



Air Conditioning & Heating

ASPT SERIES

*MULTI-POSITION, MULTI-SPEED,
ECM-BASED AIR HANDLER
WITH INTERNAL TXV
1½ TO 5 TONS*



Contents

Air Handler Nomenclature.....	2
Heater Kit Nomenclature	2
Product Specifications.....	3
Dimensions	4
Airflow Data	6
Heat Kit Data.....	7
Wiring Diagram.....	9
Accessories	12

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



* 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 Québec.

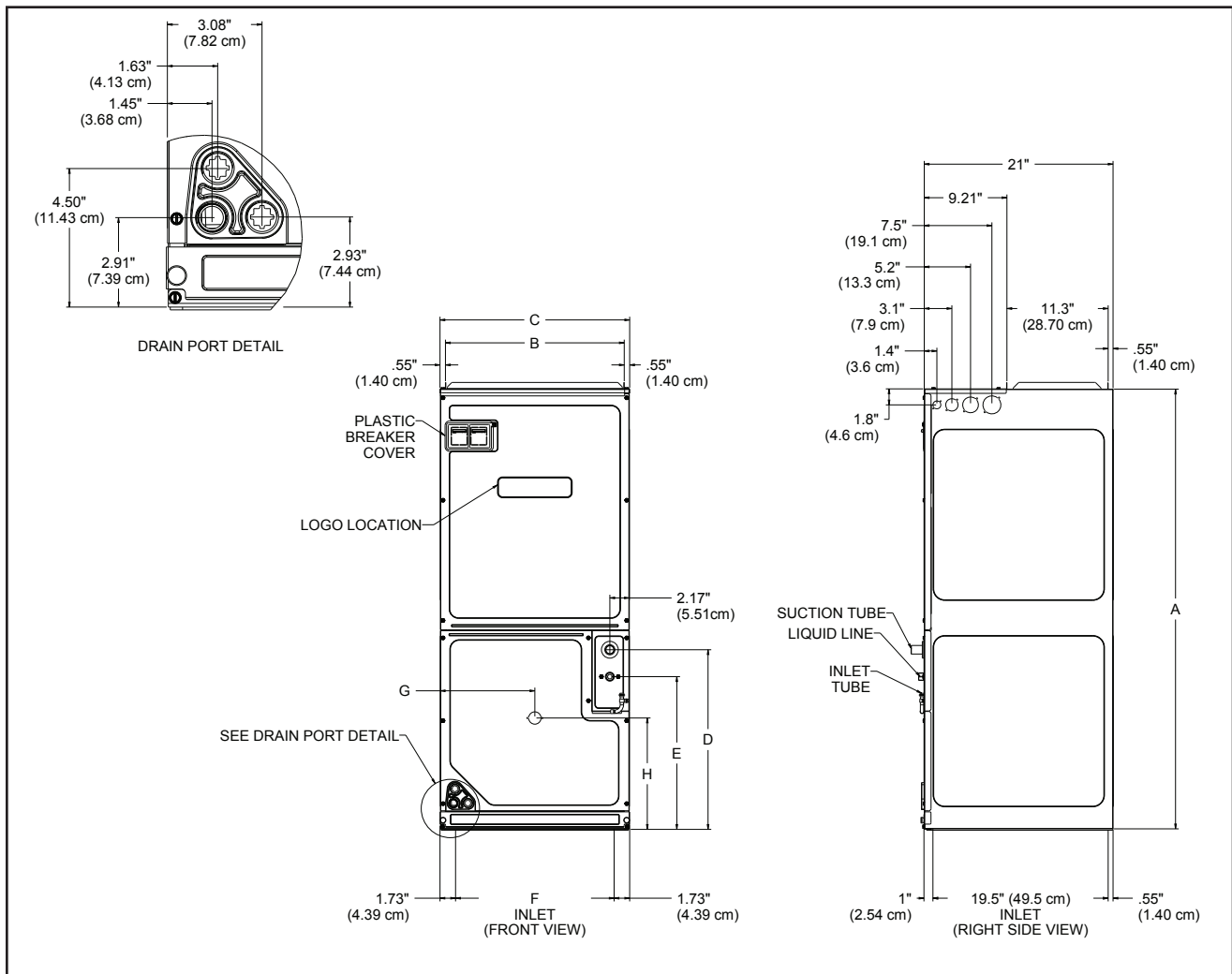
	A	S	P	T	24	C	1	4	AA	
	1	2	3	4	5,6	7	8	9	10,11	
Brand A - Single-Piece Air Handler										Engineering * Major/ Minor Revisions *Not used for inventory management
Unit Application C - Ceiling Mount PSC Motor R - Multi-Position PSC Motor S - Multi-Position EEM Motor W - Wall Mount PSC Motor										Refrigerant Compatibility 4 = R-410A
Cabinet Finish U - Unpainted P - Painted N - Uncased										Electrical 1 - 208/240 V, 1 Phase, 60 Hz
Expansion Device F - Flowrator T - Expansion Valve										Nominal Width B - 17½" Wide C - 21" Wide D - 24½" Wide
										Nominal Capacity Range 24 = 2 Tons 42 = 3½ Tons 30 = 2½ Tons 48 = 4 Tons 36 = 3 Tons 60 = 5 Tons 61 = 5 Tons

	HKS	X	03	X	A	AA	
Unit Type HKS - AH Heater Kit							Major & Minor Revisions
Circuit Breaker X -- No circuit breaker C -- Circuit Breaker							Phase A -- 208 VAC / 1 Ø D -- 208 VAC / 3 Ø B -- 240 VAC / 1 Ø E -- 240 VAC / 3 Ø C -- 208/240 VAC / 1 Ø F -- 208/240 VAC / 3 Ø G -- 460 VAC / 3 Ø
kW 03 -- 3.0 kW 15 -- 14.4 kW 05 -- 4.8 kW 19 -- 19.2kW w/150F limit 06 -- 6.0kW 20 -- 19.2kW w/170F limit 08 -- 8.0kW 25 -- 25.0 kW 10 -- 9.6 kW							Cabinet Size (MAX) C -- C Cabinet D -- D Cabinet X -- All Cabinet Sizes

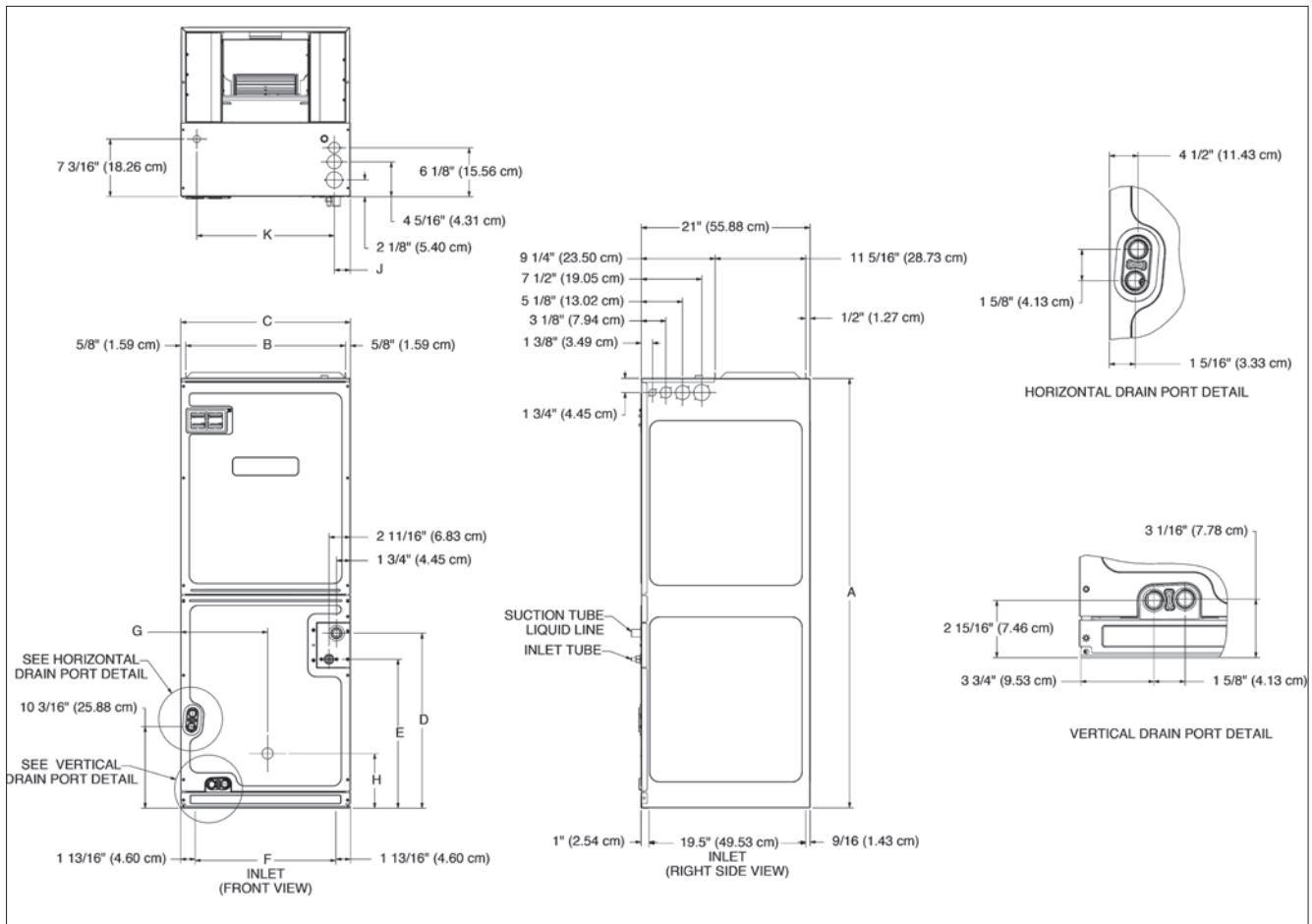
	ASPT 25B14*	ASPT 29B14*	ASPT 37B14*	ASPT 37C14*	ASPT 47C14*	ASPT 59C14*	ASPT 47D14*	ASPT 49D14*	ASPT 61D14*
NOMINAL RATINGS									
Cooling (Btu/h)	24,000	24,000	30,000	36,000	42,000	60,000	42,000	48,000	60,000
BLOWER									
Diameter	9½"	9½"	9½"	10⅝"	10⅝"	10⅝"	10⅝"	11 ¹⁵ / ₁₆ "	11 ¹⁵ / ₁₆ "
Width	6"	6"	6"	8"	10⅝"	10⅝"	10⅝"	10⅝"	10⅝"
COIL CONNECTIONS									
Liquid	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"	⅜"
Suction	¾"	⅞"	⅞"	⅞"	⅞"	⅞"	⅞"	⅞"	⅞"
Coil Drain Connect (FPT)	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"
ELECTRICAL DATA									
Voltage	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230
Minimum Circuit Ampacity	5.8 / 5.8	5.8 / 5.8	5.6 / 5.6	5.6 / 5.6	5.6 / 5.6	7.9 / 7.9	5.6 / 5.6	8.6 / 8.6	8.6 / 8.6
Max. Overcurrent Device (Amps)	15 / 15	15 / 15	15 / 15	15 / 15	15 / 15	15/15	15 / 15	15 / 15	15 / 15
Minimum VAC	197	197	197	197	197	197	197	197	197
Maximum VAC	253	253	253	253	253	253	253	253	253
Blower Motor									
Full Load Amps (FLA)	4.6	4.6	4.5	4.5	4.5	6.3	4.5	6.9	6.9
Horsepower (HP)	¾	¾	¾	¾	¾	1	¾	1	1
SHIP WEIGHT (LBS.)									
	116	129	129	144	144	144	155	167	167

*Airflow rate @.3 static

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



MODEL	A"	B"	C"	D"	E"	F"	G"	H"
ASPT25B14*	45	16%	17½	15¼	12	14 ³ / ₁₆	9%	12%
ASPT29B14*	53 ⁷ / ₁₆	16%	17½	23 ¹¹ / ₁₆	20½	14 ³ / ₁₆	9%	7%
ASPT37B14*	53 ⁷ / ₁₆	16%	17½	23 ¹¹ / ₁₆	20½	14 ³ / ₁₆	9%	7%
ASPT37C14*	53 ⁷ / ₁₆	19%	21	21 ¹³ / ₁₆	18%	17 ¹¹ / ₁₆	10 ¹³ / ₁₆	6%
ASPT47C14*	53 ⁷ / ₁₆	19%	21	21 ¹³ / ₁₆	18%	17 ¹¹ / ₁₆	10 ¹³ / ₁₆	6%
ASPT59C14*	53 ⁷ / ₁₆	19%	21	21 ¹³ / ₁₆	18%	17 ¹¹ / ₁₆	10 ¹³ / ₁₆	6%
ASPT47D14*	53 ⁷ / ₁₆	23 ⁵ / ₁₆	24½	21½	18 ⁵ / ₁₆	21 ³ / ₁₆	12%	6%
ASPT49D14*	58	23 ⁵ / ₁₆	24½	26%	22%	21 ³ / ₁₆	12%	25%
ASPT61D14	58	23 ⁵ / ₁₆	24½	26%	22%	21 ³ / ₁₆	12%	25%



MODEL	A"	B"	C"	D"	E"	F"	G"	H"
ASPT61D14	58	$23\frac{5}{16}$	$24\frac{1}{2}$	$26\frac{3}{8}$	$22\frac{3}{8}$	$21\frac{3}{16}$	$12\frac{3}{8}$	$25\frac{3}{8}$

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	1.0
ASPT 25B14AA	1	640	585	580	545	510	490	410	340	280	
	2	800	765	725	700	670	645	595	565	490	
	3	840	805	800	760	740	700	670	625	580	
	4	985	950	920	885	850	815	800	760	725	
	5	1,475	1,440	1,400	1,375	1,335	1,305	1,270	1,240	1,150	
ASPT 29B14AA	1	595	590	565	530	505	455	380	305	260	
	2	790	775	745	705	665	625	585	515	445	
	3	865	820	790	770	735	695	645	595	530	
	4	1,015	980	955	925	880	840	795	770	720	
	5	1,505	1,465	1,430	1,410	1,385	1,350	1,315	1,285	1,220	
ASPT 37B14AA	1	1,025	985	945	910	875	830	795	735	690	
	2	1,150	1,105	1,065	1,025	995	950	915	870	825	
	3	1,240	1,200	1,160	1,120	1,085	1,050	1,010	970	925	
	4	1,425	1,400	1,355	1,320	1,290	1,250	1,215	1,180	1,145	
	5	1,490	1,455	1,415	1,390	1,355	1,320	1,285	1,250	1,205	
ASPT 37C14AA	1	980	935	895	860	825	800	755	710	665	
	2	1,125	1,075	1,045	1,000	965	930	880	845	820	
	3	1,235	1,190	1,155	1,120	1,085	1,045	1,005	965	920	
	4	1,485	1,450	1,425	1,390	1,355	1,315	1,275	1,230	1,190	
	5	1,565	1,535	1,510	1,480	1,240	1,390	1,365	1,320	1,280	
ASPT 47C14AA	1	955	895	855	840	780	735	675	615	560	
	2	1,100	1,050	1,005	965	925	870	815	770	705	
	3	1,205	1,160	1,120	1,075	1,035	990	940	885	830	
	4	1,445	1,410	1,365	1,320	1,275	1,235	1,190	1,140	1,095	
	5	1,525	1,480	1,435	1,400	1,360	1,320	1,275	1,230	1,180	
ASPT 47D14AA	1	1,055	1,015	950	895	830	785	730	680	620	
	2	1,210	1,165	1,110	1,070	1,015	960	900	840	785	
	3	1,335	1,290	1,250	1,205	1,145	1,100	1,050	980	910	
	4	1,625	1,580	1,530	1,495	1,455	1,405	1,350	1,295	1,230	
	5	1,720	1,670	1,625	1,580	1,540	1,490	1,435	1,390	1,325	
ASPT 49D14AA	1	1,485	1,435	1,380	1,320	1,265	1,200	1,230	1,015	930	
	2	1,570	1,525	1,480	1,430	1,370	1,315	1,235	1,155	1,035	
	3	1,680	1,600	1,570	1,555	1,475	1,430	1,360	1,280	1,185	
	4	1,800	1,765	1,715	1,670	1,625	1,590	1,510	1,465	1,390	
	5	2,215	2,160	2,120	2,085	2,040	2,000	1,970	1,930	1,865	
ASPT 59C14AA	1	1,370	1,330	1,295	1,255	1,215	1,180	1,140	1,100	1,060	
	2	1,535	1,500	1,465	1,430	1,405	1,370	1,335	1,300	1,210	
	3	1,680	1,645	1,615	1,575	1,545	1,510	1,440	1,330	1,205	
	4	1,905	1,855	1,780	1,690	1,605	1,515	1,425	1,330	1,205	
	5	1,940	1,855	1,775	1,700	1,605	1,505	1,420	1,320	1,205	
ASPT 61D14AA	1	1,545	1,495	1,440	1,390	1,335	1,260	1,180	1,080	1,030	
	2	1,745	1,695	1,625	1,575	1,525	1,475	1,400	1,360	1,275	
	3	1,905	1,855	1,815	1,770	1,725	1,670	1,635	1,575	1,500	
	4	2,155	2,105	2,090	2,045	2,000	1,970	1,935	1,890	1,830	
	5	2,340	2,310	2,265	2,220	2,185	2,165	2,120	2,080	2,030	

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

MODEL	CIRCUIT 1			CIRCUIT 2			SINGLE-POINT KIT	
	AMPS	MCA ¹	MOP ²	AMPS	MCA ¹	MOP ²	MCA ¹	MOP ²
ASPT25B14AA	0/0	5.8/5.8	15/15	---	---	---	---	---
HKS*03XC*	10.8/12.5	19/21	20/25	---	---	---	---	---
HKS*05XC*	17.3/20.0	27/31	30/35	---	---	---	---	---
HKS*06XC*	21.6/25.0	33/37	35/40	---	---	---	---	---
HKS*08XC*	28.8/33.3	42/47	45/50	---	---	---	---	---
HKS*10XC*	34.6/40.0	49/56	50/60	---	---	---	---	---
ASPT29B14AA	0/0	5.8/5.8	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	---	---	---	---	---
HKS*15*##	34.7/40	49/56	50/60	17/20	22/25	25/25	71/81	80/90
ASPT37B14AA	0/0	5.6/5.6	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	---	---	---	---	---
HKS*15*##	34.7/40	49/56	50/60	17.3/20	22/25	25/25	71/81	80/90
ASPT37C14AA	0/0	5.6/5.6	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	---	---	---	---	---
HKS*15*##	34.7/40	49/56	50/60	17.3/20	22/25	25/25	71/81	80/90
HKSC19C*##	34.7/40	49/56	50/60	34.7/40	43/50	45/50	92/106	100/110
HKSC*15XF*	0/0	5.6/5.6	15/15	30/34.6	38/43	40/45	---	---
ASPT47C14AA	0/0	5.6/5.6	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	---	---	---	---	---
HKS*15*##	34.7/40	49/56	50/60	17.3/20	22/25	25/25	71/81	80/90
HKSC19C*##	34.7/40	49/56	50/60	34.7/40	43/50	45/50	92/106	100/110
HKSC*15XF*	0/0	5.6/5.6	15/15	30/34.6	38/43	40/45	---	---

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

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

[^] 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

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.

HEAT KIT DATA (CONT.)

MODEL	CIRCUIT 1			CIRCUIT 2			SINGLE-POINT KIT	
	AMPS	MCA ¹	MOP ²	AMPS	MCA ¹	MOP ²	MCA ¹	MOP ²
ASPT59C14AA	0.0/0.0	7.9/7.9	15/15	---	---	---	--	--
HKS*03XC*	10.8/12.5	21/24	25/25	---	---	---	--	--
HKS*05XC*	17.3/20	30/33	30/35	---	---	---	--	--
HKS*06XC*	21.7/25	35/39	35/40	---	---	---	--	--
HKS*08XC*	28.9/33.3	44/50	45/50	---	---	---	--	--
HKS*10XC*	34.7/40	51/58	60/60	---	---	---	--	--
HKS*15*##	34.7/40	51/58	60/60	17.3/20	22/25	25/25	73/83	80/90
HKSC19C*##	34.7/40	51/58	60/60	34.7/40	43/50	45/50	95/108	100/110
HKSC*15XF*	0.0/0.0	7.9/7.9	15/15	30/34.6	38/43	40/45	---	---
ASPT47D14AA	0/0	5.6/5.6	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	---	---	---	--	--
HKS*15*##	34.7/40	49/56	50/60	17.3/20	22/25	25/25	71/81	80/90
HKSC20D#C*	34.7/40	49/56	50/60	34.7/40	43/50	45/50	92/106	100/110
HKSC*15XF*	0/0	5.6/5.6	15/15	30/34.6	38/43	40/45	---	---
HKS*20XF*	0/0	5.6/5.6	15/15	37.5/43.3	47/54	50/60	---	---
ASPT49D14AA	0/0	8.6/8.6	15/15	---	---	---	--	--
HKS*03XC*	10.8/12.5	22/24	25/25	---	---	---	--	--
HKS*05XC*	17.3/20	30.3/34	35/35	---	---	---	--	--
HKS*06XC*	21.7/25	36/40	40/40	---	---	---	--	--
HKS*08XC*	28.9/33.3	45/50.3	45/60	---	---	---	--	--
HKS*10XC*	34.7/40	52/59	60/60	---	---	---	--	--
HKSC15*##	34.7/40	52/59	60/60	17.3/20.0	22/25	25/25	74/84	80/90
HKSC20D#*	34.7/40	52/59	60/60	34.7/40.0	43/50	45/50	95/109	100/110
HKS*15XF*	0/0	8.6/8.6	15/15	30/34.6	38/43	40/45	---	---
HKS*20XF*	0/0	8.6/8.6	15/15	37.5/43.3	47/54	50/60	---	---
HKSC25DC*	52/60	74/84	80/90	35/40	43/50	45/50	117/134	125/150
ASPT61D14AA	0/0	8.6/8.6	15/15	---	---	---	--	--
HKS*03XC*	10.8/12.5	22/24	25/25	---	---	---	--	--
HKS*05XC*	17.3/20	30.3/34	35/35	---	---	---	--	--
HKS*06XC*	21.7/25	36/40	40/40	---	---	---	--	--
HKS*08XC*	28.9/33.3	45/50.3	45/60	---	---	---	--	--
HKS*10XC*	34.7/40	52/59	60/60	---	---	---	--	--
HKSC15*##	34.7/40	52/59	60/60	17.3/20.0	22/25	25/25	74/84	80/90
HKSC20D#*	34.7/40	52/59	60/60	34.7/40.0	43/50	45/50	95/109	100/110
HKS*15XF*	0/0	8.6/8.6	15/15	30/34.6	38/43	40/45	---	---
HKS*20XF*	0/0	8.6/8.6	15/15	37.5/43.3	47/54	50/60	---	---
HKSC25DC*	52/60	74/84	80/90	35/40	43/50	45/50	117/134	125/150

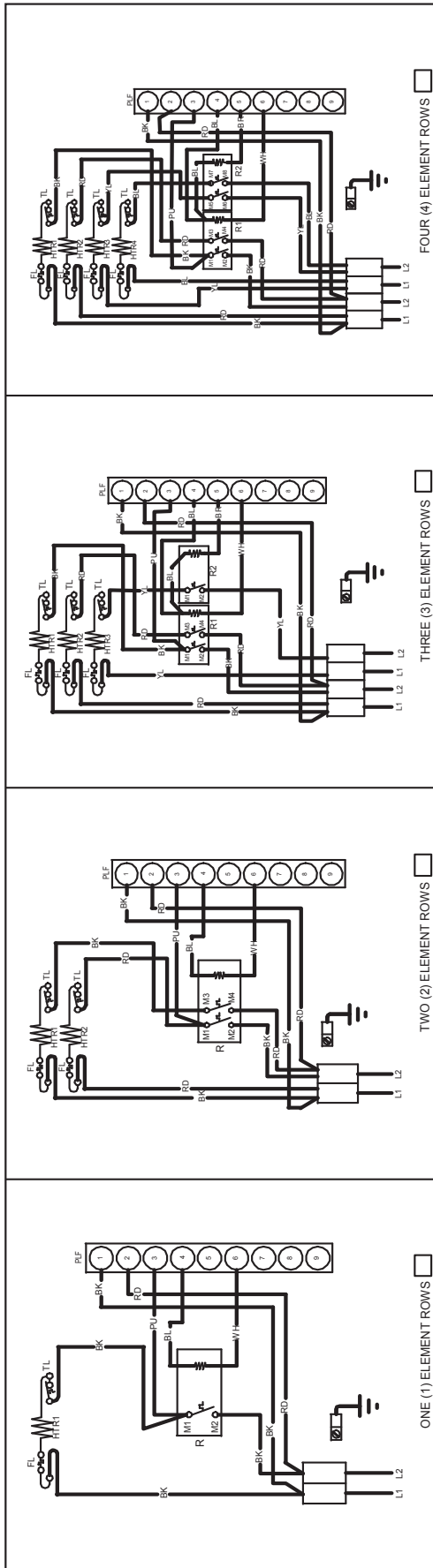
¹ Minimum Circuit Ampacity (Heater Amps + Motor Amps) X 1.25
² Maximum Overcurrent Protection = 2.25 X Motor Amps + Heater Amps
[^] Circuit 1: Single-phase for Air Handlers
 Circuit 2: Three-phase for HKR3 Heater Kits

* Revision level that may or may not be designated
 C = Circuit Breaker Option
 --- indicates Not Required

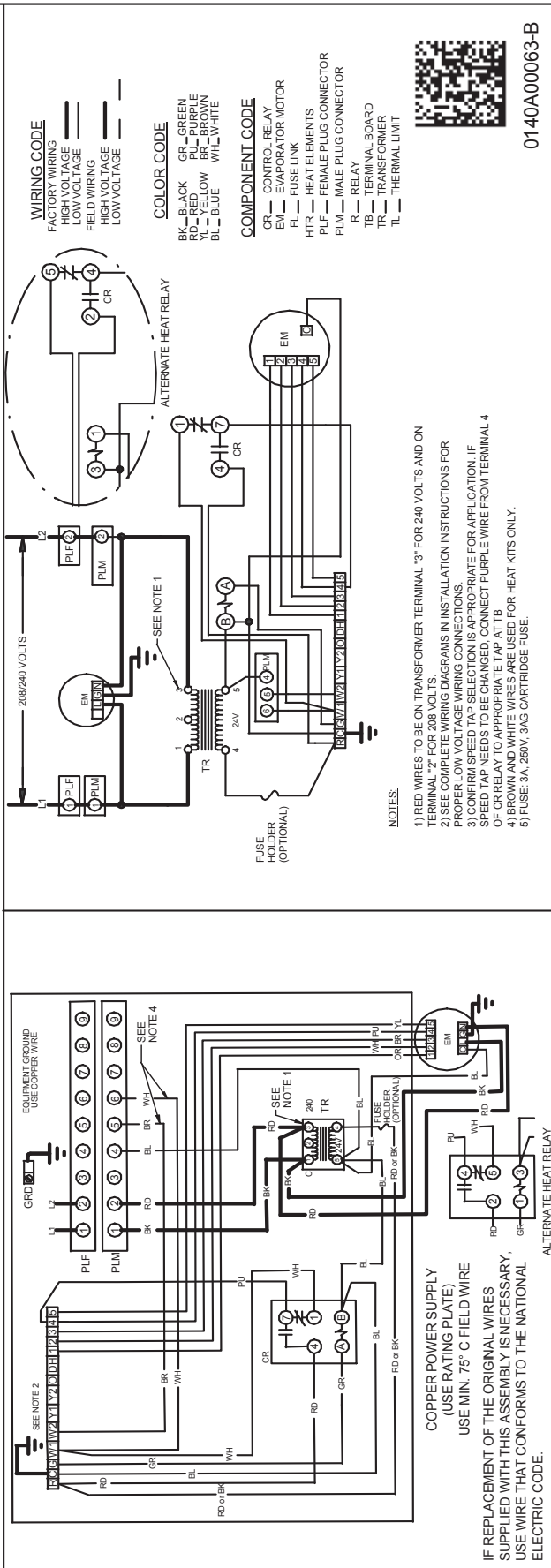
HEATING kW CORRECTION FACTOR

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.



NOTE: WHEN INSTALLING HEATER KIT, ENSURE SPEED TAP DOES NOT EXCEED MINIMUM BLOWER SPEED (MBS) SPECIFIED FOR THE AIRHANDLER/HEATER KIT COMBINATION ON THIS UNIT'S S&R PLATE. AFTER INSTALLING OPTIONAL HEAT KIT, MARK A "X" IN THE BOX PROVIDED ABOVE. MARK ACCORDING TO NUMBER OF HEATER ELEMENT ROWS INSTALLED. NO MARK INDICATES NO HEAT KIT INSTALLED.

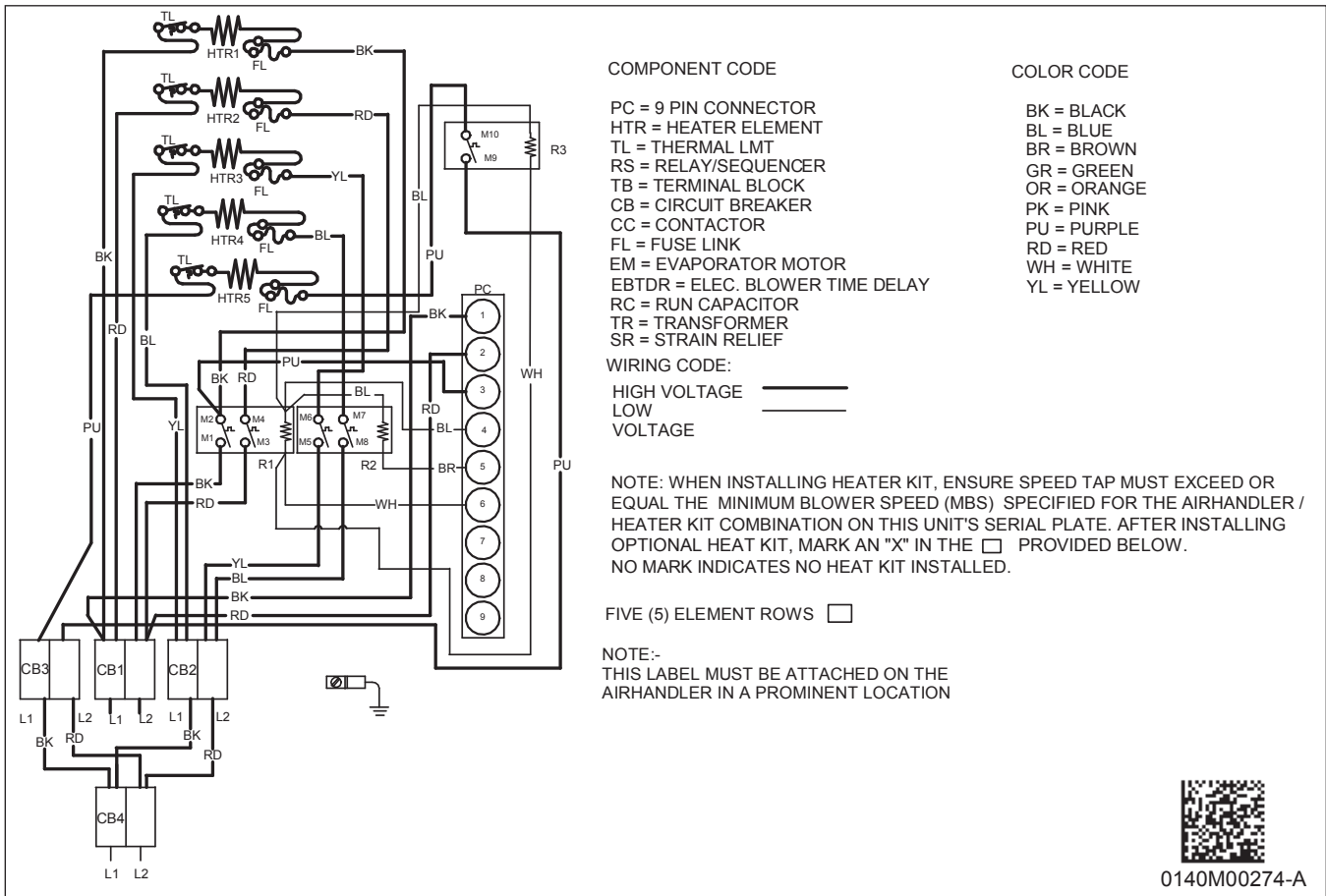


WARNING

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.

NOTE: The five element, 25 kW heater kit is not SHOWN ABOVE.

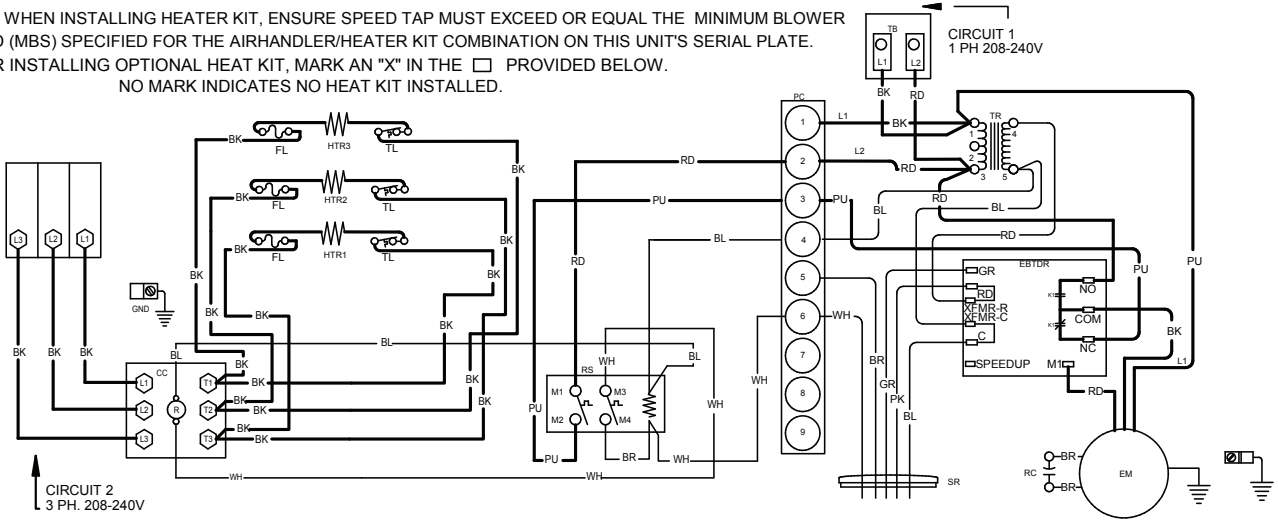
FIVE-ELEMENT HEATER KIT WIRING DIAGRAM



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

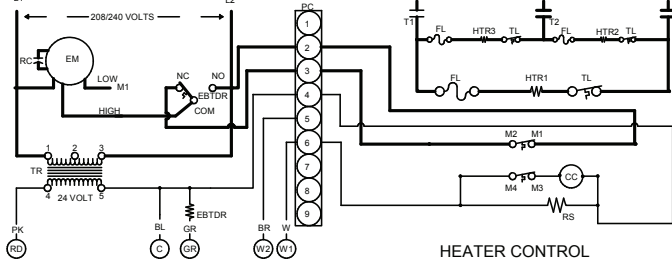
	WARNING	High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.	
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NOTE: WHEN INSTALLING HEATER KIT, ENSURE SPEED TAP MUST 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.



AR POWER SUPPLY (CIRCUIT 1)

HKR POWER SUPPLY (CIRCUIT 2)



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

COLOR CODE

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

WIRING CODE

- HIGH VOLTAGE ————
- LOW VOLTAGE ————



0140M00273-A

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

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

	<p>WARNING</p>	<p>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.</p>	
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DOWNFLOW INSULATION KIT

DFK-B	DFK-C	DFK-D
ASPT24B14**	ASPT30C14**	ASPT42D14**
	ASPT36C14**	ASPT48D14**
	ASPT42C14**	ASPT60D14**
	ASPT48C14**	ASPT61D14**

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"