

**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>	1807.0 / 1553.9 / 1353.8 / 724.0 / N/A	
<b>Indoor Noise Level (Turbo/H/M/L/Si) (dBA)</b>	N/A/51/48/42.5/N/A	
<b>Dimension (W×D×H)</b>	<b>inch</b>	21.02 x 24.49 x 52.99
	<b>mm</b>	534.0×622.0×1346.0
<b>Package (W×D×H)</b>	<b>inch</b>	27.95 x 26.77 x 56.50
	<b>mm</b>	710×680×1435
<b>Net/Gross Weight</b>	<b>lbs</b>	164.02/189.82
	<b>kg</b>	74.4/86.1

**OUTDOOR SPECIFICATION**

<b>Compressor Type</b>	ROTARY	
<b>Compressor Model</b>	KTQ420D1UMU	
<b>Refrigerant</b>	R454B	
<b>Refrigerant Oil Charge(mL)</b>	1000	
<b>Refrigerant Oil</b>	VG74	
<b>Outdoor Air Flow (Max) (CFM)</b>	4237.9	
<b>Outdoor Noise Level (dBA)</b>	62.5	
<b>Dimension (W×D×H)</b>	<b>inch</b>	37.48 x 16.34 x 52.48
	<b>mm</b>	952.0×415.0×1333.0
<b>Package (W×D×H)</b>	<b>inch</b>	43.11 x 19.49 x 58.27
	<b>mm</b>	1095×495×1480
<b>Net/Gross Weight</b>	<b>lbs</b>	209.44/240.08
	<b>kg</b>	95/108.9

**EFFICIENCY**

Cooling		Heating	
<b>SEER2</b>	16	<b>HSPF2-4</b>	9.1
<b>EER2</b>	9.5	<b>COP</b>	3.44

**PERFORMANCE of Cooling**

Cooling (Btu/hr)	
<b>Rated Capacity</b>	55000
<b>Min/Max Capacity</b>	21800~57300
<b>Moisture Removal(L/h)</b>	5.62
<b>Standard Operating Range(°F/°C)</b>	-13~122(-25~50)
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>	59000
<b>1. @ 47°F Min/Max Capacity</b>	11800~60300
<b>2. @ 17°F Rated</b>	40500
<b>3. @ 5°F Rated: Capacity / COP</b>	35400/1.9
<b>3. @ 5°F Max: Capacity</b>	35400
<b>Standard Operating Range(°F/°C)</b>	-13~75(-25~24)
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

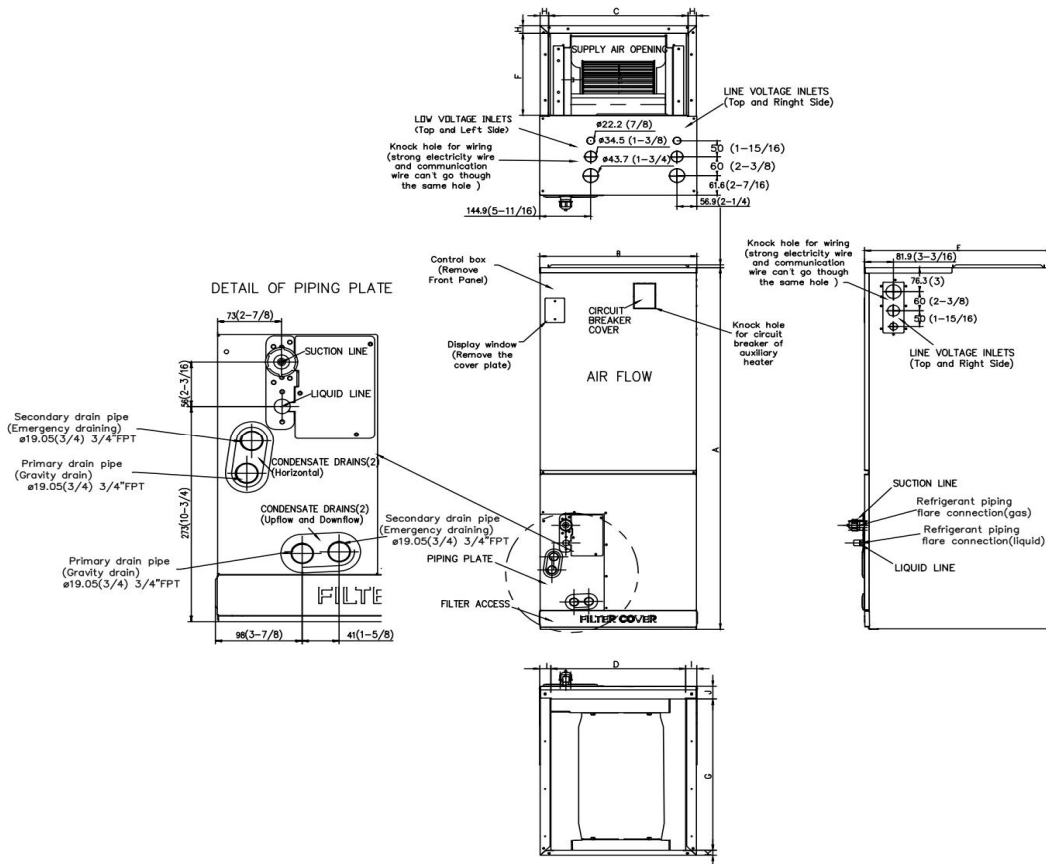
**ELECTRICAL**

<b>Power Supply</b>	208/230V,60Hz,1Ph
<b>System MCA</b>	42
<b>Communication Wiring</b>	AWG 20-2
<b>System MOCP</b>	45
<b>Compressor RLA</b>	25
<b>Outdoor Fan Motor RLA</b>	2.2
<b>Outdoor Fan Motor W</b>	85
<b>Indoor Fan Motor RLA</b>	8.3
<b>Indoor Fan Motor W</b>	750
<b>System Power Input @ Cooling (W)</b>	5798(1660 ~ 6280)
<b>System Power Input @ Heating (W)</b>	5450(770 ~5300)
<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**

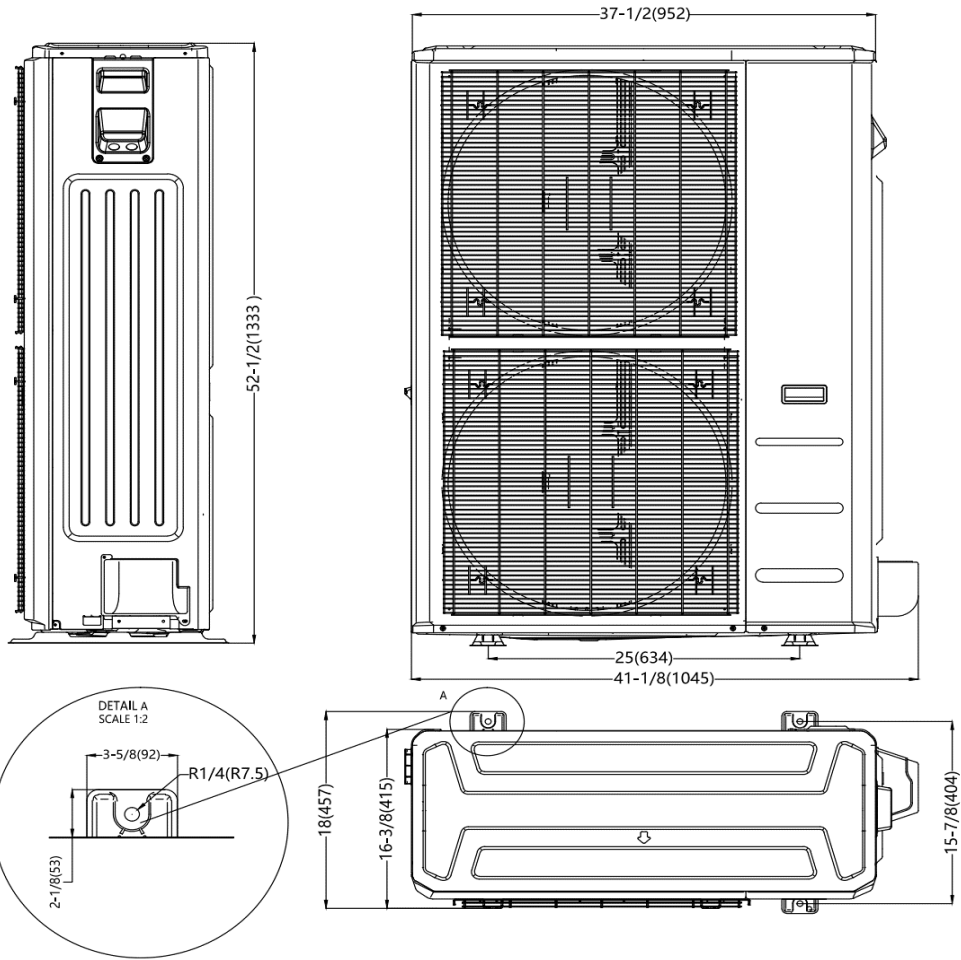
<b>Throttle type(Indoor)</b>	N/A
<b>Throttle type(Outdoor)</b>	EXV+Throttle valve
<b>Liquid Size</b>	9.52mm(3/8in)
<b>Gas Size</b>	19mm(3/4in)
<b>Max. Piping Length(ft/m)</b>	213.2(65)
<b>Max. Height Difference(ft/m)</b>	98.4(30)
<b>Max. Pre-charged Length(ft/m)</b>	24.6(7.5)
<b>Refrigerant Pre-charged Amount(oz/kg)</b>	144.62(4.1)
<b>Additional Charge of Refrigerant((oz/ft)/(g/m))</b>	0.32(30)
<b>Connection Method</b>	Flared

## Indoor Unit Dimension

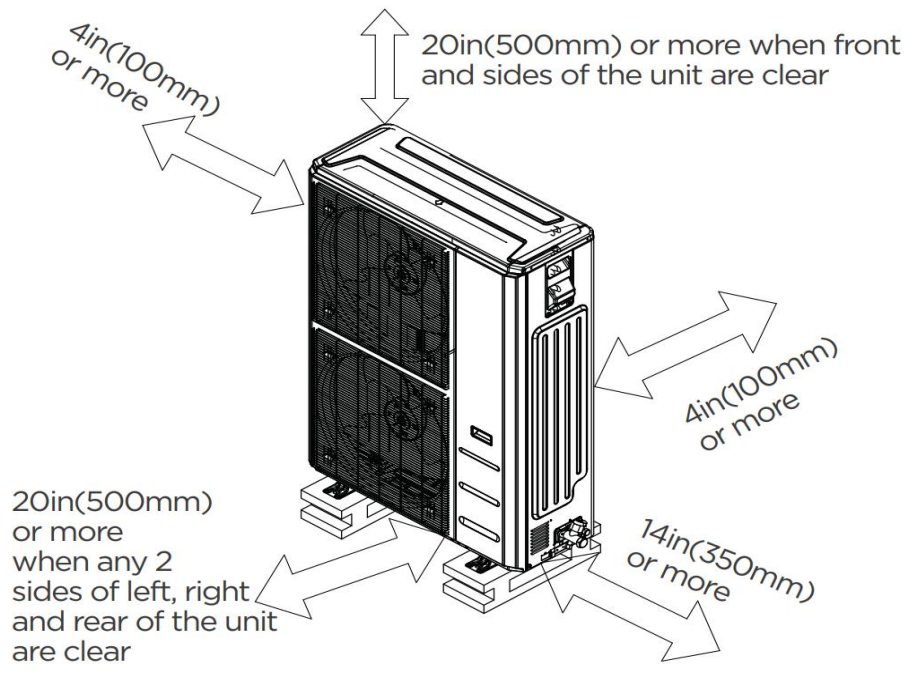


Dimensions	Model	18k/24k		30k/36k		48k/60k	
		inch	mm	inch	mm	inch	mm
A	Model Height	45	1143	49	1245	53	1346
B	Model Width	17-1/2	445	21	534	24-1/2	622
C	Supply Air Opening Width	15-5/8	397	19-1/8	486	22-5/8	575
D	Return Air Opening Width	15-1/8	384	18-5/8	473	22-1/8	562
E	Model Depth	21	534	21	534	21	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

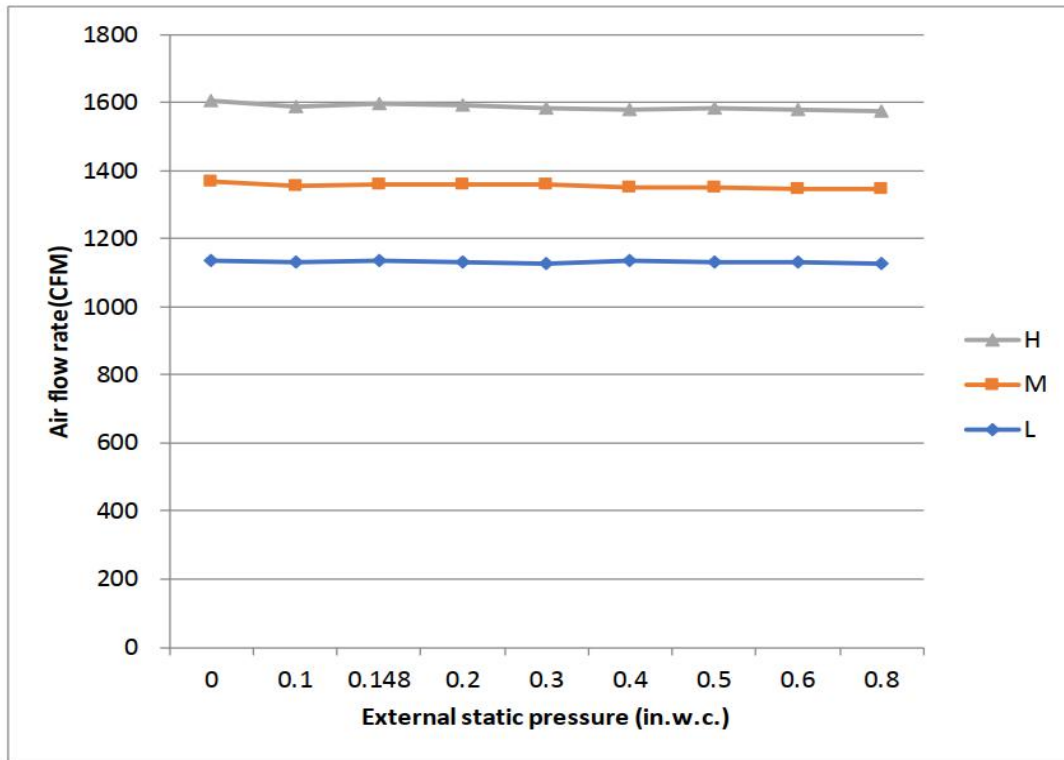
### Outdoor Unit Dimension



### Installation Instruction



## 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
- Chassis heater and crankcase heater equipped as standard