

**Indoor KEENULDAH24AA**
**Outdoor KEENHYDHP24AA**
**Air Handler Heat Pump System**

Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:


**INDOOR SPECIFICATION**

<b>ESP (in WG)</b>	0 ~ 1.0	
<b>Indoor Air Flow (Turbo/H/M/L/Si) (CFM)</b>	824.0 / 759.3 / 694.5 / 629.8 / N/A	
<b>Indoor Noise Level (Turbo/H/M/L/Si) (dBA)</b>	N/A / 47.5 / 44 / 33 / N/A	
<b>Dimension (W×D×H)</b>	inch	21.50 x 14.49 x 49.72
	mm	546.0 x 368.0 x 1263
<b>Package (W×D×H)</b>	inch	52.95 x 17.52 x 31.10
	mm	1345 x 445 x 790
<b>Net/Gross Weight</b>	lbs	123.02 / 154.76
	kg	55.8 / 70.2

**OUTDOOR SPECIFICATION**

<b>Compressor Type</b>	ROTARY	
<b>Compressor Model</b>	KTM240D46UKT2	
<b>Refrigerant</b>	R454B	
<b>Refrigerant Oil Charge (mL)</b>	620	
<b>Refrigerant Oil</b>	VG74	
<b>Outdoor Air Flow (Max) (CFM)</b>	1765.8	
<b>Outdoor Noise Level (dBA)</b>	59	
<b>Dimension (W×D×H)</b>	inch	35.04 x 13.46 x 26.50
	mm	890.0 x 342.0 x 673.0
<b>Package (W×D×H)</b>	inch	39.17 x 15.67 x 29.13
	mm	995 x 398 x 740
<b>Net/Gross Weight</b>	lbs	102.29 / 109.13
	kg	46.4 / 49.5

**EFFICIENCY**

Cooling		Heating	
<b>SEER2</b>	18.6	<b>HSPF2-4</b>	10.0
<b>EER2</b>	12.0	<b>COP</b>	3.49

**PERFORMANCE of Cooling**

Cooling (Btu/hr)	
<b>Rated Capacity</b>	24000
<b>Min/Max Capacity</b>	6400 ~ 28700
<b>Moisture Removal (L/h)</b>	2.23
<b>Standard Operating Range (°F/°C)</b>	-22 ~ 122 (-30 ~ 50)
Rated Cooling Conditions:	Indoor: 80°F DB / 67°F WB Outdoor: 95°F DB / 75°F WB

**PERFORMANCE of Heating**

Heating (Btu/hr)	
<b>1. @ 47°F Rated</b>	24000
<b>2. @ 47°F Min/Max Capacity</b>	6700 ~ 29100
<b>3. @ 17°F Rated</b>	19000
<b>4. @ 5°F Rated: Capacity / COP</b>	20600 / 2.14
<b>5. @ 5°F Max: Capacity</b>	20600
<b>Standard Operating Range (°F/°C)</b>	-22 ~ 75 (-30 ~ 24)
1. Rated Heating Conditions:	Indoor: 70°F DB / 60°F WB Outdoor: 47°F DB / 43°F WB
2. Rated Heating Conditions:	Indoor: 70°F DB / 60°F WB Outdoor: 17°F DB / 15°F WB
3. Heating Conditions, Compressor Operating at Max. Frequency	Indoor: 70°F DB / 60°F WB Outdoor: 5°F DB / 5°F WB

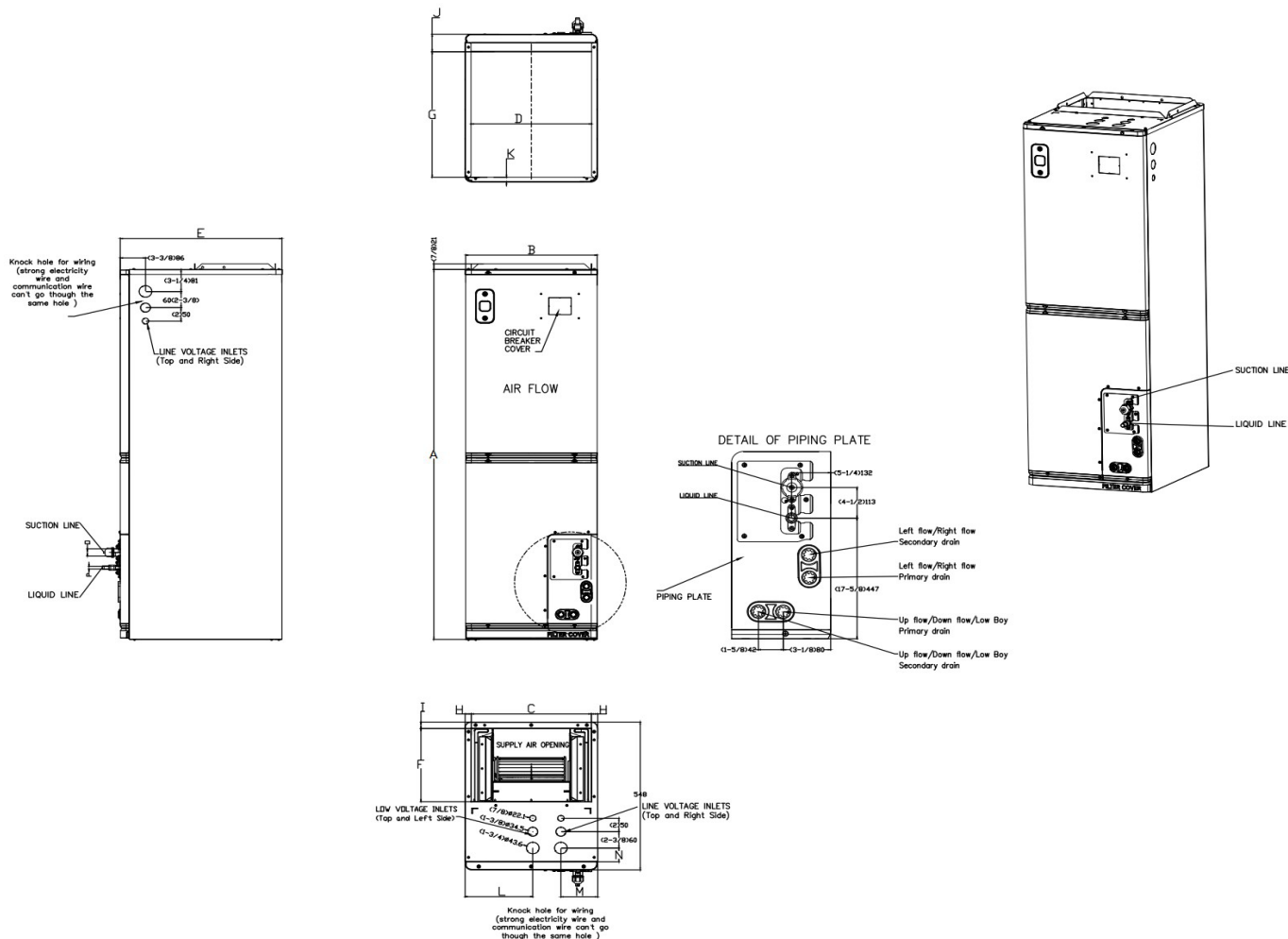
**ELECTRICAL**

<b>Indoor Power Supply</b>	115/208/230V, 60Hz, 1Ph	
<b>Indoor MCA 115V / (208/230V)</b>	5.5 / 3.5	
<b>Indoor MOP</b>	15	
<b>Outdoor Power Supply</b>	208/230V, 60Hz, 1Ph	
<b>Outdoor MCA</b>	19	
<b>Outdoor MOP</b>	20	
<b>Communication Wiring</b>	AWG 20-2	
<b>Compressor RLA</b>	14	
<b>Outdoor Fan Motor RLA</b>	1	
<b>Outdoor Fan Motor W</b>	80	
<b>Indoor Fan Motor RLA</b>	2.5	
<b>Indoor Fan Motor W</b>	N/A	
<b>System Power Input @ Cooling (W)</b>	2150 (830 ~ 2850)	
<b>System Power Input @ Heating (W)</b>	2150 (405 ~ 2450)	
<b>MCA: Min. circuit amps (A)</b>	<b>MOCP: Max. over current protection (A)</b>	
<b>RLA: Rated load amps (A)</b>	<b>W: Fan motor rated output (W)</b>	

**PIPING**

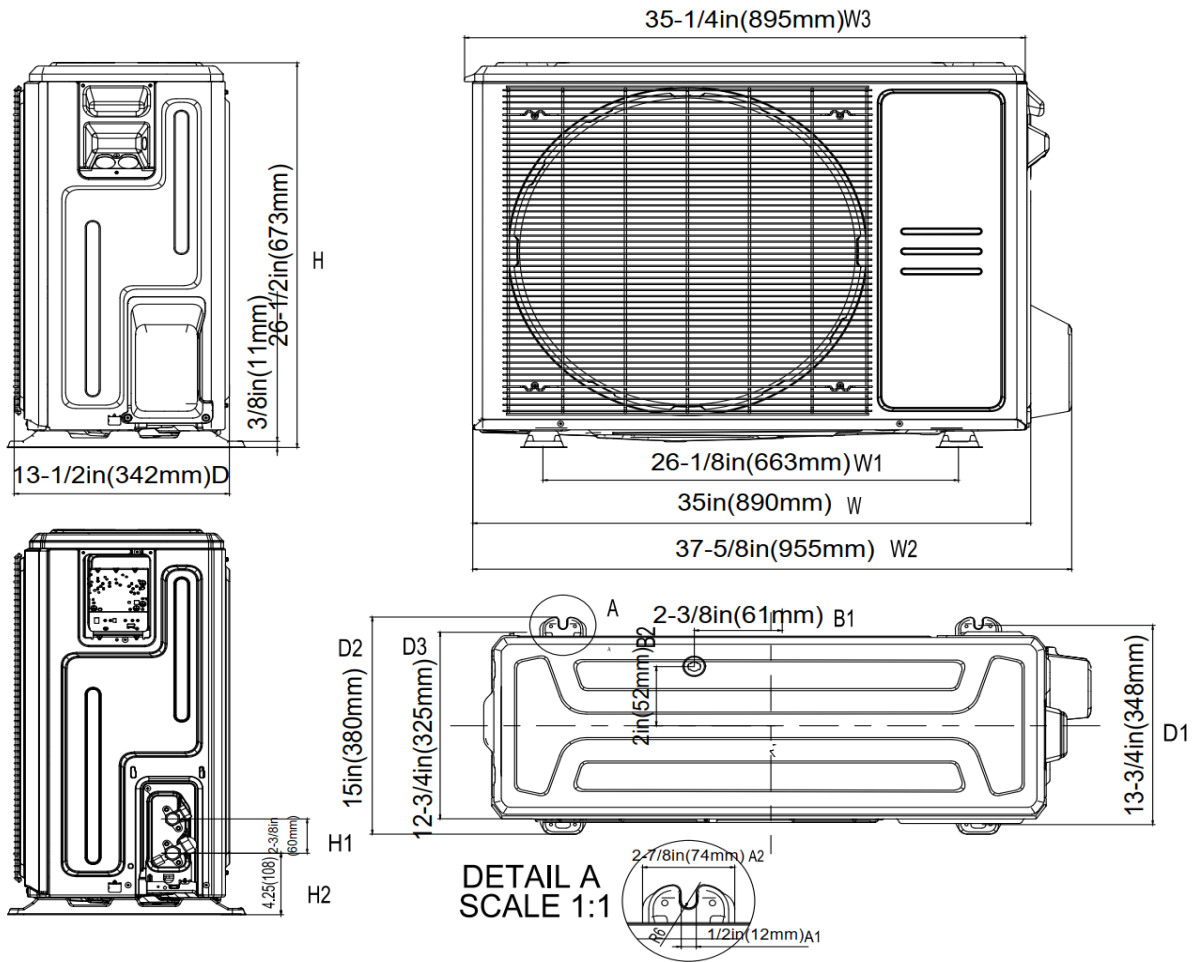
<b>Throttle type (Indoor)</b>	EXV
<b>Throttle type (Outdoor)</b>	EXV
<b>Liquid Size</b>	9.52mm (3/8in)
<b>Gas Size</b>	19mm (3/4in)
<b>Max. Piping Length (ft/m)</b>	164 (50)
<b>Max. Height Difference (ft/m)</b>	82 (25)
<b>Max. Pre-charged Length (ft/m)</b>	24.6 (7.5)
<b>Refrigerant Pre-charged Amount (oz/kg)</b>	74.08 (2.1)
<b>Additional Charge of Refrigerant ((oz/ft) / (g/m))</b>	0.7 (65)
<b>Connection Method</b>	Flared

Indoor Unit Dimension

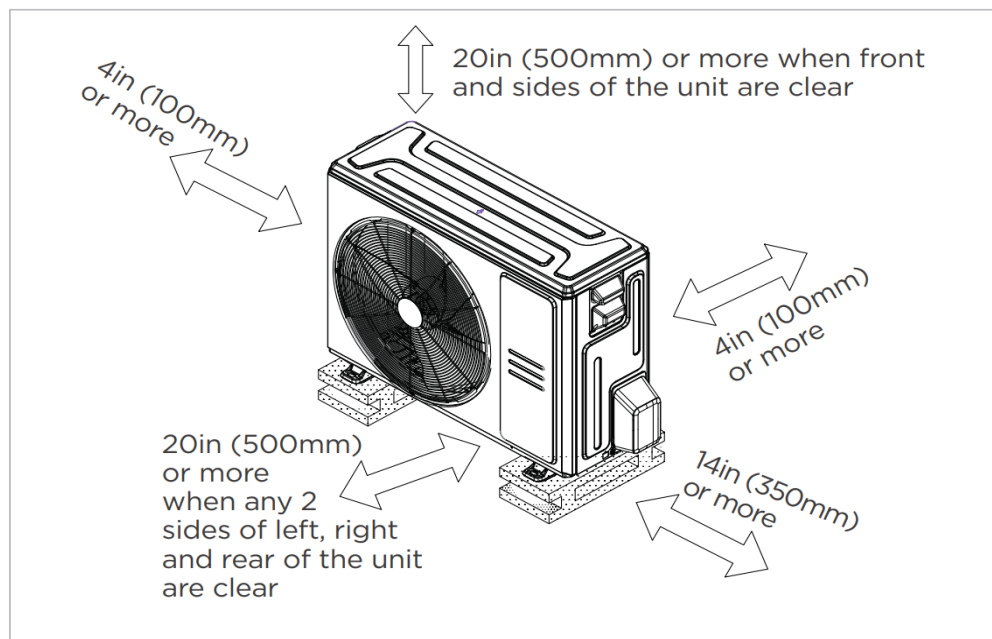


Dimensions		Model(Btu/h)		18K/24K		30K/36K		48K/54K	
		inch	mm	inch	mm	inch	mm		
A	Model Height	49-3/4	1263	54	1371	56	1421		
B	Model Width	14-1/2	368	17-1/2	445	21-1/2	546		
C	Supply Air Opening Width	12-7/8	328	16	405	19-7/8	506		
D	Return Air Opening Width	13	331	16	407	20	509		
E	Model Depth	21-1/2	546	21-1/2	546	21-1/2	546		
F	Supply Air Opening Depth	10-5/8	271	10-5/8	271	10-5/8	271		
G	Return Air Opening Depth	18-1/4	465	18-1/4	465	18-1/4	465		
H	Supply Air Opening Clearance	7/8	22	7/8	22	7/8	22		
I	Supply Air Opening Clearance	1	24	1	24	1	24		
J	Return Air Opening Front Clearance	2-1/2	65	2-1/2	65	2-1/2	65		
K	Return Air Opening Back Clearance	3/4	18	3/4	18	3/4	18		
L	Top cover knock hole	/	/	9	229	10-7/8	275		
M	Top cover knock hole	4-1/2	113	4-7/8	124	5-1/8	131		
N	Top cover knock hole	2	51	2	51	1-5/8	41		
O	Refrigerant piping flareconnection(gas)	3/4	19	3/4	19	3/4	19		
P	Refrigerant piping flareconnection(liquid)	3/8	9	3/8	9	3/8	9		

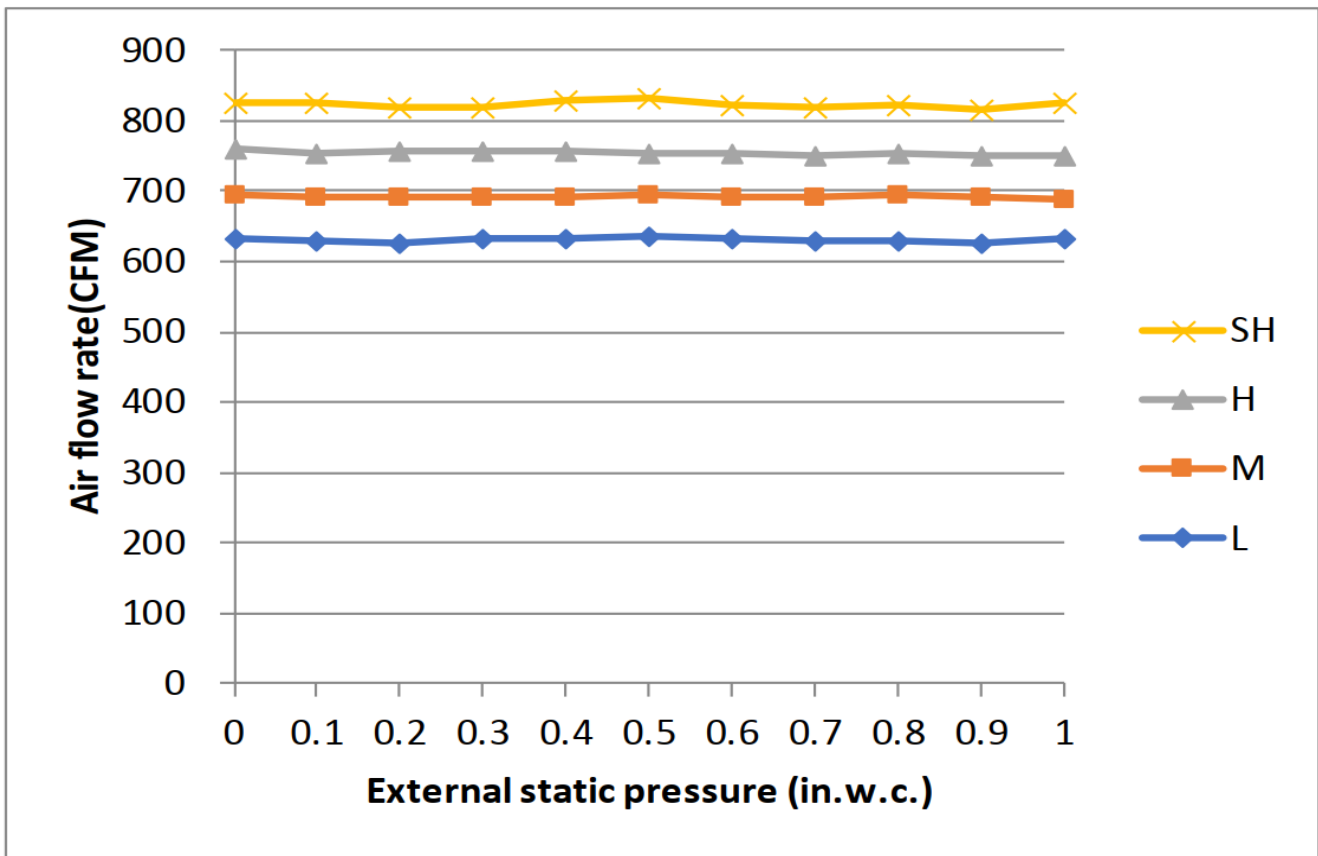
Outdoor Unit Dimension



Installation Instruction For Outdoor Unit



Meets all spatial requirements shown in Installation Clearance Requirements above.



**Features**

- Multi-position installation: horizontal (left or right), vertical (up or down)
- 115/230V voltage compatible for IDU
- Aluminum Coil
- Constantly Air Flow system up to 1.0 In.W.G
- Optional Auxiliary heat kit up to 25kW
- Easy Maintenance
- Multiple control options available:
  - Two way communication wired controller:120N(X6)
  - Two way communication wired controller with built-in WiFi: 120N(X6W)
  - Wireless remote controller
  - Third-Party 24V Thermostat
- Adaptive Control System
- High efficiency up to 19 SEER2, 12.5 EER2, 10.8 HSPF2
- 100% heat output at -13F\*
- Chassis heater and crankcase heater equipped as standard

\* For MVBDM-36HWFN10-WB3-D pairing with MOX630-36HFN10-M3X, rated cooling capacity/heating capacity at -13F=100%