



CHILLER SELECTION REPORT

Daikin Refrigeration Malaysia Sdn. Bhd.

Project : Philips
Created By : Ch'ng Swee Guan

Customer Input

Selected Model / Type : UAMV20AFM / Inverter Speed (Hybrid) Scroll Chiller Version A
Ambient Temperature : 45.0 °C Frequency : 50 Hz
Chilled Water : EWT 14.00 °C Voltage : 380-415 V
LWT 9.00 °C Country of Origin : Malaysia

Generated Outputs

Full Load Performance		Nominal Data (MS Standard)		Input Conditions	
Cooling Capacity		20.00	17.62	TR	
		70.34	61.97	kW	
Current	Compressor	35	44	A	
	Fan	5	5	A	
	Total	40	49	A	
Power Input	Compressor	21.81	28.19	kW	
	Fan	1.800	1.800	kW	
	Total	23.61	29.99	kW	
COP		2.979	2.066	kW/kW	
Flow Rate		10.91	10.67	m ³ /h	
Pressure Drop		37.9	36.4	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	-	-	-	-	-
Corresponding Capacity		100.0	75.0	50.0	39.1	-	-	-	-	-
Total Cooling Capacity		20.00	15.00	10.00	7.813	-	-	-	-	TR
Total Cooling Capacity		70.34	52.76	35.17	27.48	-	-	-	-	kW
Total Power Input		23.61	15.60	9.675	6.372	-	-	-	-	kW
Total Current		40	29	20	13	-	-	-	-	A
COP		2.979	3.381	3.635	4.312	-	-	-	-	kW/kW
Ambient Temperature		35.0	31.5	27.9	25.6	-	-	-	-	°C
EEWT		12.22	10.83	9.45	8.84	-	-	-	-	°C
ELWT		6.67	6.67	6.67	6.67	-	-	-	-	°C
Flow Rate		10.91	10.91	10.91	10.91	-	-	-	-	m ³ /h
Pressure Drop		37.9	37.9	37.9	37.9	-	-	-	-	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	-

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

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