



CHILLER SELECTION REPORT

Daikin Refrigeration Malaysia Sdn. Bhd.

Project : sharing purpose
Created By : DRMSASoftware

Customer Input

Selected Model / Type : UAMV20AFM / Inverter Speed (Hybrid) Scroll Chiller Version A
Ambient Temperature : 31.0 °C Frequency : 50 Hz
Chilled Water : EWT 12.00 °C Voltage : 380-415 V
LWT 8.00 °C Country of Origin : Malaysia

Generated Outputs

Full Load Performance		Nominal Data (AHRI Standard)		Input Conditions	
Cooling Capacity		20.20		17.00	TR
		71.04		59.79	kW
Current	Compressor	35		25	A
	Fan	5		5	A
	Total	40		30	A
Power Input	Compressor	21.78		14.72	kW
	Fan	1.800		1.800	kW
	Total	23.58		16.52	kW
COP		3.012		3.619	kW/kW
Flow Rate		12.23		12.09	m ³ /h
Pressure Drop		46.5		45.6	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		5.017										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	43.4	43.4	43.4	43.4	%
Total Cooling Capacity		17.00	15.30	13.60	11.90	10.20	8.500	7.370	7.370	7.370	7.370	TR
Total Cooling Capacity		59.79	53.81	47.83	41.85	35.87	29.89	25.92	25.92	25.92	25.92	kW
Total Power Input		16.52	14.93	13.40	11.92	10.49	9.117	8.229	8.229	8.229	8.229	kW
Total Current		30	28	25	23	21	19	17	17	17	17	A
COP		3.619	3.603	3.570	3.511	3.419	3.279	3.150	3.150	3.150	3.150	kW/kW
Ambient Temperature		31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0	°C
EEWT		12.26	11.83	11.41	10.98	10.55	10.13	9.85	9.85	9.85	9.85	°C
ELWT		8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	°C
Flow Rate		12.09	12.09	12.09	12.09	12.09	12.09	12.09	12.09	12.09	12.09	m ³ /h
Pressure Drop		45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	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	m ³ /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	m ² /Coil
Fan			
Type/ Drive		Axial / Direct	-
Quantity per System		2	-