



CHILLER SELECTION REPORT

Daikin Refrigeration Malaysia Sdn. Bhd.

Project : UAM
Created By : Siti Nor Aqilah binti Ahmad

Customer Input

Selected Model / Type : UAM80CFM / Fixed Speed Scroll Chiller Version C
Ambient Temperature : 35.0 °C Frequency : 50 Hz
Chilled Water : EWT 20.00 °C Voltage : 380-415 V
LWT 13.00 °C Country of Origin : Malaysia

Generated Outputs

Full Load Performance		Nominal Data (AHRI Standard)		Input Conditions	
Cooling Capacity		80.99		100.0	TR
		284.8		351.8	kW
Current	Compressor	161		162	A
	Fan	18		18	A
	Total	179		180	A
Power Input	Compressor	92.19		92.86	kW
	Fan	12.00		12.00	kW
	Total	104.2		104.9	kW
COP		2.734		3.355	kW/kW
Flow Rate		49.05		43.27	m ³ /h
Pressure Drop		38.1		31.5	kPa

- 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.
- Input Condition data is based on customer's input condition of EWT/LWT, and ambient temperature.
- Evaporator rating fouling factor = 0.018 m².K/kW, and rating altitude at 0 m.

Part Load Performance

IPLV		-										kW/kW
Point		1	2	3	4	5	6	7	8	9	10	
Corresponding Capacity		100.0	77.7	72.3	55.3	50.0	44.7	27.7	22.3	-	-	%
Total Cooling Capacity		100.0	77.68	72.37	55.32	50.02	44.71	27.66	22.36	-	-	TR
Total Cooling Capacity		351.8	273.2	254.5	194.6	175.9	157.3	97.28	78.63	-	-	kW
Total Power Input		104.9	82.27	77.02	59.68	52.43	49.18	29.84	24.59	-	-	kW
Total Current		180	141	132	103	90	84	52	42	-	-	A
COP		3.355	3.321	3.305	3.260	3.355	3.197	3.260	3.197	-	-	kW/kW
Ambient Temperature		35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	-	-	°C
EEWT		20.00	18.44	18.06	16.87	16.50	16.13	14.94	14.56	-	-	°C
ELWT		13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	-	-	°C
Flow Rate		43.27	43.27	43.27	43.27	43.27	43.27	43.27	43.27	-	-	m ³ /h
Pressure Drop		31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	-	-	kPa

Others

MCA		223	A
No. of Refrigerant Circuit		2	-
Refrigerant Type		R410A	-
Refrigerant Charge	System 1/2	25.0 / 25.0	kg/System
Chiller Dimension	W / D / H	2237 / 3263 / 2156	mm
Weight	Shipping	2917	kg
	Operating	3039	kg

Evaporator

Type		S&T	-
Inlet/Outlet Diameter		5" Victaulic Joint	-
Flow Rate	Min / Max	15.00 / 56.70	m ³ /h
Pressure Drop	Min / Max	5.00 / 47.0	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		11.52	m ² /Coil
Fan			
Type/ Drive		Axial / Direct	-
Quantity per System		3	-

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

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