

# SUBMITTAL DATA SHEET



Model Number: ECMP-18U/ECUO-18E

## Air Handler Heat Pump System

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



INDOOR SPECIFICATION		
<b>ESP(in.W.G)</b>		0-0.8
<b>Indoor Air Flow (Turbo/H/M/L/Si) (CFM)</b>		618.0 / 576.8 / 529.7 / 488.5 / 488.5
<b>Indoor Noise Level (Turbo/H/M/L/Si) (dBA)</b>		41/41/39/33/33
<b>Dimension (W×D×H)</b>	inch	17.52 x 21.02 x 45.00
	mm	445.0×534.0×1143.0
<b>Package (W×D×H)</b>	inch	26.57 x 20.87 x 48.62
	mm	675×530×1235
<b>Net/Gross Weight</b>	lbs	105.82/126.76
	kg	48/57.5

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>		1765.7
<b>Outdoor Noise Level (dBA)</b>		59
<b>Dimension (W×D×H)</b>	inch	35.04 x 13.46 x 26.50
	mm	890.0×342.0×673.0
<b>Package (W×D×H)</b>	inch	39.17 x 15.67 x 29.13
	mm	995×398×740
<b>Net/Gross Weight</b>	lbs	101.41/109.13
	kg	46/49.5

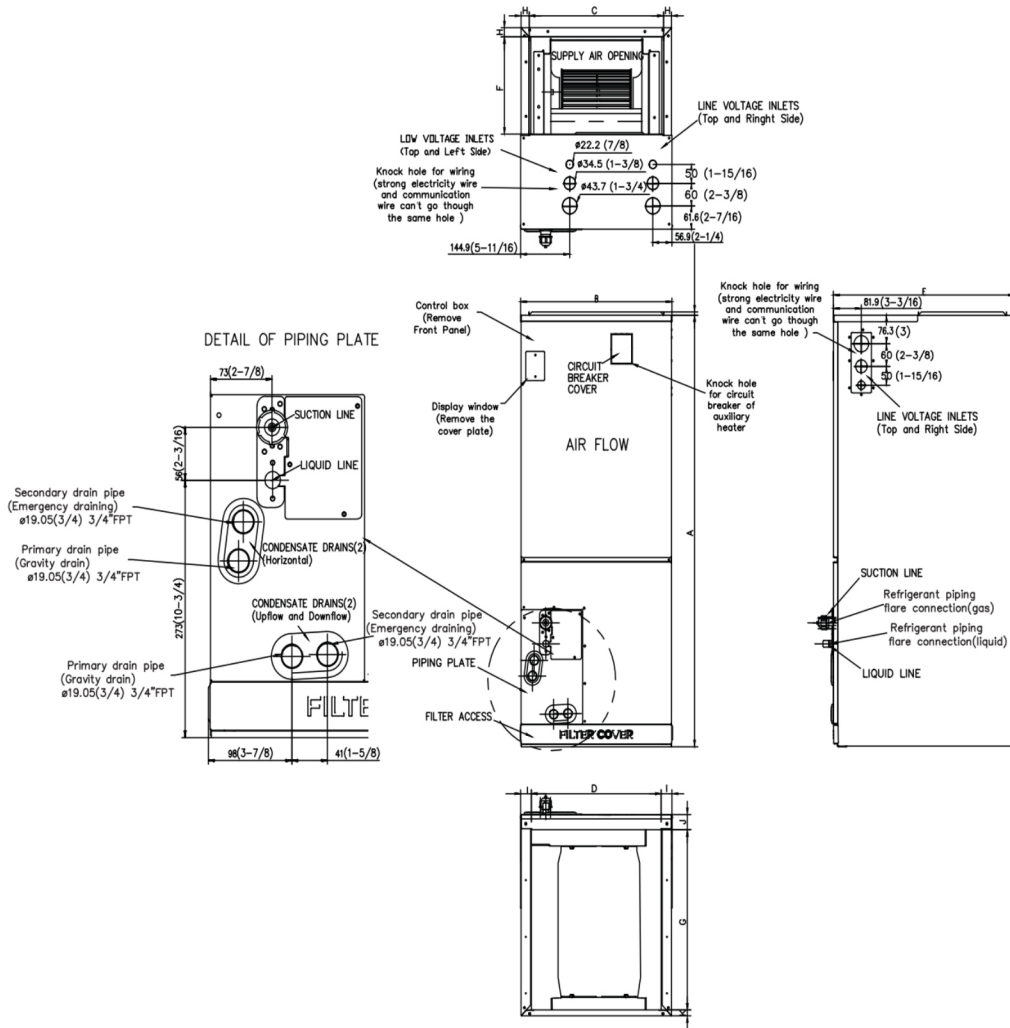
EFFICIENCY			
Cooling		Heating	
<b>SEER2</b>	19.0	<b>HSPF2-4</b>	9.7
<b>EER2</b>	12.5	<b>COP</b>	3.20

PERFORMANCE of Cooling	
Cooling (Btu/hr)	
<b>Rated Capacity</b>	18000
<b>Min/Max Capacity</b>	5600~22000
<b>Moisture Removal(L/h)</b>	1.65
<b>Standard Operating Range(℉/°C)</b>	-22~122(-30~50)
<b>Rated Cooling Conditions:</b>	Indoor: 80℉ DB/67℉ WB Outdoor: 95℉ DB/75℉ WB

PERFORMANCE of Heating	
Heating (Btu/hr)	
<b>1. @ 47℉ Rated</b>	19000
<b>1. @ 47℉ Min/Max Capacity</b>	6000~22000
<b>2. @ 17℉ Rated</b>	15000
<b>3. @ 5℉ Rated: Capacity / COP</b>	18000/2
<b>3. @ 5℉ Max: Capacity</b>	18000
<b>Standard Operating Range(℉/°C)</b>	-22~75(-30~24)
<b>1. Rated Heating Conditions:</b>	Indoor: 70℉ DB/60℉ WB Outdoor: 47℉ DB/43℉ WB
<b>2. Rated Heating Conditions:</b>	Indoor: 70℉ DB/60℉ WB Outdoor: 17℉ DB/15℉ WB
<b>3. Heating Conditions, Compressor Operating at Max. Frequency</b>	Indoor: 70℉ DB/60℉ WB Outdoor: 5℉ DB/5℉ WB

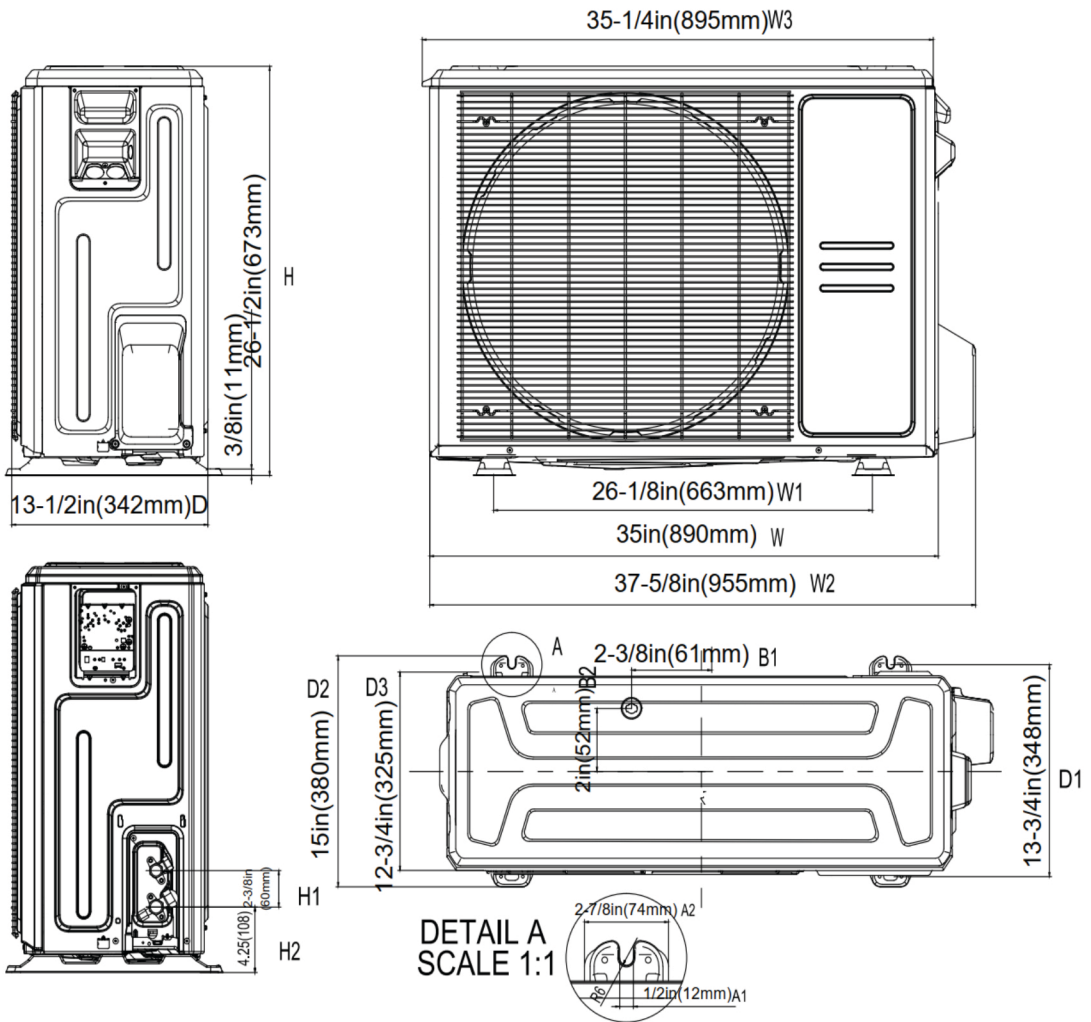
ELECTRICAL	
<b>Indoor Power Supply</b>	115/208/230V,60Hz,1Ph
<b>Indoor MCA 115V/(208/230V)</b>	5.5/4.0
<b>Indoor MOP</b>	15
<b>Outdoor Power Supply</b>	208/230V,60Hz,1Ph
<b>Outdoor MCA</b>	16
<b>Outdoor MOP</b>	20
<b>Communication Wiring</b>	AWG 20-2
<b>Compressor RLA</b>	10.5
<b>Outdoor Fan Motor RLA</b>	0.9
<b>Outdoor Fan Motor W</b>	80
<b>Indoor Fan Motor RLA</b>	2
<b>Indoor Fan Motor W</b>	250
<b>System Power Input @ Cooling (W)</b>	1445(440 ~ 1950)
<b>System Power Input @ Heating (W)</b>	1740(500 ~1950)
<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>	98.4(30)
<b>Max. Height Difference(ft/m)</b>	65.6(20)
<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

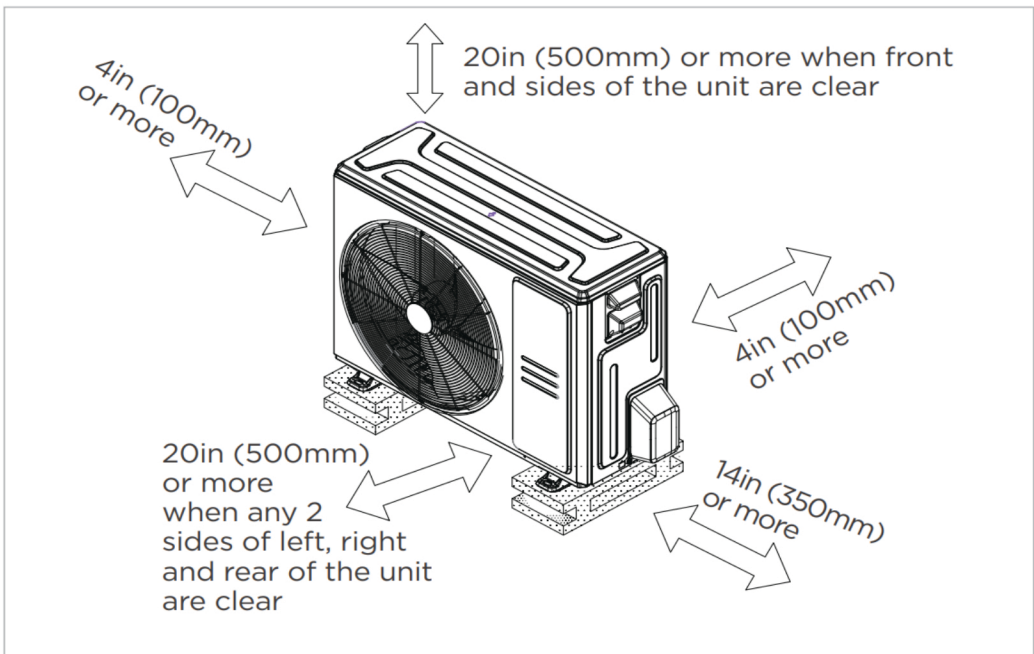


Dimension	Model	18k/24K		30k/36K		48k/60K	
		inch	mm	inch	mm	inch	mm
A	Model Height	45	1143	49	1245	53	1346
B	Model Width	17-1/2	445	21	534	24-1/2	622
C	Supply Air Opening Width	15-5/8	397	19-1/8	486	22-5/8	575
D	Return Air Opening Width	15-1/8	384	18-5/8	473	22-1/8	562
E	Model Depth	21	534	21	534	21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

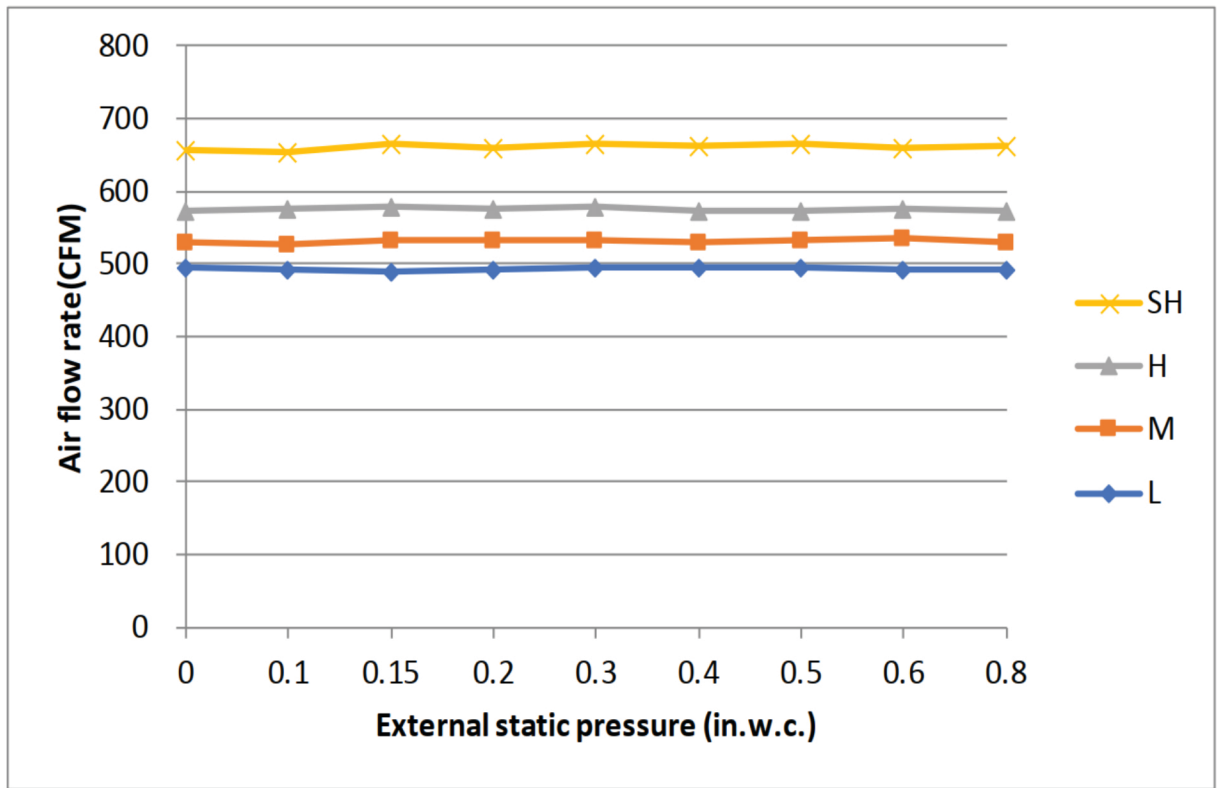
Outdoor Unit Dimension



Installation Instruction 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)
- 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%