

MULTI-POSITION, VARIABLE-SPEED AIR HANDLER

- *Comfortnet™ Compatible*
- *ECM-based*
- *Internal EEV, Inverter-tuned*
- *2 to 5 Tons*



Contents

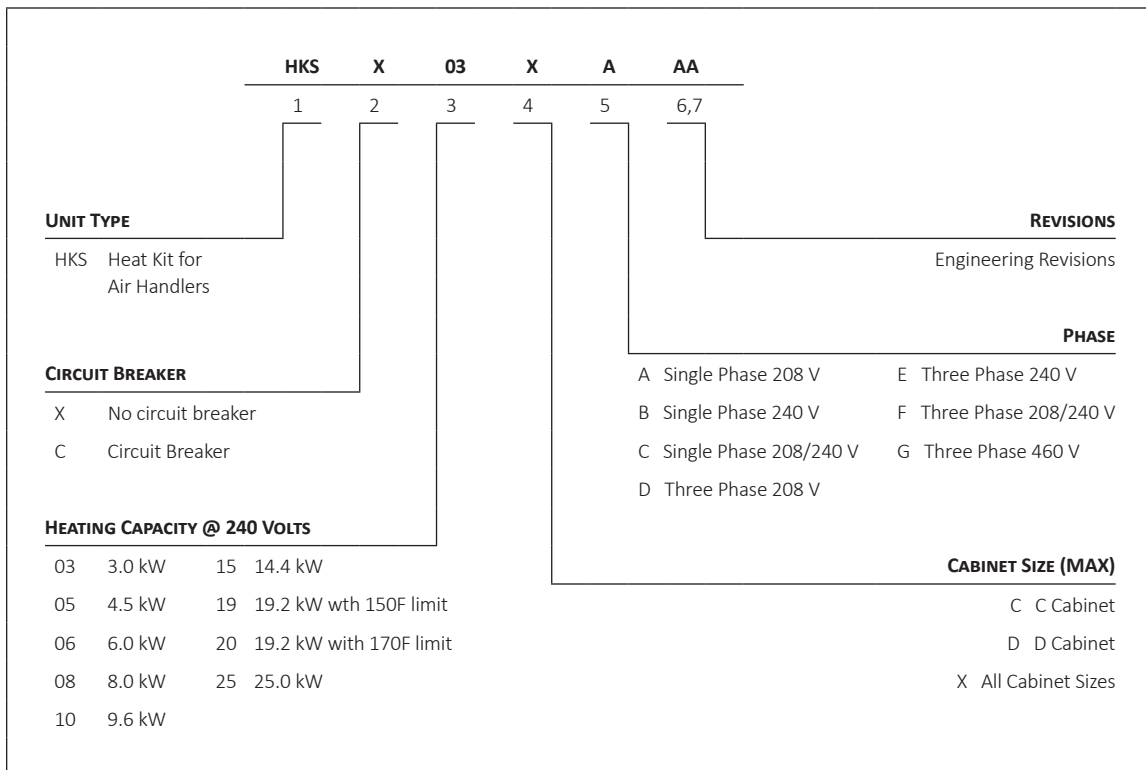
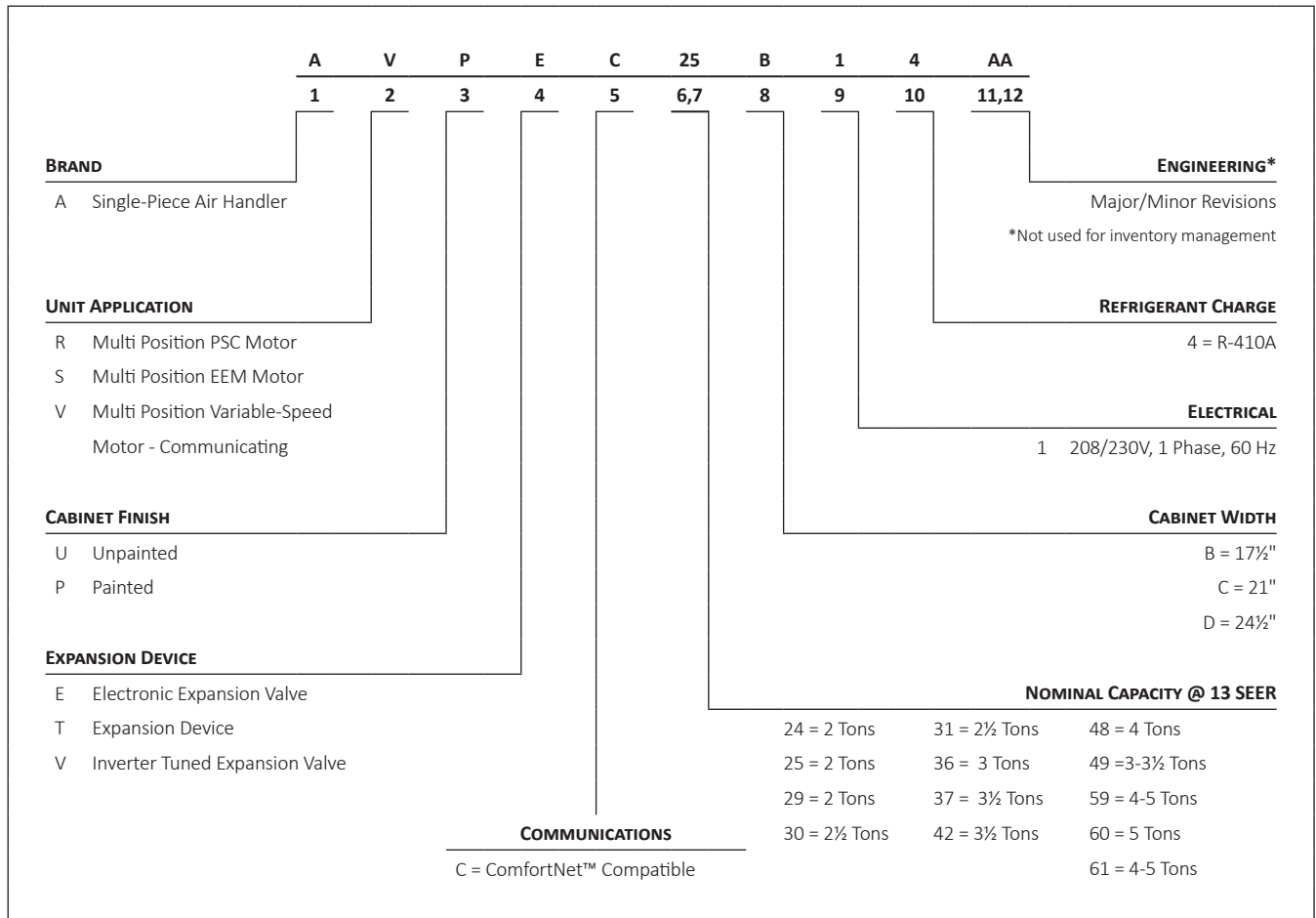
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Product Features

- Electronic Expansion Valve (EEV) for cooling and heat pump applications.
- Variable-speed ECM blower motor
- ComfortNet™ Communicating System compatible
- Provides constant CFM over a wide range of static pressure conditions independent of duct system
- CFM indicator
- Thermostat provides adjustable low CFM for efficient fan-only operation
- All-aluminum evaporator coil
- Fault recall of six most recent faults
- Improved humidity and comfort control
- 3 kW – 25 kW electric heater kits
- AHRI certified; ETL listed
- 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
- 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



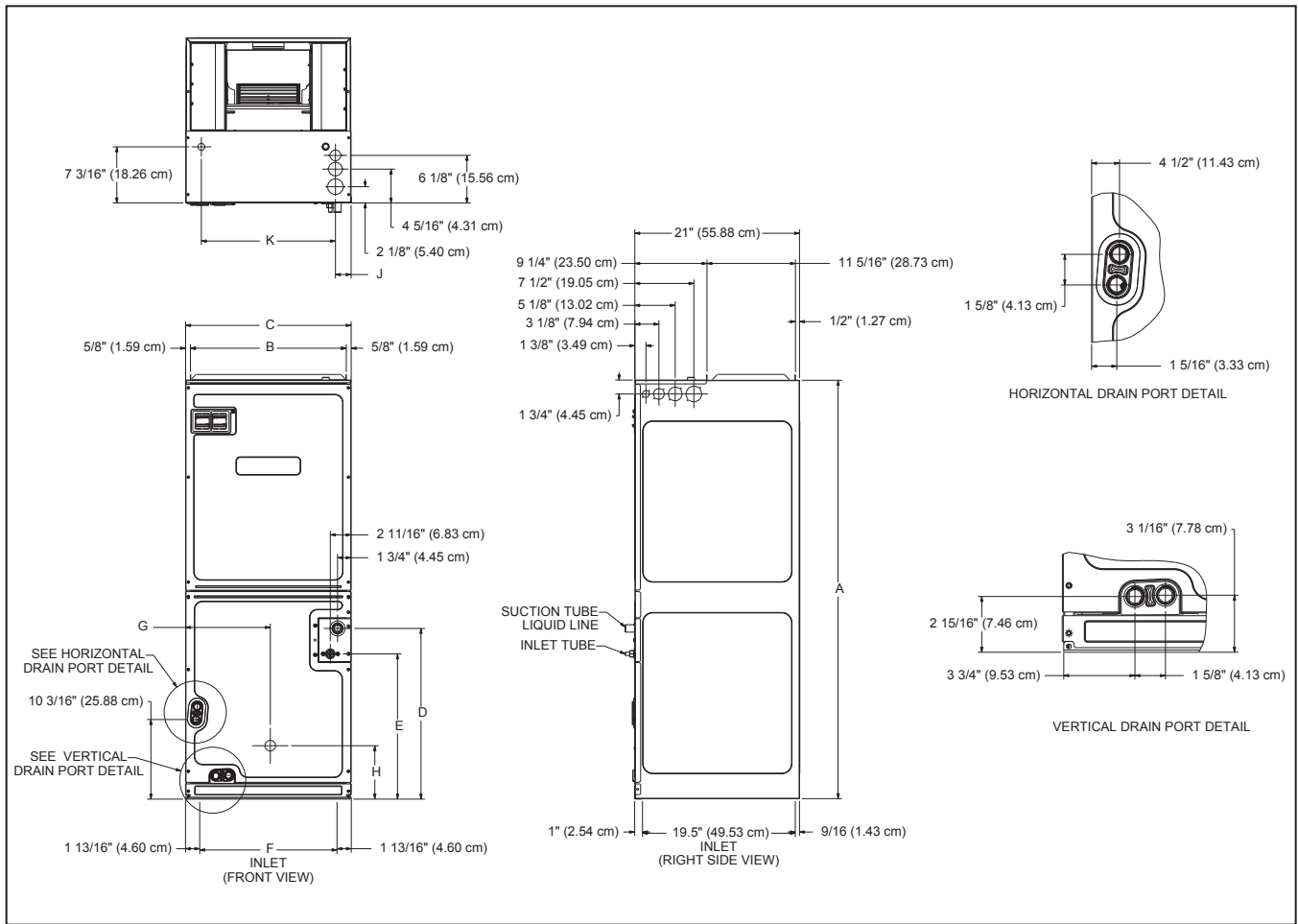
* Complete warranty details available from your local dealer or at www.amana-hac.com To receive the 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Québec.



	AVPEC25 B14A*	AVPEC37 C14A*	AVPEC59 D14A*	AVPEC61 D14A*
NOMINAL RATINGS				
Cooling (BTU/h)	24,000	36,000	48,000	60,000
CFM (High range)	1200/600	1700/800	1800/1350	2000/1600
BLOWER				
Diameter	10 $\frac{5}{8}$ "	10 $\frac{5}{8}$ "	11 $\frac{5}{8}$ "	11 $\frac{5}{8}$ "
Width	6"	10 $\frac{5}{8}$ "	10 $\frac{5}{8}$ "	10 $\frac{5}{8}$ "
Coil Drain Connection FPT	$\frac{3}{4}$ "	$\frac{3}{4}$ "	$\frac{3}{4}$ "	$\frac{3}{4}$ "
SERVICE VALVE				
Liquid	$\frac{3}{8}$ "	$\frac{3}{8}$ "	$\frac{3}{8}$ "	$\frac{3}{8}$ "
Suction	$\frac{3}{4}$ "	$\frac{7}{8}$ "	$\frac{7}{8}$ "	$\frac{7}{8}$ "
ELECTRICAL DATA				
Voltage	208/240	208/240	208/240	208/240
Electric Heat Capacity (kW)	3, 5, 6, 8, 10	5, 6, 8, 10, 15, 19	5, 6, 8, 10, 15, 20, 25	5, 6, 8, 10, 15, 20, 25
Min Circuit Ampacity	4.9/4.9	6.5/6.5	8.6/8.6	8.6/8.6
Max. Overcurrent Device (Amps)	15/15	15/15	15/15	15/15
Minimum VAC	197	197	197	197
Maximum VAC	253	253	253	253
BLOWER MOTOR				
Full Load Amps (FLA)	3.9	5.2	6.9	6.9
Horsepower (HP)	$\frac{1}{2}$	$\frac{3}{4}$	1	1
SHIP WEIGHT (LBS.)	128	150	160	177

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
AVPEC25B14	53 7/16	16 3/8	17 1/2	20	21 1/2	14 3/8	9 1/8	7 3/8
AVPEC37C14	53 7/16	19 3/8	21	21 13/16	18 5/8	17 11/16	10 13/16	6 13/16
AVPEC59D14	53 7/16	23 3/16	24 1/2	21 1/2	18 5/16	21 3/16	12 5/8	6 7/8
AVPEC61D14	58	23 3/16	24 1/2	26 3/8	22 7/8	21 3/16	12 5/16	25 3/8

MODEL	STAGE	AIRFLOW CFM								
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
AVPEC25B14A*	High	700	690	690	685	680	670	665	660	655
	Low	520	505	495	490	470	455	445	435	425
AVPEC37C14A*	High	1190	1170	1165	1160	1145	1130	1120	1105	1100
	Low	820	810	795	785	765	740	730	720	710
AVPEC59D14A*	High	1445	1440	1430	1415	1405	1390	1380	1375	1370
	Low	880	875	870	870	860	845	840	835	830
AVPEC61D14A*	High	1645	1640	1640	1635	1630	1625	1620	1620	1615
	Low	1080	1075	1070	1070	1060	1055	1050	1050	1045

Note: During cooling operation outdoor will determine the indoor airflow

COOLING/HEAT PUMP AIRFLOW TABLE

MODEL	AIRFLOW LEVEL	CFM
AVPEC25B14A*	High	690
	Low	495
AVPEC37C14A*	High	1165
	Low	795
AVPEC59D14A*	High	1430
	Low	870
AVPEC61D14A*	High	1640
	Low	1070

MODELS	CIRCUIT 1			CIRCUIT 2			SINGLE-POINT KIT	
	AMPS	MCA ¹	MOP ²	AMPS	MCA ¹	MOP ²	MCA ¹	MOP ²
AVPEC25B14AA	0.0/0.0	4.9/4.9	15/15	---	---	---	---	---
HKS*03XC*	10.8/12.5	18/21	20/25	---	---	---	---	---
HKS*05XC*	17.3/20.0	27/30	30/30	---	---	---	---	---
HKS*06XC*	21.7/25.0	32/36	35/40	---	---	---	---	---
HKS*08XC*	28.9/33.3	41/47	45/50	---	---	---	---	---
HKS*10XC*	34.7/40.0	48/55	50/60	---	---	---	---	---
AVPEC37C14AA	0.0/0.0	6.5/6.5	15/15	---	---	---	---	---
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	50/60	---	---	---	---	---
HKSC15*##	34.7/40.0	50/57	50/60	17.3/20.0	22/25	25/25	72/82	80/90
HKSC19C##	34.7/40.0	50/57	50/60	34.7/40	43/50	45/50	93/107	100/110
HKSC15XF*	0.0/0.0	6.5/6.5	15/15	30.0/34.6	38/43	40/45	---	---
AVPEC59D14AA	0.0/0.0	6.5/6.5	15/15	---	---	---	---	---
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	50/60	---	---	---	---	---
HKSC15*##	34.7/40.0	50/57	50/60	17.3/20.0	22/25	25/25	72/82	80/90
HKSC20D##	34.7/40.0	50/57	50/60	34.7/40	43/50	45/50	93/107	100/110
HKSC15XF*	0.0/0.0	6.5/6.5	15/15	30.0/34.6	38/43	40/45	---	---
HKSC20XF*	0.0/0.0	6.5/6.5	15/15	37.5/43.3	47/54	50/60	---	---
AVPEC61D14AA	0.0/0.0	8.6/8.6	15/15	---	---	---	---	---
HKS*05XC*	17.3/20.0	30/34	35/35	---	---	---	---	---
HKS*06XC*	21.7/25.0	36/40	40/40	---	---	---	---	---
HKS*08XC*	28.9/33.3	45/50	45/60	---	---	---	---	---
HKS*10XC*	34.7/40.0	52/59	60/60	---	---	---	---	---
HKSC15*##	34.7/40.0	52/59	60/60	17.3/20	22/25	25/25	74/84	80/90
HKSC20D##	34.7/40.0	52/59	60/60	34.7/40.0	43/50	45/50	95/109	100/110
HKSC15XF*	0.0/0.0	8.6/8.6	15/15	30.0/34.6	38/43	40/45	---	---
HKSC20XF*	0.0/0.0	8.6/8.6	15/15	37.5/43.3	47/54	50/60	---	---
HKSC25DC*	52.0/60.0	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

HKA meets the new UL1995 requirements for 15 and 20KW heaters

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.

