

**Ceiling & Floor Heat Pump System**

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

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

**Set Model**  
 Indoor unit model CH-36LCFC/I  
 Outdoor unit model CH-NHPR36LCU-230VO

**Certified**  
 AHRI  
 CSA



**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(Outdoor)	(A)	41.0
Max.fuse(Outdoor)	(A)	50.0
Connection wiring		14AWG*2 Stranded, shielded
<b>Cooling</b>		
Capacity	(Btu/h)	36000(7780-42100)
Power input	(W)	4090(370-4140)
Current	(A)	17.8(3.05-18.31)
SEER2	(Btu/W)	17.6
EER2	(Btu/W)	8.8
<b>Heating</b>		
Capacity	(Btu/h)	39000(11500-45700)
Power input	(W)	4250(740-4790)
Current	(A)	19(4.17-21.14)
HSPF2-4	(Btu/W)	10.0
HSPF2-5	(Btu/W)	8.2
COP	W/W	2.69
Heat at 17F(H32)	(Btu/h)	32000
Heat at 5F(H42)	(Btu/h)	36600
COP at 5F(H42)	W/W	1.75

**INDOOR UNIT DATA**

<b>Indoor fan motor</b>		
Model		ZKFN-115-8-1
Qty		1
Input	(W)	130.0
Output	(W)	115.0
RLA	(A)	1.50
Speed(Hi/Mi/Lo)	(r/min)	1300/1150/800
<b>Air flow &amp; Noise level</b>		
Indoor air flow (Hi/Med/Lo) (No duct)	(CFM)	//1036.47/917.06/637.65
Indoor noise level (Hi/Med/Lo)	[dB(A)]	52.5/48.5/42.5
Dehumidification	(L/H)	4.919
<b>Indoor unit</b>		
Dimension (WxDxH)	(inch)	50.59x26.57x9.25
	(mm)	1285x675x235
Packing(WxDxH)	(inch)	53.54x29.72x12.52
	(mm)	1360x755x318
Net/Gross weight	(lbs.)	69.00/81.57
	(kg)	31.3/37

**OUTDOOR UNIT DATA**

<b>Compressor</b>		
Type		ROTARY
Model		EAP0420D1UMUA
Brand		GMCC
Capacity	(Btu/h)	44015
Input	(W)	3565
Rated current (RLA)	(A)	32.0
Refrigerant oil/oil charge	(ml)	1460±15ml/ESTER OIL VG74
<b>Outdoor fan motor</b>		
Model		ZKFN-85-8-22-5
Qty		2
Input	(W)	126.00
Output	(W)	85.00
RLA	(A)	1.20
Speed	(r/min)	800/750/650
<b>Air flow &amp; Noise level</b>		
Outdoor air flow (Max.)	(CFM)	4500.0
Outdoor noise level	[dB(A)]	63.0
<b>Outdoor unit</b>		
Dimension (WxDxH)	(inch)	37.48x16.34x52.48
	(mm)	952x415x1333
Packing (WxDxH)	(inch)	43.11x19.49x58.27
	(mm)	1095x495x1480
Net/ Gross weight	(lbs.)	220.24/248.02
	(kg)	99.9/112.5

**REFRIGERANT PIPE DATA**

Throttle type	Indoor unit		N/A
	Outdoor unit	EXV+Throttle valve	
Design pressure	(PSIG)	550/340	
Refrigerant Type		R410A	
Refrigerant charge	oz	148.40	
Refrigerant precharge	(ft)	25.0	
	(m)	7.5	
Additional charge for each ft	(oz/ft)	0.32	
Additional charge for each m	(g/m)	30.0	
Liquid side/ Gas side(indoor)	(inch)	3/8"/5/8"	
	(mm)	9.52/15.9	
Liquid side/ Gas side(outdoor)	(inch)	3/8"/5/8"	
	(mm)	9.52/15.9	
Max. pipe length	(ft)	213.3	
	(m)	65.0	
Max. difference in level	(ft)	98.4	
	(m)	30.0	
Connection method		Flared	
Indoor(cooling)	(Deg. °F)	62~90	
	(Deg. °C)	17~32	
Indoor(heating)	(Deg. °F)	32~86	
	(Deg. °C)	0~30	
Outdoor(cooling)	(Deg. °F)	5~122	
	(Deg. °C)	-15~50	
Outdoor(heating)	(Deg. °F)	-22~75	
	(Deg. °C)	-30~24	

**Indoor unit dimension**

Capacity (Btu/h)	Unit	A	B	C	D
18K / 24K	mm	1068	675	235	963
	inch	42.05	26.57	9.25	38.70
36K	mm	1285	675	235	1200
	inch	50.59	26.57	9.25	47.24
48K/60K	mm	1650	675	235	1565
	inch	64.96	26.57	9.25	61.61

**Outdoor unit dimension**

Capacity (Btu/h)	Unit	A	B	C	D	H
18K / 24K	mm	1068	675	235	963	1333
	inch	42.05	26.57	9.25	38.70	52.48
36K	mm	1285	675	235	1200	1333
	inch	50.59	26.57	9.25	47.24	52.48
48K/60K	mm	1650	675	235	1565	1333
	inch	64.96	26.57	9.25	61.61	52.48