Goodman
Air Conditioning & Heating

ARPT Series

Multi-Position
Internal TXV, Multi-Speed PSC Motor
Air Handler
2 to 5 Tons

Product Features

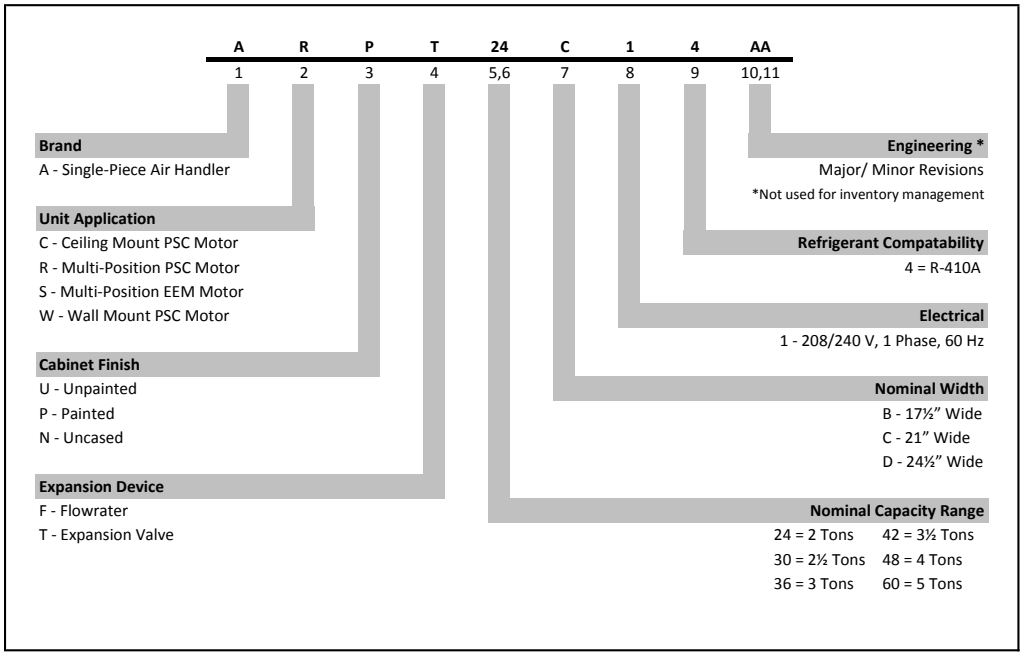
- Internal factory-installed thermal expansion valves for cooling and heat pump applications
- Direct drive, multi-speed PSC blower motor
- All-aluminum evaporator coil
- Coil mounting track for quick repositioning
- Optimized for use with R-410A refrigerant
- Cabinet air leakage less than 2.0% at 1.0 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

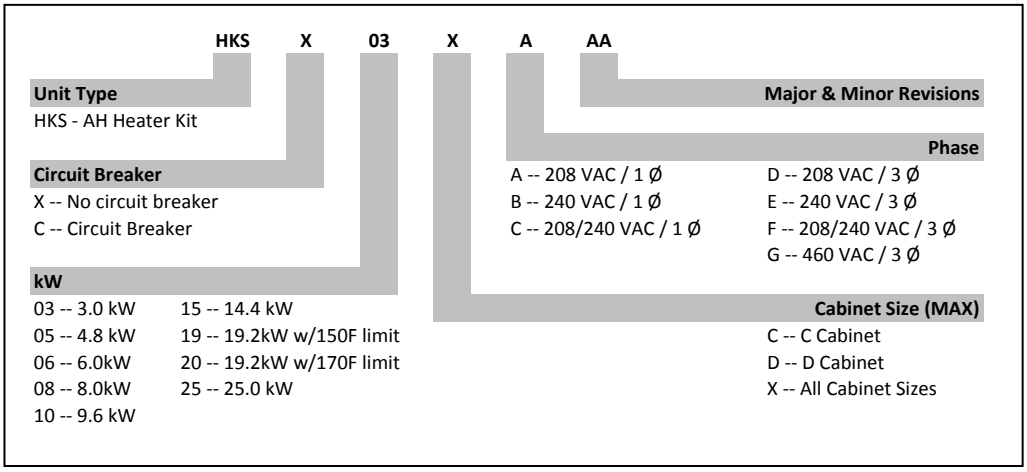
Contents

10 YEAR PARTS LIMITED WARRANTY* R-410A REFRIGERANT ALL ALUMINUM COIL ETL AHRI CERTIFIED BBB ACCREDITED BUSINESS BETTER VALUE ISO 9001 ISO 14001 CERTIFIED

* 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





HEATING kW CORRECTION FACTOR

SUPPLY VOLTAGE	240	230	220	210	208
CORRECTION FACTOR	1.00	0.92	0.84	0.77	0.75

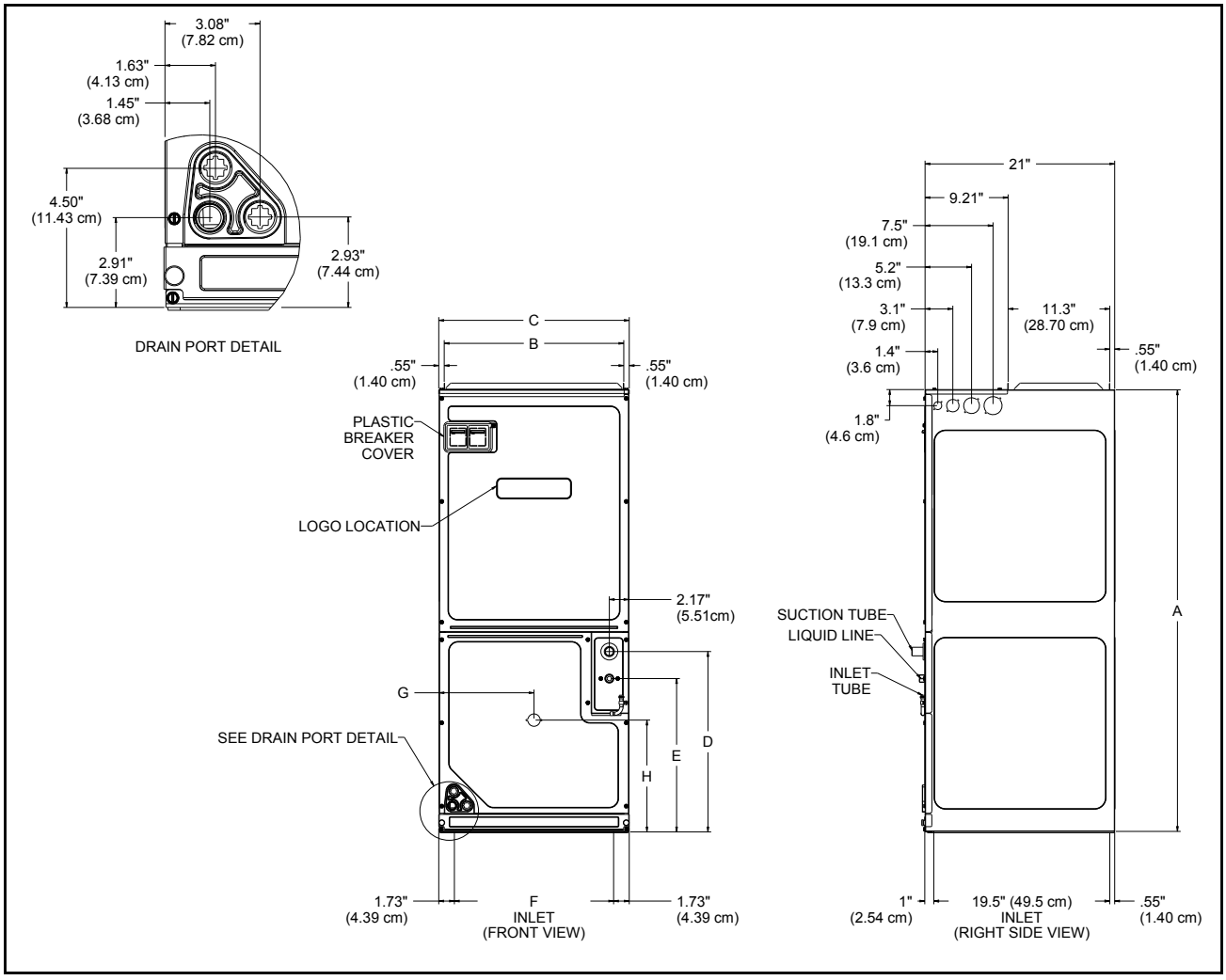
Multiply the 240-volt heating capacity by correction factors.

Specifications

	ARPT 24B14*	ARPT 30B14*	ARPT 36C14*	ARPT 36D14*	ARPT 42D14*	ARPT 48D14*	ARPT 60D14*
Nominal Ratings							
Cooling (Btu/h)	24,000	30,000	36,000	36,000	42,000	48,000	60000
Blower							
Diameter	9½"	9½"	10⅝"	10⅝"	10⅝"	12"	12"
Width	6"	6"	8"	10⅝"	10⅝"	10⅝"	10⅝"
Coil Connections							
Liquid	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"
Suction	¾"	¾"	⅞"	⅞"	⅞"	⅞"	⅞"
Coil Drain Connect (FPT)	¾"	¾"	¾"	¾"	¾"	¾"	¾"
Electrical Data							
Voltage	208/230	208/230	208/230	208/230	208/230	208/230	208/230
Min Circuit Ampacity	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
Minimum VAC	197	197	197	197	197	197	197
Maximum VAC	253	253	253	253	253	253	253
Blower Motor							
Full Load Amps (FLA)	1.9	1.9	3.1	3.0	3.5	3.5	4.6
Horsepower (HP)	⅓	⅓	⅓	½	½	½	¾
Ship Weight (Lbs.)	99	110	130	130	147	157	159

Note: Minimum Circuit Ampacity (MCA) and Maximum Overcurrent Protection (MOP) for blower without supplemental heat installed. Refer to unit nameplate and/or Heat Kit Data for specification with approved accessory heaters installed

DIMENSIONS



MODEL	A"	B"	C"	D"	E"	F"	G"	H"
ARPT24B14*	45	16⅜	17½	18	15	14¼	8⅞	12
ARPT30B14*	45	16⅜	17½	18	15	14¼	8⅞	12
ARPT36C14*	49	20	21	20	17	17¾	10½	12⅜
ARPT36D14*	58	23⅜	24½	28¼	25¼	21¼	12⅜	12⅜
ARPT42D14*	58	23⅜	24½	28¼	25¼	21¼	12⅜	12⅜
ARPT48D14*	58	23⅜	24½	28¼	25¼	21¼	12⅜	12⅜
ARPT60D14*	58	23⅜	24½	28¼	25¼	21¼	12⅜	12⅜

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
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

- The chart is for information only. For satisfactory operation, external static pressure must not exceed value shown on rating plate.
- Use the CFM adjustment factors of .98 for horizontal left, .95 for horizontal right & .96 for downflow orientations.
- Airflow data indicated is at 230V without air filter in place.
- Shaded area indicates ranges in excess of maximum recommended design external static pressure.

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]
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	29/34	30/35	---	---	---	---	---
HKS*08XC*	28.9/33.3	38/44	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	29/34	30/35	---	---	---	---	---
HKS*08XC*	28.9/33.3	38/44	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	31/35.1	35/40	---	---	---	---	---
HKS*08XC*	28.9/33.3	40/46	45/50	---	---	---	---	---
HKS*10XC*	34.7/40	47/54	50/60	---	---	---	---	---
HKSX15XF*	0/0	4/4	15/15	30.0/34.6	38/43	40/45	---	---
HKSX20XF*	0/0	4/4	15/15	38/43	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	---	---
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	40/45.4	40/50	---	---	---	---	---
HKS*10XC*	34.7/40	47/54	50/60	---	---	---	---	---
HKSX15XF*	0/0	4/4	15/15	30/34.6	38/43	40/45	---	---
HKSX20XF*	0/0	4/4	15/15	38/43	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	43/50	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	---	---

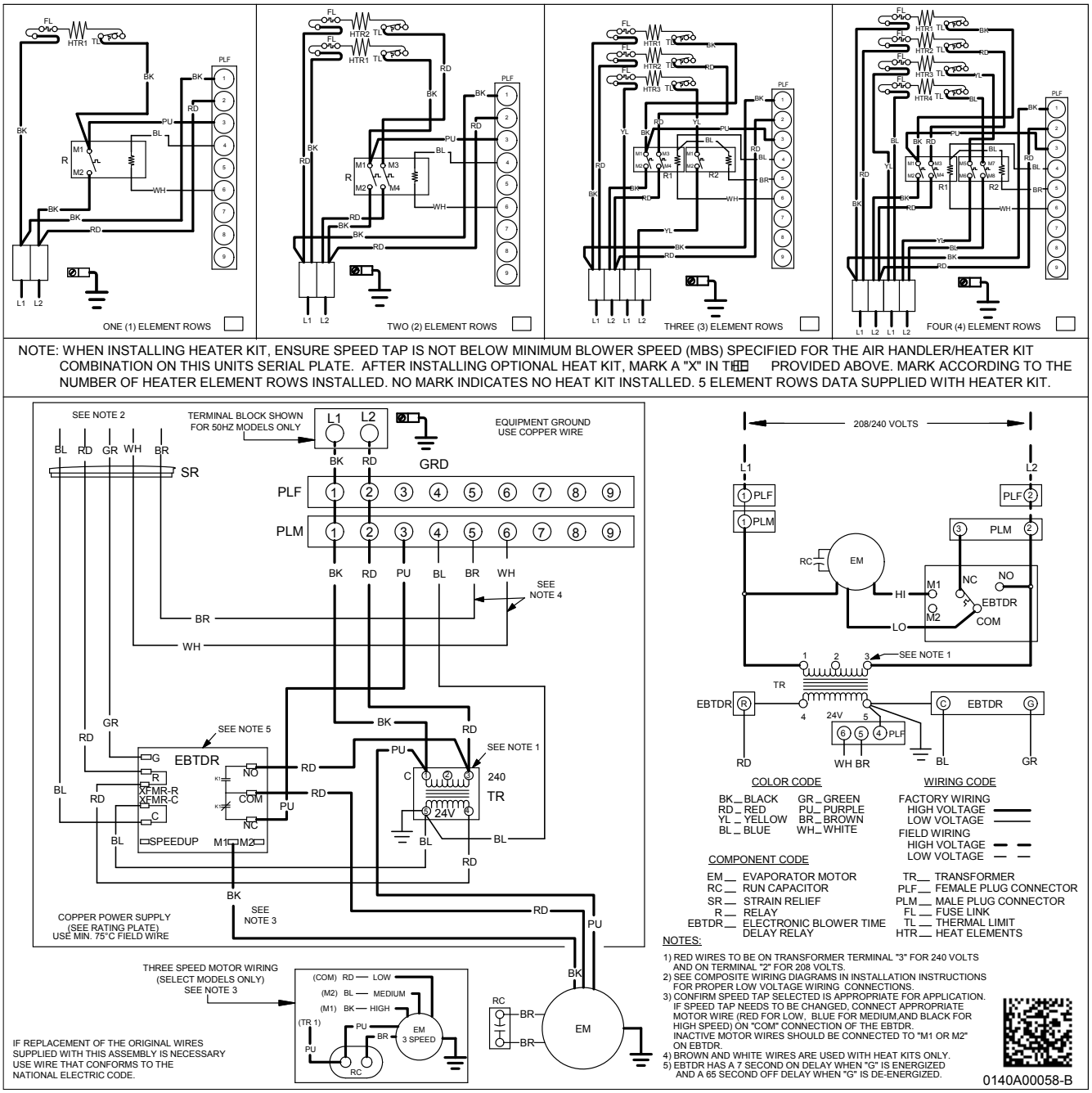
Heat Kit Data (cont.)

Models	Circuit 1			Circuit 2			Single-Point Kit	
	Amps	MCA[1]	MOP[2]	Amps	MCA[1]	MOP[2]	MCA[1]	MOP[2]
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	40.5/46	45/50	---	---	---	---	---
HKS*10XC*	34.7/40	48/54	50/60	---	---	---	---	---
HKSX15XF*	0/0	4/4	15/15	30/34.6	38/43	40/45	---	---
HKSX20XF*	0/0	4/4	15/15	38/43	47/54	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	43/50	45/50	91/104	100/110
HKSC15XF*	0/0	4/4	15/15	30/34.6	38/43	40/50	---	---
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	40.5/46	45/50	---	---	---	---	---
HKS*10XC*	34.7/40	48/54	50/60	---	---	---	---	---
HKSX15XF*	0/0	4/4	15/15	30/34.6	38/43	40/45	---	---
HKSX20XF*	0/0	4/4	15/15	38/43	47/54	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	---	---	---	---	---
HKSX15XF*	0/0	6/6	15/15	30/34.6	38/43	40/45	---	---
HKSX20XF*	0/0	6/6	15/15	38/43	47/54	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

All ampacities noted above include air handler motor amps
Circuit 1: Single-phase for Air Handlers / Circuit 2: Three-phase for HKR3 Heater Kits
[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
C = Circuit Breaker Option
--- indicates Not Required
HKA meets the new UL1995 requirements for 15 and 20KW heaters
- Only applicable when HKA kits are included in table
- MBVC and MBR models

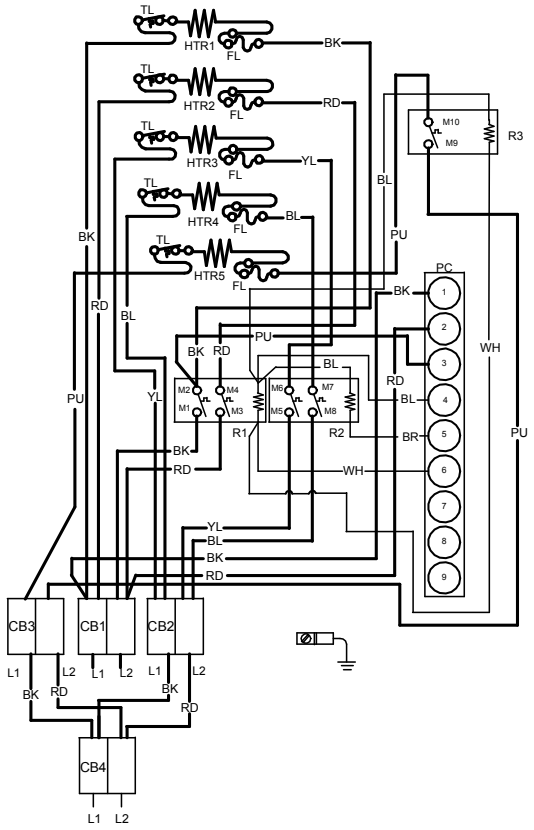
WIRING DIAGRAM – AIR HANDLER



Wiring is subject to change. Always refer to the wiring diagram on 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. ⚡

WIRING DIAGRAM – 5 ELEMENT HEATER KIT



COMPONENT CODE

PC = 9 PIN CONNECTOR
HTR = HEATER ELEMENT
TL = THERMAL LMT
RS = RELAY/SEQUENCER
TB = TERMINAL BLOCK
CB = CIRCUIT BREAKER
CC = CONTACTOR
FL = FUSE LINK
EM = EVAPORATOR MOTOR
EBTDR = ELEC. BLOWER TIME DELAY
RC = RUN CAPACITOR
TR = TRANSFORMER
SR = STRAIN RELIEF

WIRING CODE:

HIGH VOLTAGE ——
LOW VOLTAGE ——

COLOR CODE

BK = BLACK
BL = BLUE
BR = BROWN
GR = GREEN
OR = ORANGE
PK = PINK
PU = PURPLE
RD = RED
WH = WHITE
YL = YELLOW

NOTE: WHEN INSTALLING HEATER KIT, ENSURE SPEED TAP MUST EXCEED OR EQUAL THE MINIMUM BLOWER SPEED (MBS) SPECIFIED FOR THE AIRHANDLER / HEATER KIT COMBINATION ON THIS UNIT'S SERIAL PLATE. AFTER INSTALLING OPTIONAL HEAT KIT, MARK AN "X" IN THE ☐ PROVIDED BELOW.
NO MARK INDICATES NO HEAT KIT INSTALLED.

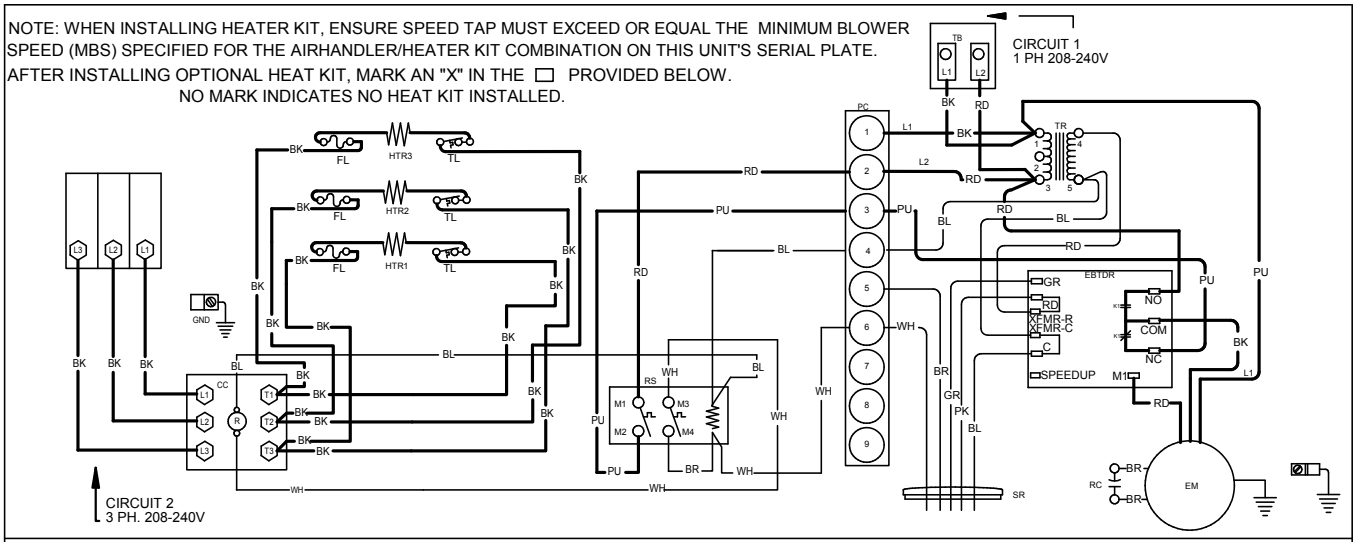
FIVE (5) ELEMENT ROWS ☐

NOTE:-
THIS LABEL MUST BE ATTACHED ON THE AIRHANDLER IN A PROMINENT LOCATION

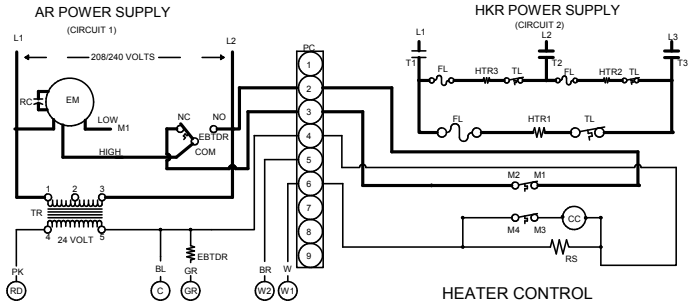
0I40M00274-A

WIRING DIAGRAM – 3 PHASE HEATER KIT

NOTE: WHEN INSTALLING HEATER KIT, ENSURE SPEED TAP MUST EXCEED OR EQUAL THE MINIMUM BLOWER SPEED (MBS) SPECIFIED FOR THE AIRHANDLER/HEATER KIT COMBINATION ON THIS UNIT'S SERIAL PLATE.
AFTER INSTALLING OPTIONAL HEAT KIT, MARK AN "X" IN THE ☐ PROVIDED BELOW.
NO MARK INDICATES NO HEAT KIT INSTALLED.



NOTE:-
THIS LABEL MUST BE ATTACHED ON THE AIRHANDLER IN A PROMINENT LOCATION



COMPONENT CODE

- HTR — HEAT ELEMENT
- EM — EVAPORATOR MOTOR
- EBTDR — ELEC. BLOWER TIME DELAY RELAY
- RS — RELAY/SEQUENCER
- RC — RUN CAPACITOR
- TL — THERMAL LIMIT
- TR — TRANSFORMER
- TB — TERMINAL BLOCK
- CC — CONTACTOR
- PC — 9-PIN CONNECTOR
- SR — STRAIN RELIEF
- FL — FUSE LINK
- CB — CIRCUIT BREAKER

WIRING CODE

- HIGH VOLTAGE
- LOW VOLTAGE

COLOR CODE

- BK BLACK
- BL BLUE
- BR BROWN
- GR GREEN
- OR ORANGE
- PK PINK
- PU PURPLE
- RD RED
- WH WHITE
- YL YELLOW

0140M00273-A

Accessories

Downflow Insulation Kit

DPI-B	DPI-C	DPI-D
	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”

Notes