

Project : UAM Quotation
Created By : Nur Athirah Binti Abdullah

Customer Input

Selected Model / Type : UAM80CUM / Fixed Speed Scroll Chiller Version B
Ambient Temperature : 35.0 °C Frequency : 60 Hz
Chilled Water : EWT 12.00 °C Voltage : 380 V
LWT 7.00 °C Country of Origin : Malaysia

Generated Outputs

Full Load Performance		Nominal Data (MS Standard)		Input Conditions	
Cooling Capacity		79.28		80.21	TR
		278.8		282.1	kW
Current	Compressor	167		167	A
	Fan	21		21	A
	Total	188		188	A
Power Input	Compressor	89.81		89.90	kW
	Fan	9.000		9.000	kW
	Total	98.81		98.90	kW
COP		2.822		2.852	kW/kW
Flow Rate		43.26		48.58	m ³ /h
Pressure Drop		57.3		68.3	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 m ² .K/kW, and rating altitude at 0 m.				

Part Load Performance

MPLV		3.368										kW/kW
Point		1	2	3	4	5	6	7	8	9	10	
Corresponding Capacity		100.0	83.3	66.7	50.0	33.3	16.7	-	-	-	-	%
Total Cooling Capacity		80.21	66.84	53.47	40.11	26.74	13.37	-	-	-	-	TR
Total Cooling Capacity		282.1	235.1	188.1	141.1	94.03	47.02	-	-	-	-	kW
Total Power Input		98.90	82.42	65.93	49.45	32.97	16.48	-	-	-	-	kW
Total Current		188	157	126	94	63	32	-	-	-	-	A
COP		2.852	2.852	2.852	2.852	2.852	2.852	-	-	-	-	kW/kW
Ambient Temperature		35.0	35.0	35.0	35.0	35.0	35.0	-	-	-	-	°C
EEWT		12.00	11.17	10.33	9.50	8.67	7.83	-	-	-	-	°C
ELWT		7.00	7.00	7.00	7.00	7.00	7.00	-	-	-	-	°C
Flow Rate		48.58	48.58	48.58	48.58	48.58	48.58	-	-	-	-	m ³ /h
Pressure Drop		68.3	68.3	68.3	68.3	68.3	68.3	-	-	-	-	kPa

Others

MCA		226	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	2819	kg
	Operating	2941	kg

Evaporator

Type		S&T	-
Inlet/Outlet Diameter		5" Victaulic Joint	-
Flow Rate	Min / Max	12.60 / 52.30	m ³ /h
Pressure Drop	Min / Max	7.00 / 76.0	kPa

Compressor

Quantity	System 1/2	3 / 3	-
Type		Hermetic-sealed (Scroll)	-
Oil Charge	System 1/2	20.1 / 20.1	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	-