

ASPT SERIES

MULTI-POSITION, INTERNAL TXV

MULTI-SPEED ECM BASED

AIR HANDLER

1½ TO 5 TONS



Product Features

- Internal factory-installed thermal expansion valves for cooling and heat pump applications
- Direct drive, multi-speed ECM 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	7



* Complete warranty details available from your local dealer or at www.amana-hac.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 Québec.

NOMENCLATURE

	A	S	P	T	24	C	1	4	AA	
	1	2	3	4	5,6	7	8	9	10,11	
Brand										Engineering *
A - Single-Piece Air Handler										Major/ Minor Revisions
Unit Application										*Not used for inventory management
C - Ceiling Mount PSC Motor										Refrigerant Compatability
R - Multi-Position PSC Motor										4 = R-410A
S - Multi-Position EEM Motor										Electrical
Cabinet Finish										1 - 208/240 V, 1 Phase, 60 Hz
U - Unpainted										Nominal Width
P - Painted										B - 17½" Wide
Expansion Device										C - 21" Wide
F - Flowrater										D - 24½" Wide
T - Expansion Valve										Nominal Capacity Range
										24 = 2 Tons 42 = 3½ Tons
										30 = 2½ Tons 48 = 4 Tons
										36 = 3 Tons 60 = 5 Tons

ACCESSORIES

DOWNFLOW INSULATION KIT

DFK-B	DFK-C	DFK-D
ASPT24B14**	ASPT30C14**	ASPT42D14**
	ASPT36C14**	ASPT48D14**
	ASPT42C14**	ASPT60D14**
	ASPT48C14**	

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"



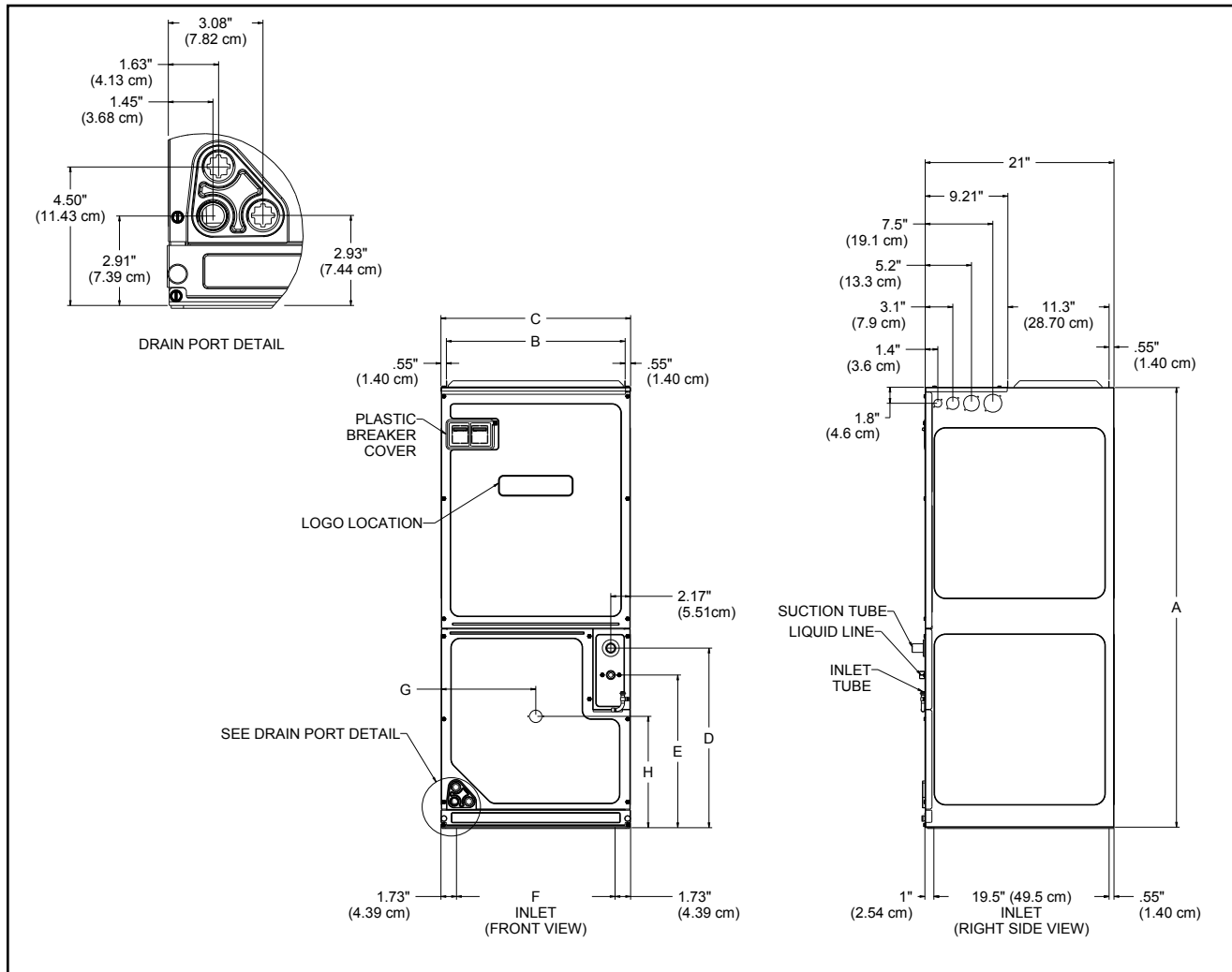
SPECIFICATIONS

	ASPT 24B14*	ASPT 30C14*	ASPT 36C14*	ASPT 42C14*	ASPT 42D14*	ASPT 48C14*	ASPT 48D14*	ASPT 60D14*
NOMINAL RATINGS								
Cooling (Btu/h)	24,000	30,000	36,000	42,000	42,000	48,000	48,000	60,000
Airflow Rate CFM *								
T1	520	540	890	865	1,110	1275	1,400	1,400
T2	600	625	995	980	1,250	1400	1,490	1,600
T3	660	720	1,090	1,070	1,355	1500	1,600	1,745
T4	775	810	1,205	1,190	1,440	1585	1,745	1,995
T5	975	1,400	1,425	1,520	1,780	1680	2,160	2,160
BLOWER								
Diameter	9½"	10⅝"	10⅝"	10⅝"	10⅝"	10⅝"	10⅝"	11⅝"
Width	6"	8"	8"	10⅝"	10⅝"	10⅝"	10⅝"	10⅝"
Coil Drain Connect FPT	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"
REFRIGERANT LINE CONNECTION SIZE								
Liquid	⅝"	⅝"	⅝"	⅝"	⅝"	⅝"	⅝"	⅝"
Suction	¾"	⅞"	⅞"	⅞"	⅞"	⅞"	⅞"	⅞"
ELECTRICAL DATA								
Voltage	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230
Min Circuit Ampacity	3/3	4 / 4	4 / 4	4 / 4	6/6	7/7	8/8	8/8
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	2.18/ 3/4	3.15/ 3/4	3.15/ 3/4	3.15/ 3/4	4.84/ 3/4	5.4/ 3/4	6.65/ 1	6.65/ 1
SHIP WEIGHT (LBS)	100	118	118	125	167	125	167	167

*Airflow rate @.3 static

Note: Assumes dry coil with filter in place; SCFM correction for wet coil = 4% (208V / 240V)

DIMENSIONS



MODEL	A"	B"	C"	D"	E"	F"	G"	H"
ASPT24B14*	45	16 ³ / ₈	17 ¹ / ₂	18	15	14 ³ / ₁₆	8 ¹³ / ₁₆	11 ¹⁵ / ₁₆
ASPT30C14*	49	19 ¹⁵ / ₁₆	21	20	17	17 ¹¹ / ₁₆	10 ¹ / ₂	12 ³ / ₈
ASPT36C14*	49	19 ¹⁵ / ₁₆	21	20	17	17 ¹¹ / ₁₆	10 ¹ / ₂	12 ³ / ₈
ASPT42C14	49	19 ¹⁵ / ₁₆	21	20	17	17 ¹¹ / ₁₆	10 ¹ / ₂	12 ³ / ₈
ASPT42D14*	58	23 ⁵ / ₁₆	24 ¹ / ₂	28 ³ / ₄	25 ³ / ₄	21 ³ / ₁₆	12 ⁵ / ₁₆	12 ³ / ₈
ASPT48C14	49	19 ¹⁵ / ₁₆	21	20	17	17 ¹¹ / ₁₆	10 ¹ / ₂	12 ³ / ₈
ASPT48D14*	58	23 ⁵ / ₁₆	24 ¹ / ₂	28 ³ / ₄	25 ³ / ₄	21 ³ / ₁₆	12 ⁵ / ₁₆	12 ³ / ₈
ASPT60D14*	58	23 ⁵ / ₁₆	24 ¹ / ₂	28 ³ / ₄	25 ³ / ₄	21 ³ / ₁₆	12 ⁵ / ₁₆	12 ³ / ₈

AIRFLOW DATA

MODEL	SPEED TAP	STATIC PRESSURE (IN W.C)									
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1
ASPT24B14	1	570	540	520	480	450	415	370	305	270	240
	2	650	605	600	570	530	500	460	425	380	330
	3	740	690	660	650	615	570	525	480	440	405
	4	855	810	775	755	750	720	690	650	620	575
	5	1,050	1,005	975	940	910	900	885	880	845	820
ASPT30C14	1	610	580	540	445	390	330	285	240	205	160
	2	705	670	625	570	545	465	425	385	325	270
	3	785	740	720	660	640	580	515	475	440	370
	4	880	845	810	805	740	700	660	595	550	515
	5	1,450	1,440	1,400	1,380	1,350	1,330	1,295	1,275	1,245	1,205
ASPT36C14	1	960	905	890	810	760	720	665	620	550	485
	2	1,060	1,010	995	920	875	835	790	745	690	615
	3	1,150	1,100	1,090	1,025	990	945	905	860	810	750
	4	1,250	1,220	1,205	1,145	1,110	1,070	1,035	990	940	885
	5	1,470	1,440	1,425	1,405	1,375	1,260	1,315	1,280	1,245	1,205
ASPT42C14	1	950	925	865	815	730	675	660	600	545	---
	2	1,075	1,025	980	930	875	785	730	690	650	---
	3	1,160	1,115	1,070	1,025	975	905	815	770	715	---
	4	1,275	1,235	1,190	1,145	1,100	1,040	975	875	835	---
	5	1,600	1,560	1,520	1,480	1,430	1,390	1,345	1,290	1,245	---
ASPT42D14	1	1,230	1,180	1,110	1,060	1,000	945	885	810	745	685
	2	1,365	1,310	1,250	1,190	1,140	1,090	1,030	980	920	855
	3	1,460	1,410	1,355	1,305	1,255	1,210	1,155	1,115	1,060	1,010
	4	1,545	1,490	1,440	1,375	1,330	1,295	1,245	1,200	1,150	1,100
	5	1,865	1,825	1,780	1,745	1,695	1,645	1,610	1,570	1,520	1,475
ASPT48C14	1	1,365	1,305	1,275	1,225	1,175	1,110	1,070	1,020	995	---
	2	1,490	1,455	1,405	1,360	1,305	1,255	1,205	1,160	1,115	---
	3	1,580	1,540	1,500	1,455	1,400	1,350	1,300	1,260	1,210	---
	4	1,670	1,635	1,585	1,545	1,495	1,445	1,395	1,365	1,315	---
	5	1,750	1,715	1,680	1,645	1,590	1,530	1,495	1,460	1,410	---
ASPT48D14	1	1,485	1,425	1,400	1,325	1,270	1,220	1,165	1,115	1,080	1,005
	2	1,560	1,510	1,490	1,425	1,385	1,335	1,295	1,250	1,205	1,155
	3	1,675	1,625	1,600	1,530	1,485	1,435	1,390	1,345	1,295	1,245
	4	1,820	1,770	1,745	1,685	1,640	1,595	1,555	1,510	1,470	1,420
	5	2,225	2,180	2,160	2,085	2,060	2,010	1,970	1,930	1,895	1,850
ASPT60D14	1	1,485	1,425	1,400	1,325	1,270	1,220	1,165	1,115	1,080	1,005
	2	1,675	1,625	1,600	1,530	1,485	1,435	1,390	1,345	1,295	1,245
	3	1,820	1,770	1,745	1,685	1,640	1,595	1,555	1,510	1,470	1,420
	4	2,060	2,010	1,995	1,925	1,880	1,845	1,800	1,760	1,720	1,680
	5	2,225	2,180	2,160	2,085	2,060	2,010	1,970	1,930	1,895	1,850

NOTES

- Assumes dry coil; SCFM correction for wet coil = 4%
- All ASPT models are shipped from the factory with the speed tap set on T4.

HEAT KIT DATA

MODEL	CIRCUIT 1			CIRCUIT 2			SINGLE-POINT KIT	
	AMPS	MCA ¹	MOP ²	AMPS	MCA ¹	MOP ²	MCA ¹	MOP ²
ASPT24B14AC	0 / 0	3 / 3	15 / 15	---	---	---	---	---
HKS*03XC*	10.8 / 12.5	17 / 19	20 / 20	---	---	---	---	---
HKS*05XC*	17.3 / 20.0	25 / 28	25 / 30	---	---	---	---	---
HKS*06XC*	21.6 / 25.0	30 / 34	35 / 35	---	---	---	---	---
HKS*08XC*	28.9 / 33.3	39 / 45	40 / 45	---	---	---	---	---
HKS*10XC*	34.7 / 40.0	46 / 53	50 / 60	---	---	---	---	---
HKSC15*##	34.7 / 40.0	46 / 53	50 / 60	17.2 / 19.8	22 / 25	25 / 25	68 / 78	70 / 80
ASPT30C14AB	0 / 0	3.9 / 3.9	15 / 15	---	---	---	---	---
HKS*03XC*	10.8 / 12.5	17 / 20	20 / 20	---	---	---	---	---
HKS*05XC*	17.3 / 20.0	26 / 29	30 / 30	---	---	---	---	---
HKS*06XC*	21.7 / 25.0	31 / 35	35 / 40	---	---	---	---	---
HKS*08XC*	28.9 / 33.3	40 / 46	40 / 50	---	---	---	---	---
HKS*10XC*	34.7 / 40.0	47 / 54	50 / 60	---	---	---	---	---
HKSC15*##	34.7 / 40.0	47 / 54	50 / 60	17.2 / 19.8	22 / 25	25 / 25	69 / 79	70 / 80
ASPT36C14AC	0 / 0	4 / 4	15 / 15	---	---	---	---	---
HKS*03XC*	10.8 / 12.5	17 / 20	20 / 20	---	---	---	---	---
HKS*05XC*	17.3 / 20.0	26 / 29	30 / 30	---	---	---	---	---
HKS*06XC*	21.7 / 25.0	31 / 35	40 / 40	---	---	---	---	---
HKS*08XC*	28.9 / 33.3	40 / 46	40 / 50	---	---	---	---	---
HKS*10XC*	34.7 / 40.0	47 / 54	50 / 60	---	---	---	---	---
HKSC15*##	34.7 / 40.0	47 / 54	50 / 60	17.3 / 20	22 / 25	25 / 25	69 / 79	70 / 80
HKSC19*##	34.3 / 39.6	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 / 50	---	---
HKSC20XF*	0 / 0	4 / 4	15 / 15	38 / 43	47 / 54	50 / 60	---	---
ASPT42C14AA	0 / 0	4 / 4	15 / 15	---	---	---	---	---
HKS*03XC*	10.8 / 12.5	17 / 20	20 / 20	---	---	---	---	---
HKS*05XC*	17.3 / 20.0	26 / 29	30 / 30	---	---	---	---	---
HKS*06XC*	21.7 / 25.0	31 / 35	35 / 40	---	---	---	---	---
HKS*08XC*	28.9 / 33.3	40 / 46	40 / 50	---	---	---	---	---
HKS*10XC*	34.7 / 40.0	47 / 54	50 / 60	---	---	---	---	---
HKSC15*##	34.7 / 40.0	47 / 54	50 / 60	17.3 / 20	22 / 25	25 / 25	69 / 79	70 / 80
HKSC19*##	34.3 / 40.0	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	---	---
ASPT48C14AA	0 / 0	7 / 7	15 / 15	---	---	---	---	---
HKS*03XC*	10.8 / 12.5	20 / 22	25 / 25	---	---	---	---	---
HKS*05XC*	17.3 / 20.0	28 / 32	30 / 35	---	---	---	---	---
HKS*06XC*	21.7 / 25.0	34 / 38	35 / 40	---	---	---	---	---
HKS*08XC*	28.9 / 33.3	43 / 48	45 / 50	---	---	---	---	---
HKS*10XC*	34.7 / 40.0	50 / 57	60 / 60	---	---	---	---	---
HKSC15*##	34.7 / 40.0	50 / 57	60 / 60	17.3 / 20	22 / 25	25 / 25	72 / 82	80 / 90
HKSC19*##	34.3 / 40.0	50 / 57	60 / 60	34.7 / 40	43 / 50	45 / 50	93 / 107	100 / 110
HKSC15XF*	0 / 0	4 / 4	15 / 15	30 / 34.6	38 / 43	40 / 45	---	---
HKSC20XF*	0 / 0	4 / 4	15 / 15	37 / 43	47 / 54	50 / 60	---	---
ASPT42D14	0 / 0	6 / 6	15 / 15	---	---	---	---	---
HKS*03XC*	10.8 / 12.5	20 / 22	20 / 25	---	---	---	---	---
HKS*05XC*	17.3 / 20.0	28 / 31	30 / 35	---	---	---	---	---
HKS*06XC*	21.7 / 25.0	33 / 37	35 / 40	---	---	---	---	---
HKS*08XC*	28.9 / 33.3	42 / 48	45 / 50	---	---	---	---	---
HKS*10XC*	34.7 / 40.0	49 / 56	50 / 60	---	---	---	---	---
HKSC15*##	34.7 / 40.0	49 / 56	50 / 60	17.3 / 20	22 / 25	25 / 25	71 / 81	80 / 90
HKSC20*##	34.3 / 39.6	49 / 56	50 / 60	34.7 / 40	43 / 50	45 / 50	93 / 106	100 / 110
HKSC15XF*	0 / 0	6 / 6	15 / 15	30 / 34.6	38 / 44	40 / 50	---	---
HKSC20XF*	0 / 0	6 / 6	15 / 15	38 / 43	47 / 54	50 / 60	---	---
ASPT48D14AD	0 / 0	8 / 8	15 / 15	---	---	---	---	---
HKS*03XC*	10.8 / 12.5	22 / 24	25 / 25	---	---	---	---	---
HKS*05XC*	17.3 / 20.0	30 / 33	30 / 35	---	---	---	---	---
HKS*06XC*	21.7 / 25.0	35 / 40	40 / 40	---	---	---	---	---
HKS*08XC*	28.9 / 33.3	44 / 50	45 / 50	---	---	---	---	---
HKS*10XC*	34.7 / 40.0	52 / 58	60 / 60	---	---	---	---	---
HKSC15*##	34.7 / 40.0	52 / 58	60 / 60	17.3 / 20	22 / 25	25 / 25	73 / 83	80 / 90
HKSC20*##	34.3 / 39.6	52 / 58	60 / 60	34.7 / 40	43 / 50	45 / 50	95 / 108	100 / 110
HKSC15XF*	0 / 0	8 / 8	15 / 15	30 / 34.6	38 / 44	40 / 50	---	---
HKSC20XF*	0 / 0	8 / 8	15 / 15	38 / 43	47 / 54	50 / 60	---	---
HKSC25*##	52 / 60	73 / 83	80 / 90	34.7 / 40	43 / 50	45 / 50	117 / 133	125 / 150
ASPT60D14AC	0 / 0	8.3 / 8.3	15 / 15	---	---	---	---	---
HKS*03XC*	10.8 / 12.5	22 / 24	25 / 25	---	---	---	---	---
HKS*05XC*	17.3 / 20.0	30 / 33	30 / 35	---	---	---	---	---
HKS*06XC*	21.7 / 25.0	35 / 40	40 / 40	---	---	---	---	---
HKS*08XC*	28.9 / 33.3	44 / 50	45 / 50	---	---	---	---	---
HKS*10XC*	34.7 / 40.0	52 / 58	60 / 60	---	---	---	---	---
HKSC15*##	34.7 / 40.0	52 / 58	60 / 60	17.3 / 20	22 / 25	25 / 25	73 / 83	80 / 90
HKSC20*##	34.3 / 39.6	52 / 58	60 / 60	34.7 / 40	43 / 50	45 / 50	95 / 108	100 / 110
HKSC15XF*	0 / 0	8.3 / 8.3	15 / 15	30 / 34.6	38 / 44	40 / 50	---	---
HKSC20XF*	0 / 0	8.3 / 8.3	15 / 15	38 / 43	47 / 54	50 / 60	---	---
HKSC25*##	52 / 60	73 / 83	80 / 90	34.7 / 40	43 / 50	45 / 50	117 / 133	125 / 150

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

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

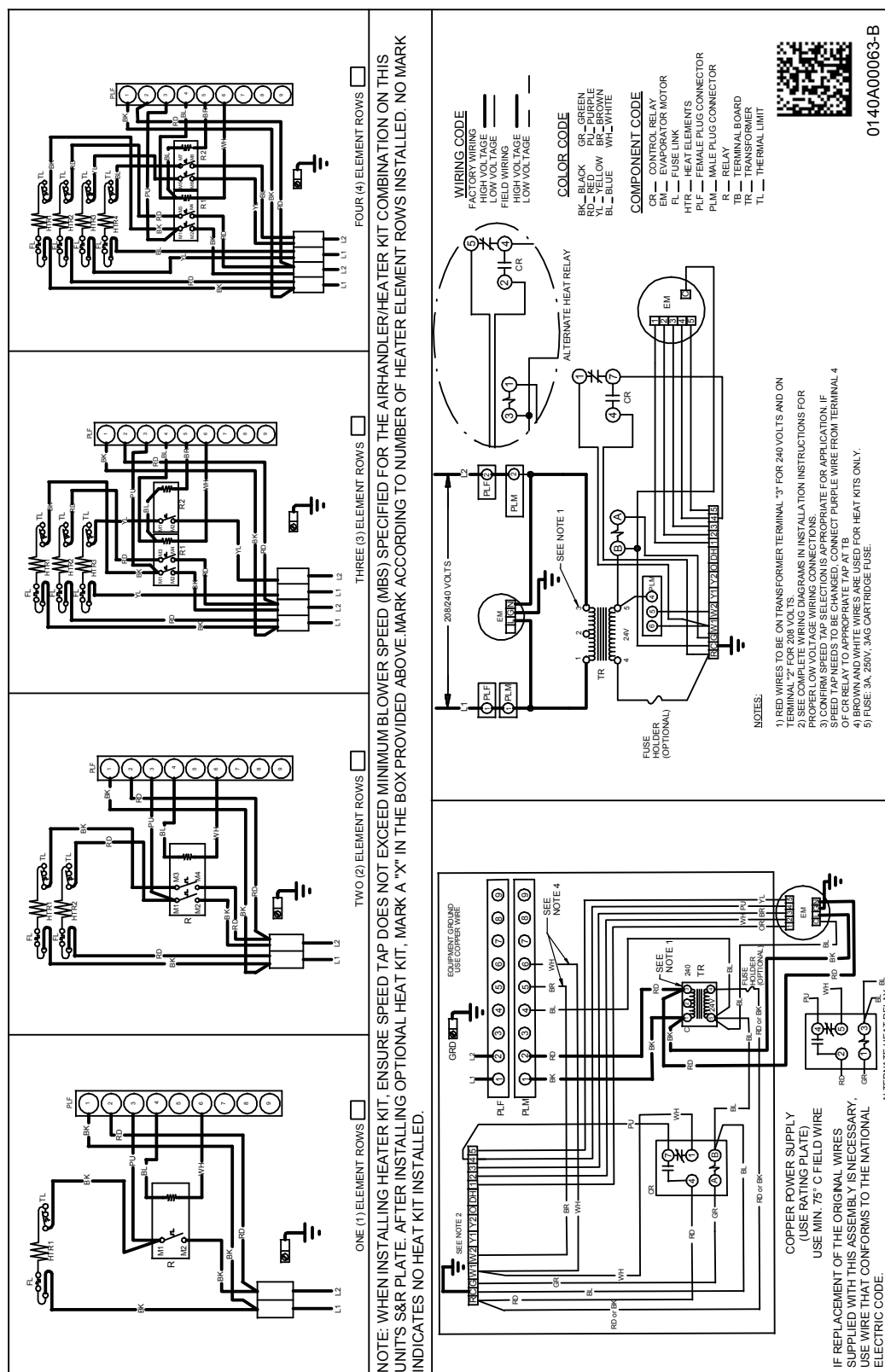
^A Circuit 1: Single-phase for Air Handlers Circuit 2: Three-phase for HKR3 Heater Kits

* Revision level that may or may not be designated

C = Circuit Breaker Option

--- Indicates Not Required

WIRING DIAGRAM



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.



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.



