

Air Handler Heat Pump System

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

System Product Code: 810175550589
Indoor Unit Product Code: 810175550442
Outdoor Unit Product Code: 810175550596



INDOOR UNIT SPECIFICATIONS

ESP (in.W.G)		0-0.8
Indoor Air Flow (Turbo/H/M/L/Si) (CFM)		1189.0 / 1083.0 / 971.2 / 865.2 / NA
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)		49 / 48.0 / 45.5 / 25.5 / NA
Dimension (WxDxH)	inch	21.02 x 21.02 x 49.02
	mm	534.0 x 534.0 x 1245.0
Package (WxDxH)	inch	26.57 x 24.41 x 52.56
	mm	675 x 620 x 1335
Net/Gross Weight	lbs	129.41 / 153.88
	kg	58.7 / 69.8

OUTDOOR UNIT SPECIFICATIONS

Compressor Type		TWIN-ROTARY
Compressor Model		EKPQ420D1UMUA
Refrigerant		R454B
Refrigerant Oil Charge (mL)		1460
Refrigerant Oil		VG75
Outdoor Air Flow (Max) (CFM)		3001.8
Outdoor Noise Level (dBA)		62.5
Dimension (WxDxH)	inch	38.58 x 16.34 x 38.39
	mm	980.0 x 415.0 x 975.0
Package (WxDxH)	inch	45.08 x 19.68 x 42.52
	mm	1145 x 500 x 1080
Net/Gross Weight	lbs	204.15 / 235.23
	kg	92.6 / 106.7

EFFICIENCY RATINGS

Cooling		Heating	
SEER2	17.4	HSPF2-4	10.2
EER2	11.7	COP	3.60

COOLING PERFORMANCE

Cooling (Btu/hr)	
Rated Capacity	36000
Min/Max Capacity	9700~42000
Moisture Removal (L/h)	3.4
Standard Operating Range °F (°C)	-22~122 (-30~50)
Rated Cooling Conditions:	Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

HEATING PERFORMANCE

Heating (Btu/hr)	
1. @ 47°F Rated	37000
1. @ 47°F Min/Max Capacity	11000~48000
2. @ 17°F Rated	31800
3. @ 5°F Rated: Capacity / COP	39000 / 1.9
3. @ 5°F Max: Capacity	39000
Standard Operating Range °F (°C)	-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

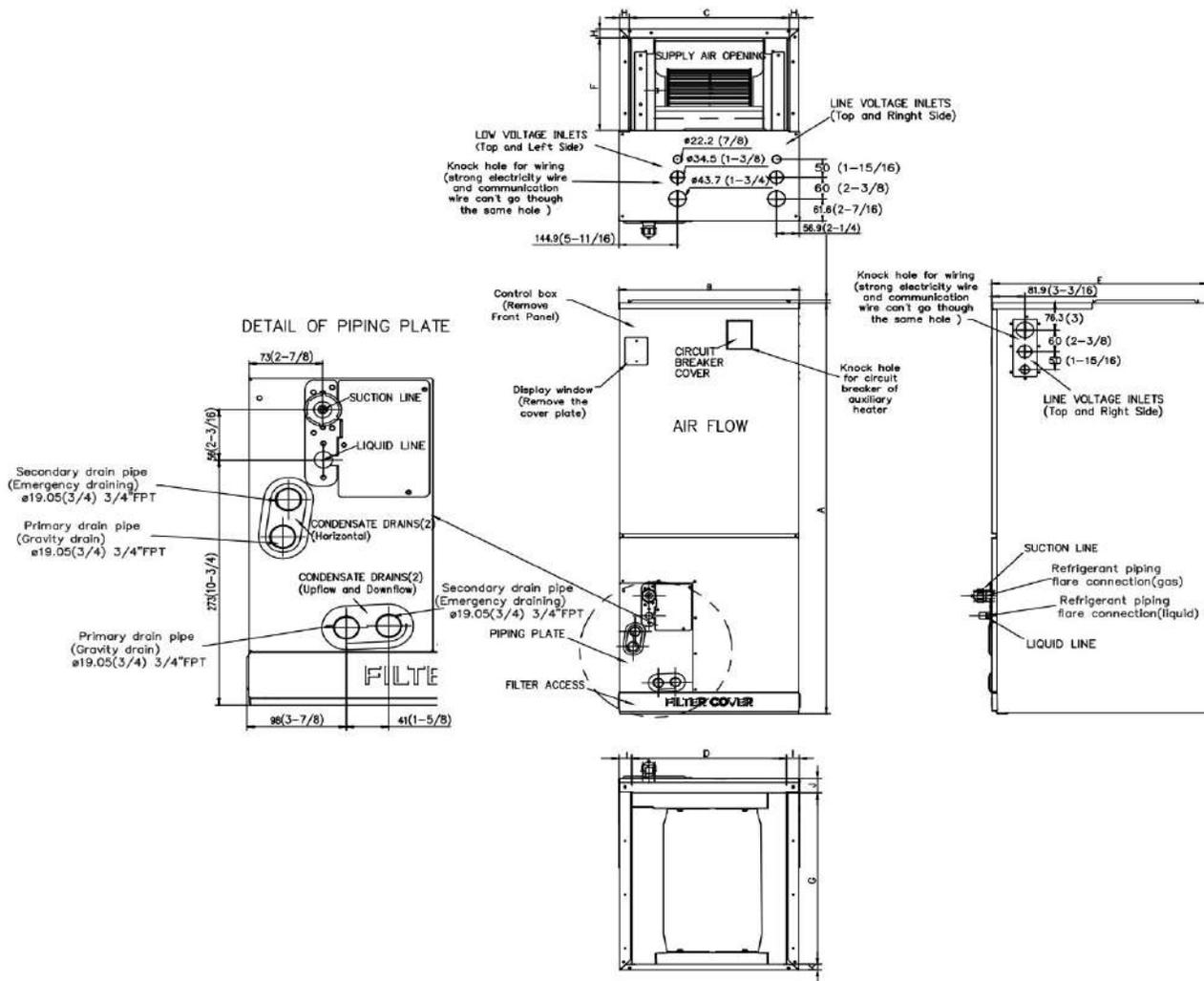
ELECTRICAL SPECIFICATIONS

Indoor Power Supply	115/208/230V,60Hz,1Ph
Indoor MCA 115V / (208/230V)	8.0 / 6.0
Indoor MOP	15
Outdoor Power Supply	208/230V,60Hz,1Ph
Outdoor MCA	32
Outdoor MOP	35
Communication Wiring	AWG 20-2
Compressor RLA	23
Outdoor Fan Motor RLA	2
Outdoor Fan Motor W	250
Indoor Fan Motor RLA	4.5
Indoor Fan Motor W	375
System Power Input @ Cooling (W)	3076 (820 ~ 4440)
System Power Input @ Heating (W)	3012 (665 ~4370)
MCA: Min. circuit amps (A)	MOP: Max. overcurrent protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

REFRIGERANT PIPING SPECIFICATIONS

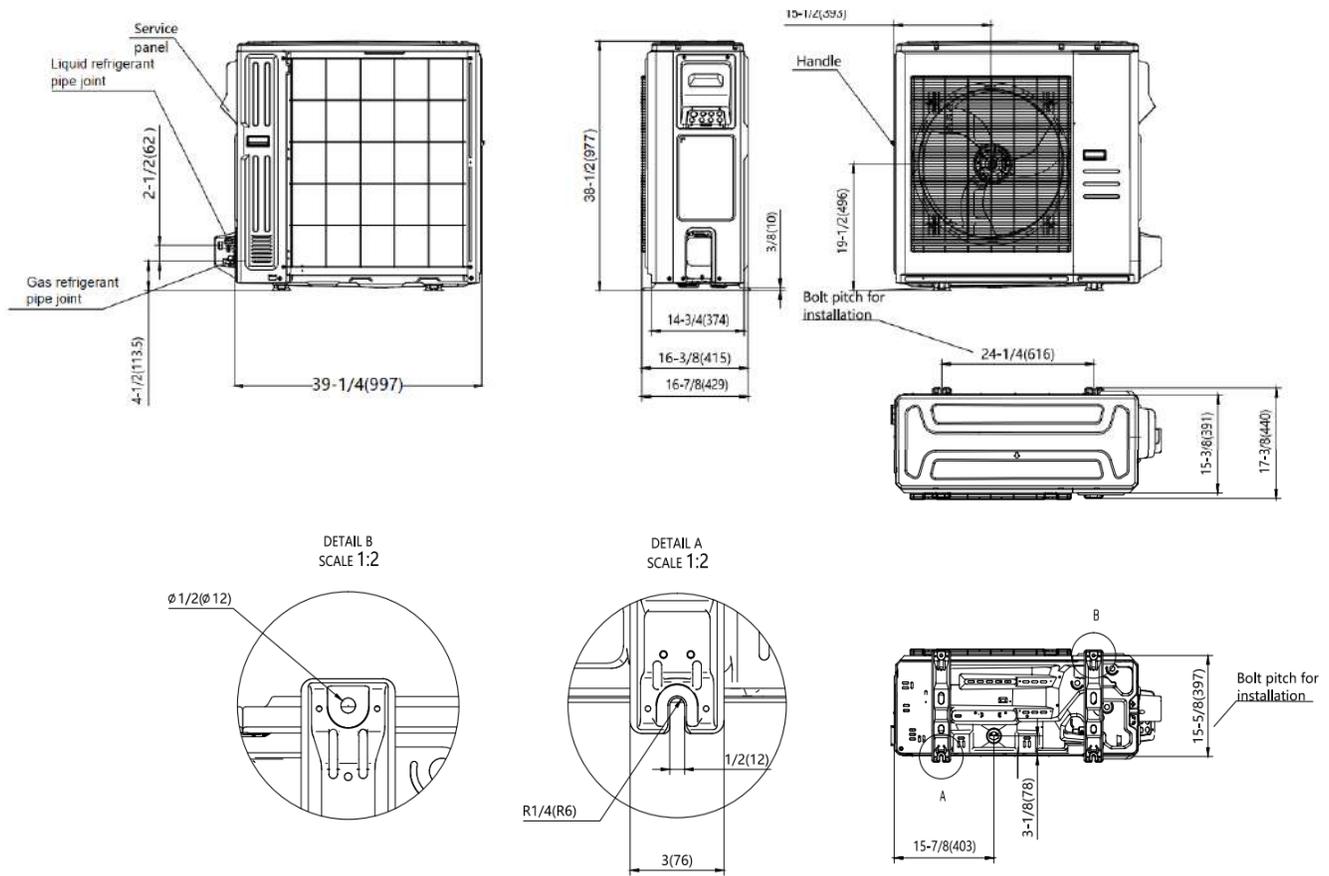
Throttle type (Indoor)	EXV
Throttle type (Outdoor)	EXV
Liquid Size	9.52mm (3/8in)
Gas Size	19mm (3/4in)
Max. Piping Length (ft/m)	246 / 75
Max. Height Difference (ft/m)	98.4 / 30
Max. Pre-charged Length (ft/m)	24.6 / 7.5
Refrigerant Pre-charged Amount (oz/kg)	126.99 / 3.6
Additional Refrigerant Charge (oz/ft) / (g/m)	0.7 / 65
Connection Method	Flared

Indoor Unit Dimensions

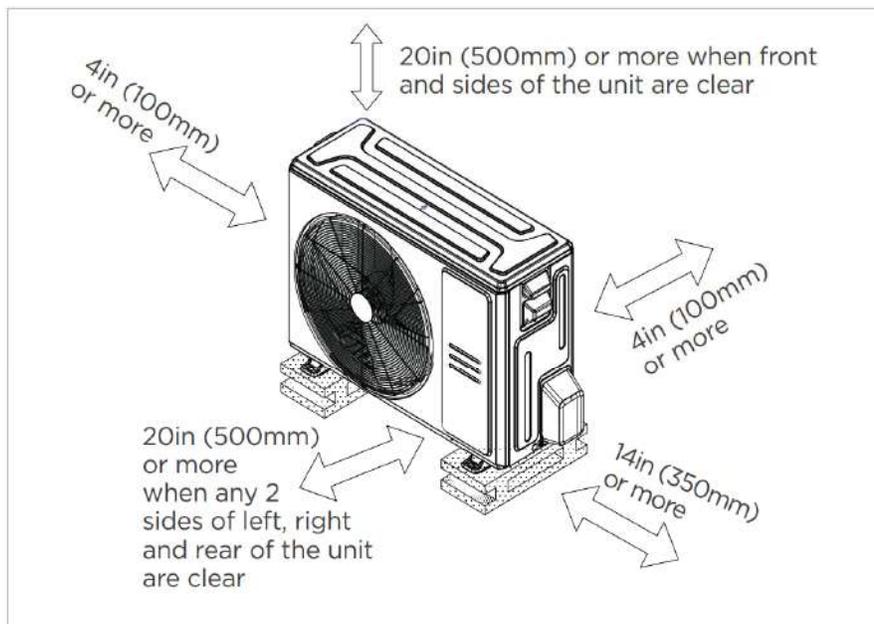


Dimensions	Model	18k/24k		30k/36k		42k/48k/60k	
		inch	mm	inch	mm	inch	mm
A	Model Height	45	1143	49	1245	53	1346
B	Model Width	17-1/2	445	21	534	24-1/2	622
C	Supply Air Opening Width	15-5/8	397	19-1/8	486	22-5/8	575
D	Return Air Opening Width	15-1/8	384	18-5/8	473	22-1/8	562
E	Model Depth	21	534	21	534	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 Dimensions

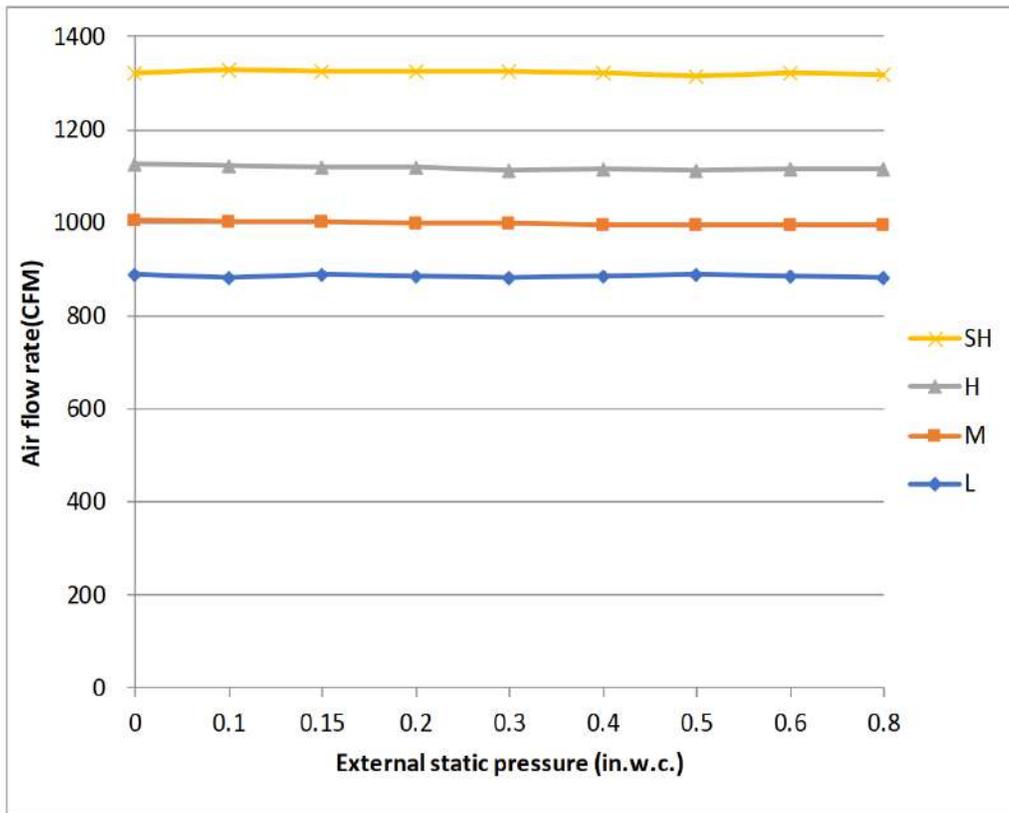


Installation Instructions For Outdoor Unit



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: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, 10.3 HSPF2
- 100% heat output at -4F*
- Chassis heater and crankcase heater equipped as standard

* For 36K model, rated cooling capacity/heating capacity at -4F=100%