



# ARPF

## 1½- TO 5-TON MULTI-POSITION, THREE-SPEED AIR HANDLER WITH PAINTED CABINET



The KlimaIRE ARPF Multi-Position, Multi-Speed Air Handler is suitable for use with refrigerants R-410A and R-22. The ARPF features a check flowrater expansion device as well as direct-drive, multi-speed motor.

### Standard Features

- Suitable for use with refrigerants R-410A and R-22 (see Nomenclature Chart on Page 2).
- Check flowrater expansion device
- Direct-drive, multi-speed motor
- Transformer and blower time-delay on all units
- Copper tube/aluminum fin coil
- Complies with the Factory-sealed Air Handling Credit with or without field-installed filter kits as listed in the 2001 Florida Building Code, Chapter 13, Section 610.2.A.2.1
- ARI Certified; ETL Listed

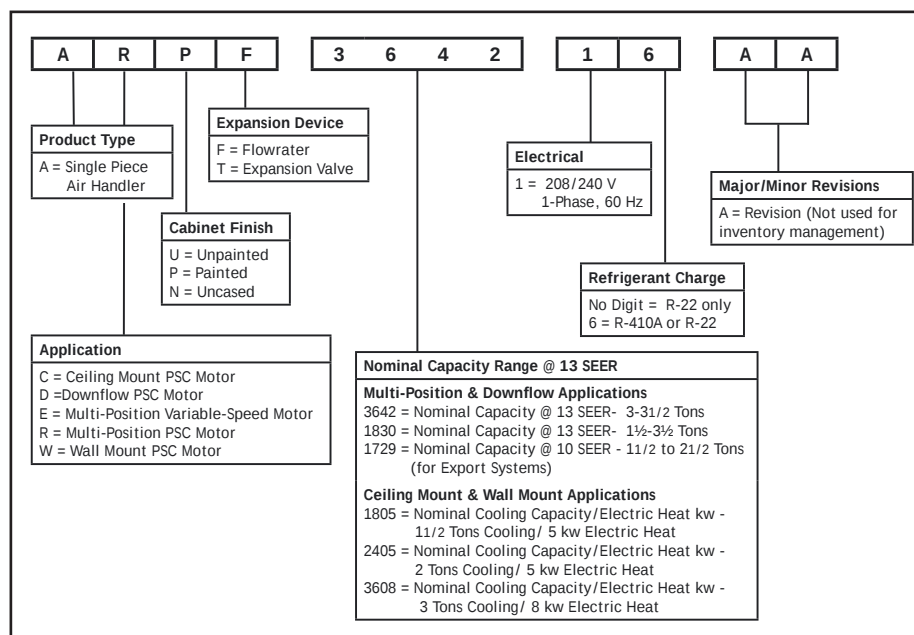
### Cabinet Features

- Fully insulated, painted steel cabinet with attractive Architectural Gray finish
- Built-in coil has horizontal, vertical, and downflow drain pans with secondary drain connections
- Built-in filter rack for 1" filter (filter not included)
- Power supply entry at top; low-voltage entry on top and both sides
- Factory-sealed to achieve 2% or less leakage rate with or without field-installed filter kits at 1.0" water gauge external duct static pressure

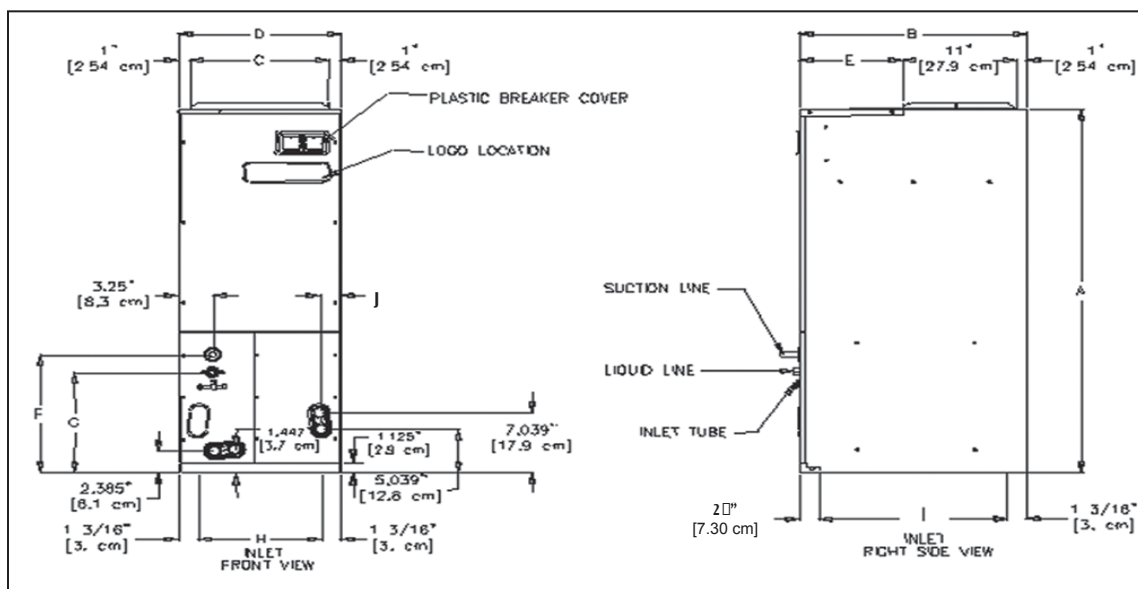
### Accessories

- 3 kW to 21 kW electric heat kits available as field-installed options
- Permanent washable plastic air filters
- Coil Insulation Kits for downflow applications
- Horizontal drain pan insulation kits

## NOMENCLATURE



## DIMENSIONS



| Model      | A                                | B   | C                                | D                                | E   | F                                | G                                  | H                                | I                                  | J                               |
|------------|----------------------------------|-----|----------------------------------|----------------------------------|-----|----------------------------------|------------------------------------|----------------------------------|------------------------------------|---------------------------------|
| ARPF17291* | 42 <sup>1</sup> / <sub>8</sub> " | 22" | 13 <sup>1</sup> / <sub>2</sub> " | 15 <sup>1</sup> / <sub>2</sub> " | 10" | 14 <sup>1</sup> / <sub>2</sub> " | 11 <sup>15</sup> / <sub>16</sub> " | 13 <sup>3</sup> / <sub>8</sub> " | 17 <sup>15</sup> / <sub>16</sub> " | 2"                              |
| ARPF18241* | 42 <sup>1</sup> / <sub>8</sub> " | 22" | 13 <sup>1</sup> / <sub>2</sub> " | 15 <sup>1</sup> / <sub>2</sub> " | 10" | 14 <sup>1</sup> / <sub>2</sub> " | 11 <sup>15</sup> / <sub>16</sub> " | 13 <sup>3</sup> / <sub>8</sub> " | 17 <sup>15</sup> / <sub>16</sub> " | 2"                              |
| ARPF19311* | 46 <sup>3</sup> / <sub>4</sub> " | 22" | 17 <sup>1</sup> / <sub>2</sub> " | 19 <sup>1</sup> / <sub>2</sub> " | 10" | 14 <sup>1</sup> / <sub>2</sub> " | 11 <sup>15</sup> / <sub>16</sub> " | 17 <sup>1</sup> / <sub>8</sub> " | 17 <sup>15</sup> / <sub>16</sub> " | 2"                              |
| ARPF30301* | 46 <sup>3</sup> / <sub>4</sub> " | 22" | 17 <sup>1</sup> / <sub>2</sub> " | 19 <sup>1</sup> / <sub>2</sub> " | 10" | 14 <sup>1</sup> / <sub>2</sub> " | 11 <sup>15</sup> / <sub>16</sub> " | 17 <sup>1</sup> / <sub>8</sub> " | 17 <sup>15</sup> / <sub>16</sub> " | 2"                              |
| ARPF36361* | 46 <sup>3</sup> / <sub>4</sub> " | 22" | 17 <sup>1</sup> / <sub>2</sub> " | 19 <sup>1</sup> / <sub>2</sub> " | 10" | 14 <sup>1</sup> / <sub>2</sub> " | 11 <sup>15</sup> / <sub>16</sub> " | 17 <sup>1</sup> / <sub>8</sub> " | 17 <sup>15</sup> / <sub>16</sub> " | 1 <sup>4</sup> / <sub>5</sub> " |
| ARPF36421* | 53 <sup>1</sup> / <sub>4</sub> " | 24" | 20"                              | 22"                              | 12" | 14 <sup>1</sup> / <sub>2</sub> " | 11 <sup>15</sup> / <sub>16</sub> " | 19 <sup>5</sup> / <sub>8</sub> " | 19 <sup>15</sup> / <sub>16</sub> " | 1 <sup>4</sup> / <sub>5</sub> " |
| ARPF37431* | 53 <sup>1</sup> / <sub>4</sub> " | 24" | 20"                              | 22"                              | 12" | 14 <sup>1</sup> / <sub>2</sub> " | 11 <sup>15</sup> / <sub>16</sub> " | 19 <sup>5</sup> / <sub>8</sub> " | 19 <sup>15</sup> / <sub>16</sub> " | 1 <sup>4</sup> / <sub>5</sub> " |
| ARPF48601* | 53 <sup>1</sup> / <sub>4</sub> " | 24" | 20"                              | 22"                              | 12" | 14 <sup>1</sup> / <sub>2</sub> " | 11 <sup>15</sup> / <sub>16</sub> " | 19 <sup>5</sup> / <sub>8</sub> " | 19 <sup>15</sup> / <sub>16</sub> " | 1 <sup>4</sup> / <sub>5</sub> " |

## SPECIFICATIONS

|                                | ARPF<br>172916 | ARPF<br>182416 | ARPF<br>193116 | ARPF<br>303016 | ARPF<br>363616 | ARPF<br>364216 | ARPF<br>374316                     | ARPF<br>486016 |
|--------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------------------------|----------------|
| <b>Blower</b>                  |                |                |                |                |                |                |                                    |                |
| Diameter                       | 9½"            | 9½"            | 9½"            | 9½"            | 9½"            | 10⅝"           | 11 <sup>15</sup> / <sub>16</sub> " | 10⅝"           |
| Width                          | 6"             | 6"             | 6"             | 8"             | 6"             | 8"             | 10 <sup>11</sup> / <sub>16</sub> " | 10⅝"           |
| Coil Drain Connect FPT         | ¾"             | ¾"             | ¾"             | ¾"             | ¾"             | ¾"             | ¾"                                 | ¾"             |
| <b>Service Valve</b>           |                |                |                |                |                |                |                                    |                |
| Liquid                         | ⅜"             | ⅜"             | ⅜"             | ⅜"             | ⅜"             | ⅜"             | ⅜"                                 | ⅜"             |
| Suction                        | ¾"             | ¾"             | ⅞"             | ¾"             | ¾"             | ⅞"             | ⅞"                                 | ⅞"             |
| <b>Electrical Data</b>         |                |                |                |                |                |                |                                    |                |
| Voltage                        | 208/ 240       | 208/ 240       | 208/ 240       | 208/ 240       | 208/ 240       | 208/ 240       | 208/ 240                           | 208/ 240       |
| Min Circuit Ampacity           | 2.1/ 2.1       | 2.1/ 2.1       | 1.9/ 1.9       | 3.3/ 3.3       | 3.3/ 3.3       | 3.7/ 3.7       | 4.2/ 4.2                           | 5.4/ 5.4       |
| Max. Overcurrent Device (amps) | 15/ 15         | 15/ 15         | 15/ 15         | 15/ 15         | 15/ 15         | 15/ 15         | 15/ 15                             | 15/ 15         |
| Min. / Max VAC                 | 197/ 253       | 197/ 253       | 197/ 253       | 197/ 253       | 197/ 253       | 197/ 253       | 197/ 253                           | 197/ 253       |
| Blower Motor FLA/ HP           | 1.7/ ⅓         | 1.7/ ⅓         | 1.48/ ¼        | 2.64/ ⅓        | 2.64/ ⅓        | 2.95/ ½        | 3.39/ ½                            | 4.3/ ¾         |
| <b>Ship Weight (lbs)</b>       | 110            | 120            | 155            | 144            | 164            | 173            | 195                                | 192            |

## BLOWER PERFORMANCE

| Model      | Motor Speed | CFM delivered against External Static Pressure |       |       |       |       |
|------------|-------------|------------------------------------------------|-------|-------|-------|-------|
|            |             | 0.1"                                           | 0.2"  | 0.3"  | 0.4"  | 0.5"  |
| ARPF172916 | High        | 1,155                                          | 1,090 | 1,025 | 950   | 895   |
|            | Med         | 875                                            | 830   | 790   | 750   | 715   |
|            | Low         | 640                                            | 610   | 570   | 535   | 490   |
| ARPF182416 | High        | 1,155                                          | 1,090 | 1,025 | 950   | 895   |
|            | Med         | 875                                            | 830   | 790   | 750   | 715   |
|            | Low         | 640                                            | 610   | 570   | 535   | 490   |
| ARPF193116 | High        | 1,135                                          | 1,085 | 1,025 | 965   | 915   |
|            | Med         | 860                                            | 825   | 780   | 750   | 680   |
|            | Low         | 600                                            | 570   | 545   | 500   | 465   |
| ARPF303016 | High        | 1,455                                          | 1,385 | 1,330 | 1,205 | 1,090 |
|            | Med         | 1,340                                          | 1,290 | 1,230 | 1,140 | 1,050 |
|            | Low         | 1,075                                          | 1,030 | 980   | 910   | 840   |
| ARPF363616 | High        | 1,345                                          | 1,290 | 1,230 | 1,150 | 1,070 |
|            | Med         | 1,270                                          | 1,210 | 1,140 | 1,075 | 980   |
|            | Low         | 1,045                                          | 1,005 | 955   | 885   | 805   |
| ARPF364216 | High        | 1,700                                          | 1,680 | 1,645 | 1,610 | 1,535 |
|            | Med         | 1,500                                          | 1,480 | 1,440 | 1,380 | 1,325 |
|            | Low         | 1,345                                          | 1,320 | 1,275 | 1,230 | 1,195 |
| ARPF374316 | High        | 2,065                                          | 2,000 | 1,925 | 1,860 | 1,780 |
|            | Med         | 1,685                                          | 1,635 | 1,550 | 1,470 | 1,410 |
|            | Low         | 1,490                                          | 1,425 | 1,345 | 1,280 | 1,205 |
| ARPF486016 | High        | 2,135                                          | 2,080 | 1,985 | 1,900 | 1,805 |
|            | Med         | 1,975                                          | 1,935 | 1,875 | 1,775 | 1,675 |
|            | Low         | 1,715                                          | 1,670 | 1,650 | 1,590 | 1,530 |

**Note:** Assumes dry coil with filter in place; SCFM correction for wet coil = 4%

# PRODUCT SPECIFICATIONS

## ACCESSORIES

### HEAT KITS

|                       | ARPF<br>172916 | ARPF<br>182416 | ARPF<br>193116 | ARPF<br>303016 | ARPF<br>363616 | ARPF<br>364216 | ARPF<br>374316 | ARPF<br>486016 |
|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| HKR-03*               | X              | X              | X              | X              | X              | X              | X              | X              |
| HKR-05*, HKR-05C*     | X              | X              | X              | X              | X              | X              | X              | X              |
| HKR-06*               | X              | X              | X              | X              | X              | X              | X              | X              |
| HKR-08*, HKR-08C*     | X <sup>1</sup> | X <sup>1</sup> | X <sup>1</sup> | X              | X              | X              | X              | X              |
| HKR-10*, HKR-10C*     | X <sup>1</sup> | X <sup>1</sup> | X <sup>1</sup> | X <sup>1</sup> | X              | X              | X              | X              |
| HKR-15C*              | X <sup>2</sup> | X <sup>2</sup> | X <sup>2</sup> | X <sup>2</sup> | X <sup>2</sup> | X <sup>3</sup> | X <sup>3</sup> | X              |
| HKR-20C*              |                |                |                | X <sup>2</sup> |                | X <sup>3</sup> | X <sup>3</sup> | X              |
| HKR-21C*              |                |                |                | X <sup>2</sup> |                | X <sup>3</sup> | X <sup>3</sup> | X              |
| <sup>^</sup> HKR3-15* |                |                |                | X <sup>2</sup> | X <sup>2</sup> | X <sup>3</sup> | X <sup>3</sup> | X              |
| <sup>^</sup> HKR3-20* |                |                |                | X <sup>2</sup> |                | X <sup>3</sup> | X <sup>3</sup> | X              |

\* Revision level that may or may not be designated

C Circuit breaker option

<sup>^</sup> Heat kit requires three-phase power supply

<sup>1</sup> Air handler must either be on medium or high speed

<sup>2</sup> Air handler must be on high speed

<sup>3</sup> For static pressure of 0.6 or higher, air handler must be on medium or high speed

### EXPANSION VALVE KITS FOR AIR CONDITIONING AND HEAT PUMP APPLICATIONS

| Kit Number | Description     | Application | Refrigerant | Tonnage:<br>Outdoor Unit |
|------------|-----------------|-------------|-------------|--------------------------|
| XVB18-36C  | 20% Bleed Valve | AC Only     | R-22        | 1½ - 3 Ton               |
| XVB42-60C  | 20% Bleed Valve | AC Only     | R-22        | 3½ - 5 Ton               |
| XV18-36C   | Non-bleed Valve | AC Only     | R-22        | 1½ - 3 Ton               |
| XV42-60C   | Non-bleed Valve | AC Only     | R-22        | 3½ - 5 Ton               |
| TX2N2      | Non-bleed Valve | AC or HP    | R-22        | 1½ - 2 Ton               |
| TX3N2      | Non-bleed Valve | AC or HP    | R-22        | 2½ - 3 Ton               |
| TX5N2      | Non-bleed Valve | AC or HP    | R-22        | 3½ - 5 Ton               |
| TX2N4      | Non-bleed Valve | AC or HP    | R-410A      | 1½ - 2 Ton               |
| TX3N4      | Non-bleed Valve | AC or HP    | R-410A      | 2½ - 3 Ton               |
| TX5N4      | Non-bleed Valve | AC or HP    | R-410A      | 3½ - 5 Ton               |

### DRAIN PAN INSULATION KITS DOWNFLOW APPLICATIONS

| Chassis Size  | Insulation Kit |
|---------------|----------------|
| Small (15½")  | DPI18-30/20    |
| Medium (19½") | DPI36-42/20    |
| Large (22")   | DPI48-60/20    |

### HORIZONTAL APPLICATIONS

| Chassis Size  | Insulation Kit |
|---------------|----------------|
| Small (15½")  | DPIH18-32      |
| Medium (19½") | DPIH36-42      |
| Large (22")   | DPIH48-61      |

**Note:** Each kit contains enough material to modify 20 coils

### FILTERS

|            | Filter #  | Qty<br>Required |
|------------|-----------|-----------------|
| 1729/ 1824 | FIL 18-32 | 1               |
| 1931       | FIL-36-42 | 1               |
| 3030/ 3636 | FIL-36-42 | 1               |
| 3642       | FIL 48-61 | 1               |
| 3743       | FIL 48-61 | 1               |
| 4860       | FIL 48-61 | 1               |