



CHILLER SELECTION REPORT

Daikin Refrigeration Malaysia Sdn. Bhd.

Project : THERMOEX
Created By : Siti Nor Aqilah binti Ahmad

Customer Input

Selected Model / Type : UAM100CFM / Fixed Speed Scroll Chiller Version C
Ambient Temperature : 35.0 °C Frequency : 50 Hz
Chilled Water : EWT 12.22 °C Voltage : 380-415 V
LWT 5.56 °C Country of Origin : Malaysia

Generated Outputs

Full Load Performance		Nominal Data (AHRI Standard)		Input Conditions	
Cooling Capacity			103.0	97.83	TR
			362.4	344.1	kW
Current	Compressor		202	202	A
	Fan		24	24	A
	Total		226	226	A
Power Input	Compressor		115.8	115.5	kW
	Fan		16.00	16.00	kW
	Total		131.8	131.5	kW
COP			2.750	2.617	kW/kW
Flow Rate			62.41	44.48	m ³ /h
Pressure Drop			65.9	39.0	kPa

Note : 1. Nominal data is based on the AHRI (551/591) standard condition of EWT/LWT of 12.00/7.00°C, and ambient temperature of 35.0°C.
2. Input Condition data is based on customer's input condition of EWT/LWT, and ambient temperature.
3. Evaporator rating fouling factor = 0.018 m².K/kW, and rating altitude at 0 m.

Part Load Performance

IPLV		4.035										kW/kW
Point		1	2	3	4	5	6	7	8	9	10	
Corresponding Capacity		100.0	78.3	71.7	56.6	50.0	43.4	28.3	21.7	-	-	%
Total Cooling Capacity		97.83	76.61	70.14	55.39	48.92	42.44	27.69	21.22	-	-	TR
Total Cooling Capacity		344.1	269.4	246.7	194.8	172.0	149.3	97.40	74.64	-	-	kW
Total Power Input		131.5	101.9	95.37	72.24	65.74	59.25	36.12	29.62	-	-	kW
Total Current		226	175	164	124	113	102	62	51	-	-	A
COP		2.617	2.645	2.587	2.697	2.617	2.520	2.697	2.520	-	-	kW/kW
Ambient Temperature		35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	-	-	°C
EEWT		12.22	10.78	10.33	9.33	8.89	8.45	7.45	7.00	-	-	°C
ELWT		5.56	5.56	5.56	5.56	5.56	5.56	5.56	5.56	-	-	°C
Flow Rate		44.48	44.48	44.48	44.48	44.48	44.48	44.48	44.48	-	-	m ³ /h
Pressure Drop		39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	-	-	kPa

Others

MCA		282	A
No. of Refrigerant Circuit		2	-
Refrigerant Type		R410A	-
Refrigerant Charge	System 1/2	35.0 / 35.0	kg/System
Chiller Dimension	W / D / H	2237 / 4163 / 2156	mm
Weight	Shipping	3048	kg
	Operating	3239	kg

Evaporator

Type		S&T	-
Inlet/Outlet Diameter		5" Victaulic Joint	-
Flow Rate	Min / Max	16.40 / 70.40	m ³ /h
Pressure Drop	Min / Max	7.00 / 79.0	kPa

Compressor

Quantity	System 1/2	2 / 2	-
Type		Hermetic-sealed (Scroll)	-
Oil Charge	System 1/2	13.4 / 13.4	L/System

Condenser

Coil			
Tube	Type	Copper Tube	-
Fin	Type	Aluminium Fin	-
Surface Area/ Coil		15.36	m ² /Coil
Fan			
Type/ Drive		Axial / Direct	-
Quantity per System		4	-

Note : For any enquiry, please contact your authorized sales agent.

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