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TAG:

Submittal

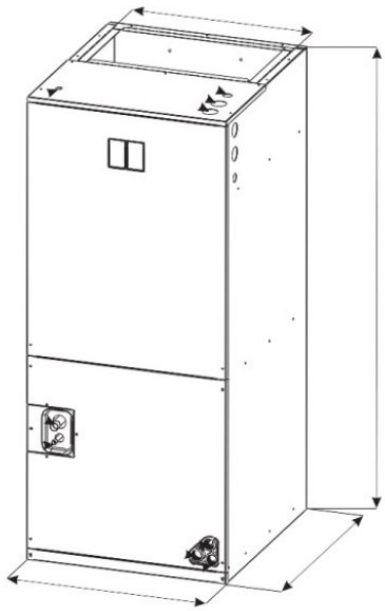
1.5 / 2 /2.5 / 3 / 3.5 Ton Multi-Position Standard Air Handler (STD) - 1 Phase

D4AH4P19E1B00* D4AH4P24E1B00
D4AH4P30E1B00* D4AH4P36E1B00
D4AH4P42E1B00*

Standard Features:

- Multi-stage blower Speed Control to align with varying capacity demands
- Multi-position installation: Upflow, Horizontal Right, Downflow, Horizontal Left.
- Horizontal and vertical condensate drain pans standard, primary and secondary condensate fittings. Optional electric heater kits: 5, 7.5, 10, 15, 20kW
- Slide out coil design for easy maintenance.
- Integrated filter rack with toolless door access.
- All-aluminum heat exchanger prevent for formicary corrosion.
- R32 refrigerant sensor is factory-installed, ensures safe operation.

FOR ILLUSTRATIVE PURPOSES ONLY



Model	W - inch [mm]	H - inch [mm]	L - inch [mm]	GAS VALVE SIZE in.	LIQUID VALVE SIZE in.
D4AH4P19E1B00*	19-11/16[500]	45-3/4[1162]	22[560]	3/4	3/8
D4AH4P24E1B00*	19-11/16[500]	45-3/4[1162]	22[560]	3/4	3/8
D4AH4P30E1B00*	19-11/16[500]	45-3/4[1162]	22[560]	3/4	3/8
D4AH4P36E1B00*	19-11/16[500]	45-3/4[1162]	22[560]	3/4	3/8
D4AH4P42E1B00*	19-11/16[500]	45-3/4[1162]	22[560]	3/4	3/8

NOMINAL RATING	1.5 Ton	2 Ton	2.5 Ton	3 Ton	3.5 Ton
Cooling (BTU/h)	1800 0	232 00	278 00	328 00	400 00
Rate CFM	820	820	910	1060	1200
External Static Pressure (in.w.c) [Pa]	0.5[125]	0.5[125]	0.5[125]	0.5[125]	0.5[125]
ELECTRICAL DATA					
Voltage / Phase (60 Hz)	208/230/1	208/230/1	208/230/1	208/230/1	208/230/1
Min. / Max. Voltage	187/253	187/253	187/253	187/253	187/253
MCA	2.25	2.25	2.79	2.79	3.76
MOP	3	3	3	3	6
INDOOR UNIT COIL					
Type	Tube & Fin	Tube & Fin	Tube & Fin	Tube & Fin	Tube & Fin
Material	ALL-Aluminum	ALL-Aluminum	ALL-Aluminum	ALL-Aluminum	ALL-Aluminum
Tube Size (in.)	9/32	9/32	9/32	9/32	9/32
FAN MOTOR					
Motor Type	PSC	PSC	PSC	PSC	PSC
Capacitor(uF)	10	10	15	15	20
Horsepower (HP)	1/5	1/5	3/10	3/10	2/5
Full Load Amps (FLA)	1.8	1.8	2.23	2.23	3.01
BLOWER					
Material	Metal	Metal	Metal	Metal	Metal
Diameter(in.)	11	11	11	11	11
Coil Drain Connection FPT (in.)	3/4"	3/4"	3/4"	3/4"	3/4"
REFRIGERATION CONNECTION					
Liquid Line Size (“O.D.)	3/8"	3/8"	3/8"	3/8"	3/8"
Suction Line Size (“O.D.)	3/4"	3/4"	3/4"	3/4"	3/4"
SHIPPING DIM.-(IN.)[mm]					
Width	22-13 /16[58 0]	22-13 /16[58 0]	22-13 /16[58 0]	22-13 /16[58 0]	22-13/16[580]
Height	47-5/8[1210]	47-5/8[1210]	47-5/8[1210]	47-5/8[1210]	47-5/8[1210]
Length	25-9/16[650]	25-9/16[650]	25-9/16[650]	25-9/16[650]	25-9/16[650]
SHIPPING WEIGHT					
Shipping (LBS.) [kg]	131[59.6]	132 [59.8]	140 [63.3]	140 [63.3]	140 [63.3]

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Heater Kit Model	Electric Heater (kW)	Min. Circuit Ampacity		Max. Fuse or Breaker (HACR) Ampacity		REFERENCE AIR HANDLER USE	Min. Heating Blower Speed (AC/HP) PSC MOTOR		
		208V	230V	208V	230V		LOW	MEDIUM	HIGH
AEHK-05(STD)	5	22.8	24.9	25	25	18K (PSC)	●	●	●
						24K (PSC)	●	●	●
						30K (PSC)	✕	●	●
						36K (PSC)	✕	✕	●
						42K (PSC)	✕	●	●
AEHK-08(STD)	7.5	34.8	37.9	35	40	18K (PSC)	●	●	●
						24K (PSC)	●	●	●
						30K (PSC)	✕	●	●
						36K (PSC)	✕	✕	●
						42K (PSC)	✕	●	●
AEHK-10(STD)	10	45.4	49.8	50	50	24K (PSC)	●	●	●
						30K (PSC)	✕	●	●
						36K (PSC)	✕	✕	●
						42K (PSC)	✕	●	●
AEHK-15(STD)	15	34.8/34.8	37.9/37.9	3 5 /35	40/40	36K (PSC)	✕	✕	●
						42K (PSC)	✕	●	●
AEHK-20(STD)	20	45.4/45.4	49.8/49.8	5 0 /50	50/50	42K (PSC)	✕	●	●

✕ = Not available, ● = Available

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Heater Kit Model	Electric Heater (kW)	Min. Circuit Ampacity		Max. Fuse or Breaker (HACR) Ampacity		REFERENCE AIR HANDLER USE	Min. Heating Blower Speed (AC/HP) ECM MOTOR				
		208V	230V	208V	230V		1	2	3	4	5
AEHK-05(STD)	5	22.8	24.9	25	25	30K (ECM)	✕	●	●	●	●
						36K (ECM)	✕	●	●	●	●
						42K (ECM)	✕	●	●	●	●
AEHK-08(STD)	7.5	34.8	37.9	35	40	30K (ECM)	✕	●	●	●	●
						36K (ECM)	✕	●	●	●	●
						42K (ECM)	✕	●	●	●	●
AEHK-10(STD)	10	45.4	49.8	50	50	30K (ECM)	✕	●	●	●	●
						36K (ECM)	✕	●	●	●	●
						42K (ECM)	✕	●	●	●	●
AEHK-15(STD)	15	34.8/34.8	37.9/37.9	3 5 /35	40/40	36K (ECM)	✕	●	●	●	●
						42K (ECM)	✕	●	●	●	●
AEHK-20(STD)	20	45.4/45.4	49.8/49.8	5 0 /50	50/50	42K (ECM)	✕	●	●	●	●

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PRODUCT SPECIFICATIONS

AIR HANDLER MODEL	Motor Speed	AIR FLOW PERFORMANCE (PSC MOTOR)									
		External Static Pressure-Inches W.C. (kPa)									
			0(0)	0.1(.02)	0.2(.05)	0.3(.07)	0.4(.10)	0.5(12)	0.6(.15)	0.7(.17)	0.8(.20)
18K	Low	CFM	887	838	772	683	618	550	507	/	/
	Medium(*)	CFM	1086	1041	993	932	823	749	673	587	529
	High	CFM	1134	1090	1039	982	869	784	704	614	528
24K	Low (*)	CFM	1127	1082	1028	973	856	761	679	574	526
	Medium	CFM	1193	1144	1092	1031	897	803	717	622	531
	High	CFM	1292	1240	1185	1120	1037	885	787	693	553
30K	Low	CFM	1090	1020	940	870	800	720	650	580	500
	Medium(*)	CFM	1340	1260	1180	1100	1010	930	850	770	690
	High	CFM	1510	1430	1360	1280	1200	1120	1050	970	890
36K	Low	CFM	1090	1020	940	870	800	720	650	580	500
	Medium	CFM	1340	1260	1180	1100	1010	930	850	770	690
	High (*)	CFM	1510	1430	1360	1280	1200	1120	1050	970	890
42K	Low	CFM	1460	1380	1300	1230	1150	1070	990	910	830
	Medium(*)	CFM	1790	1700	1610	1520	1430	1340	1250	1160	1070
	High	CFM	2120	2020	1920	1830	1730	1640	1540	1440	1350

(*) = Factory Default

Note:

1. Airflow ratings are based on dry coil operation at 230V, without electric heat or filter. Verify that line voltage remains stable at the rated 230V to ensure consistent air delivery.
2. System airflow requirement: 300–450 CFM per ton. (Note: Indoor Units equipped with electric heat kits require 350–450 CFM per ton.)
3. Rated airflow must be maintained during full-load operation of the equipment.
4. The duct system has the greatest impact on delivered airflow. Since the duct system is fully controlled by the contractor, only industry-recognized procedures should be applied.
5. Duct design and installation must be performed carefully. Improper layout or poor workmanship can reduce system capacity and efficiency.
6. Supply ducts and diffusers must be properly sized and located along the perimeter of the conditioned space. Undersized or misapplied diffusers can cause noise, drafts, or inadequate ventilation. Return grilles must also be correctly sized to provide sufficient airflow back to the blower.
7. The installer must balance the air distribution system to ensure quiet, uniform airflow throughout all zones. Air balancing should be verified using appropriate test instruments.

Important:

1. When model 36 used with electrical heater kit model 15kW, you need to ensure that the air volume is not less than 1100 CFM.
2. When model 42 used with electrical heater kit model 15kW and 20kW, you need to ensure that the air volume is not less than 1280 CFM.

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PRODUCT SPECIFICATIONS

AIR HANDLER MODEL	Motor Speed	AIR FLOW PERFORMANCE (ECM MOTOR)								
		External Static Pressure-Inches W.C. (kPa)								
			0(0)	0.1(.02)	0.2(.05)	0.3(.07)	0.4(.10)	0.5(12)	0.6(.15)	0.7(.17)	0.8(.20)
30K	2	CFM	1131	1074	1012	950	893	836	779	727	679
	3(*)	CFM	1245	1197	1145	1093	1045	983	917	865	817
	4	CFM	1359	1316	1270	1226	1183	1131	1074	1007	945
	5	CFM	1510	1471	1432	1393	1355	1316	1277	1238	1200
36K	2	CFM	1131	1074	1012	950	893	836	779	727	679
	3	CFM	1245	1197	1145	1093	1045	983	917	865	817
	4(*)	CFM	1359	1316	1270	1226	1183	1131	1074	1007	945
	5	CFM	1510	1471	1432	1393	1355	1316	1277	1238	1200
42K	2	CFM	1131	1074	1012	950	893	836	779	727	679
	3	CFM	1245	1197	1145	1093	1045	983	917	865	817
	4	CFM	1359	1316	1270	1226	1183	1131	1074	1007	945
	5(*)	CFM	1510	1471	1432	1393	1355	1316	1277	1238	1200

(*) = Factory Default

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