $h_{ewb}$  = enthalpy of air entering coil. Direct interpolation is permissible. Do not extrapolate.

- SHC is based on 80°F (27°C) db temperature of air entering coil. Below 80°F (27°C) db, subtract (Correction Factor x CFM) from SHC. Above 80°F (27°C) db, add (Correction Factor x CFM) to SHC.
- Bypass Factor = 0 indicates no psychometric solution. Use bypass factor of next lower EWB for approximation.

**ESTIMATED SOUND POWER LEVEL (dBA)**

| UNIT SIZE | CONDITIONS |                     | OCTAVE BAND CENTER FREQUENCY |      |      |      |      |      | 2000 | 4000 |
|-----------|------------|---------------------|------------------------------|------|------|------|------|------|------|------|
|           | CFM        | Ext Static Pressure | 63                           | 125  | 250  | 500  | 1000 |      |      |      |
| 18        | 600        | 0.25                | 46                           | 52.1 | 48.9 | 51.8 | 52.5 | 51.7 | 49.7 |      |
| 24        | 800        | 0.25                | 54.1                         | 57.1 | 58.6 | 59   | 61.5 | 59.8 | 57   |      |
| 30        | 1000       | 0.25                | 51.6                         | 52.6 | 52.6 | 53.3 | 56.1 | 52.8 | 59.7 |      |
| 36        | 1200       | 0.25                | 52.6                         | 52.3 | 54.6 | 54.3 | 57.2 | 53.8 | 50.4 |      |

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

**ELECTRICAL DATA FOR FMA4P PSC MOTOR UNITS**

| Heat Kit Model | Used on Size | Nominal Heat Capacity @ 240V | Shipping Weight | Heater Capacity (MBH) |           | Minimum Circuit Ampacity (MCA) |      | MAX. Fuse or Breaker Heat-Kit Ampacity (HACR) |     | Min Wire Size (AWG) †† |     | Min Ground Wire Size |     | Max Wire Length (Ft) †† |     |
|----------------|--------------|------------------------------|-----------------|-----------------------|-----------|--------------------------------|------|---|-----|------------------------|-----|----------------------|-----|-------------------------|-----|
|                |              |                              |                 | KW                    | lbs. (kg) | 208                            | 240  | 208   | 240 | 208                    | 240 | 208                  | 240 | 208                     | 240 |
| EHK2-05B       | 18           | 5                            | 5.1 (2.3)       | 12.3                  | 16.4      | 23.6                           | 27.1 | 30  | 30  | 10                     | 10  | 10                   | 10  | 73                      | 74  |
| EHK2-08B       |              | 7.5                          |                 | 22.2                  | 25.6      | 34.9                           | 40.1 | 50  | 50  | 8                      | 8   | 10                   | 10  | 76                      | 77  |
| EHK2-10B       |              | 10                           |                 | 24.6                  | 32.8      | 46.2                           | 53.1 | 60  | 60  | 6                      | 6   | 10                   | 10  | 92                      | 92  |
| EHK2-05B       | 24           | 5                            | 5.1 (2.3)       | 12.3                  | 16.4      | 23.9                           | 27.3 | 30  | 30  | 10                     | 10  | 10                   | 10  | 73                      | 73  |
| EHK2-08B       |              | 7.5                          |                 | 22.2                  | 25.6      | 35.2                           | 40.4 | 50  | 50  | 8                      | 8   | 10                   | 10  | 76                      | 76  |
| EHK2-10B       |              | 10                           |                 | 24.6                  | 32.8      | 46.4                           | 53.4 | 60  | 60  | 6                      | 6   | 10                   | 10  | 91                      | 92  |
| EHK2-05B       | 30           | 5                            | 5.1 (2.3)       | 12.3                  | 16.4      | 24.2                           | 27.7 | 30  | 30  | 10                     | 10  | 10                   | 10  | 72                      | 72  |
| EHK2-08B       |              | 7.5                          |                 | 22.2                  | 25.6      | 35.5                           | 40.7 | 50  | 50  | 8                      | 8   | 10                   | 10  | 75                      | 76  |
| EHK2-10B       |              | 10                           |                 | 24.6                  | 32.8      | 46.8                           | 53.7 | 60  | 60  | 6                      | 6   | 10                   | 10  | 91                      | 91  |
| EHK2-05B       | 36           | 5                            | 5.1 (2.3)       | 12.3                  | 16.4      | 24.9                           | 28.3 | 30  | 30  | 10                     | 10  | 10                   | 10  | 70                      | 71  |
| EHK2-08B       |              | 7.5                          |                 | 22.2                  | 25.6      | 36.2                           | 41.4 | 50  | 50  | 8                      | 8   | 10                   | 10  | 74                      | 74  |
| EHK2-10B       |              | 10                           |                 | 24.6                  | 32.8      | 47.4                           | 54.4 | 60  | 60  | 6                      | 6   | 10                   | 10  | 90                      | 90  |

\* †† 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/NGPA 70).

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

**ELECTRICAL DATA FOR FMA4X ECM MOTOR UNITS**

| Heat Kit Model | Used on Size | Nominal Heat Capacity @ 240V | Shipping Weight | Heater Capacity (MBH) |           | Minimum Circuit Ampacity (MCA) |      | MAX. Fuse or Breaker Heat-Kit Ampacity (HACR) |     | Min Wire Size (AWG) †† |     | Min Ground Wire Size |     | Max Wire Length (Ft) ‡‡ |     |
|----------------|--------------|------------------------------|-----------------|-----------------------|-----------|--------------------------------|------|---|-----|------------------------|-----|----------------------|-----|-------------------------|-----|
|                |              |                              |                 | KW                    | lbs. (kg) | 208                            | 240  | 208   | 240 | 208                    | 240 | 208                  | 240 | 208                     | 240 |
| EHK2-05B       | 18           | 5                            | 5.1 (2.3)       | 12.3                  | 16.4      | 25                             | 28.5 | 30  | 30  | 10                     | 10  | 10                   | 10  | 69                      | 70  |
| EHK2-08B       |              | 7.5                          |                 | 22.2                  | 25.6      | 36.3                           | 41.5 | 50  | 50  | 8                      | 8   | 10                   | 10  | 73                      | 74  |
| EHK2-10B       |              | 10                           |                 | 24.6                  | 32.8      | 47.6                           | 54.5 | 60  | 60  | 6                      | 6   | 10                   | 10  | 89                      | 90  |
| EHK2-05B       | 24           | 5                            | 5.1 (2.3)       | 12.3                  | 16.4      | 25                             | 28.5 | 30  | 30  | 10                     | 10  | 10                   | 10  | 69                      | 70  |
| EHK2-08B       |              | 7.5                          |                 | 22.2                  | 25.6      | 36.3                           | 41.5 | 50  | 50  | 8                      | 8   | 10                   | 10  | 73                      | 74  |
| EHK2-10B       |              | 10                           |                 | 24.6                  | 32.8      | 47.6                           | 54.5 | 60  | 60  | 6                      | 6   | 10                   | 10  | 89                      | 90  |
| EHK2-05B       | 30           | 5                            | 5.1 (2.3)       | 12.3                  | 16.4      | 26                             | 29.5 | 30  | 30  | 10                     | 10  | 10                   | 10  | 67                      | 68  |
| EHK2-08B       |              | 7.5                          |                 | 22.2                  | 25.6      | 37.3                           | 42.5 | 50  | 50  | 8                      | 8   | 10                   | 10  | 71                      | 72  |
| EHK2-10B       |              | 10                           |                 | 24.6                  | 32.8      | 48.6                           | 55.5 | 60  | 60  | 6                      | 6   | 10                   | 10  | 87                      | 88  |
| EHK2-05B       | 36           | 5                            | 5.1 (2.3)       | 12.3                  | 16.4      | 26                             | 29.5 | 30  | 30  | 10                     | 10  | 10                   | 10  | 67                      | 68  |
| EHK2-08B       |              | 7.5                          |                 | 22.2                  | 25.6      | 37.3                           | 42.5 | 50  | 50  | 8                      | 8   | 10                   | 10  | 71                      | 72  |
| EHK2-10B       |              | 10                           |                 | 24.6                  | 32.8      | 48.6                           | 55.5 | 60  | 60  | 6                      | 6   | 10                   | 10  | 87                      | 88  |

\* †† 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/NGPA 70).

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

**OTHER ACCESSORIES**

| Kit Number  | Description                             | Used on sizes  |
|-------------|---|----------------|
| AMWK001WG   | Louvered Wall Panel with Frame (6 pack) | 18, 24         |
| AMWK002WG   | Louvered Wall Panel with Frame (6 pack) | 30, 36         |
| NAEA20101TX | TXV Kit R-22                            | 18, 24, 30, 36 |
| NAEA40501TX | TXV Kit R-410A                          | 18, 24, 30     |
| NAEA40601TX | TXV Kit R-410A                          | 36             |
| EBAC01CTK   | PVC Condensate Trap Kit (50 pack)       | All            |
| NASA00110RA | Return Air Opening Grille (10 pack)     | 18, 24         |
| NASA00210RA | Return Air Opening Grille (10 pack)     | 30, 36         |