

**AHU Heat Pump System**

Location: \_\_\_\_\_  
 Engineer: \_\_\_\_\_  
 Submitted to: \_\_\_\_\_  
 Submitted by: \_\_\_\_\_  
 Reference: \_\_\_\_\_

Approval: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Construction: \_\_\_\_\_  
 Unit #: \_\_\_\_\_  
 Drawing #: \_\_\_\_\_

Set Code	#REF!		
Indoor unit code	#REF!		CH-M18AHU
Outdoor unit code	#REF!		CH-ES18-230V0
Set Model			
Certified	AHRB		
	UL		


**SYSTEM PERFORMANCE DATA**

<b>Power supply</b>			
Normal Operational Voltage	(V, Ph, Hz)	208/230V, 1Ph, 60Hz	
Voltage Range	(V)	187-253	
<b>Electrical</b>			
Minimum circuit ampacity	(A)	19.0	
Max. fuse	(A)	30.0	
Connection wiring		14AWG*2 Stranded, shielded	
<b>Cooling</b>			
Rated Capacity	(Btu/h)	18000	
Capacity Range	(Btu/h)	7000-19600	
Power input	(W)	1440	
Rated current	(A)	6.6	
SEER	(Btu/W)	21.6	
EER	(Btu/W)	12.5	
<b>Heating at 47F</b>			
Rated Capacity	(Btu/h)	19000	
Capacity Range	(Btu/h)	6200-21000	
Power input	(W)	1590	
Rated current	(A)	7.0	
HSPF4	(Btu/W)	11.5	
HSPF5	(Btu/W)	8.5	
COP	W/W	3.58	

**REFRIGERANT PIPE DATA**

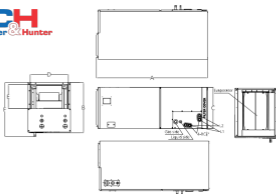
Throttle type	Indoor unit	Outdoor unit	EXV
Design pressure	(PSIG)	550/340	
Refrigerant Type	(Oz)	R410A/56.44	
Refrigerant precharge	(ft)	25.0	
	(in)	7.5	
Additional charge for each ft	(oz/ft)	0.16	
	(g/m)	15	
Liquid side/ Gas side	(inch)	1/4" / 1/2"	
	(mm)	6.35/12.7	
Max. pipe length	(ft)	98.0	
	(m)	30	
Max. difference in level	(ft)	66.0	
	(m)	20	
Connection method	Flared		
Indoor(cooling/ heating)	(Deg. F)	60-90/32-86	
	(Deg. C)	16-32/0-30	
Outdoor(cooling/heating)	(Deg. F)	-13-122 / -13-75	
	(Deg. C)	-25-50 / -25-24	
Application area	(sq.ft)	258.33-376.74	
	(m2)	24-35	

**INDOOR UNIT DATA**

<b>Indoor fan motor</b>			
Type		Centrifugal	
Model		ZKFD-250-8-1	
Qty		1	
Input	(W)	67.8	
RLA	(A)	---	
LRA	(A)	---	
Winding Resistance	(Ω)	---	
Capacitor	(μF)	---	
Speed(Hi/Mi/Lo)	(r/min)	---	
<b>Air flow &amp; Noise level</b>			
Indoor air flow (Hi/Med/Lo) (F)	(CFM)	576.47/529.41/488.24	
Indoor noise level (Hi/Med/Lc)	[dB(A)]	38.5/35/34	
<b>Dehumidification</b>			
Indoor unit	(Pint/H)	---	
Dimension (WxDxH)	(inch)	21.02x17.52x45.00	
	(mm)	534x445x1143	
Packing(WxDxH)	(inch)	26.57x20.87x48.62	
	(mm)	675x530x1235	
Net/Gross weight	(lbs.)	48.4/57.7	
	(kg)	106.70/127.21	

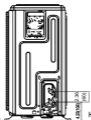
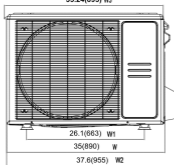
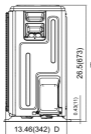
**OUTDOOR UNIT DATA**

<b>Compressor</b>			
Type		ROTARY	
Model		KSN140D58UFZ	
Brand		GMCC	
Capacity	(Btu/h)	14723	
Input	(W)	1090	
Rated current (RLA)	(A)	---	
Refrigerant oil oil charge	(ml)	VG74/440	
<b>Outdoor fan motor</b>			
Model		ZKFN-80-8-3	
Qty		1	
Input	(W)	88.00	
RLA	(A)	---	
Speed	(r/min)	810/720	
<b>Air flow &amp; Noise level</b>			
Outdoor air flow (Max.)	(CFM)	1765	
Outdoor noise level	[dB(A)]	59.00	
<b>Outdoor unit</b>			
Dimension (WxDxH)	(inch)	35.04x13.46x26.50	
	(mm)	890x342x673	
Packing (WxDxH)	(inch)	39.17x15.67x29.13	
	(mm)	995x398x740	
Net/ Gross weight	(lbs.)	94.36/100.97	
	(kg)	42.8/45.8	



Model	Unit	Dimensions(mm)						Drain hole	
		A	B	C	D	E	F	L1	L2
18k~24k	mm	1143	534	445	400	260	585	Main drain	Overflow drain
	inch	45	21	17-1/2	15-3/4	10-1/4	23		
30k~48k	mm	1245	534	534	490	260	585		
	inch	49	21	21	19-5/16	10-1/4	23		
60k	mm	1346	534	622	580	260	585		
	inch	53	21	24-1/2	22-7/8	10-1/4	23		

35.24(895) W3


 DETAIL A  
 SCALE 1:1