# **ComfortStar®**

## **SUBMITTAL DATA SHEET**

Air Handler Heat Pump System			
Location:	Approval:		
Engineer:	Date:		
Submitted to:	Construction:		
Submitted by:	Unit #:		
Reference:	Drawing #:		



	INDOOR SPEC	CIFICATION		
ESP(in.W.G)		0-0		
Indoor Air Flow (Turbo/H/M/L/Si) (CFM)		989 / 895 / 806 / 542 / 542		
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)		63/62/60/54/54		
Dimension (W×D×H)	inch	55.24 x 23.33 x 10.93		
	mm	1403×592.7×277.6		
Package (W×D×H)	inch	59.25 x 26.77 x 13.58		
	mm	1505×680×345		
Net/Gross Weight	lbs	63/68		
	kg	63/68.5		

OUTDOOR SPECIFICATION				
Compressor Type		ROTARY		
Compressor Model		MTH356UKRC8FQI		
Refrigerant		R454E		
Refrigerant Oil Charge(n	nL)	1300		
Refrigerant Oil		HAF68D1A		
Outdoor Air Flow (Max) (CFM)		3,00		
Outdoor Noise Level (dB	A)	65		
Dimension	inch	37.24 x 16.14 x 31.89		
(W×D×H)	mm	946×410×810		
Package (W×D×H)	inch	42.91 x 19.68 x 34.84		
	mm	1090×500×885		
Net/Gross Weight	lbs	164.02/174.6		
	kg	74.4/79.2		

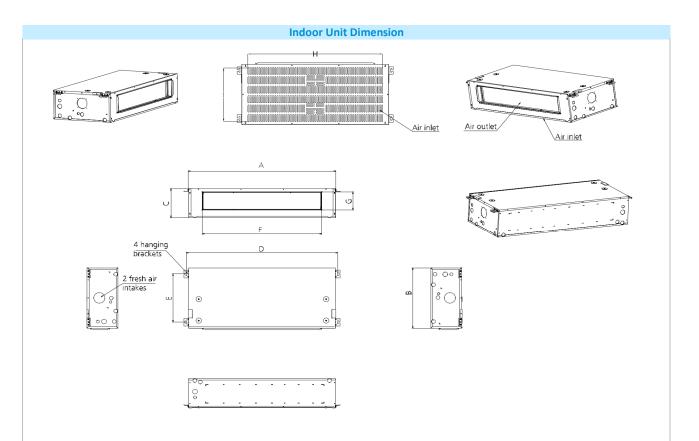
SEER2	16.3	HSPF2-4	9.5		
EER2	11	СОР	3.42		
PERFORMANCE of Cooling					
Cooling (Btu/hr)					
Rated Capacity 30,0			30,000		
Min/Max Capacity		11,000~36,000			
Moisture Removal(L/h)		2.56			
Standard Operating Range(°F/°C) -22~122(-30			-22~122(-30~50)		
Rated Cooling Conditions:		Indoor: 80°F DB/67°F WB			
		Outdoor: 95°F DB/75°F WB			

**EFFICIENCY** 

PERFORMANCE of Heating			
Heating (Btu/hr)			
31,000			
9,800~37,600			
24,000			
31,000/1.8			
31,000			
-22~75(-30~24)			
Indoor: 70°F DB/60°F WB			
Outdoor: 47°F DB/43°F WB			
Indoor: 70°F DB/60°F WB			
Outdoor: 17°F DB/15°F WB			
Indoor: 70°F DB/60°F WB			
Outdoor: 5°F DB/5°F WB			

ELECTRICAL			
Indoor Power Supply	115/208/230,60Hz,1Ph		
Indoor MCA 115V/(208/230V)	115V:8A; 208/230V:6A		
Indoor MOP	15		
Outdoor Power Supply	115/208/230,60Hz,1Ph		
Outdoor MCA	29.5		
Outdoor MOP	30		
Communication Wiring	AWG 20/2		
Compressor RLA	22.4		
Outdoor Fan Motor RLA	1.5		
Outdoor Fan Motor W	120		
Indoor Fan Motor RLA	115V:6.4A 208/230V:4.5A		
Indoor Fan Motor W	375		
System Power Input @ Cooling (W)	2,727(800 ~ 3,650)		
System Power Input @ Heating (W)	2,656(690 ~3,400)		
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)		
RLA: Rated load amps (A)	W: Fan motor rated output (W)		

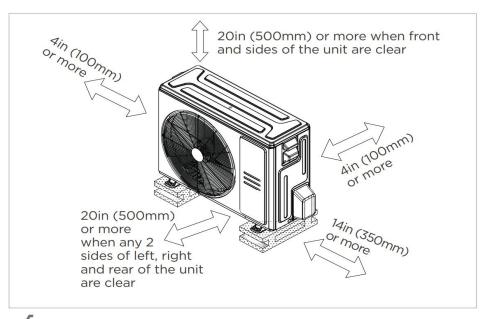
PIPING			
Throttle type(Indoor)	EXV		
Throttle type(Outdoor)	EXV		
Liquid Size	9.52mm(3/8in)		
Gas Size	19mm(3/4in)		
Max. Piping Length(ft/m)	164(50)		
Max. Height Difference(ft/m)	82(25)		
Max. Pre-charged Length(ft/m)	24.6(7.5)		
Refrigerant Pre-charged Amount(oz/kg)	105.82(3)		
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.7(65)		
Connection Method	Flared		



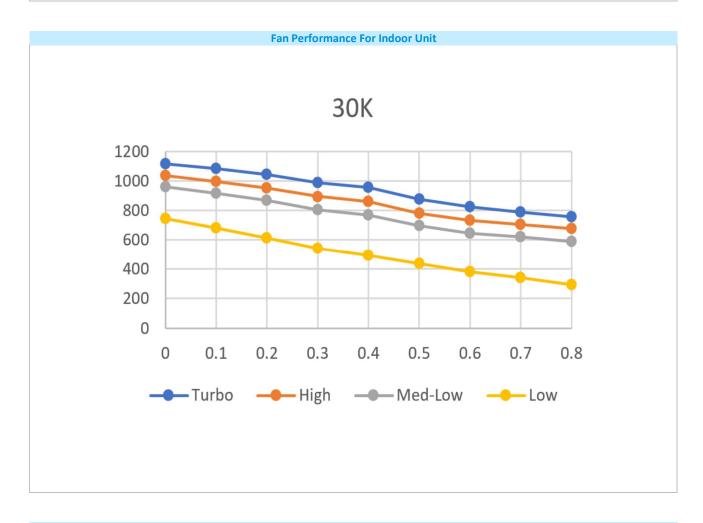
Dimensions Model		18k	24k	30k/	36k	
		inch(mm)	inch(mm)	inch(mm)	inch(mm)	
Outline Dimension	А	Model Model	39-15/16 (1015)	45-7/8 (1165)	51-15/16 (1320)	58-7/8 (1495)
	В	Model Width	23-5/16 (593)	23-5/16 (593)	23-5/16 (593)	23-5/16 (593)
	С	Model Height	10-15/16 (278)	10-15/16 (278)	10-15/16 (278)	10-15/16 (278)
Size Of Mounted Lug	D	Mounted Lug Length	41-5/8 (1057)	47-1/2 (1207)	53-5/8 (1362)	60-1/2 (1537)
	Е	Mounted Lug Width	18-1/8 (460)	18-1/8 (460)	18-1/8 (460)	18-1/8 (460)
All Outlet	F	Air Outlet Length	30-5/16 (769)	36-3/16 (919)	42-5/16 (1074)	49-3/16 (1249)
	G	Air Outlet Width	6-7/8 (174)	6-7/8 (174)	6-7/8 (174)	6-7/8 (174)
Air Return Opening Size	Н	Air Return Length	38-3/8 (975)	44-5/16 (1125)	50-3/8 (1280)	57-1/4 (1455)
	1	Air Return Width	21-1/8 (536)	21-1/8 (536)	21-1/8 (536)	21-1/8 (536)

# 31-7/8(810) 31-7/8(810) 31-7/8(810) 31-7/8(810) 31-7/8(810) 31-7/8(810) 31-7/8(810) 31-7/8(810) 31-7/8(810) 31-7/8(810) 31-7/8(810) 31-7/8(810) 31-7/8(810) 31-7/8(810) 31-7/8(810) 31-7/8(810) 31-7/8(810) 31-7/8(810) 31-7/8(810)

## **Installation Instruction For Outdoor Unit**



Meets all spatial requirements shown in Installation Clearance Requirements above.



### **Features**

- High efficiency up to 16.8 SEER2, 12 EER2, 10.5 HSPF2
- Aluminum Coil
   IDU campatible with 115V and 230V
- Constantly Air Flow system up to 0.80 In.W.G
- Optional Auxiliary heat kit up to 10kW
   Easy Maintenance
- Multiple control options available:
- o Two way communication wired controller:AWC-4
- o Two way communication wired controller with built-in WiFi:AWC-8P-LC-WIFI
- o Wireless remote controller
- o Third-Party 24V Thermostat

- Adaptive Control wiring method on 24V and RS485
   Downward or Backward (optional) air inlet
   Chassis heater and crankcase heater equipped as standard