



## SUBMITTAL DATA SHEET

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

<b>Set Code</b>	22023010005825
Indoor unit code	22023011003874
Outdoor unit code	22022016016162
<b>Set Model</b>	
Indoor unit model	MIU-A09D-2
Outdoor unit model	MOU-A09H-2
<b>Certified</b>	
AHRI	
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(Outdoor)	(A)	15.0
Max.fuse(Outdoor)	(A)	15.0
Connection wiring		14AWG*4
<b>Cooling</b>		
Capacity	(Btu/h)	9000(2400~12500)
Power Input	(W)	682(174~1150)
Current	(A)	4.7(1.41~5.1)
SEER2	(Btu/W)	20.2
EER2	(Btu/W)	13.2
<b>Heating</b>		
Capacity	(Btu/h)	10000(1700~15600)
Power Input	(W)	870(176~1494)
Current	(A)	4.0(1.44~6.59)
HSPF2-4	(Btu/W)	12.0
HSPF2-5	(Btu/W)	9.5
COP	W/W	3.37
Heat at 17F(H32)	(Btu/h)	10100
Heat at 5F(H42)	(Btu/h)	10800
COP at 5F(H42)	W/W	1.90

### REFRIGERANT PIPE DATA

Throttle type	Indoor unit	N/A
	Outdoor unit	EXV
Design pressure	(PSIG)	550/340
Refrigerant Type		R410A
Refrigerant charge	oz	41.62
Refrigerant precharge	(ft)	25.0
	(m)	7.5
Additional charge for each ft	(oz/ft)	0.16
Additional charge for each m	(g/m)	15.0
Liquid side/ Gas side(indoor)	(inch)	1/4"/3/8"
	(mm)	6.35/9.52
Liquid side/ Gas side(outdoor)	(inch)	1/4"/3/8"
	(mm)	6.35/9.52
Max. pipe length	(ft)	82.0
	(m)	25.0
Max. difference in level	(ft)	32.8
	(m)	10.0
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)	-22~122
	(Deg. °C)	-30~50
Outdoor(heating)	(Deg. °F)	-22~75
	(Deg. °C)	-30~24

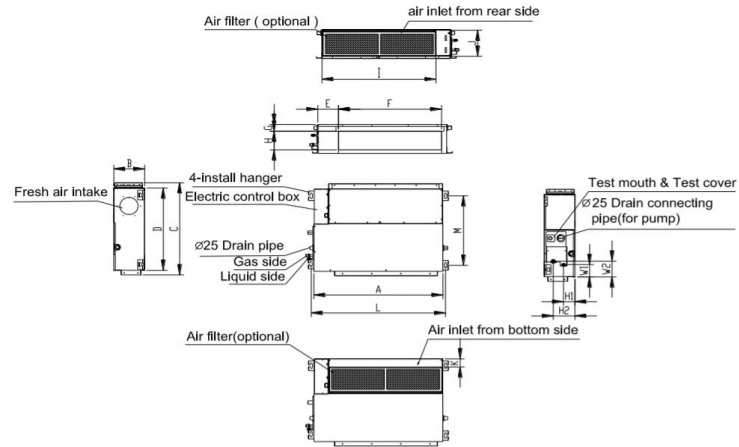
### INDOOR UNIT DATA

<b>Indoor fan motor</b>		
Model		ZKFN-55-8-22-1
Qty		1
Input	(W)	130.00
Output	(W)	55.0
RLA	(A)	0.9
Speed(Hi/Mi/Lo)	(r/min)	1170/1030/850
<b>Air flow &amp; Noise level</b>		
Indoor air flow (Hi/Med/Lo) (No duct)	(CFM)	//352.94/282.35/176.47
Indoor noise level (Hi/Med/Lo)	[dB(A)]	33/30.5/27
<b>Dehumidification</b>	(L/H)	0.92
<b>Indoor unit</b>		
Dimension (WxDxH)	(inch)	27.56x19.92x7.87
	(mm)	700x506x200
Packing(WxDxH)	(inch)	33.86x21.26x11.22
	(mm)	860x540x285
Net/Gross weight	(lbs.)	39.02/48.28
	(kg)	17.7/21.9

### OUTDOOR UNIT DATA

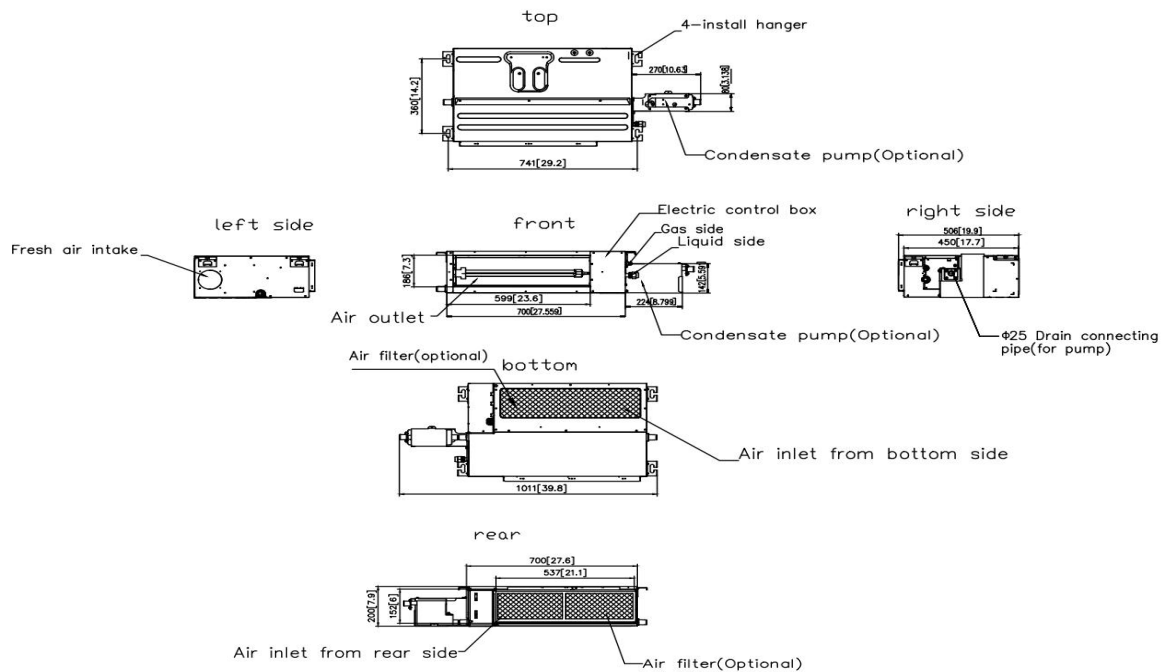
<b>Compressor</b>		
Type		ROTARY
Model		KTN110D42UFZ
Brand		GMCC
Capacity	(Btu/h)	11823
Input	(W)	885
Rated current (RLA)	(A)	8.8
Refrigerant oil/oil charge	(ml)	VG74/350
<b>Outdoor fan motor</b>		
Model		ZKFN-34-10-1
Qty		1
Input	(W)	/
Output	(W)	34
RLA	(A)	0.4
Speed	(r/min)	850/680/450
<b>Air flow &amp; Noise level</b>		
Outdoor air flow (Max.)	(CFM)	1324
Outdoor noise level	[dB(A)]	54.0
<b>Outdoor unit</b>		
Dimension (WxDxH)	(inch)	31.69x12.99x21.81
	(mm)	805x330x554
Packing (WxDxH)	(inch)	36.02x14.57x24.21
	(mm)	915x370x615
Net/ Gross weight	(lbs.)	74.07/80.25
	(kg)	33.6/36.4

**Indoor unit dimension(internal pump)**



Model (KBTu/h)	unit	A	B	C	D	E	F	G	H	I	J	K	L	M	H1	H2	W1	W2
9/12	mm	700	200	506	450	137	537	30	152	599	186	50	741	360	84	140	84	84
	inch	27.6	7.9	19.9	17.7	5.4	21.1	1.2	6.0	23.6	7.3	2.0	29.2	14.2	3.3	5.5	3.3	3.3
18	mm	880	210	674	600	140	706	50	136	782	190	40	920	508	78	148	88	112
	inch	34.6	8.3	26.5	23.6	5.5	27.8	2.0	5.4	30.8	7.5	1.6	36.2	20.0	3.1	5.8	3.5	4.4
24	mm	1100	249	774	700	140	926	50	175	1001	228	5	1140	598	80	150	130	155
	inch	43.3	9.8	30.5	27.6	5.5	36.5	2.0	6.9	39.4	9.0	0.2	44.9	23.5	3.1	5.9	5.1	6.1
36	mm	1360	249	774	700	140	1186	50	175	1261	228	5	1400	598	80	150	130	155
	inch	53.5	9.8	30.5	27.6	5.5	46.7	2.0	6.9	49.6	9.0	0.2	55.1	23.5	3.1	5.9	5.1	6.1
48	mm	1200	300	874	800	123	1044	50	227	1101	280	5	1240	697	80	150	185	210
	inch	47.2	11.8	34.4	31.5	4.8	41.1	2.0	8.9	43.3	11.0	0.2	48.8	27.4	3.1	5.9	7.3	8.3

**Indoor unit dimension(external pump)**



Outdoor unit dimension

