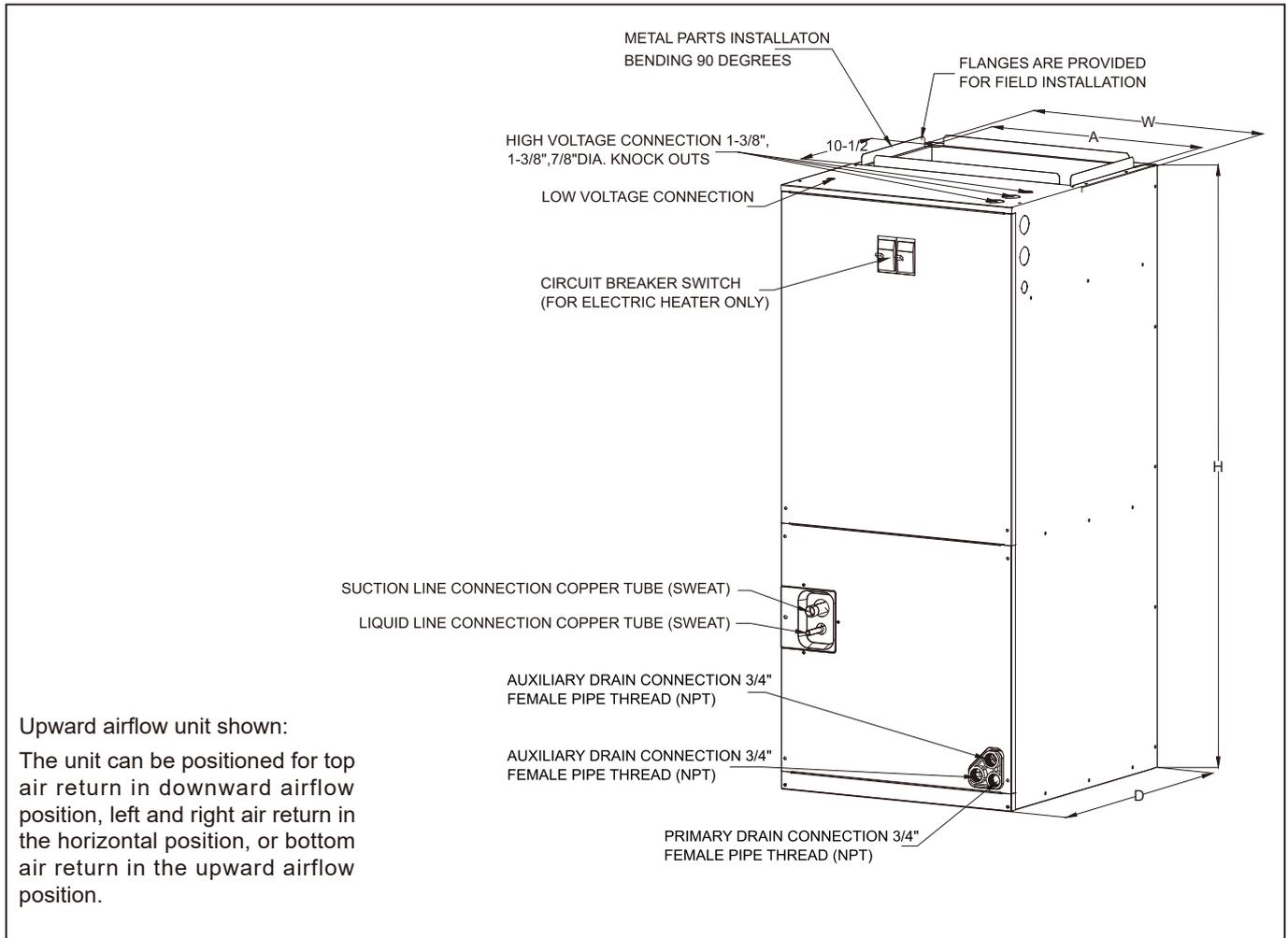


High-Efficiency Air Handlers

Prime Series

Cooling capacity: 18-60 kBTU/h



Unit Dimension

Model	Dimension Inches [mm]				
	Height "H"	Width "W"	Dimension "D"	Air outlet "A"	Liquid Line / Vapor Line
18K	45-3/4 [1162]	19-5/8 [500]	22 [560]	17-7/8 [454]	3/8 / 3/4 [9.5]/[19]
24K	45-3/4 [1162]	19-5/8 [500]	22 [560]	17-7/8 [454]	3/8 / 3/4 [9.5]/[19]
30K	45-3/4 [1162]	19-5/8 [500]	22 [560]	17-7/8 [454]	3/8 / 3/4 [9.5]/[19]
36K	45-3/4 [1162]	19-5/8 [500]	22 [560]	17-7/8 [454]	3/8 / 3/4 [9.5]/[19]
42K	53-1/8 [1350]	22 [560]	24 -1/2[623]	19-1/2 [496]	3/8 / 7/8 [9.5]/[22]
48K	53-1/8 [1350]	22 [560]	24 -1/2[623]	19-1/2 [496]	3/8 / 7/8 [9.5]/[22]
60K	53-1/8 [1350]	22 [560]	24 -1/2[623]	19-1/2 [496]	3/8 / 7/8 [9.5]/[22]

Specifications

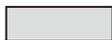
	18K	24K	30K	36K
NOMINAL RATING				
Cooling (BTU/h)	17600	22800	22800	33000
CFM (High/Low range)	770	785	975	1030
External Static Pressure (in.w.c) [Pa]	0.58 [145]	0.58 [145]	0.58 [145]	0.58 [145]
ELECTRICAL DATA				
Voltage / Phase(60Hz)	208V/230V-1ph-60Hz	208V/230V-1ph-60Hz	208V/230V-1ph-60Hz	208V/230V-1ph-60Hz
Min. / Max. Voltage (V)	187/253	187/253	187/253	187/253
Min. Circuit Amps (MCA) (A)	4	4	5	5
Max. Overcurrent Protection (MOP) (A)	6	6	6	6
FAN MOTOR				
Motor Type	ECM	ECM	ECM	ECM
Capacitor (uF)	/	/	/	/
Horsepower (HP)	1/3	1/3	1/2	1/2
Rated RPM	643	643	760	760
Full Load Amps (FLA) (A)	2.6	2.6	3.8	3.8
FAN BLOWER				
Material	Metal	Metal	Metal	Metal
Type	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Diameter(in.)	12 5/16	12 5/16	12 5/16	12 5/16
Height(in.)	12 29/32	12 29/32	12 29/32	12 29/32
Coil Drain Connection FPT (in.)	3/4	3/4	3/4	3/4
EVAPORATOR COIL				
Type	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic
Tube Material	copper&aluminum	copper&aluminum	copper&aluminum	copper&aluminum
Tube Size (in.)	9/32	9/32	9/32	9/32
SOUND POWER (dB)				
	50	54	56	56
REFRIGERANT CONNECTION SIZE				
Liquid Line Size (O.D.) (in.)	Φ3/8	Φ3/8	Φ3/8	Φ3/8
Suction Line Size (O.D.) (in.)	Φ3/4	Φ3/4	Φ3/4	Φ3/4
DIMENSIONS				
Width (In.)	19-5/8	19-5/8	19-5/8	19-5/8
Height (In.)	45-3/4	45-3/4	45-3/4	45-3/4
Depth (In.)	22	22	22	22
packaging dimension (W × H × D) (In.)	22-5/6×47-5/8×25-3/5	22-5/6×47-5/8×25-3/5	22-5/6×47-5/8×25-3/5	22-5/6×47-5/8×25-3/5
Service Valve				
Liquid (in.)	Φ3/8	Φ3/8	Φ3/8	Φ3/8
Suction (in.)	Φ3/4	Φ3/4	Φ3/4	Φ3/4
Weight				
Net weight (lbs.) [kg]	56/123	56/123	60/132	60/132
Shipping weight (lbs.) [kg]	61.5/135	61.5/135	63.5/140	63.5/140

	42K	48K	60K
NOMINAL RATING			
Cooling (BTU/h)	41000	46000	54000
CFM (High/Low range)	1330	1490	1700
External Static Pressure (in.w.c) [Pa]	0.58 [145]	0.58 [145]	0.58 [145]
ELECTRICAL DATA			
Voltage / Phase(60Hz)	208V/230V-1ph-60Hz	208V/230V-1ph-60Hz	208V/230V-1ph-60Hz
Min. / Max. Voltage (V)	187/253	187/253	187/253
Min. Circuit Amps (MCA) (A)	7	7	7
Max. Overcurrent Protection (MOP) (A)	10	10	10
FAN MOTOR			
Motor Type	ECM	ECM	ECM
Capacitor (uF)	/	/	/
Horsepower (HP)	3/4	3/4	3/4
Rated RPM	977	977	977
Full Load Amps (FLA) (A)	5.4	5.4	5.4
FAN BLOWER			
Material	Metal	Metal	Metal
Type	Centrifugal	Centrifugal	Centrifugal
Diameter(in.)	12 5/16	12 5/16	12 5/16
Height(in.)	12 29/32	12 29/32	12 29/32
Coil Drain Connection FPT (in.)	3/4	3/4	3/4
EVAPORATOR COIL			
Type	Hydrophilic	Hydrophilic	Hydrophilic
Tube Material	copper&aluminum	copper&aluminum	copper&aluminum
Tube Size (in.)	9/32	9/32	9/32
SOUND POWER (dB)			
	59	59	60
REFRIGERANT CONNECTION SIZE			
Liquid Line Size (O.D.) (in.)	Φ3/8	Φ3/8	Φ3/8
Suction Line Size (O.D.) (in.)	Φ3/4	Φ7/8	Φ7/8
DIMENSIONS			
Width (In.)	22	22	22
Height (In.)	53-1/8	53-1/8	53-1/8
Depth (In.)	24-1/2	24-1/2	24-1/2
packaging dimension (W × H × D) (In.)	28×54-3/4×25-1/5	28×54-3/4×25-1/5	28×54-3/4×25-1/5
Service Valve			
Liquid (in.)	Φ3/8	Φ3/8	Φ3/8
Suction (in.)	Φ3/4	Φ7/8	Φ7/8
Weight			
Net weight (lbs.) [kg]	72/159	72/159	77/170
Shipping weight (lbs.) [kg]	78/172	78/172	83/183

Air Flow Performance

Model size of air processor	Motor speed		SCFM								
			External Static Pressure-Inch Water Column [kPa]								
			0[0]	0.1[.025]	0.2[.050]	0.3[.075]	0.4[.100]	0.5[.125]	0.6[.150]	0.7[.175]	0.8[.200]
18K	Tap (1)	SCFM	669.9	571.8	490.9	394.3	269.5	-	-	-	-
		Watts	41	47	52	57	61	-	-	-	-
	Tap (2)	SCFM	792.2	708.6	615.9	548.5	474.2	371.5	265.1	-	-
		Watts	59	67	73	77	83	88	93	-	-
	Tap (3)	SCFM	948.8	887.5	809.6	723.6	671.6	597.0	504.2	410.2	-
		Watts	96	102	109	115	129	126	132	141	-
	Tap (4)	SCFM	1020.9	966.5	887.1	798.4	738.8	697.9	672.3	572.8	490.1
		Watts	118	127	136	144	150	156	160	167	177
	Tap (5)	SCFM	1115.2	1059.2	995.0	906.5	842.5	791.4	727.2	707.0	652.5
		Watts	148	157	167	178	186	191	198	205	211
24K	Tap (1)	SCFM	669.9	571.8	490.9	394.3	269.5	-	-	-	-
		Watts	41	47	52	57	61	-	-	-	-
	Tap (2)	SCFM	792.2	708.6	615.9	548.5	474.2	371.5	265.1	-	-
		Watts	59	67	73	77	83	88	93	-	-
	Tap (3)	SCFM	948.8	887.5	809.6	723.6	671.6	597.0	504.2	410.2	-
		Watts	96	102	109	115	129	126	132	141	-
	Tap (4)	SCFM	1020.9	966.5	887.1	798.4	738.8	697.9	672.3	572.8	490.1
		Watts	118	127	136	144	150	156	160	167	177
	Tap (5)	SCFM	1115.2	1059.2	995.0	906.5	842.5	791.4	727.2	707.0	652.5
		Watts	148	157	167	178	186	191	198	205	211
30K	Tap (1)	SCFM	955.3	897.8	839.5	739.4	655.3	575.9	511.5	432.4	392.2
		Watts	91	96	102	110	115	121	127	138	140
	Tap (2)	SCFM	1080.7	1031.5	977.4	925.6	819.4	743.8	675.5	608.7	547.1
		Watts	125	131	137	143	153	160	166	173	179
	Tap (3)	SCFM	1182.2	1138.1	1089.0	1042.9	986.9	879.5	811.4	749.5	689.2
		Watts	158	165	172	177	185	197	203	212	221
	Tap (4)	SCFM	1305.6	1261.8	1220.9	1179.5	1132.2	1086.1	984.1	914.5	856.6
		Watts	207	214	221	228	236	244	257	266	273
	Tap (5)	SCFM	1386.7	1350.0	1309.4	1274.6	1233.1	1186.6	1137.8	1031.5	970.0
		Watts	245	253	262	270	277	285	295	309	318
36K	Tap (1)	SCFM	955.3	897.8	839.5	739.4	65.5	575.9	511.5	432.4	392.2
		Watts	91	96	102	110	115	121	127	138	140
	Tap (2)	SCFM	1080.7	1031.5	977.4	925.6	819.4	743.8	675.5	608.7	547.1
		Watts	125	131	137	143	153	160	166	173	179
	Tap (3)	SCFM	1182.2	1138.1	1089.0	1042.9	986.9	879.5	811.4	749.5	689.2
		Watts	158	165	172	177	185	197	203	212	221
	Tap (4)	SCFM	1305.6	1261.8	1220.9	1179.5	1132.2	1086.1	984.1	914.5	856.6
		Watts	207	214	221	228	236	244	257	266	273
	Tap (5)	SCFM	1386.7	1350.0	1309.4	1274.6	1233.1	1186.6	1137.8	1031.5	970.0
		Watts	245	253	262	270	277	285	295	309	318
42K	Tap (1)	SCFM	1343.9	1271.9	1208.5	1150.9	1085.5	1042.0	899.4	839.6	777.6
		Watts	141.9	150.5	159.2	168	175	185	196	202	210
	Tap (2)	SCFM	1513.9	1451.5	1392.2	1320.2	1266.8	1211.4	1148.5	1036.2	975.4
		Watts	194.2	203.9	214	220.2	228.8	238.7	247.9	264.2	271.9
	Tap (3)	SCFM	1672.5	1620.5	1562.0	1522.0	1470.6	1422.7	1371.1	1309.8	1204.8
		Watts	259	271	282	293	303	312	323	333	353
	Tap (4)	SCFM	1807.3	1781.4	1731.6	1686.0	1640.4	1595.5	1547.1	1509.5	1460.8
		Watts	328.4	343.6	357.5	370.6	385.6	395.2	407	418	430
	Tap (5)	SCFM	2048.0	2000.5	1950.9	1905.3	1861.4	1819.2	1776.4	1729.9	1684.1
		Watts	447	462	476	491	507	520	525.6	538	550

48K	Tap (1)	SCFM	1343.9	1271.9	1208.5	1150.9	1085.5	1042.0	899.4	839.6	777.6
		Watts	141.9	150.5	159.2	168	175	185	196	196	202
	Tap (2)	SCFM	1513.9	1451.5	1392.2	1320.2	1266.8	1211.4	1148.5	1036.2	975.4
		Watts	194.2	203.9	214	220.2	228.8	238.7	247.9	264.2	271.9
	Tap (3)	SCFM	1672.5	1620.5	1562.0	1522.0	1470.6	1422.7	1371.1	1309.8	1204.8
		Watts	259	271	282	293	303	312	323	333	353
	Tap (4)	SCFM	1807.3	1781.4	1731.6	1686.0	1640.4	1595.5	1547.1	1509.5	1460.8
		Watts	328.4	343.6	357.5	370.6	385.6	395.2	407	418	430
	Tap (5)	SCFM	2048.0	2000.5	1950.9	1905.3	1861.4	1819.2	1776.4	1729.9	1684.1
		Watts	447	462	476	491	507	520	525.6	538	550
60K	Tap (1)	SCFM	1275.4	1220.3	1165.5	1115.8	1051.6	974.7	913.6	859.1	800.6
		Watts	153	163	173	183	194	203	212	220	231
	Tap (2)	SCFM	1435.1	1381.7	1335.1	1289.5	1243.6	1186.2	1113.6	1075.9	1016.2
		Watts	210	220	232	243	254	266	276	287	297
	Tap (3)	SCFM	1610.6	1567.1	1528.1	1482.2	1440.8	1396.1	1350.6	1261.8	1219.6
		Watts	287	301	313	325	336	355	361	381	391
	Tap (4)	SCFM	1756.8	1718.5	1674.5	1633.8	1601.1	1557.2	1519.5	1475.1	1426.2
		Watts	366	376	392	405	415	431	444	459	472
	Tap (5)	SCFM	1917.1	1882.9	1842.6	1798.9	1772.9	1734.2	1700.6	1662.9	1622.4
		Watts	467	482	496	512	525	542	553	569	584

 The highlighted area indicates the airflow within the required range of 300-450cfm/ton.

Note:

1. The advanced airflow must be used as the rated airflow for the full-load operation of the machine.
2. The rated airflow of a system without an electric heater kit requires 300 to 450 cubic feet of air per minute (CFM).
3. The rated airflow of a system with an electric heater kit requires 350 to 450 cubic feet of air per minute (CFM).
4. The air distribution system has the greatest influence on air flow. Therefore, the contractor should only use the procedures recognized by the industry.
5. The design and construction of air duct should be done carefully. Poor design or process will lead to a significant decline in system performance.
6. The air supply duct should be set along the periphery of the air-conditioned space with appropriate size. Improper location or insufficient airflow may lead to insufficient ventilation or noise in the ductwork.
7. The installer should balance the air distribution system to ensure that all rooms in the room have proper quiet airflow. The speedometer or airflow hood can be used to balance and verify the branch duct and system airflow (CFM).

Features

- A-shaped evaporator coil engineered for superior heat transfer efficiency and minimal static pressure drop.
- Foil-faced insulation to minimize energy loss through the cabinet.
- Multi-speed blower control that automatically adjusts to meet varying system capacity needs.
- Versatile four-position installation: Upflow, Downflow, Horizontal Left, and Horizontal Right.
- Standard horizontal and vertical condensate drain pans with both primary and secondary drain connections.
- Field-installable electric heat kits available in 5, 7.5, 10, 15, and 20 kW capacities; multiple electrical entry points for flexible installation.
- Removable dual front panels, slide-out blower and coil assembly on tracks.
- Built-in filter rack with tool-free door for easy filter changes.
- Copper evaporator lines designed for straightforward brazing.
- Pre-installed Thermostatic Expansion Valve (TXV).
- Durable polymer drain pan with built-in UV inhibitor to extend service life.
- Fully insulated cabinet construction for optimal efficiency.
- Factory-installed R454B refrigerant detection sensor for enhanced safety and broader application compatibility.
- AHRI certified and ETL listed.



Note: Product specifications change from time to time as product improvements and developments are released and may vary from those in this document.