



CHILLER SELECTION REPORT

Daikin Refrigeration Malaysia Sdn. Bhd.

Project : UITM KEDAH
Created By : Siti Nor Aqilah binti Ahmad

Customer Input

Selected Model / Type : UAM100CFM / Fixed Speed Scroll Chiller Version C
Ambient Temperature : 33.3 °C Frequency : 50 Hz
Chilled Water : EWT 12.22 °C Voltage : 380-415 V
LWT 6.67 °C Country of Origin : Malaysia

Generated Outputs

Full Load Performance		Nominal Data (AHRI Standard)		Input Conditions	
Cooling Capacity		103.0		104.5	TR
		362.4		367.5	kW
Current	Compressor	202		197	A
	Fan	24		24	A
	Total	226		221	A
Power Input	Compressor	115.8		111.8	kW
	Fan	16.00		16.00	kW
	Total	131.8		127.8	kW
COP		2.750		2.875	kW/kW
Flow Rate		62.41		57.02	m ³ /h
Pressure Drop		65.9		57.3	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 m ² .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	:	104.5	81.82	74.92	59.15	52.25	45.34	29.58	22.67	-	-	TR
Total Cooling Capacity	:	367.5	287.8	263.5	208.0	183.8	159.5	104.0	79.74	-	-	kW
Total Power Input	:	127.8	99.04	92.69	70.26	63.91	57.56	35.13	28.78	-	-	kW
Total Current	:	221	171	160	121	111	100	61	50	-	-	A
COP	:	2.875	2.906	2.843	2.961	2.875	2.771	2.961	2.771	-	-	kW/kW
Ambient Temperature	:	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	-	-	°C
EEWT	:	12.22	11.02	10.65	9.81	9.45	9.08	8.24	7.87	-	-	°C
ELWT	:	6.67	6.67	6.67	6.67	6.67	6.67	6.67	6.67	-	-	°C
Flow Rate	:	57.02	57.02	57.02	57.02	57.02	57.02	57.02	57.02	-	-	m³/h
Pressure Drop	:	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	-	-	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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