

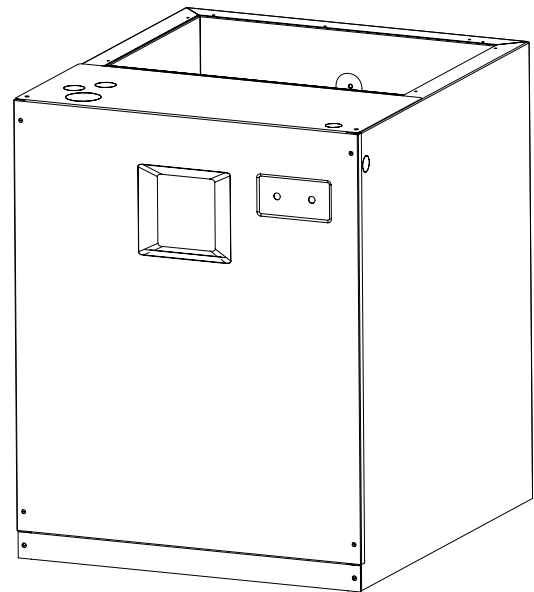


## **MB5(B,V)M Series Modular Indoor Blower 13+ SEER Residential System 18,000 - 60,000 Btuh (Heat Pump & Air Conditioner)**

The MB5 Series Modular Indoor Blower offers exceptional flexibility for space restricted applications. Match the MB5 with our cased coils to create upflow, downflow, and horizontal two-piece air handlers.

### **FEATURES and BENEFITS**

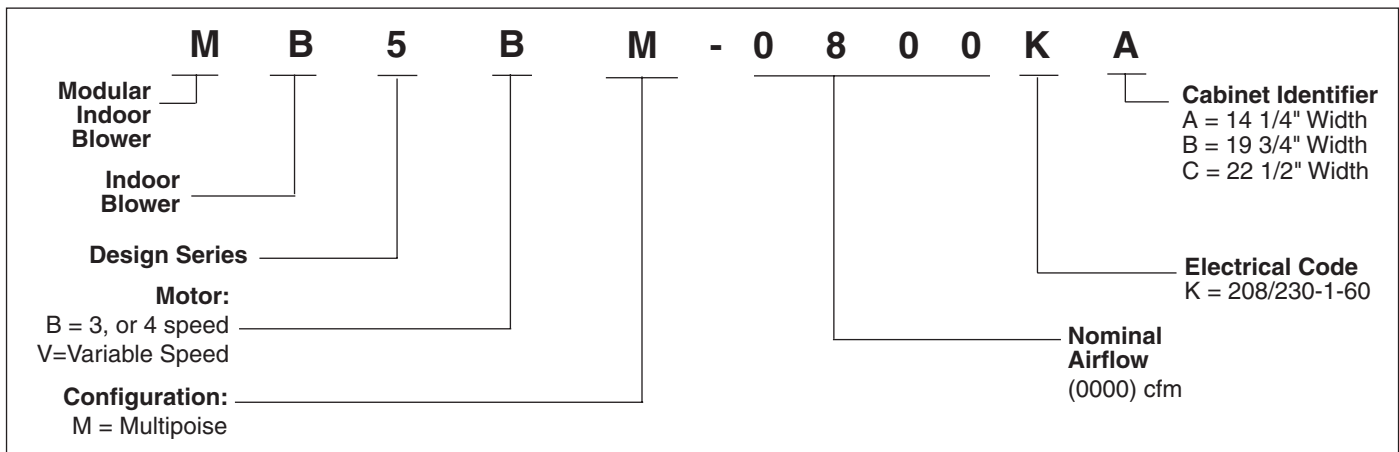
- **Durable, Attractive Cabinet** — Designed using galvanized steel. The door is also galvanized steel, with a polyester urethane finish. The 950 hour salt spray finish resists corrosion 50% better than comparable units. The plastic drain pan is corrosion-resistant.
- **Multi-poised** — Can be used in horizontal, upflow, downflow and vertical applications.
- **Multi-speed** — Gives flexibility of installation.
- **Ease-of-Service** — Plug-in wire connections and modularity make the air handler easy to service.
- **Plug-in Heater Kits**— Available in 5kw - 20kw
- **Circuit Board** — Incorporating blower time delay relay, low voltage terminal strip, and heat-strip sequencing.
- **Air Handler Control Board** — Controls time-sequencing of heat stages with field-selectable sequence timing.
- **Breaker Accessibility** — Breaker accessible from front of unit when heater is applied.
- **No Fasteners on Sides** — Smooth surfaces for ease of installation.
- **Cabinet Insulation** — 1/2" insulation contributes to quiet operation and prevents cabinet sweating in difficult applications.
- **Warranty** — Five year limited all parts warranty, a major benefit to the consumer.



### **Additional MB5VM Features:**

- **Increased Efficiencies** — Air conditioning and heat pump efficiencies up to 14 SEER and 8.5 HSPF.
- **ECM Variable Speed Motor** — Advanced technology allows for 12 selected cooling airflows and 4 heating airflows to match any application.
- **Quiet Blower Operation** — Extra quiet and smooth blower on and off cycles.
- **Constant Airflow** — Motor automatically adjusts to different static loads.
- **Field selectable delay profiles** — Increase efficiency and comfort.
- **Reduced air stratification** — This results in improved air quality by optimizing humidity removal and filtration capabilities.

# MODEL IDENTIFICATION CODE



# ELECTRICAL DATA

| Model Number<br>H6HK- | Voltage | KW   | Standard Air Handler (A & B size) |           |                              |                | Variable Speed & Std Air Handler (C size) |           |                              |                |           |           |           |                |    |    |    |     |
|-----------------------|---------|------|-----------------------------------|-----------|------------------------------|----------------|---|-----------|------------------------------|----------------|-----------|-----------|-----------|----------------|----|----|----|-----|
|                       |         |      | Min. Circuit Ampacity             |           | Max. Over-Current Protection |                | Min. Circuit Ampacity                     |           | Max. Over-Current Protection |                |           |           |           |                |    |    |    |     |
|                       |         |      | Circuit A                         | Circuit B | Circuit C                    | Single Circuit | Circuit A                                 | Circuit B | Circuit C                    | Single Circuit | Circuit A | Circuit B | Circuit C | Single Circuit |    |    |    |     |
| 005H-XX               | 240     | 4.8  | -                                 | -         | -                            | 30             | -   | -         | -                            | 30             | -         | -         | -         | 34             | -  | -  | -  | 40  |
| 008H-XX               | 240     | 7.5  | -                                 | -         | -                            | 45             | -   | -         | -                            | 50             | -         | -         | -         | 48             | -  | -  | -  | 50  |
| 010H-XX               | 240     | 9.6  | -                                 | -         | -                            | 55             | -   | -         | -                            | 60             | -         | -         | -         | 59             | -  | -  | -  | 60  |
| 015H-XX               | 240     | 14.4 | 55                                | 25        | -                            | 80             | 60  | 30        | -                            | 90             | 59        | 25        | -         | 83             | 60 | 30 | -  | 90  |
| 020H-XX               | 240     | 19.2 | 55                                | 50        | -                            | 105            | 60  | 60        | -                            | 125            | 59        | 50        | -         | 109            | 60 | 60 | -  | 125 |
| 025H-XX               | 240     | 24.0 | -                                 | -         | -                            | -              | -   | -         | -                            | -              | 59        | 50        | 25        | 134            | 60 | 60 | 30 | 150 |
| 030H-XX               | 240     | 28.8 | -                                 | -         | -                            | -              | -   | -         | -                            | -              | 59        | 50        | 50        | 159            | 60 | 60 | 60 | 175 |
| 005H-XX               | 208     | 3.6  | -                                 | -         | -                            | 27             | -   | -         | -                            | 30             | -         | -         | -         | 30             | -  | -  | -  | 40  |
| 008H-XX               | 208     | 5.6  | -                                 | -         | -                            | 39             | -   | -         | -                            | 40             | -         | -         | -         | 42             | -  | -  | -  | 50  |
| 010H-XX               | 208     | 7.2  | -                                 | -         | -                            | 48             | -   | -         | -                            | 50             | -         | -         | -         | 52             | -  | -  | -  | 60  |
| 015H-XX               | 208     | 10.8 | 48                                | 21        | -                            | 70             | 50  | 25        | -                            | 80             | 52        | 22        | -         | 73             | 60 | 25 | -  | 80  |
| 020H-XX               | 208     | 14.4 | 48                                | 43        | -                            | 92             | 50  | 50        | -                            | 100            | 52        | 43        | -         | 95             | 60 | 50 | -  | 100 |
| 025H-XX               | 208     | 18.0 | -                                 | -         | -                            | -              | -   | -         | -                            | -              | 52        | 43        | 22        | 117            | 60 | 50 | 25 | 125 |
| 030H-XX               | 208     | 21.6 | -                                 | -         | -                            | -              | -   | -         | -                            | -              | 52        | 43        | 43        | 138            | 60 | 50 | 50 | 150 |
| 009Q-XX               | 240     | 9.0  | -                                 | -         | -                            | 32             | -   | -         | -                            | 40             | -         | -         | -         | 36             | -  | -  | -  | 40  |
| 015Q-XX               | 240     | 14.4 | -                                 | -         | -                            | 48             | -   | -         | -                            | 50             | -         | -         | -         | 52             | -  | -  | -  | 60  |
| 009Q-XX               | 208     | 6.8  | -                                 | -         | -                            | 29             | -   | -         | -                            | 30             | -         | -         | -         | 32             | -  | -  | -  | 40  |
| 015Q-XX               | 208     | 10.8 | -                                 | -         | -                            | 43             | -   | -         | -                            | 50             | -         | -         | -         | 46             | -  | -  | -  | 50  |

# ACCESSORIES

| Accessory Kit Description                     | Cabinet Size |     |   | Order Number |
|---|--------------|-----|---|--------------|
|   | A            | B   | C |              |
| Single circuit adaptor for 2 circuit breakers | X            | X   | X | 913874       |
| Single circuit adaptor for 3 circuit breakers | n/a          | n/a | X | 913556       |

<sup>1</sup> Required for 042 models

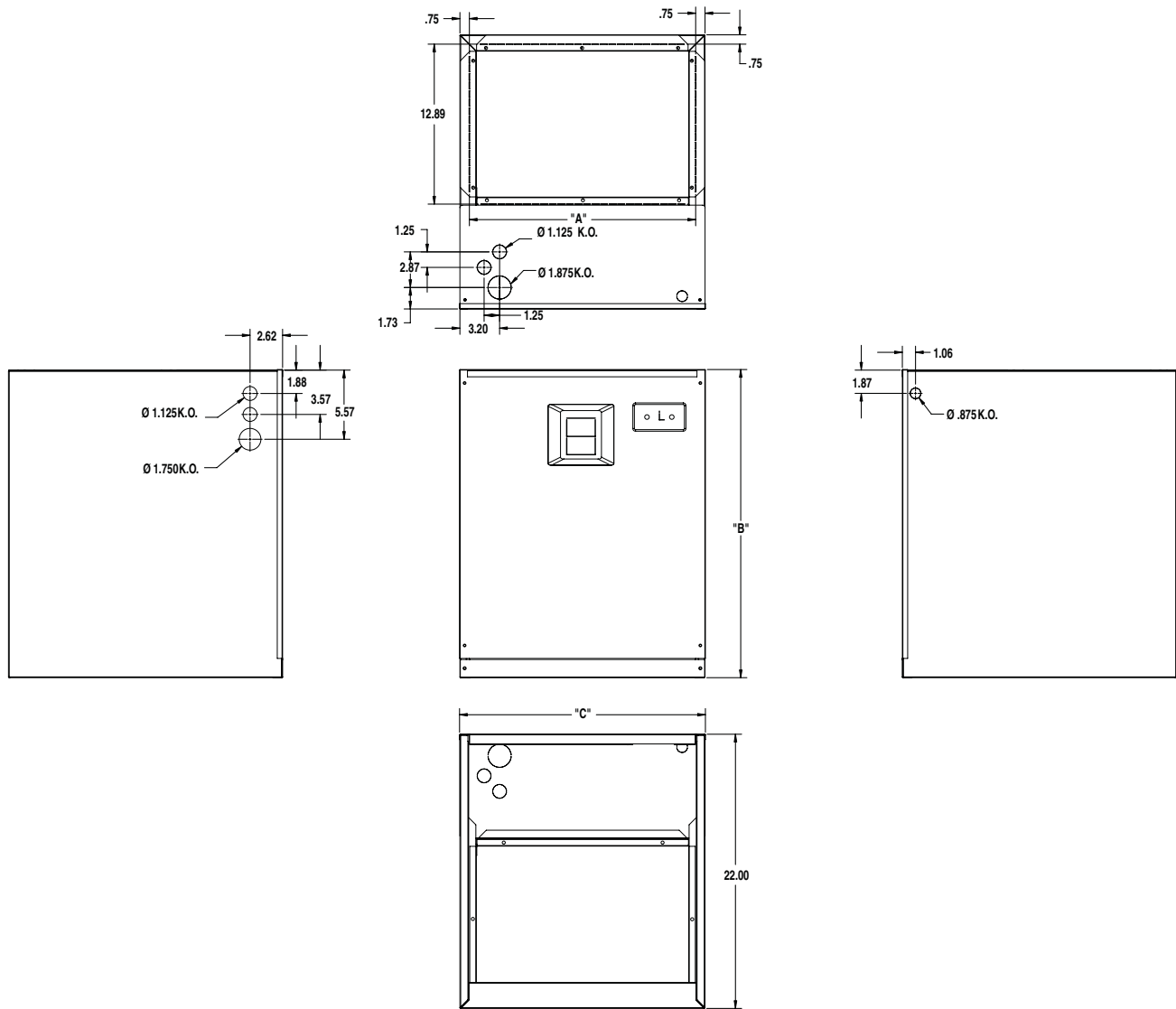
## 240V Single-Phase Heater Kit Application

| Nominal KW | Matched Units |         |         |         |         | Order Number          |                          |
|------------|---------------|---------|---------|---------|---------|-----------------------|--------------------------|
|            | *800-A        | *1200-A | *1200-B | *1600-B | *2000-C | With Circuit Breakers | Without Circuit Breakers |
| 5          | X             | X       | X       | X       | X       | 904407                | 904406                   |
| 8          | X             | X       | X       | X       | X       | 904409                | 904408                   |
| 10         | X             | X       | X       | X       | X       | 904412                | 904411                   |
| 15         | n/a           | X       | X       | X       | X       | 904414                | n/a                      |
| 20         | n/a           | n/a     | X       | X       | X       | 904416                | n/a                      |
| 25         | n/a           | n/a     | n/a     | n/a     | X       | 904417                | n/a                      |
| 30         | n/a           | n/a     | n/a     | n/a     | X       | 904418                | n/a                      |

## 240V Three-Phase Heater Kit Application

| Nominal KW | Matched Units |         |         |         |         | Order Number          |                          |
|------------|---------------|---------|---------|---------|---------|-----------------------|--------------------------|
|            | *800-A        | *1200-A | *1200-B | *1600-B | *2000-C | With Circuit Breakers | Without Circuit Breakers |
| 9          | X             | X       | X       | X       | X       | 904410                | n/a                      |
| 15         | n/a           | X       | X       | X       | X       | 904415                | n/a                      |

# DIMENSIONS



# SPECIFICATIONS

| Model Number<br>MB5-                         | BM-0800-A       | BM-1200-A       | BM-1200-B       | BM-1600-B       | BM-2000-C   | VM-1200-A       | VM-1600-B       | VM-2000-C   |
|--|-----------------|-----------------|-----------------|-----------------|-------------|-----------------|-----------------|-------------|
| Nominal cooling capacity - BTUh <sup>1</sup> | 24000           | 30000           | 36000           | 42000           | 60000       | 30000           | 42000           | 60000       |
| Maximum Available Auxiliary Heat             | 10              | 15              | 20              | 20              | 30          | 10              | 20              | 30          |
| Nominal Blower Size (Dia. x Width)           | 10 x 6          | 10 x 6          | 10 x 8          | 10 x 8          | 11 x 10     | 10 x 6          | 11 x 8          | 11 x 10     |
| Motor Hp-speeds-type                         | 1/5-3-PSC       | 1/3-3-PSC       | 1/3-3-PSC       | 1/3-3-PSC       | 3/4-3-PSC   | 1/2-VS          | 1/2-VS          | 3/4-VS      |
| Approximate Shipping Weight, lbs             | 50              | 50              | 60              | 60              | 73          | 50              | 60              | 73          |
| Height, "H", in.                             | 24-3/4          | 24-3/4          | 24-3/4          | 24-3/4          | 27-1/2      | 24-3/4          | 24-3/4          | 27-1/2      |
| Width, "W", in.                              | 14-1/4          | 14-1/4          | 19-3/4          | 19-3/4          | 22-1/2      | 14-1/4          | 19-3/4          | 22-1/2      |
| Supply Air Outlet Dimension, in.             | 12-7/8 x 12-3/4 | 12-7/8 x 12-3/4 | 12-7/8 x 18-1/4 | 12-7/8 x 18-1/4 | 12-7/8 x 21 | 12-7/8 x 12-3/4 | 12-7/8 x 18-1/4 | 12-7/8 x 21 |

<sup>1</sup> See current ARI Directory for certified combinations and ratings.

# BLOWER PERFORMANCE DATA

|                   |                | Dry Coil ESP |      |      |      |      |      |      |      |
|-------------------|----------------|--------------|------|------|------|------|------|------|------|
|                   |                | 0.10         | 0.20 | 0.30 | 0.40 | 0.50 | 0.60 | 0.70 | 0.80 |
| 0800<br>A-Cabinet | Low            | 683          | 647  | 607  | 563  | 515  | 463  | 406  | 345  |
|                   | Corrected ESP* |              | 0.07 | 0.19 | 0.30 | 0.42 | 0.53 | 0.65 | 0.76 |
|                   | Medium         | 861          | 823  | 781  | 734  | 682  | 625  | 564  | 498  |
|                   | Corrected ESP* |              |      | 0.11 | 0.23 | 0.36 | 0.48 | 0.60 | 0.72 |
|                   | High           | 1072         | 1026 | 975  | 920  | 860  | 797  | 730  | 659  |
|                   | Corrected ESP* |              |      |      | 0.14 | 0.27 | 0.40 | 0.53 | 0.67 |
| 1200<br>A-Cabinet | Low            | 849          | 825  | 793  | 753  | 704  | 647  | 581  | 508  |
|                   | Corrected ESP* |              | 0.04 | 0.15 | 0.27 | 0.38 | 0.50 | 0.62 | 0.74 |
|                   | Medium         | 1118         | 1087 | 1046 | 997  | 940  | 874  | 799  | 717  |
|                   | Corrected ESP* |              |      | 0.04 | 0.17 | 0.29 | 0.42 | 0.55 | 0.68 |
|                   | High           | 1277         | 1233 | 1184 | 1130 | 1070 | 1005 | 935  | 860  |
|                   | Corrected ESP* |              |      |      | 0.10 | 0.23 | 0.36 | 0.49 | 0.63 |
| 1200<br>B-Cabinet | Low            | 708          | 690  | 664  | 628  | 584  | 532  | 471  | 401  |
|                   | Corrected ESP* |              | 0.08 | 0.19 | 0.30 | 0.41 | 0.53 | 0.64 | 0.76 |
|                   | Medium         | 909          | 904  | 886  | 854  | 810  | 753  | 683  | 600  |
|                   | Corrected ESP* |              |      | 0.10 | 0.22 | 0.33 | 0.46 | 0.58 | 0.71 |
|                   | High           | 1118         | 1132 | 1126 | 1101 | 1056 | 992  | 908  | 805  |
|                   | Corrected ESP* |              |      |      | 0.09 | 0.22 | 0.35 | 0.49 | 0.64 |
| 1600<br>B-Cabinet | Low            | 1324         | 1302 | 1271 | 1233 | 1187 | 1134 | 1072 | 1003 |
|                   | Corrected ESP* |              | 0.06 | 0.17 | 0.27 | 0.38 | 0.49 | 0.61 | 0.72 |
|                   | Medium         | 1485         | 1455 | 1418 | 1373 | 1320 | 1260 | 1193 | 1118 |
|                   | Corrected ESP* |              |      | 0.13 | 0.24 | 0.36 | 0.47 | 0.58 | 0.70 |
|                   | High           | 1637         | 1601 | 1558 | 1506 | 1447 | 1380 | 1305 | 1223 |
|                   | Corrected ESP* |              |      |      | 0.21 | 0.33 | 0.44 | 0.56 | 0.68 |
| 2000<br>C-Cabinet | Low            | 1880         | 1820 | 1750 | 1680 | 1610 | 1540 | 1460 | 1390 |
|                   | Corrected ESP* |              | 0.11 | 0.22 | 0.33 | 0.44 | 0.55 | 0.65 | 0.76 |
|                   | Medium         | 2030         | 1970 | 1900 | 1830 | 1750 | 1670 | 1590 | 1510 |
|                   | Corrected ESP* |              |      |      | 0.25 | 0.36 | 0.47 | 0.58 | 0.69 |
|                   | High           | 2130         | 2100 | 2020 | 1920 | 1850 | 1770 | 1690 | 1600 |
|                   | Corrected ESP* |              |      |      |      | 0.29 | 0.40 | 0.51 | 0.62 |

## Notes:

- 1) Airflow is shown in cfm, +/- 5%.
- 2) External static pressure (ESP) is shown in inches w.c.
- 3) See unit nameplate or installation instructions for maximum recommended external static pressure.

\* ESP estimate with wet coil and filter

# AIRFLOW SELECTION FOR VARIABLE SPEED MODELS

## Basic Airflow Setting

| A-CABINET |               |   |   |                  |     | B-CABINET |               |     |     |     |                  | C-CABINET |     |               |   |   |     |                  |     |
|-----------|---------------|---|---|------------------|-----|-----------|---------------|-----|-----|-----|------------------|-----------|-----|---------------|---|---|-----|------------------|-----|
| CFM       | Switch Number |   |   | Nominal Capacity |     | CFM       | Switch Number |     |     |     | Nominal Capacity |           | CFM | Switch Number |   |   |     | Nominal Capacity |     |
|           | 1             | 2 | 3 | 4                | 1.5 |           | 2.0           | 2.5 | 3.0 | 3.5 | 4.0              | 1         |     | 2             | 3 | 4 | 3.0 | 3.5              | 4.0 |
| 540       | 0             | 0 | 0 | 1                |     | 720       | 0             | 0   | 0   | 1   |                  | 1075      | 0   | 0             | 0 | 1 |     |                  |     |
| 600       | 0             | 0 | 0 | 0                |     | 800       | 0             | 0   | 0   | 0   |                  | 1135      | 1   | 0             | 0 | 1 |     |                  |     |
| 660       | 0             | 0 | 1 | 0                |     | 850       | 1             | 0   | 0   | 1   |                  | 1225      | 0   | 0             | 0 | 0 |     |                  |     |
| 715       | 1             | 0 | 0 | 1                |     | 880       | 0             | 0   | 1   | 0   |                  | 1295      | 1   | 0             | 0 | 0 |     |                  |     |
| 790       | 1             | 0 | 0 | 0                |     | 945       | 1             | 0   | 0   | 0   |                  | 1380      | 0   | 0             | 1 | 0 |     |                  |     |
| 870       | 1             | 0 | 1 | 0                |     | 1040      | 1             | 0   | 1   | 0   |                  | 1460      | 1   | 0             | 1 | 0 |     |                  |     |
| 915       | 0             | 1 | 0 | 1                |     | 1085      | 0             | 1   | 0   | 1   |                  | 1525      | 0   | 1             | 0 | 1 |     |                  |     |
| 955       | 1             | 1 | 0 | 1                |     | 1140      | 1             | 1   | 0   | 1   |                  | 1625      | 1   | 1             | 0 | 1 |     |                  |     |
| 1015      | 0             | 1 | 0 | 0                |     | 1205      | 0             | 1   | 0   | 0   |                  | 1740      | 0   | 1             | 0 | 0 |     |                  |     |
| 1060      | 0             | 1 | 1 | 0                |     | 1265      | 1             | 1   | 0   | 0   |                  | 1860      | 1   | 1             | 0 | 0 |     |                  |     |
| 1075      | 1             | 1 | 0 | 0                |     | 1325      | 0             | 1   | 1   | 0   |                  | 1960      | 0   | 1             | 1 | 0 |     |                  |     |
| 1165      | 1             | 1 | 1 | 0                |     | 1390      | 1             | 1   | 1   | 0   |                  | 2090      | 1   | 1             | 1 | 0 |     |                  |     |

Note: 1 = ON, 0 = OFF



CERTIFICATION APPLIES ONLY WHEN THE COMPLETE SYSTEM IS LISTED WITH ARI



244C-1106 (Replaces 244C-1006)