



Air Conditioning & Heating

ARPT SERIES

MULTI-POSITION

INTERNAL TXV, MULTI-SPEED PSC MOTOR

AIR HANDLER

1½ TO 5 TONS



Product Features

- Internal factory-installed thermal expansion valves for cooling and heat pump applications
- Direct drive, multi-speed PSC blower motor
- All-aluminum evaporator coil
- Coil mounting track for quick repositioning
- Optimized for use with R-410A refrigerant
- Cabinet air leakage less than 2.0% at 1.0 inch H₂O when tested in accordance with ASHRAE standard 193
- Cabinet air leakage less than 1.4% at 0.5 inch H₂O when tested in accordance with ASHRAE standard 193
- 3 kW – 25 kW electric heater kits
- Horizontal or vertical configuration capabilities
- Rigid SmartFrame™ cabinet
- 21" depth for easier attic access
- DecaBDE-free thermoplastic drain pan with secondary drain connections
- Screw-less sides and back helps to reduce condensation when installed in humid locations
- Foil-faced insulation covers the internal casing to reduce cabinet condensation
- Galvanized, leather grain-embossed finish
- Glue-less cabinet insulation retention
- Tool-less filter access
- AHRI certified; ETL listed

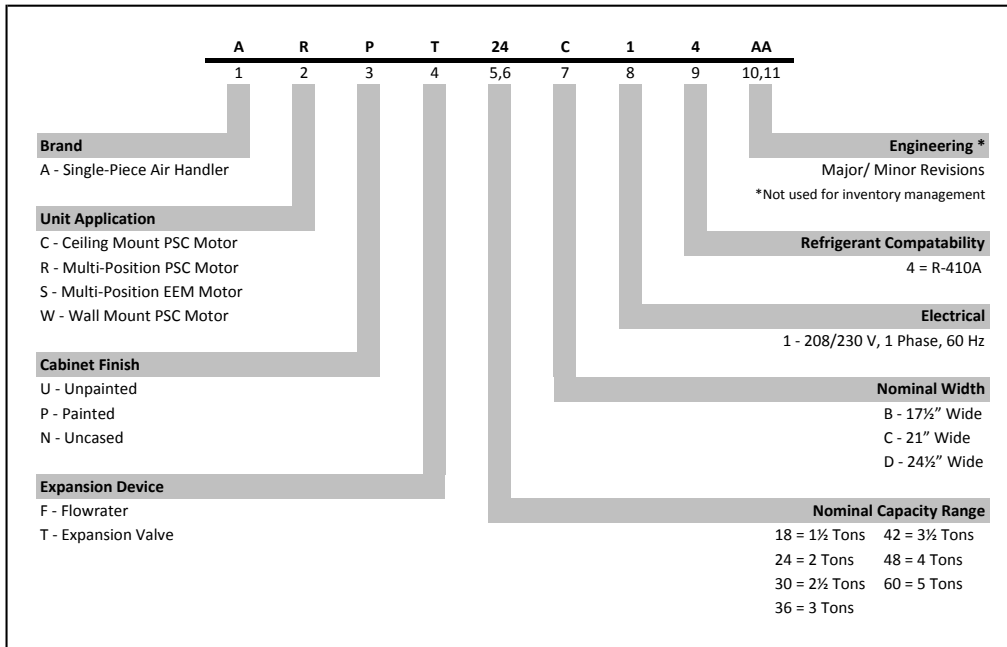
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* Complete warranty details available from your local dealer or at www.goodmanmfg.com. To receive the 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Quebec.

NOMENCLATURE



ACCESSORIES

DOWNFLOW INSULATION KIT

| DPI-B | DPI-C | DPI-D |
|-------------|-------------|-------------|
| ARPT18B14** | ARPT36C14** | ARPT36D14** |
| ARPT24B14** | | ARPT42D14** |
| ARPT30B14** | | ARPT48D14** |
| | | ARPT60D14** |

FILTERS

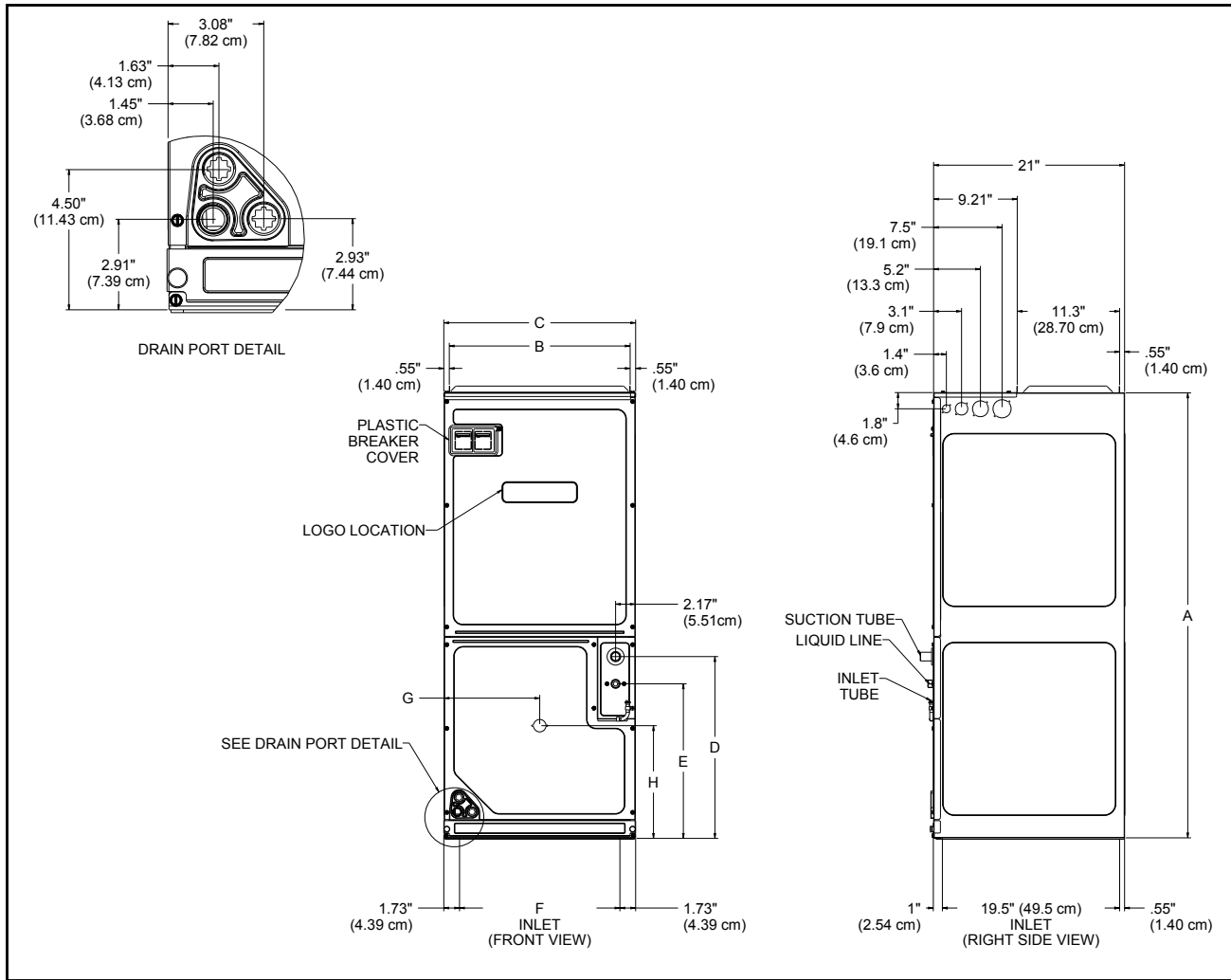
| CHASSIS | PART # | SIZE |
|---------|--------------|---------------|
| B | ALFH16201E | 16.0" x 20.0" |
| C | ALFH1912201E | 19.5" x 20.0" |
| D | ALFH20231E | 23.0" x 20.0" |



SPECIFICATIONS

| | ARPT 18B14* | ARPT 24B14* | ARPT 30B14* | ARPT 36C14* | ARPT 36D14* | ARPT 42D14* | ARPT 48D14* | ARPT 60D14* |
|---|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------------------|------------------------------------|
| NOMINAL RATINGS | | | | | | | | |
| Cooling (Btu/h) | 18,000 | 24,000 | 30,000 | 36,000 | 36,000 | 42,000 | 48,000 | 60000 |
| BLOWER | | | | | | | | |
| Diameter | 9½" | 9½" | 9½" | 10⅝" | 10⅝" | 10⅝" | 11 ¹⁵ / ₁₆ " | 11 ¹⁵ / ₁₆ " |
| Width | 6" | 6" | 6" | 8" | 10⅝" | 10⅝" | 10⅝" | 10⅝" |
| Coil Drain Connect FPT | ¾" | ¾" | ¾" | ¾" | ¾" | ¾" | ¾" | ¾" |
| REFRIGERANT LINE CONNECTION SIZE | | | | | | | | |
| Liquid | ⅜" | ⅜" | ⅜" | ⅜" | ⅜" | ⅜" | ⅜" | ⅜" |
| Suction | ¾" | ¾" | ¾" | 7/8" | 7/8" | 7/8" | 7/8" | 7/8" |
| ELECTRICAL DATA | | | | | | | | |
| Voltage | 208/230 | 208/230 | 208/230 | 208/230 | 208/230 | 208/230 | 208/230 | 208/230 |
| Min Circuit Ampacity | 3/3 | 3/3 | 3/3 | 4/4 | 4/4 | 5/5 | 5/5 | 6/6 |
| 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 | 1.9/ ¼ | 1.9/ ⅓ | 1.9/ ⅓ | 3.1/ ¼ | 3.0/ ½ | 3.5/ ½ | 3.5/ ½ | 4.6/ ¼ |
| SHIP WEIGHT (LBS) | | | | | | | | |
| | 99 | 99 | 110 | 130 | 130 | 147 | 157 | 159 |

DIMENSIONS



| MODEL | A" | B" | C" | D" | E" | F" | G" | H" |
|------------|----|----------------------------------|--------------------------------|---------------------------------|---------------------------------|----------------------------------|---------------------------------|----------------------------------|
| ARPT18B14* | 45 | 16 ³ / ₈ | 17 ¹ / ₂ | 18 | 15 | 14 ³ / ₁₆ | 8 ¹³ / ₁₆ | 11 ¹⁵ / ₁₆ |
| ARPT24B14* | 45 | 16 ³ / ₈ | 17 ¹ / ₂ | 18 | 15 | 14 ³ / ₁₆ | 8 ¹³ / ₁₆ | 11 ¹⁵ / ₁₆ |
| ARPT30B14* | 45 | 16 ³ / ₈ | 17 ¹ / ₂ | 18 | 15 | 14 ³ / ₁₆ | 8 ¹³ / ₁₆ | 11 ¹⁵ / ₁₆ |
| ARPT36C14* | 49 | 19 ¹⁵ / ₁₆ | 21 | 20 | 17 | 17 ¹¹ / ₁₆ | 10 ¹ / ₂ | 12 ³ / ₈ |
| ARPT36D14* | 58 | 23 ⁵ / ₁₆ | 24 ¹ / ₂ | 28 ³ / ₁₆ | 25 ³ / ₁₆ | 21 ³ / ₁₆ | 12 ⁵ / ₁₆ | 12 ³ / ₈ |
| ARPT42D14* | 58 | 23 ⁵ / ₁₆ | 24 ¹ / ₂ | 28 ³ / ₁₆ | 25 ³ / ₁₆ | 21 ³ / ₁₆ | 12 ⁵ / ₁₆ | 12 ³ / ₈ |
| ARPT48D14* | 58 | 23 ⁵ / ₁₆ | 24 ¹ / ₂ | 28 ³ / ₁₆ | 25 ³ / ₁₆ | 21 ³ / ₁₆ | 12 ⁵ / ₁₆ | 12 ³ / ₈ |
| ARPT60D14* | 58 | 23 ⁵ / ₁₆ | 24 ¹ / ₂ | 28 ³ / ₁₆ | 25 ³ / ₁₆ | 21 ³ / ₁₆ | 12 ⁵ / ₁₆ | 12 ³ / ₈ |

AIRFLOW DATA

| MODEL | BLOWER SPEED | STATIC PRESSURE (IN W.C) AIRFLOW (CFM) | | | | | | |
|-----------|--------------|--|-------|-------|-------|-------|-------|-------|
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 |
| ARPT18B14 | High | 1,185 | 1,125 | 1,065 | 1,010 | 985 | 910 | 780 |
| | Medium | 900 | 850 | 825 | 785 | 715 | 670 | 610 |
| | Low | 630 | 605 | 560 | 525 | 495 | 445 | 355 |
| ARPT24B14 | High | 1,185 | 1,125 | 1,065 | 1,010 | 985 | 910 | 780 |
| | Medium | 900 | 850 | 825 | 785 | 715 | 670 | 610 |
| | Low | 630 | 605 | 560 | 525 | 495 | 445 | 355 |
| ARPT30B14 | High | 1,145 | 1,085 | 1,020 | 950 | 900 | 845 | 765 |
| | Medium | 870 | 820 | 775 | 745 | 705 | 655 | 580 |
| | Low | 615 | 585 | 565 | 535 | 490 | 435 | 345 |
| ARPT36C14 | High | 1,580 | 1,515 | 1,445 | 1,395 | 1,345 | 1,240 | 1,155 |
| | Medium | 1,385 | 1,350 | 1,300 | 1,250 | 1,170 | 1,095 | 1,005 |
| | Low | 1,260 | 1,205 | 1,175 | 1,105 | 1,040 | 975 | 865 |
| ARPT36D14 | High | 1,815 | 1,770 | 1,705 | 1,640 | 1,555 | 1,450 | 1,355 |
| | Medium | 1,580 | 1,525 | 1,485 | 1,420 | 1,350 | 1,275 | 1,165 |
| | Low | 1,220 | 1,180 | 1,140 | 1,085 | 1,030 | 950 | 865 |
| ARPT42D14 | High | 1,990 | 1,915 | 1,810 | 1,765 | 1,690 | 1,585 | 1,435 |
| | Medium | 1,655 | 1,605 | 1,555 | 1,480 | 1,295 | 1,200 | 1,060 |
| | Low | 1,480 | 1,420 | 1,350 | 1,290 | 1,185 | 1,100 | 1,045 |
| ARPT48D14 | High | 1,960 | 1,905 | 1,845 | 1,780 | 1,715 | 1,645 | 1,570 |
| | Medium | 1,600 | 1,545 | 1,495 | 1,435 | 1,360 | 1,290 | 1,215 |
| | Low | 1,395 | 1,340 | 1,280 | 1,220 | 1,150 | 1,090 | 1,020 |
| ARPT60D14 | High | 2,205 | 2,140 | 2,080 | 2,010 | 1,945 | 1,870 | 1,795 |
| | Medium | 1,985 | 1,935 | 1,865 | 1,815 | 1,755 | 1,695 | 1,635 |
| | Low | 1,600 | 1,555 | 1,505 | 1,455 | 1,405 | 1,345 | 1,295 |

NOTES

1. Airflow data indicated is at 230V without air filter in place.
2. The chart is for information only. For satisfactory operation, external static pressure must not exceed value shown on rating plate. The shaded area indicates ranges in excess of maximum recommended design external static pressure.
3. Use the CFM adjustment factors of 0.98 for horizontal left and 0.96 for horizontal right & downflow orientations

HEAT KIT DATA

| Models | Circuit 1 | | | Circuit 2 | | | Single-Point Kit | |
|--------------------|-----------|------------------|------------------|-----------|------------------|------------------|------------------|------------------|
| | Amps | MCA ¹ | MOP ² | Amps | MCA ¹ | MOP ² | MCA ¹ | MOP ² |
| ARPT18B14AC | 0/0 | 2.4/2.4 | 15/15 | --- | --- | --- | --- | --- |
| HKS*03XC* | 10.8/12.5 | 16/18 | 20/20 | --- | --- | --- | --- | --- |
| HKS*05XC* | 17.3/20 | 24/27 | 25/30 | --- | --- | --- | --- | --- |
| HKS*06XC* | 21.7/25 | 29/34 | 30/35 | --- | --- | --- | --- | --- |
| HKS*08XC* | 28.9/33.3 | 38/44 | 40/45 | --- | --- | --- | --- | --- |
| HKS*10XC* | 34.7/40 | 46/52 | 50/60 | --- | --- | --- | --- | --- |
| ARPT24B14AC | 0/0 | 2.4/2.4 | 15/15 | --- | --- | --- | --- | --- |
| HKS*03XC* | 10.8/12.5 | 16/18 | 20/20 | --- | --- | --- | --- | --- |
| HKS*05XC* | 17.3/20 | 24/27 | 25/30 | --- | --- | --- | --- | --- |
| HKS*06XC* | 21.7/25 | 30/34 | 30/35 | --- | --- | --- | --- | --- |
| HKS*08XC* | 28.9/33.3 | 39/44 | 40/45 | --- | --- | --- | --- | --- |
| HKS*10XC* | 34.7/40 | 46/52 | 50/60 | --- | --- | --- | --- | --- |
| HKSC15*## | 34.7/40 | 46/52 | 50/60 | 17.3/20 | 22/25 | 25/25 | 67/77 | 70/80 |
| ARPT30B14AC | 0/0 | 2.4/2.4 | 15/15 | --- | --- | --- | --- | --- |
| HKS*03XC* | 10.8/12.5 | 16/18 | 20/20 | --- | --- | --- | --- | --- |
| HKS*05XC* | 17.3/20 | 24/27 | 25/30 | --- | --- | --- | --- | --- |
| HKS*06XC* | 21.7/25 | 30/34 | 30/35 | --- | --- | --- | --- | --- |
| HKS*08XC* | 28.9/33.3 | 39/44 | 40/45 | --- | --- | --- | --- | --- |
| HKS*10XC* | 34.7/40 | 46/52 | 50/60 | --- | --- | --- | --- | --- |
| HKSC15*## | 34.7/40 | 46/52 | 50/60 | 17.3/20 | 22/25 | 25/25 | 67/77 | 70/80 |
| ARPT36C14AC | 0/0 | 4/4 | 15/15 | --- | --- | --- | --- | --- |
| HKS*03XC* | 10.8/12.5 | 17/20 | 20/20 | --- | --- | --- | --- | --- |
| HKS*05XC* | 17.3/20 | 26/29 | 30/30 | --- | --- | --- | --- | --- |
| HKS*06XC* | 21.7/25 | 32/36 | 35/40 | --- | --- | --- | --- | --- |
| HKS*08XC* | 28.9/33.3 | 40/46 | 45/50 | --- | --- | --- | --- | --- |
| HKS*10XC* | 34.7/40 | 47/54 | 50/60 | --- | --- | --- | --- | --- |
| HKSC15*## | 34.7/40 | 47/54 | 50/60 | 17.3/20 | 22/25 | 25/25 | 69/79 | 70/80 |
| HKSC19C## | 34.7/40 | 47/54 | 50/60 | 34.7/40 | 43/50 | 45/50 | 91/104 | 100/110 |
| HKSC15XF* | 0/0 | 4/4 | 15/15 | 30/34.6 | 38/43 | 40/45 | --- | --- |
| HKSC20XF* | 0/0 | 4/4 | 15/15 | 38/43 | 47/54 | 50/60 | --- | --- |

HEAT KIT DATA (CONT.)

| Models | Circuit 1 | | | Circuit 2 | | | Single-Point Kit | |
|--------------------|-----------|------------------|------------------|-----------|------------------|------------------|------------------|------------------|
| | Amps | MCA ¹ | MOP ² | Amps | MCA ¹ | MOP ² | MCA ¹ | MOP ² |
| ARPT36D14AC | 0/0 | 4/4 | 15/15 | --- | --- | --- | --- | --- |
| HKS*03XC* | 10.8/12.5 | 17/19 | 20/20 | --- | --- | --- | --- | --- |
| HKS*05XC* | 17.3/20 | 25/29 | 30/30 | --- | --- | --- | --- | --- |
| HKS*06XC* | 21.7/25 | 31/35 | 35/35 | --- | --- | --- | --- | --- |
| HKS*08XC* | 28.9/33.3 | 40/45 | 40/50 | --- | --- | --- | --- | --- |
| HKS*10XC* | 34.7/40 | 47/54 | 50/60 | --- | --- | --- | --- | --- |
| HKSC15*## | 34.7/40 | 47/54 | 50/60 | 17.3/20 | 22/25 | 25/25 | 69/79 | 70/80 |
| HKSC20D## | 34.7/40 | 47/54 | 50/60 | 34.7/40 | 44/50 | 45/50 | 90/104 | 100/110 |
| HKSC15XF* | 0/0 | 4/4 | 15/15 | 30/34.6 | 38/43 | 40/45 | --- | --- |
| HKSC20XF* | 0/0 | 4/4 | 15/15 | 38/43 | 47/54 | 50/60 | --- | --- |
| ARPT42D14AC | 0/0 | 4/4 | 15/15 | --- | --- | --- | --- | --- |
| HKS*03XC* | 10.8/12.5 | 18/20 | 20/20 | --- | --- | --- | --- | --- |
| HKS*05XC* | 17.3/20 | 26/29 | 30/30 | --- | --- | --- | --- | --- |
| HKS*06XC* | 21.7/25 | 31/36 | 35/40 | --- | --- | --- | --- | --- |
| HKS*08XC* | 28.9/33.3 | 40/46 | 45/50 | --- | --- | --- | --- | --- |
| HKS*10XC* | 34.7/40 | 48/54 | 50/60 | --- | --- | --- | --- | --- |
| HKSC15*## | 34.7/40 | 48/54 | 50/60 | 17.3/20 | 22/25 | 25/30 | 69/79 | 70/80 |
| HKSC20D## | 34.7/40 | 48/54 | 50/60 | 34.7/40 | 44/50 | 45/60 | 91/104 | 100/110 |
| HKSC15XF* | 0/0 | 4/4 | 15/15 | 30/34.6 | 38/43 | 40/45 | --- | --- |
| HKSC20XF* | 0/0 | 4/4 | 15/15 | 38/43 | 47/54 | 50/60 | --- | --- |
| ARPT48D14AC | 0/0 | 4/4 | 15/15 | --- | --- | --- | --- | --- |
| HKS*03XC* | 10.8/12.5 | 18/20 | 20/20 | --- | --- | --- | --- | --- |
| HKS*05XC* | 17.3/20 | 26/29 | 30/30 | --- | --- | --- | --- | --- |
| HKS*06XC* | 21.7/25 | 31/36 | 35/40 | --- | --- | --- | --- | --- |
| HKS*08XC* | 28.9/33.3 | 40/46 | 45/50 | --- | --- | --- | --- | --- |
| HKS*10XC* | 34.7/40 | 48/54 | 50/60 | --- | --- | --- | --- | --- |
| HKSC15*## | 34.7/40 | 48/54 | 50/60 | 17.3/20 | 22/25 | 25/25 | 69/79 | 70/80 |
| HKSC20D## | 34.7/40 | 48/54 | 50/60 | 34.7/40 | 43/50 | 45/50 | 91/104 | 100/110 |
| HKSC15XF* | 0/0 | 4/4 | 15/15 | 30/34.6 | 38/43 | 40/45 | --- | --- |
| HKSC20XF* | 0/0 | 4/4 | 15/15 | 38/43 | 47/54 | 50/60 | --- | --- |
| ARPT60D14AC | 0/0 | 6/6 | 15/15 | --- | --- | --- | --- | --- |
| HKS*03XC* | 10.8/12.5 | 19/21 | 20/25 | --- | --- | --- | --- | --- |
| HKS*05XC* | 17.3/20 | 27/31 | 30/35 | --- | --- | --- | --- | --- |
| HKS*06XC* | 21.7/25 | 33/37 | 35/40 | --- | --- | --- | --- | --- |
| HKS*08XC* | 28.9/33.3 | 42/47 | 45/50 | --- | --- | --- | --- | --- |
| HKS*10XC* | 34.7/40 | 49/56 | 50/60 | --- | --- | --- | --- | --- |
| HKSC15*## | 34.7/40 | 49/56 | 50/60 | 17.3/20 | 22/25 | 25/25 | 71/81 | 80/90 |
| HKSC20D## | 34.7/40 | 49/56 | 50/60 | 34.7/40 | 43/50 | 45/50 | 92/106 | 100/110 |
| HKSC15XF* | 0/0 | 6/6 | 15/15 | 30/34.6 | 38/43 | 40/45 | --- | --- |
| HKSC20XF* | 0/0 | 6/6 | 15/15 | 38/43 | 47/54 | 50/60 | --- | --- |
| HKSC25DC* | 52/60 | 71/81 | 80/90 | 35/40 | 43/50 | 45/50 | 114/131 | 125/150 |

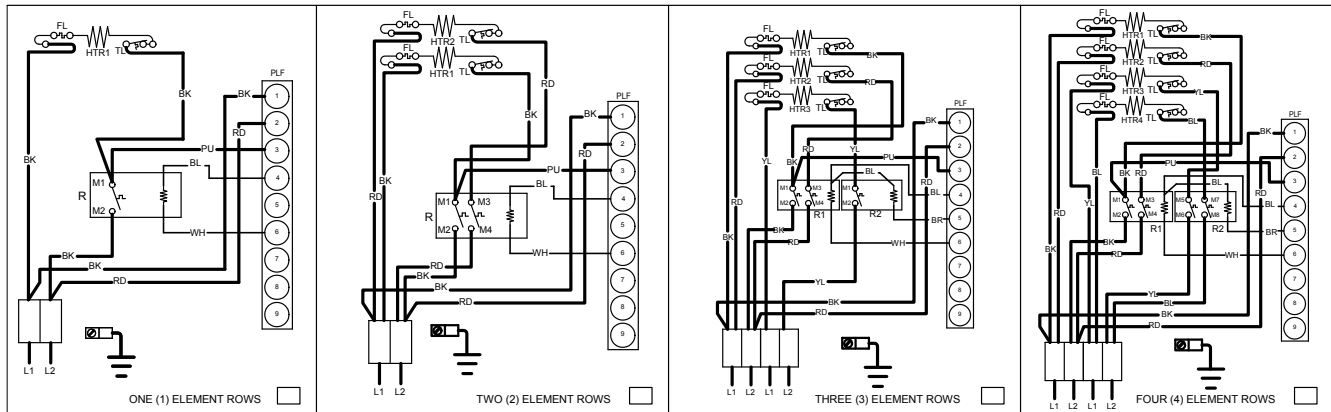
¹ Minimum Circuit Ampacity (Heater Amps + Motor Amps) X 1.25

² Maximum Overcurrent Protection = 2.25 X Motor Amps + Heater Amps

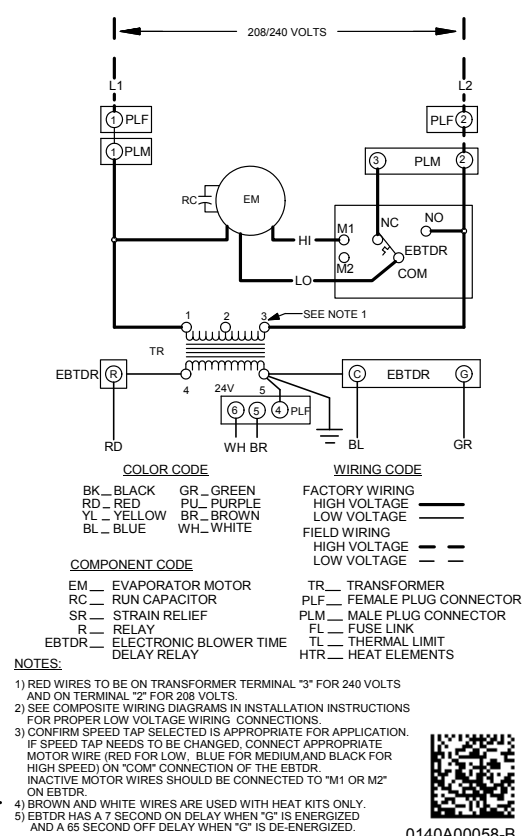
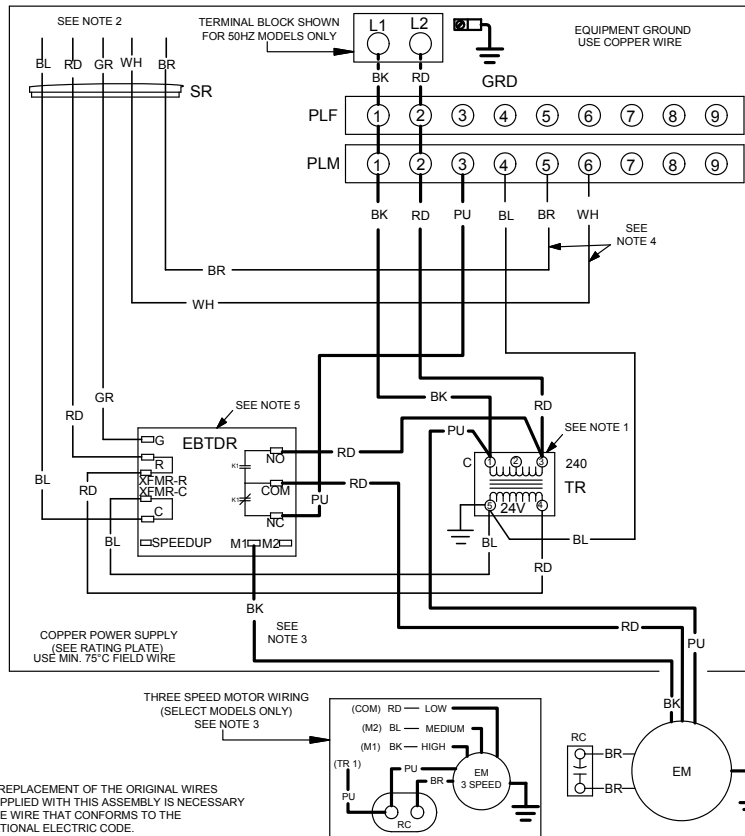
* Revision level that may or may not be designated

--- indicates Not Required

WIRING DIAGRAM



NOTE: WHEN INSTALLING HEATER KIT, ENSURE SPEED TAP IS NOT BELOW MINIMUM BLOWER SPEED (MBS) SPECIFIED FOR THE AIR HANDLER/HEATER KIT COMBINATION ON THIS UNIT'S SERIAL PLATE. AFTER INSTALLING OPTIONAL HEAT KIT, MARK AN "X" IN THE PROVIDED ABOVE. MARK ACCORDING TO THE NUMBER OF HEATER ELEMENT ROWS INSTALLED. NO MARK INDICATES NO HEAT KIT INSTALLED. 5 ELEMENT ROWS DATA SUPPLIED WITH HEATER KIT.



NOTE: The five element, 25 kW heater kit is not shown above.

Wiring is subject to change. Always refer to the wiring diagram or the unit for the most up-to-date wiring.

WARNING

High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.