

# ASPT SERIES

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



## Contents

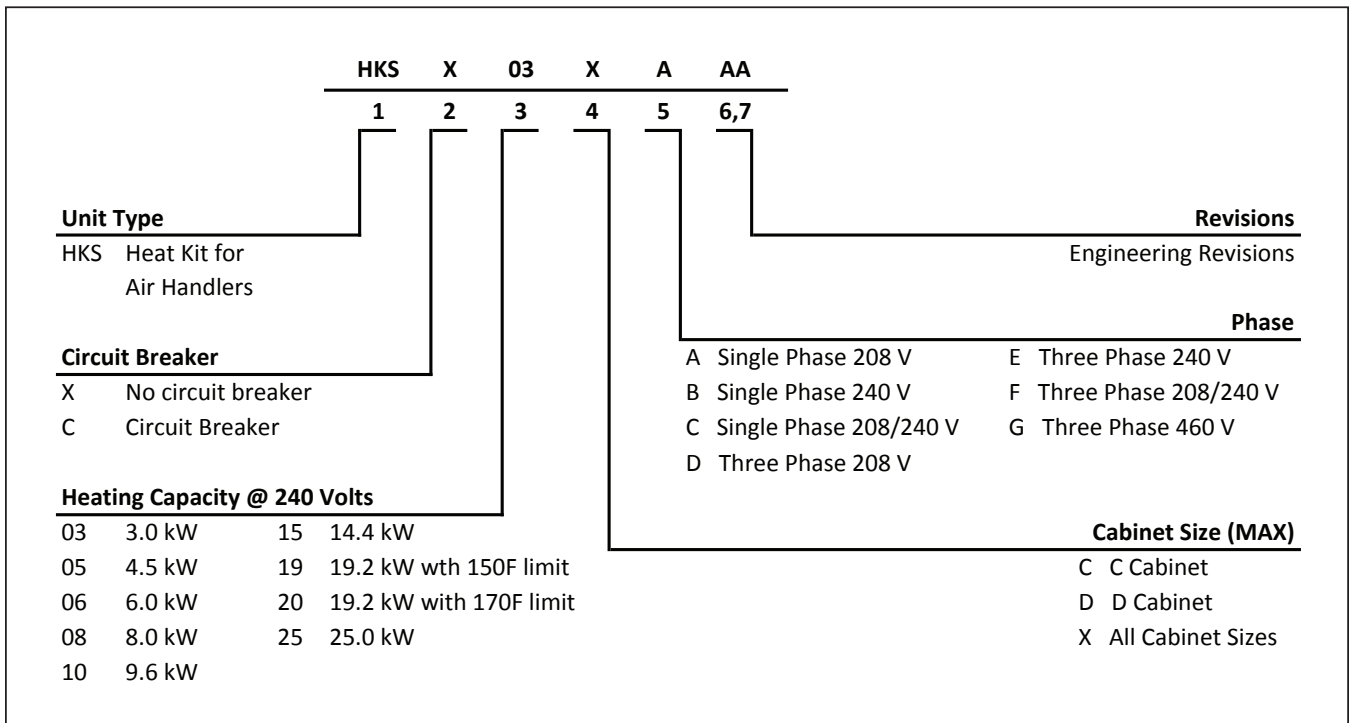
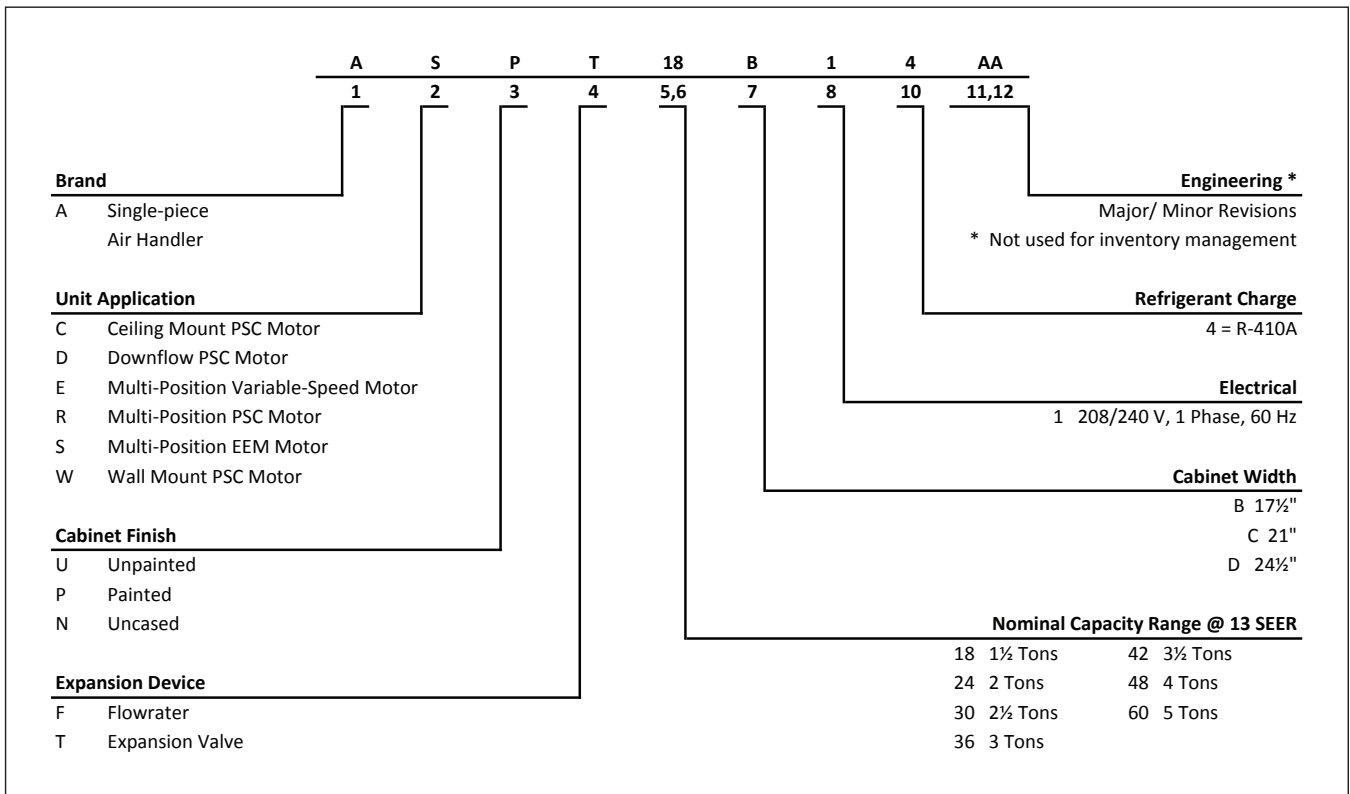
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## Product Features

- 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 H<sub>2</sub>O when tested in accordance with ASHRAE standard 193
- Cabinet air leakage less than 1.4% at 0.5 inch H<sub>2</sub>O when tested in accordance with ASHRAE standard 193
- 3 kW – 25 kW electric heater kits
- AHRI certified; ETL listed
- Rigid SmartFrame™ cabinet
- Horizontal or vertical configuration capabilities
- 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



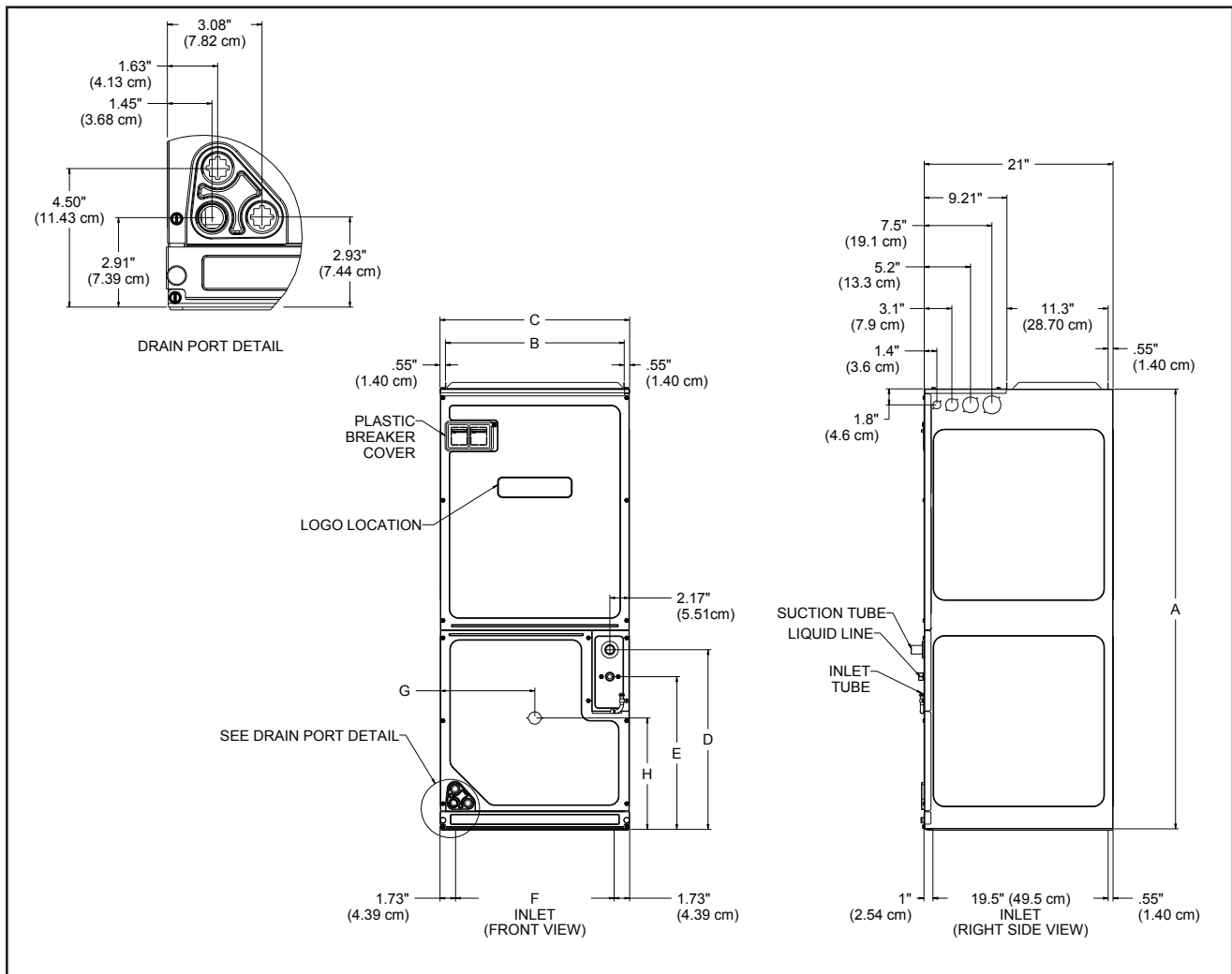
\* Complete warranty details available from your local dealer or at [www.goodmanmfg.com](http://www.goodmanmfg.com). To receive the 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Québec.



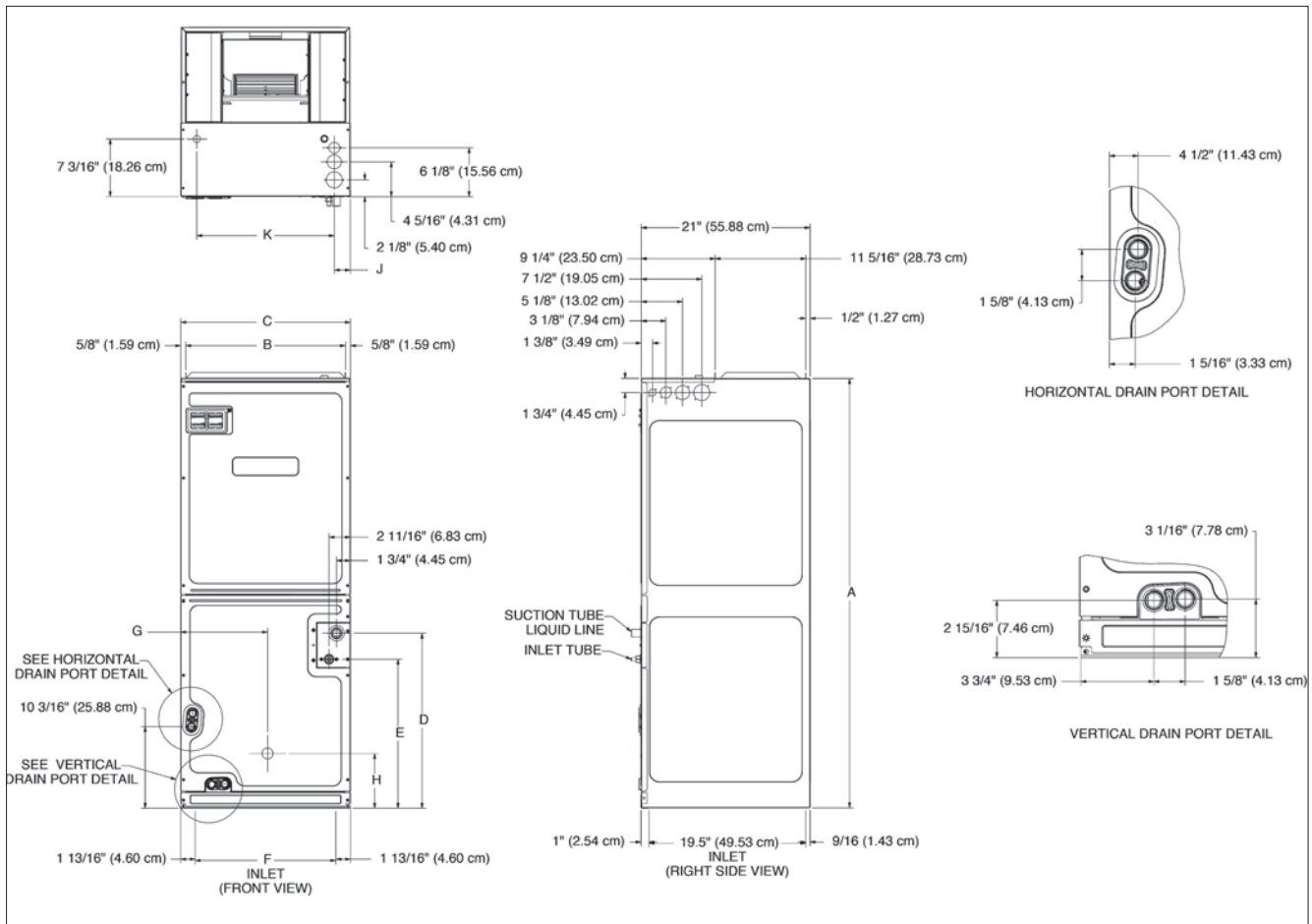
	ASPT 25B14*	ASPT 29B14*	ASPT 37B14*	ASPT 37C14*	ASPT 47C14*	ASPT 59C14*	ASPT 47D14*	ASPT 49D14*	ASPT 61D14*
<b>NOMINAL RATINGS</b>									
Cooling (Btu/h)	24,000	24,000	30,000	36,000	42,000	60,000	42,000	48,000	60,000
<b>BLOWER</b>									
Diameter	9½"	9½"	9½"	10⅝"	10⅝"	10⅝"	10⅝"	11 <sup>15</sup> / <sub>16</sub> "	11 <sup>15</sup> / <sub>16</sub> "
Width	6"	6"	6"	8"	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	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
<b>Blower Motor</b>									
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
<b>SHIP WEIGHT (LBS.)</b>	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 <sup>3</sup> / <sub>16</sub>	9%	12%
ASPT29B14*	53 <sup>7</sup> / <sub>16</sub>	16%	17½	23 <sup>11</sup> / <sub>16</sub>	20½	14 <sup>3</sup> / <sub>16</sub>	9%	7%
ASPT37B14*	53 <sup>7</sup> / <sub>16</sub>	16%	17½	23 <sup>11</sup> / <sub>16</sub>	20½	14 <sup>3</sup> / <sub>16</sub>	9%	7%
ASPT37C14*	53 <sup>7</sup> / <sub>16</sub>	19%	21	21 <sup>13</sup> / <sub>16</sub>	18%	17 <sup>11</sup> / <sub>16</sub>	10 <sup>13</sup> / <sub>16</sub>	6%
ASPT47C14*	53 <sup>7</sup> / <sub>16</sub>	19%	21	21 <sup>13</sup> / <sub>16</sub>	18%	17 <sup>11</sup> / <sub>16</sub>	10 <sup>13</sup> / <sub>16</sub>	6%
ASPT59C14*	53 <sup>7</sup> / <sub>16</sub>	19%	21	21 <sup>13</sup> / <sub>16</sub>	18%	17 <sup>11</sup> / <sub>16</sub>	10 <sup>13</sup> / <sub>16</sub>	6%
ASPT47D14*	53 <sup>7</sup> / <sub>16</sub>	23 <sup>5</sup> / <sub>16</sub>	24½	21½	18 <sup>5</sup> / <sub>16</sub>	21 <sup>3</sup> / <sub>16</sub>	12%	6%
ASPT49D14*	58	23 <sup>5</sup> / <sub>16</sub>	24½	26%	22%	21 <sup>3</sup> / <sub>16</sub>	12%	25%
ASPT61D14	58	23 <sup>5</sup> / <sub>16</sub>	24½	26%	22%	21 <sup>3</sup> / <sub>16</sub>	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 <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>ASPT25B14AA</b>	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	---	---	---	---	---
<b>ASPT29B14AA</b>	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
<b>ASPT37B14AA</b>	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
<b>ASPT37C14AA</b>	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	---	---
<b>ASPT47C14AA</b>	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	---	---

<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

<sup>^</sup> 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 <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>ASPT59C14AA</b>	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	---	---
<b>ASPT47D14AA</b>	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	---	---
<b>ASPT49D14AA</b>	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
<b>ASPT61D14AA</b>	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

<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  
<sup>^</sup> Circuit 1: Single-phase for Air Handlers  
 Circuit 2: Three-phase for HKR3 Heater Kits

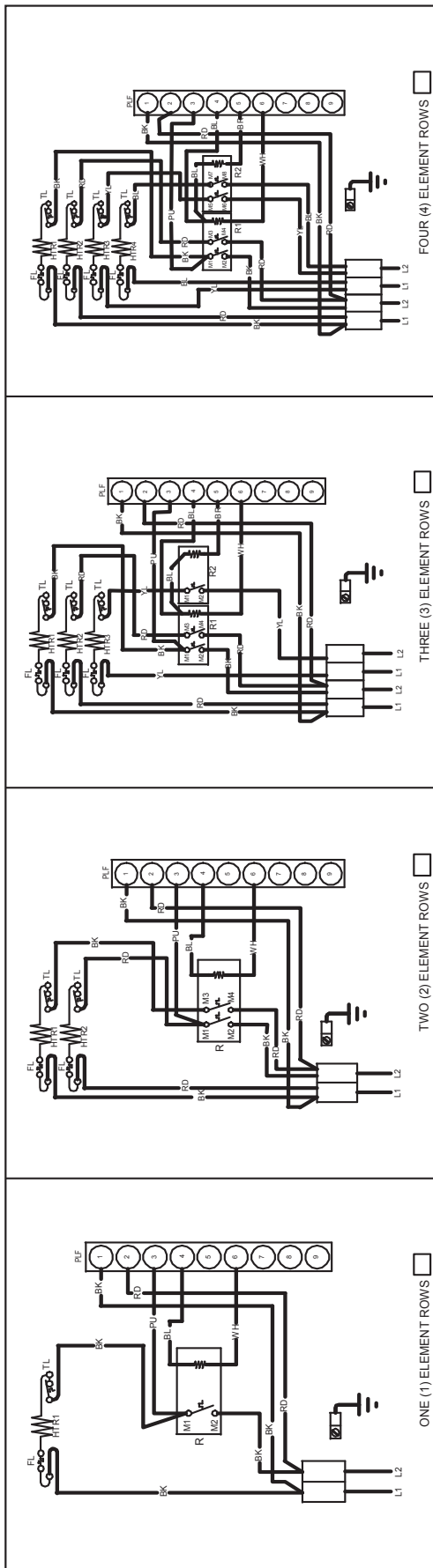
\* Revision level that may or may not be designated  
 C = Circuit Breaker Option  
 --- indicates Not Required

HEATING kW CORRECTION FACTOR

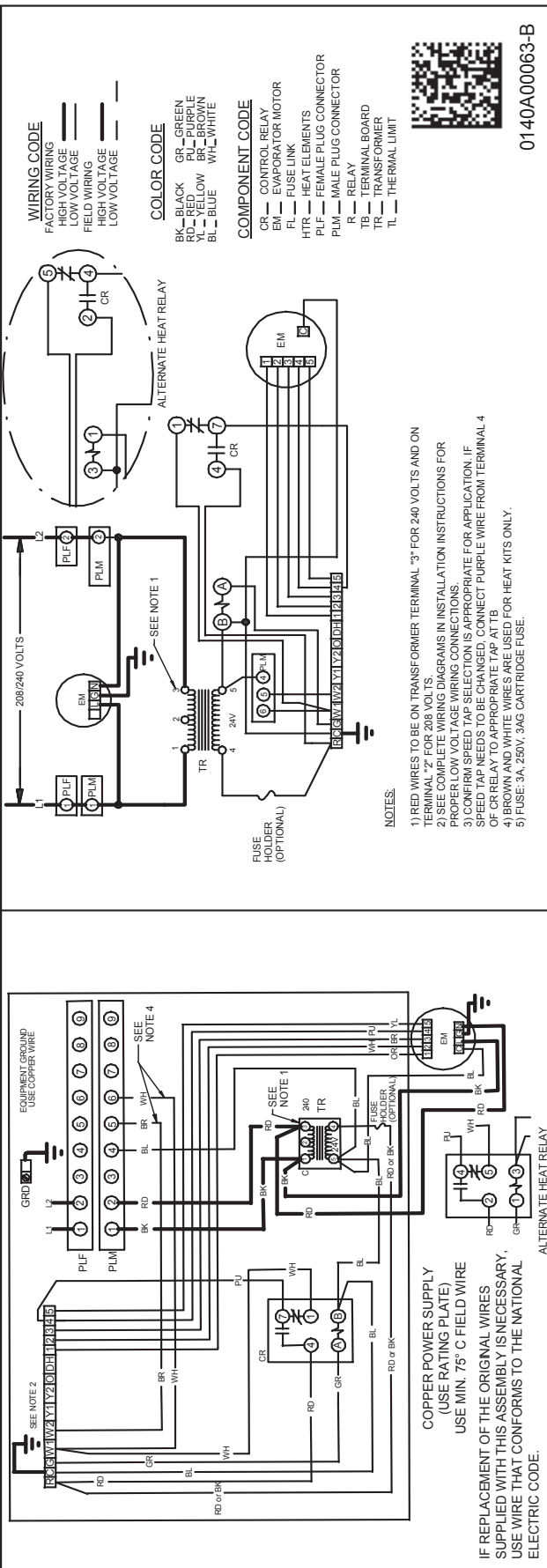
SUPPLY VOLTAGE	240	230	220	210	208
CORRECTION FACTOR	1.00	0.92	0.84	0.77	0.75

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.



0140A00063-B

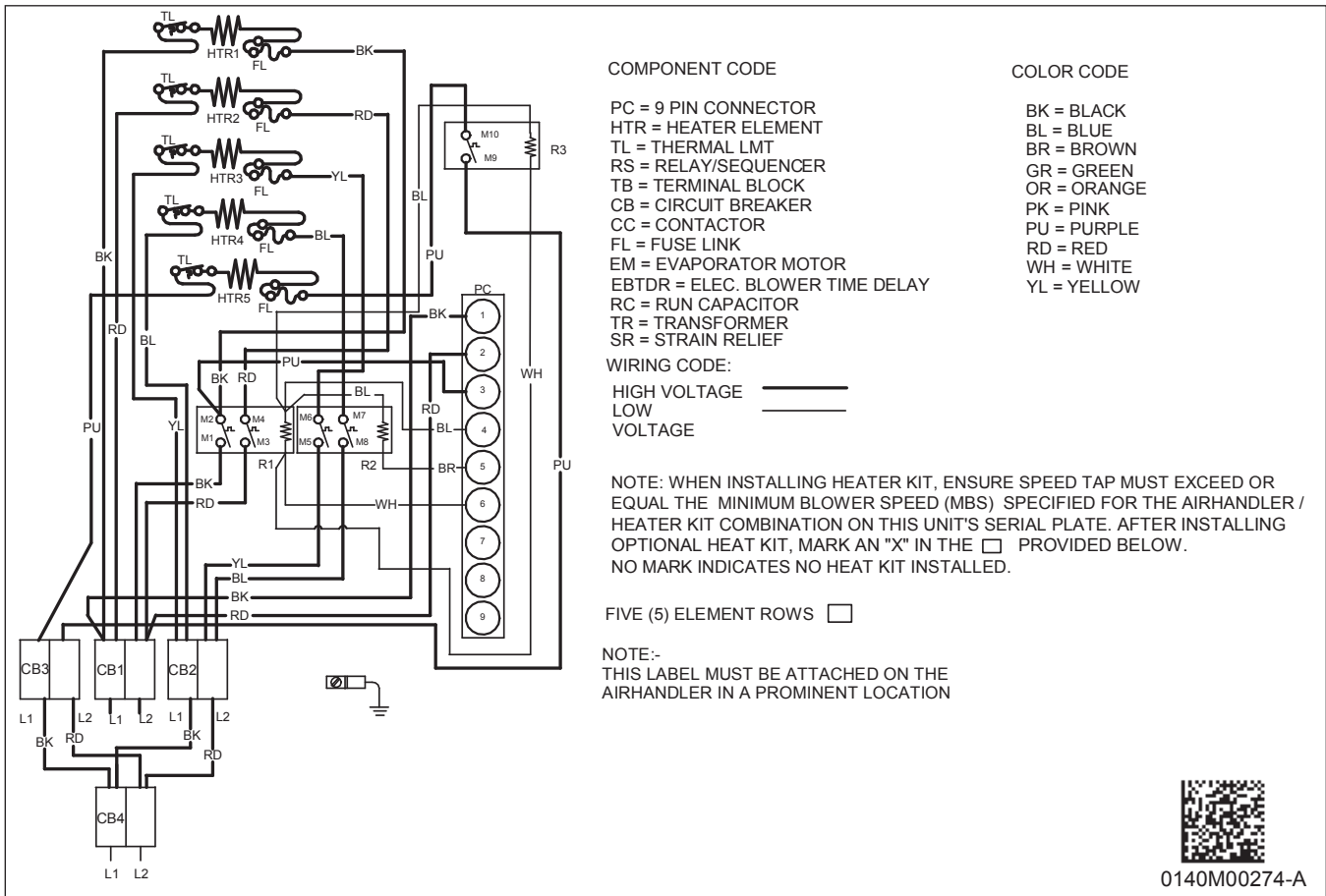
**WARNING**

⚡



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.

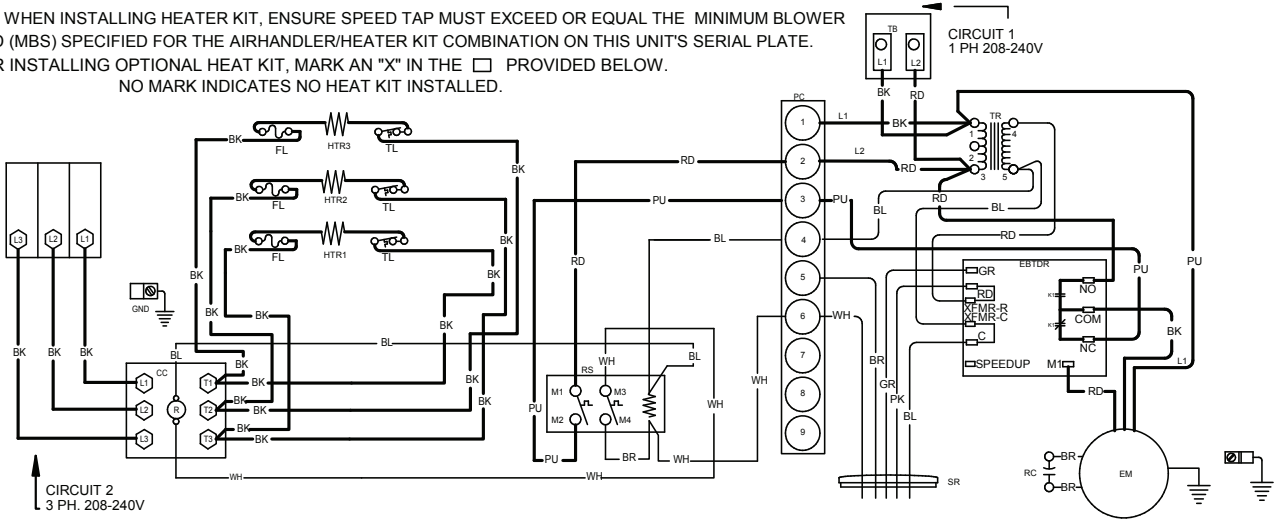
# FIVE-ELEMENT HEATER KIT WIRING DIAGRAM



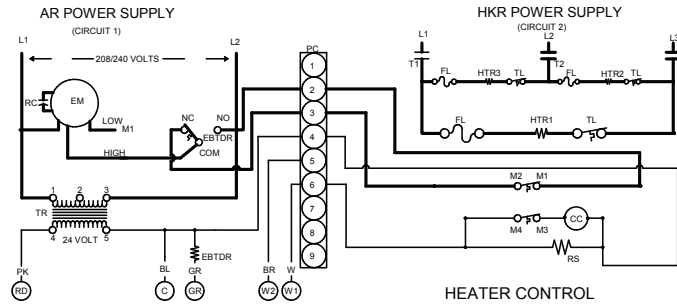
Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

 <b>WARNING</b>	<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.	
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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.



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



COMPONENT CODE		COLOR CODE	
HTR	HEAT ELEMENT	BK	BLACK
EM	EVAPORATOR MOTOR	BL	BLUE
EBTDR	ELEC. BLOWER TIME DELAY RELAY	BR	BROWN
RS	RELAY/SEQUENCER	GR	GREEN
TL	THERMAL LIMIT	OR	ORANGE
TR	TRANSFORMER	PK	PINK
TB	TERMINAL BLOCK	PU	PURPLE
CC	CONTACTOR	RD	RED
PC	9-PIN CONNECTOR	WH	WHITE
SR	STRAIN RELIEF	YL	YELLOW
FL	FUSE LINK		
CB	CIRCUIT BREAKER		
WIRING CODE			
HIGH VOLTAGE		=====	
LOW VOLTAGE		-----	



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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*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"