



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

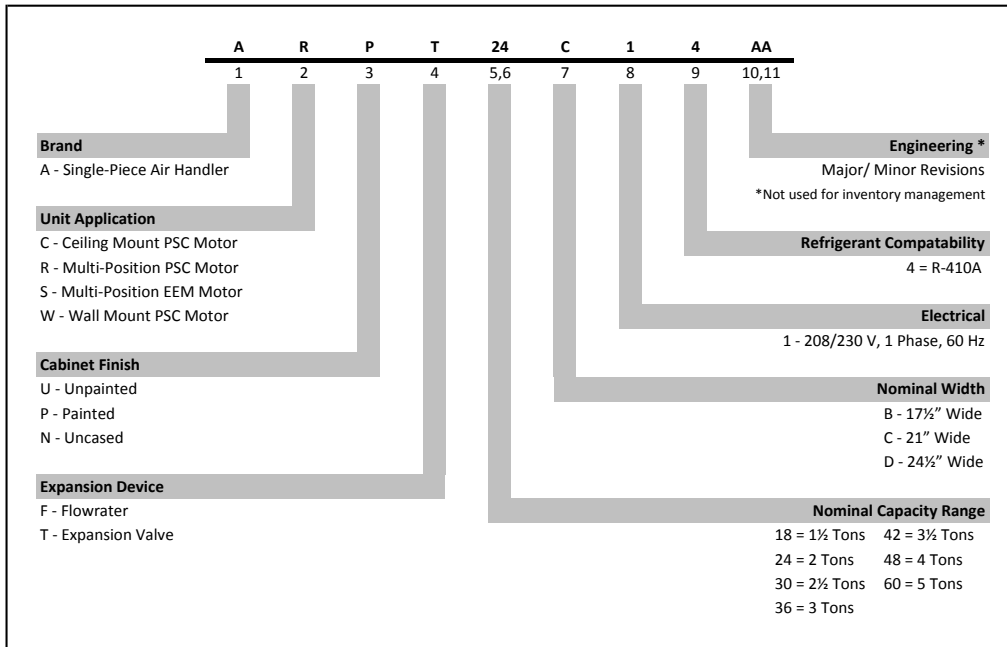
Contents

Nomenclature	2
Accessories	2
Product Specifications	3
Dimensions	4
Airflow Data	5
Heat Kit Data	6
Wiring Diagram	8



* 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

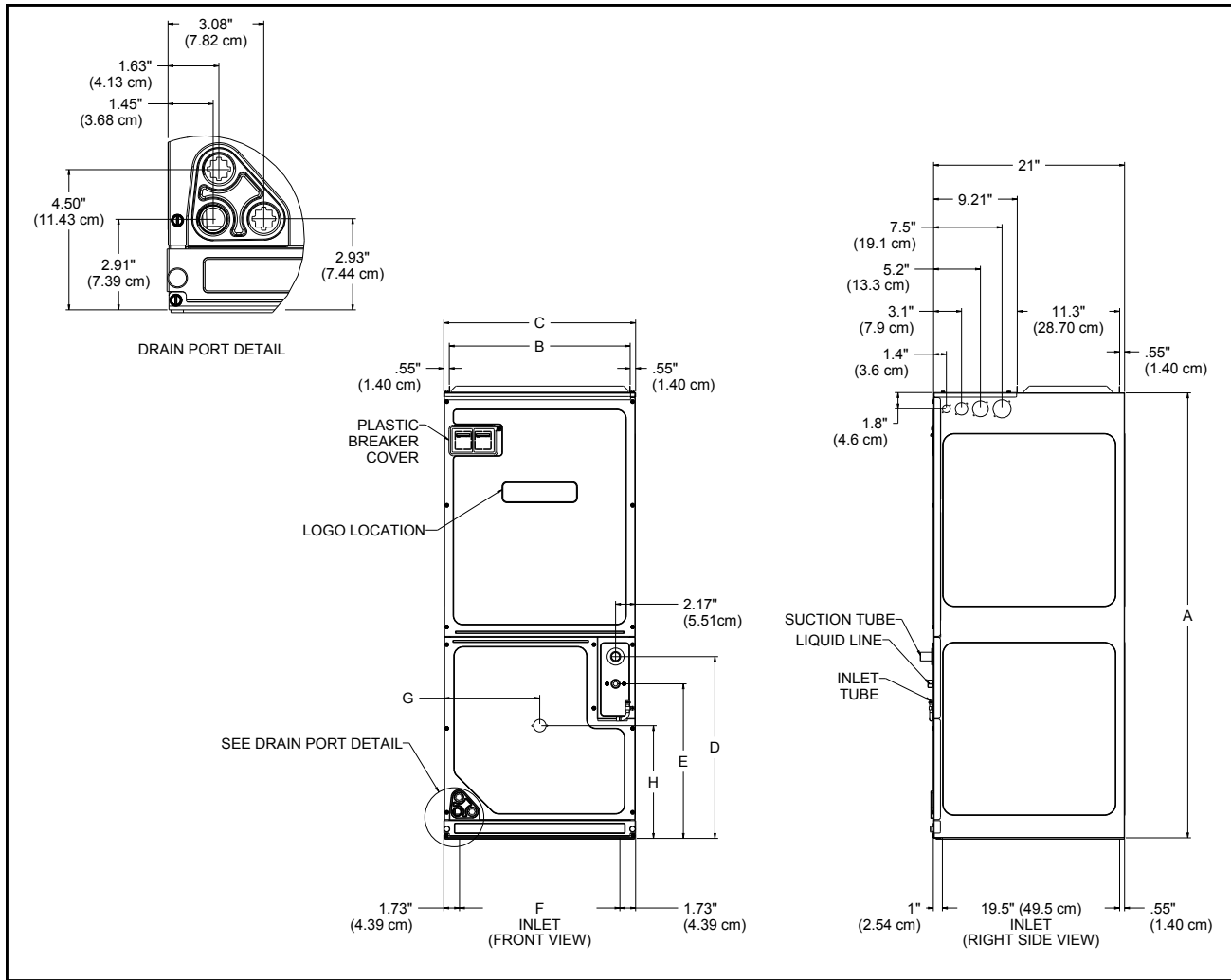
CHASSIS	PART #	SIZE
B	ALFH16201E	16.0" x 20.0"
C	ALFH1912201E	19.5" x 20.0"
D	ALFH20231E	23.0" x 20.0"



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

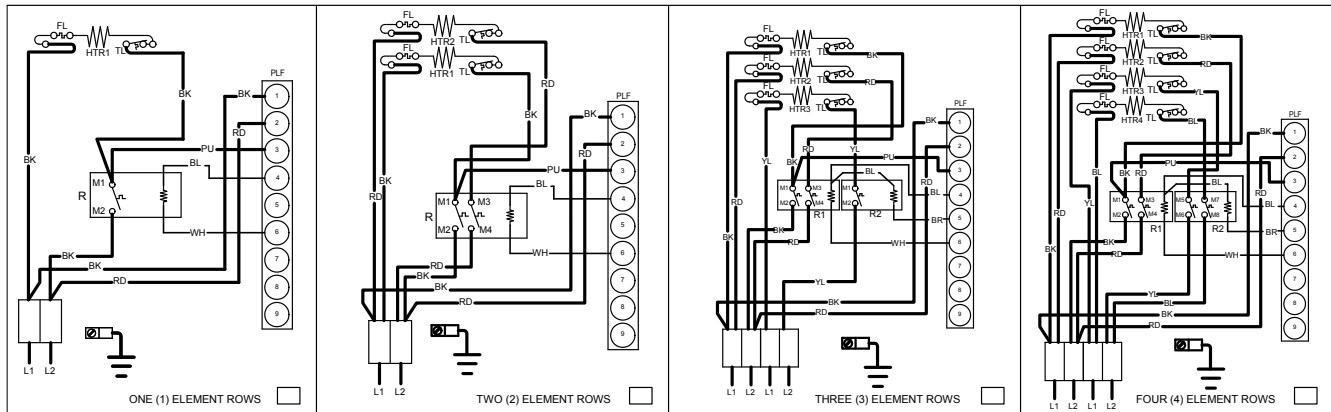
¹ Minimum Circuit Ampacity (Heater Amps + Motor Amps) X 1.25

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

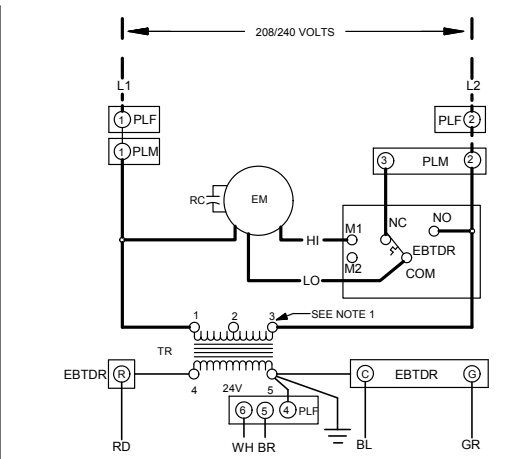
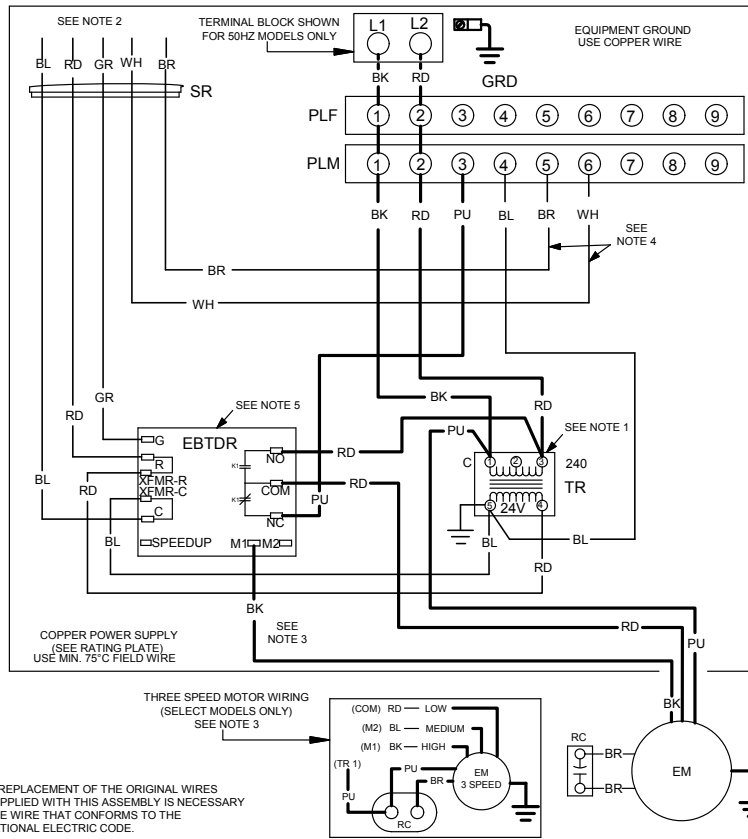
* Revision level that may or may not be designated

--- 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.



- COLOR CODE**
- BK _ BLACK
 - RD _ RED
 - YL _ YELLOW
 - BL _ BLUE
 - GR _ GREEN
 - PU _ PURPLE
 - BR _ BROWN
 - WH _ WHITE
- WIRING CODE**
- FACTORY WIRING
 - HIGH VOLTAGE
 - LOW VOLTAGE
 - FIELD WIRING
 - HIGH VOLTAGE
 - LOW VOLTAGE
- COMPONENT CODE**
- EM _ EVAPORATOR MOTOR
 - RC _ RUN CAPACITOR
 - SR _ STRAIN RELIEF
 - R _ RELAY
 - EBTDR _ ELECTRONIC BLOWER TIME DELAY RELAY
 - TR _ TRANSFORMER
 - PLF _ FEMALE PLUG CONNECTOR
 - PLM _ MALE PLUG CONNECTOR
 - SR _ STRAIN RELIEF
 - FL _ FUSE LINK
 - TL _ THERMAL LIMIT
 - HTR _ HEAT ELEMENTS

- NOTES:**
- RED WIRES TO BE ON TRANSFORMER TERMINAL "3" FOR 240 VOLTS AND ON TERMINAL "2" FOR 208 VOLTS.
 - SEE COMPOSITE WIRING DIAGRAMS IN INSTALLATION INSTRUCTIONS FOR PROPER LOW VOLTAGE WIRING CONNECTIONS.
 - CONFIRM SPEED TAP SELECTED IS APPROPRIATE FOR APPLICATION. IF SPEED TAP NEEDS TO BE CHANGED, CONNECT APPROPRIATE MOTOR WIRE (RED FOR LOW, BLUE FOR MEDIUM AND BLACK FOR HIGH SPEED) ON "COM" CONNECTION OF THE EBTDR. INACTIVE MOTOR WIRES SHOULD BE CONNECTED TO "M1 OR M2" ON EBTDR.
 - BROWN AND WHITE WIRES ARE USED WITH HEAT KITS ONLY.
 - EBTDR HAS A 7 SECOND ON DELAY WHEN "G" IS ENERGIZED AND A 65 SECOND OFF DELAY WHEN "G" IS DE-ENERGIZED.



0140A00058-B

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.

