



CHILLER SELECTION REPORT

Daikin Refrigeration Malaysia Sdn. Bhd.

Project : DAV
Created By : Lim Mei Yee

Customer Input

Selected Model / Type : UAMV20AFM / Inverter Speed (Hybrid) Scroll Chiller Version A
Ambient Temperature : 35.0 °C Frequency : 50 Hz
Chilled Water : EWT 15.00 °C Voltage : 380-415 V
LWT 10.00 °C Country of Origin : Malaysia

Generated Outputs

Full Load Performance		Nominal Data (MS Standard)		Input Conditions	
Cooling Capacity		20.00		20.00	TR
		70.34		70.34	kW
Current	Compressor	35		31	A
	Fan	5		5	A
	Total	40		36	A
Power Input	Compressor	21.81		19.26	kW
	Fan	1.800		1.800	kW
	Total	23.61		21.06	kW
COP		2.979		3.340	kW/kW
Flow Rate		10.91		12.11	m³/h
Pressure Drop		37.9		45.7	kPa

Note :
1. Nominal data is based on the MS2449 standard condition of EWT/LWT of 12.22/6.67°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

MPLV		3.579										kW/kW
Point		1	2	3	4	5	6	7	8	9	10	
Corresponding Capacity		100.0	90.0	80.0	70.0	60.0	50.0	40.0	37.0	37.0	37.0	%
Total Cooling Capacity		20.00	18.00	16.00	14.00	12.00	10.00	8.000	7.404	7.404	7.404	TR
Total Cooling Capacity		70.34	63.31	56.27	49.24	42.20	35.17	28.14	26.04	26.04	26.04	kW
Total Power Input		21.06	18.96	16.94	14.99	13.11	11.29	9.554	9.045	9.045	9.045	kW
Total Current		36	33	30	28	25	22	19	18	18	18	A
COP		3.340	3.338	3.322	3.286	3.220	3.115	2.945	2.879	2.879	2.879	kW/kW
Ambient Temperature		35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	°C
EEWT		15.00	14.50	14.00	13.50	13.00	12.50	12.00	11.85	11.85	11.85	°C
ELWT		10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	°C
Flow Rate		12.11	12.11	12.11	12.11	12.11	12.11	12.11	12.11	12.11	12.11	m³/h
Pressure Drop		45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	kPa

Others

MCA		61	A
No. of Refrigerant Circuit		1	-
Refrigerant Type		R410A	-
Refrigerant Charge	System 1/2	21.5 / -	kg/System
Chiller Dimension	W / D / H	994 / 2460 / 1810	mm
Weight	Shipping	590	kg
	Operating	595	kg

Evaporator

Type		MPHE	-
Inlet/Outlet Diameter		2.5" Male BSPT	-
Flow Rate	Min / Max	3.070 / 12.73	m³/h
Pressure Drop	Min / Max	4.29 / 50.0	kPa

Compressor

Quantity	System 1/2	1 / -	-
Type		Hermetic-sealed (Scroll)	-
Oil Charge	System 1/2	7.7 / -	L/System

Condenser

Coil			
Tube	Type	Copper Tube	-
Fin	Type	Aluminium Fin	-
Surface Area/ Coil		2.05	m²/Coil
Fan			
Type/ Drive		Axial / Direct	-
Quantity per System		2	-

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

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