

**Air Handler Heat Pump System**

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



**INDOOR SPEINDOOR SPECIFICATIONCIFICATION**

<b>Indoor Air Flow (Turbo/H/M/L/Si) (CFM)</b>	1189.0 / 1083.0 / 971.2 / 865.2 / N/A	
<b>Indoor Noise Level (Turbo/H/M/L/Si) (dBA)</b>	N/A/48/44/35/N/A	
<b>Dimension (W×D×H)</b>	inch	21.02 x 21.02 x 49.02
	mm	534.0×534.0×1245.0
<b>Package (W×D×H)</b>	inch	26.57 x 24.41 x 52.56
	mm	675×620×1335
<b>Net/Gross Weight</b>	lbs	127.87/154.10
	kg	58/69.9

**OUTDOOR SPECIFICATION**

<b>Compressor Type</b>	TWIN-ROTARY	
<b>Compressor Model</b>	KTF420D62UNT	
<b>Refrigerant</b>	R454B	
<b>Refrigerant Oil Charge(mL)</b>	1000	
<b>Refrigerant Oil</b>	VG74	
<b>Outdoor Air Flow (Max) (CFM)</b>	2236.7	
<b>Outdoor Noise Level (dBA)</b>	62.5	
<b>Dimension (W×D×H)</b>	inch	37.24 x 16.14 x 31.89
	mm	946.0×410.0×810.0
<b>Package (W×D×H)</b>	inch	42.91 x 19.68 x 34.84
	mm	1090×500×885
<b>Net/Gross Weight</b>	lbs	156.97/167.99
	kg	71.2/76.2

**EFFICIENCY**

Cooling		Heating	
<b>SEER2</b>	16.5	<b>HSPF2-4</b>	10.0
<b>EER2</b>	11.7	<b>COP</b>	3.7

**PERFORMANCE of Cooling**

Cooling (Btu/hr)	
<b>Rated Capacity</b>	33000
<b>Min/Max Capacity</b>	15000~39000
<b>Moisture Removal(L/h)</b>	3.18
<b>Standard Operating Range(°F/°C)</b>	-22~122(-30~50)
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>	35000
<b>1. @ 47°F Min/Max Capacity</b>	15000~41500
<b>2. @ 17°F Rated</b>	27400
<b>3. @ 5°F Rated: Capacity / COP</b>	34000/2
<b>3. @ 5°F Max: Capacity</b>	34000
<b>Standard Operating Range(°F/°C)</b>	-22~75(-30~24)
1. Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 47°F DB/43°F WB
2. Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 17°F DB/15°F WB
3. Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 5°F DB/5°F WB

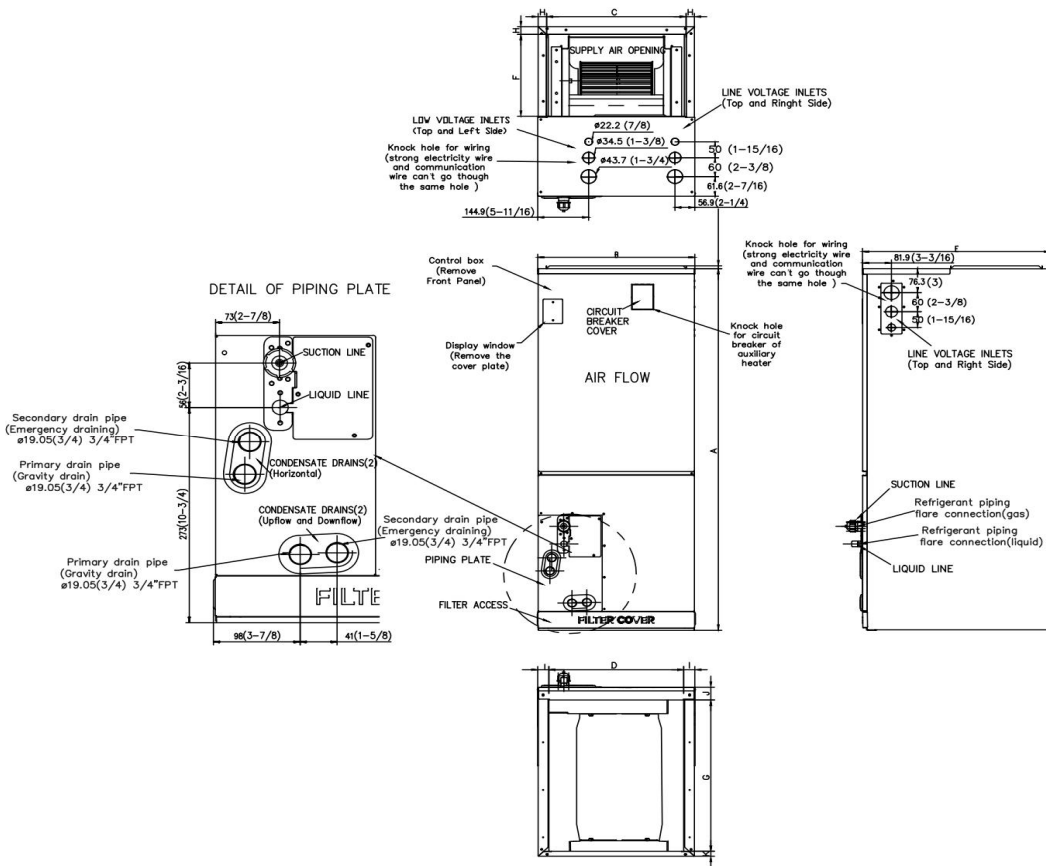
**ELECTRICAL**

<b>Power Supply</b>	208/230V,60Hz,1Ph
<b>System MCA</b>	34
<b>Connection Wiring</b>	AWG 14-4
<b>System MOCP</b>	35
<b>Compressor RLA</b>	24.5
<b>Outdoor Fan Motor RLA</b>	1.5
<b>Outdoor Fan Motor W</b>	230
<b>Indoor Fan Motor RLA</b>	4.5
<b>Indoor Fan Motor W</b>	375
<b>System Power Input @ Cooling (W)</b>	2820(540 ~ 3828)
<b>System Power Input @ Heating (W)</b>	2800(740 ~3750)
<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**

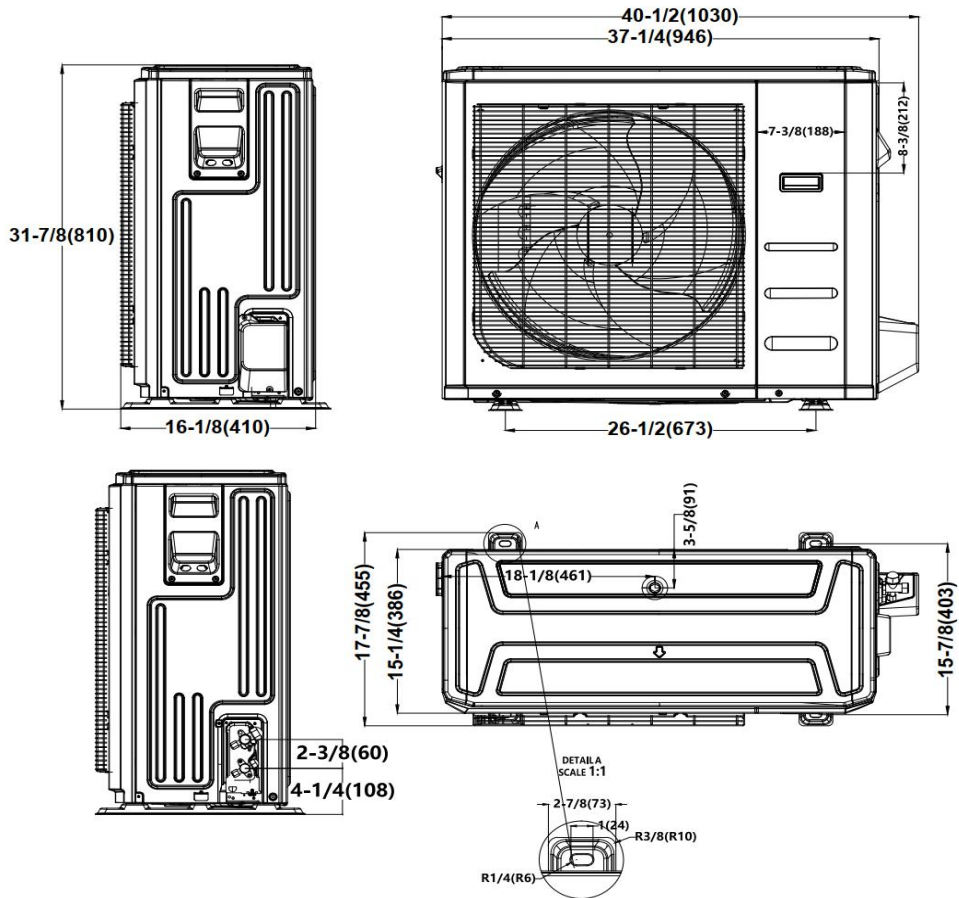
<b>Throttle type(Indoor)</b>	N/A
<b>Throttle type(Outdoor)</b>	EXV
<b>Liquid Size</b>	9.52mm(3/8in)
<b>Gas Size</b>	19mm(3/4in)
<b>Max. Piping Length(ft/m)</b>	164(50)
<b>Max. Height Difference(ft/m)</b>	82(25)
<b>Max. Pre-charged Length(ft/m)</b>	24.6(7.5)
<b>Refrigerant Pre-charged Amount(oz/kg)</b>	87.13(2.47)
<b>Additional Charge of Refrigerant((oz/ft)/(g/m))</b>	0.32(30)
<b>Connection Method</b>	Flared

## Indoor Unit Dimension

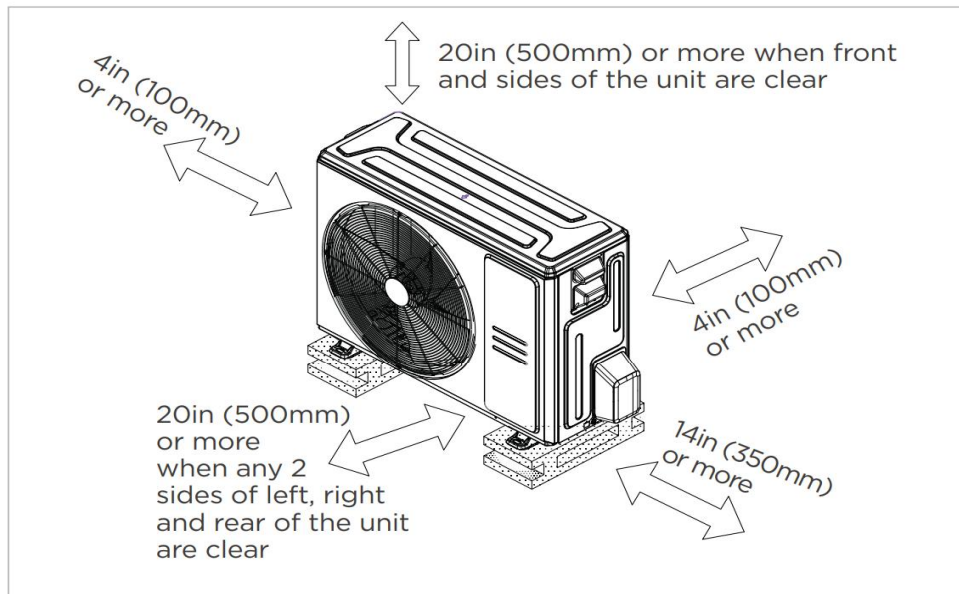


Dimensions	Model	18k/24k		30k/36k		48k/60k	
		inch	mm	inch	mm	inch	mm
A	Model Height	45	1143	49	1245	53	1346
B	Model Width	17-1/2	445	21	534	24-1/2	622
C	Supply Air Opening Width	15-5/8	397	19-1/8	486	22-5/8	575
D	Return Air Opening Width	15-1/8	384	18-5/8	473	22-1/8	562
E	Model Depth	21	534	21	534	21	534
F	Supply Air Opening Depth	10-1/4	260	10-1/4	260	10-1/4	260
G	Return Air Opening Depth	18-3/4	476	18-3/4	476	18-3/4	476
H	Supply Air Opening Clearance	15/16	24	15/16	24	15/16	24
I	Return Air Opening Side Clearance	1-1/4	32	1-1/4	32	1-1/8	28
J	Return Air Opening Front Clearance	1-1/2	38	1-5/8	41	1-5/8	41
K	Return Air Opening Back Clearance	5/8	16	5/8	16	3/4	19

### Outdoor Unit Dimension

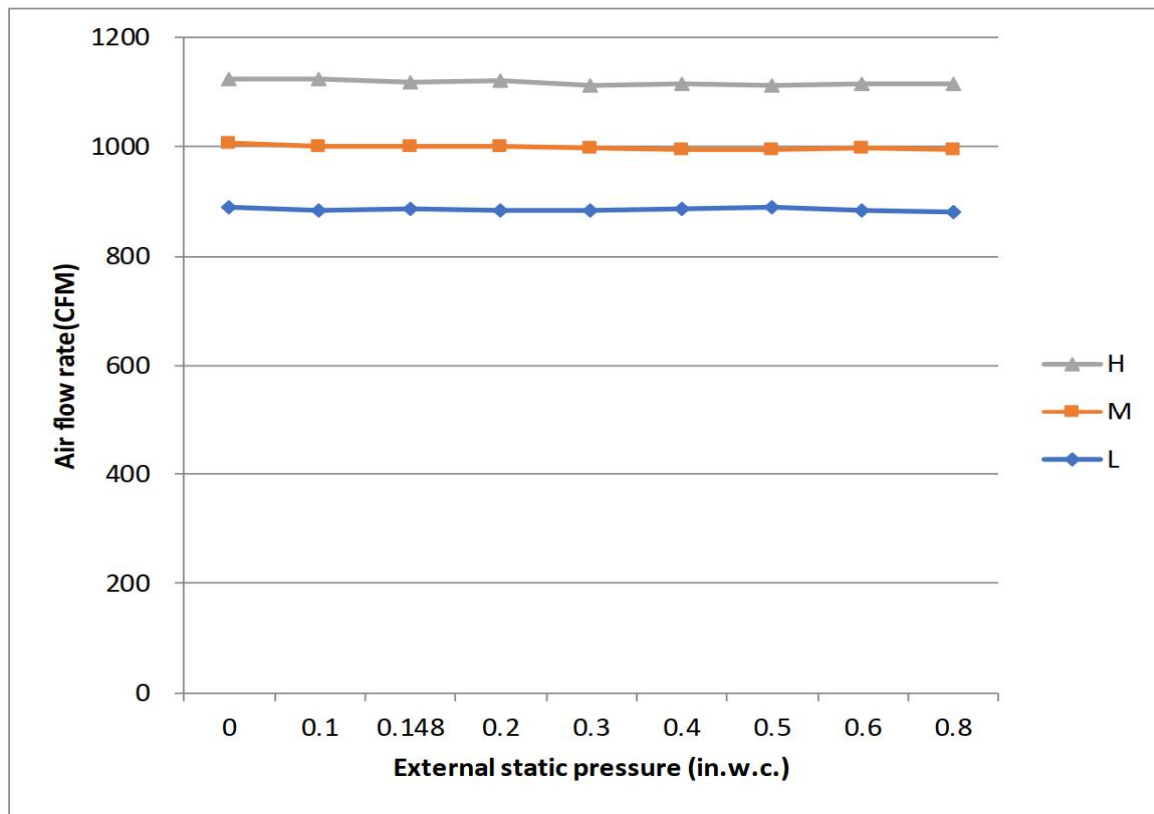


### Installation Instruction



Meets all spatial requirements shown in Installation Clearance Requirements above.

## Fan Performance For Indoor Unit



## Features

- Multi-position installation: horizontal(left or right), vertical( up or down)
- Aluminum Coil
- Constantly Air Flow system up to 0.80 In.W.G
- 1 inch R4.2 fiberglass free insulation reduces condensation and boosts efficiency(optional)
- Optional Auxiliary heat kit up to 25kW
- Easy Maintenance
- Multiple control options available:
  - Two way communication wired controller with built-in WiFi:AWC-8P-LC-WIFI
  - Wireless remote controller
  - Third-Party 24V Thermostat
- High efficiency up to 18.7 SEER2, 12 EER2, 10 HSPF2
- 100% heat output at 5F\*
- Energy Star and Cold Climate Energy Star certified
- Chassis heater and crankcase heater equipped as standard

\* Rated cooling capacity/heating capacity at 5F>=100%