



Air Conditioning & Heating

# 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

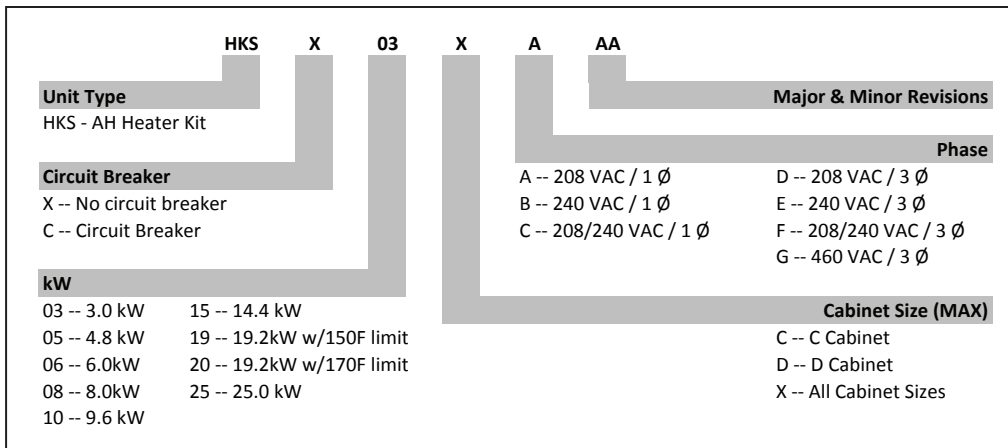
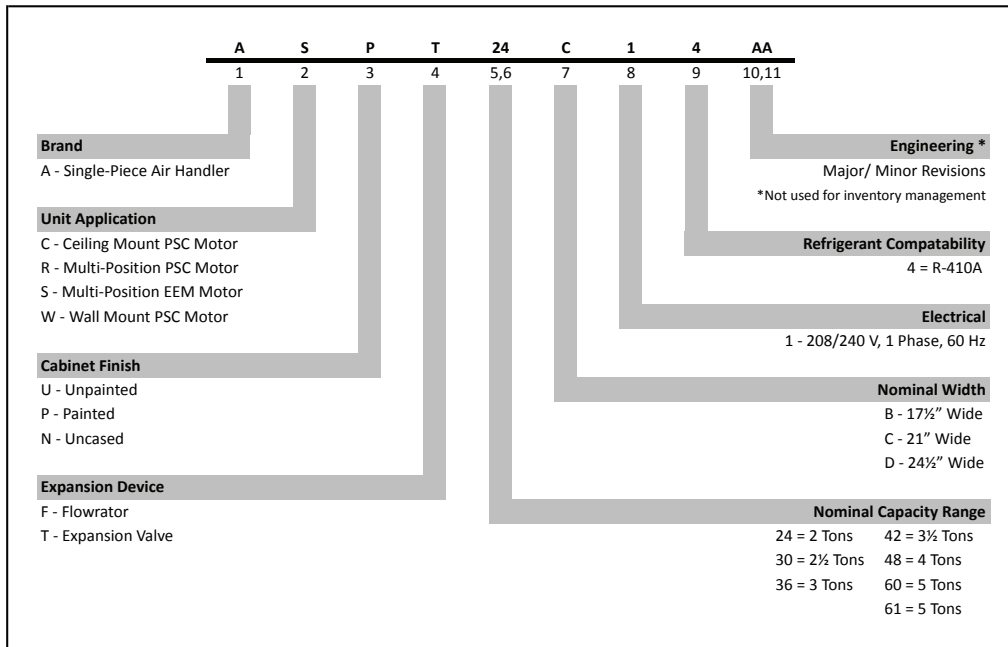
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\* Complete warranty details available from your local dealer or at [www.goodmanmfg.com](http://www.goodmanmfg.com). To receive the 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration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

# NOMENCLATURE



## HEATING kW CORRECTION FACTOR

<b>SUPPLY VOLTAGE</b>	240	230	220	210	208
<b>CORRECTION FACTOR</b>	1.00	0.92	0.84	0.77	0.75

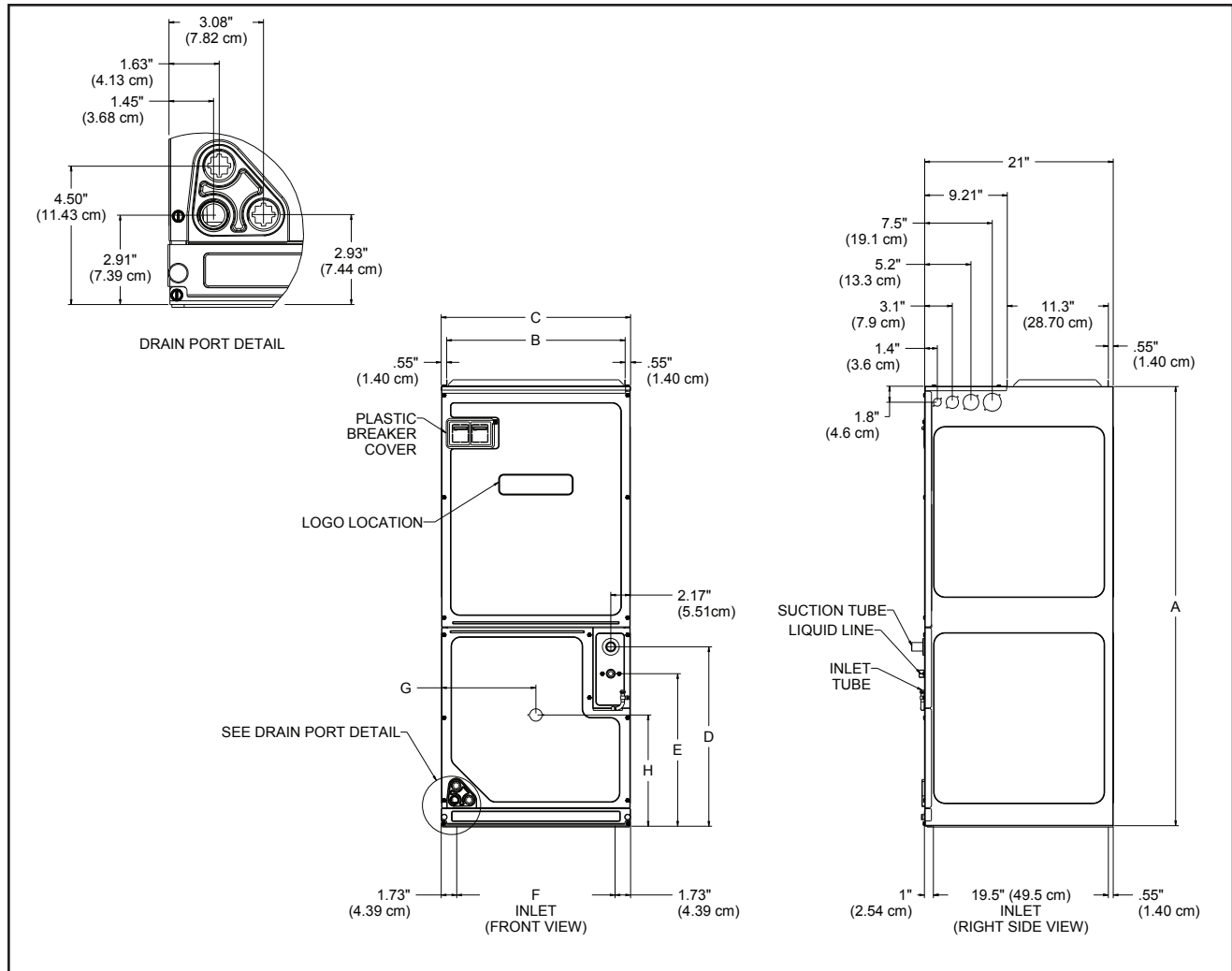
Multiply the 240-volt heating capacity by correction factors.

**SPECIFICATIONS**

	ASPT 24B14*	ASPT 30C14*	ASPT 36C14*	ASPT 42C14*	ASPT 42D14*	ASPT 48C14*	ASPT 48D14*	ASPT 60D14*	ASPT 61D14*
<b>NOMINAL RATINGS</b>									
Cooling (Btu/h)	24,000	30,000	36,000	42,000	42,000	48,000	48,000	60,000	60,000
<b>BLOWER</b>									
Diameter	9½"	10⅝"	10⅝"	10⅝"	10⅝"	10⅝"	10⅝"	11 <sup>15</sup> / <sub>16</sub> "	11 <sup>15</sup> / <sub>16</sub> "
Width	6"	8"	8"	10⅝"	10⅝"	10⅝"	10⅝"	10⅝"	10⅝"
<b>COIL CONNECTIONS</b>									
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"
<b>ELECTRICAL DATA</b>									
Voltage	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230	208 / 230
Minimum Circuit Ampacity	3/3	4/4	4/4	4/4	6/6	7/7	8/8	8/8	8/8
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
<b>Blower Motor</b>									
Full Load Amps (FLA)	2.18	3.15	3.15	3.15	4.84	5.4	6.65	6.65	6.65
Horsepower (HP)	¾	¾	¾	¾	¾	¾	1	1	1
<b>SHIP WEIGHT (LBS.)</b>									
	100	118	118	125	167	125	167	167	167

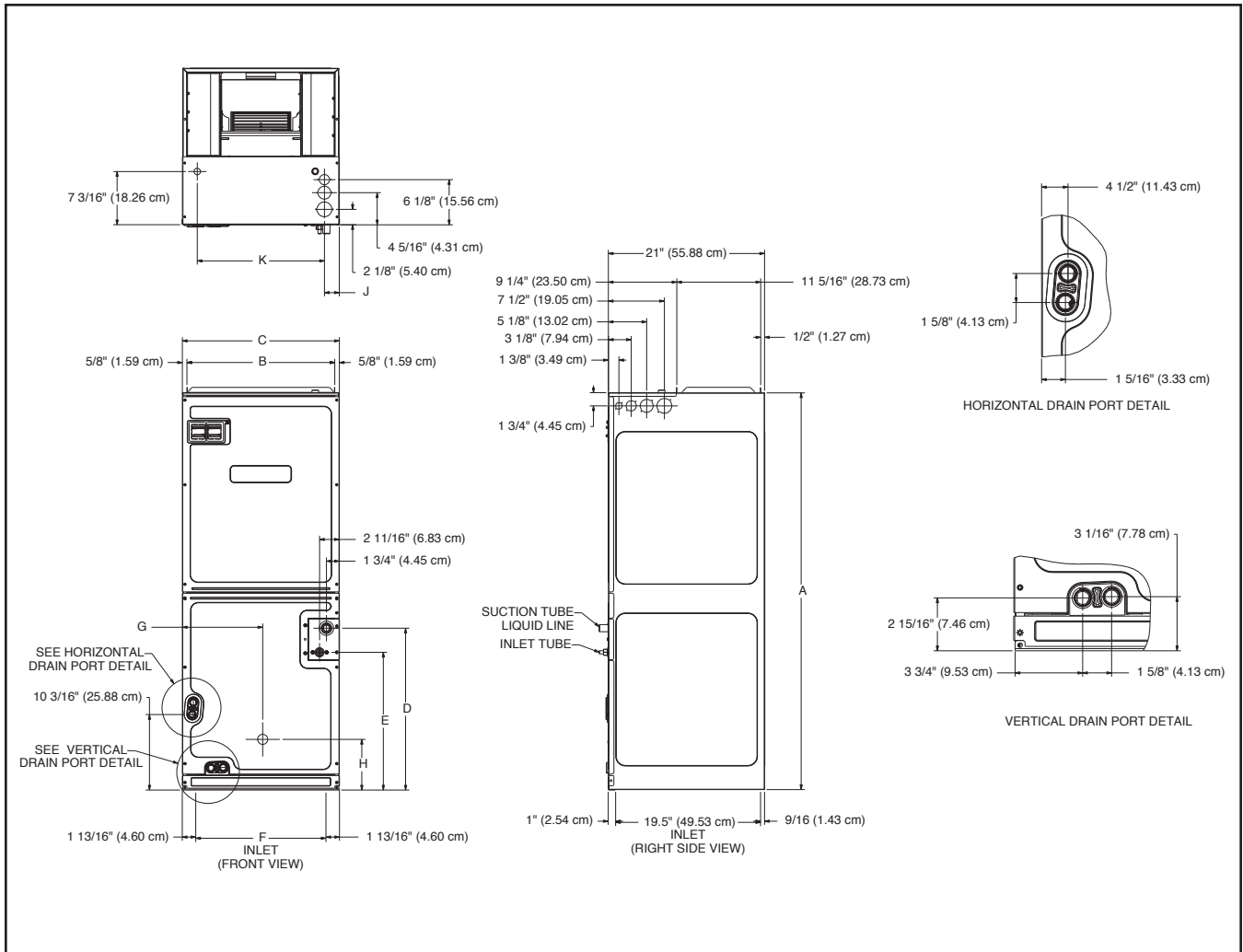
**Note:** Minimum Circuit Ampacity (MCA) and Maximum Overcurrent Protection (MOP) for blower without supplemental heat installed. Refer to unit nameplate and/or Heat Kit Data for specification with approved accessory heaters installed.

DIMENSIONS



MODEL	A"	B"	C"	D"	E"	F"	G"	H"
ASPT24B14*	45	16%	17½	18	15	14¼	8%	12
ASPT30C14*	49	20	21	20	17	17¾	10%	12½
ASPT36C14*	49	20	21	20	17	17¾	10%	12½
ASPT42C14	49	20	21	20	17	17¾	10%	12½
ASPT42D14*	58	23%	24¼	28%	25%	21¼	12%	12½
ASPT48C14	49	20	21	20	17	17¾	10%	12½
ASPT48D14*	58	23%	24¼	28%	25%	21¼	12%	12½
ASPT60D14*	58	23%	24¼	28%	25%	21¼	12%	12½

**DIMENSIONS (CONT.)**



MODEL	A"	B"	C"	D"	E"	F"	G"	H"
ASPT61D14*	58	23 <sup>5</sup> / <sub>16</sub>	24 <sup>1</sup> / <sub>2</sub>	26 <sup>5</sup> / <sub>16</sub>	22 <sup>7</sup> / <sub>16</sub>	21 <sup>3</sup> / <sub>16</sub>	12 <sup>5</sup> / <sub>16</sub>	25 <sup>1</sup> / <sub>16</sub>

**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
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
ASPT61D14	1	1,545	1,495	1,440	1,390	1,335	1,260	1,180	1,080	1,030	970
	2	1,745	1,695	1,625	1,575	1,525	1,475	1,400	1,360	1,275	1,180
	3	1,905	1,855	1,815	1,770	1,725	1,670	1,635	1,575	1,500	1,430
	4	2,155	2,105	2,090	2,045	2,000	1,970	1,935	1,890	1,830	1,770
	5	2,340	2,310	2,265	2,220	2,185	2,165	2,120	2,080	2,030	1,965

**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.

HEAT KIT DATA

MODEL	CIRCUIT 1			CIRCUIT 2			SINGLE-POINT KIT	
	AMPS	MCA <sup>1</sup>	MOP <sup>2</sup>	AMPS	MCA <sup>1</sup>	MOP <sup>2</sup>	MCA <sup>1</sup>	MOP <sup>2</sup>
<b>ASPT24B14AC</b>	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*	21.7 / 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	17.3 / 20	22 / 25	25 / 25	68 / 78	70 / 80
<b>ASPT30C14AB</b>	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	17.3 / 20	22 / 25	25 / 25	69 / 79	70 / 80
<b>ASPT36C14AC</b>	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	---	---	---	--	--
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 / 40.0	47 / 54	50 / 60	17.3 / 20	22 / 25	25 / 25	69 / 79	70 / 80
HKSC19*##	34.7 / 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	--	--
<b>ASPT42C14A</b>	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	---	---	---	--	--
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 / 40.0	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	--	--
<b>ASPT48C14AD</b>	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	---	---	---	--	--
HKSX15XF*	0/0	8/8	15/15	30/34.6	38/44	40/45	--	--
HKSX20XF*	0/0	8/8	15/15	38/43	47/54	50/60	--	--
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	--	--

**HEAT KIT DATA (CONT.)**

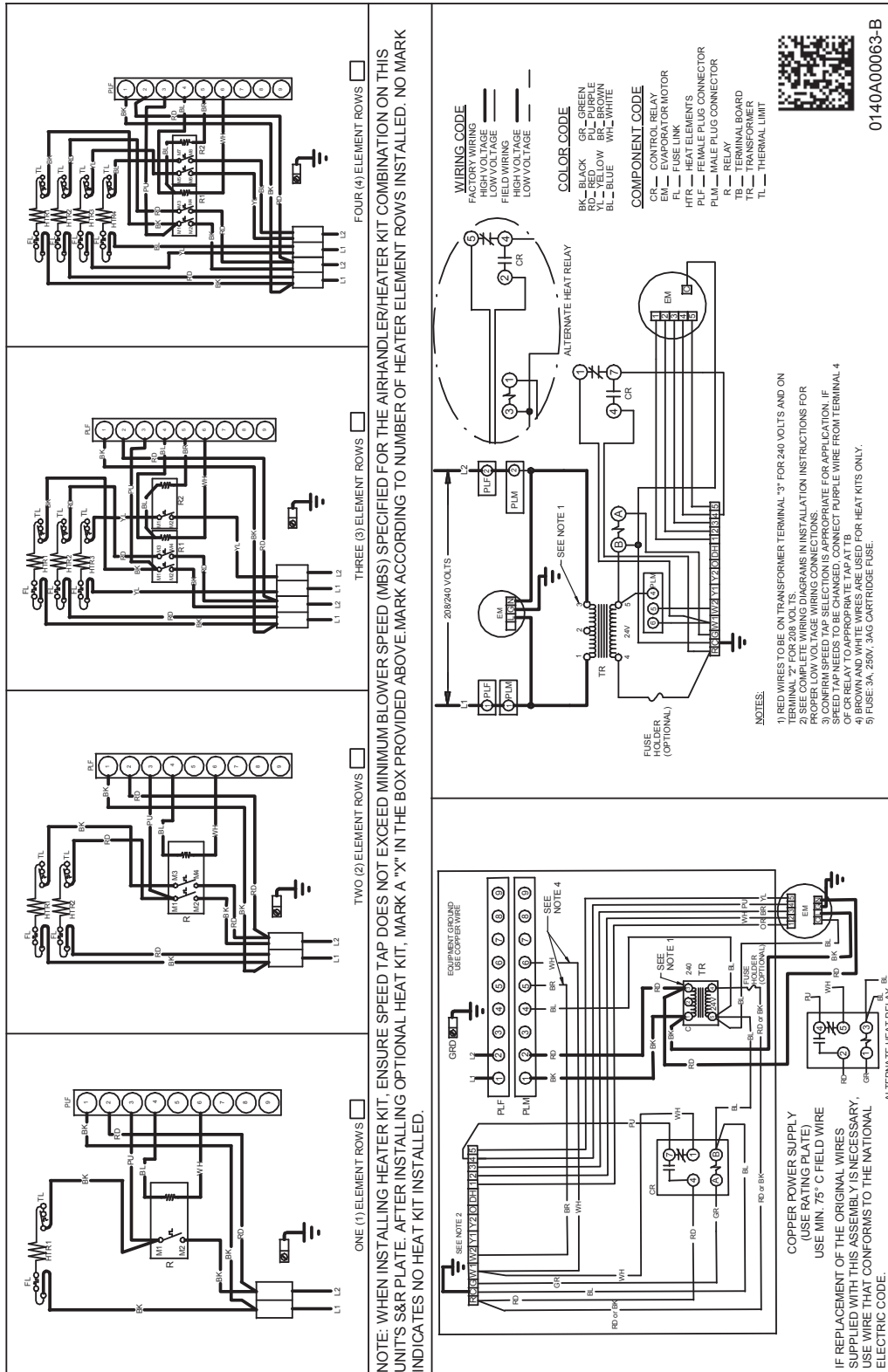
MODEL	CIRCUIT 1			CIRCUIT 2			SINGLE-POINT KIT	
	AMPS	MCA <sup>1</sup>	MOP <sup>2</sup>	AMPS	MCA <sup>1</sup>	MOP <sup>2</sup>	MCA <sup>1</sup>	MOP <sup>2</sup>
<b>ASPT42D14AC</b>	0 / 0	6/6	15 / 15	---	---	---	--	--
HKS*03XC*	10.8 / 12.5	20 / 22	20 / 25	---	---	---	--	--
HKS*05XC*	17.3 / 20.0	28 / 31	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	---	---	---	--	--
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 / 40.0	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 / 43	40 / 45	--	--
HKSC20XF*	0/0	6/6	15/15	38 / 43	47 / 54	50 / 60	--	--
<b>ASPT48D14AD</b>	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	35.4 / 40	40 / 40	---	---	---	--	--
HKS*08XC*	28.9 / 33.3	44 / 50	45 / 50	---	---	---	--	--
HKS*10XC*	34.7 / 40.0	52 / 58	60 / 60	---	---	---	--	--
HKSX15XF*	0/0	8/8	15/15	30/34.6	38/43	40/45	--	--
HKSX20XF*	0/0	8/8	15/15	38/43	47/54	50/60	--	--
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	38/43	40/45	--	--
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
<b>ASPT60D14AC</b>	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
<b>ASPT61D14AC</b>	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

<sup>1</sup> Minimum Circuit Ampacity (Heater Amps + Motor Amps) X 1.25  
<sup>2</sup> 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



# WIRING DIAGRAM – AIR HANDLER

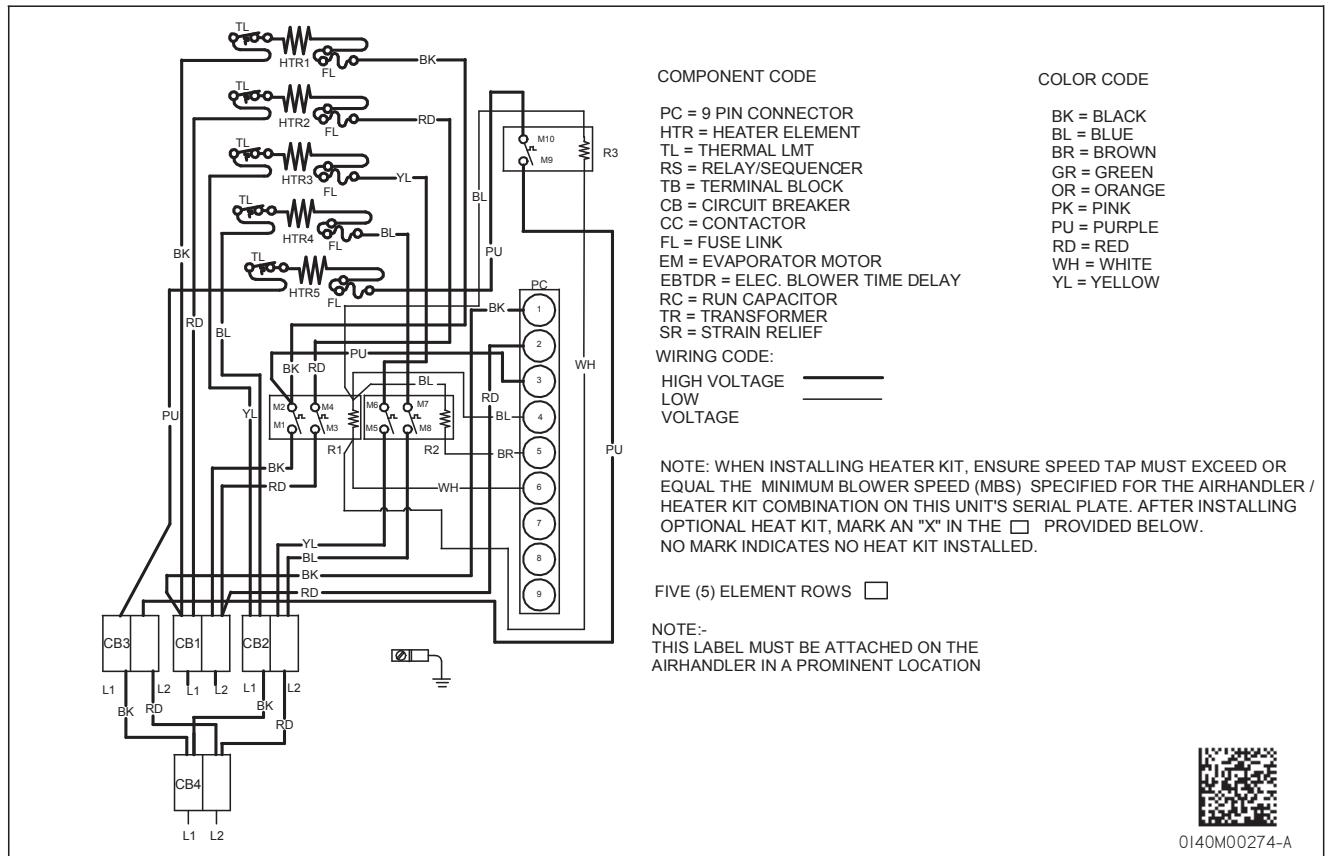


**NOTE:** The five element, 25 kW heater kit is not SHOWN ABOVE.

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

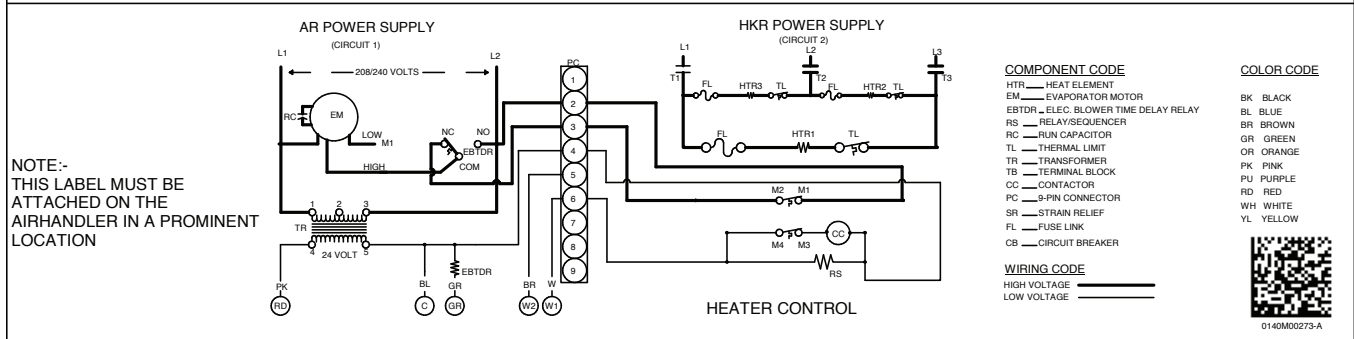
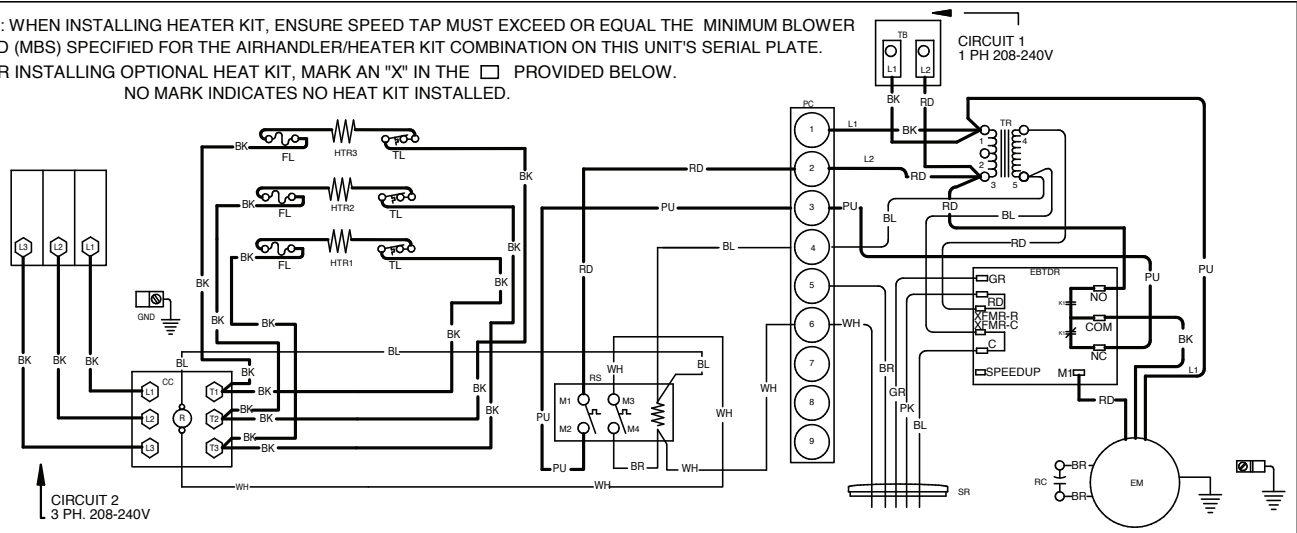


Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

	<b>WARNING</b>	<p><b>High Voltage:</b> 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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# 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.



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.

**ACCESSORIES****DOWNFLOW INSULATION KIT**

<b>DFK-B</b>	<b>DFK-C</b>	<b>DFK-D</b>
ASPT24B14**	ASPT30C14**	ASPT42D14**
	ASPT36C14**	ASPT48D14**
	ASPT42C14**	ASPT60D14**
	ASPT48C14**	ASPT61D14**

**FILTERS**

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