

Project : UAM
Created By : Nurul Ain Binti Abdul Shukor

Customer Input

Selected Model / Type : UAM100CFM / Fixed Speed Scroll Chiller Version C
Ambient Temperature : 34.0 °C Frequency : 50 Hz
Chilled Water : EWT 12.00 °C Voltage : 380-415 V
LWT 7.00 °C Country of Origin : Malaysia

Generated Outputs

Full Load Performance		Nominal Data (MS Standard)		Input Conditions	
Cooling Capacity		101.8		104.6	TR
		358.1		368.0	kW
Current	Compressor	202		199	A
	Fan	24		24	A
	Total	226		223	A
Power Input	Compressor	115.7		113.5	kW
	Fan	16.00		16.00	kW
	Total	131.7		129.5	kW
COP		2.719		2.842	kW/kW
Flow Rate		55.56		63.37	m ³ /h
Pressure Drop		55.1		67.5	kPa

- 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.
- 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

MPLV		3.308										kW/kW
Point		1	2	3	3	4	-	-	-	-	-	
Corresponding Capacity		100.0	75.5	55.3	31.3	24.7	-	-	-	-	-	%
Total Cooling Capacity		101.8	76.90	56.34	31.92	25.13	-	-	-	-	-	TR
Total Cooling Capacity		358.1	270.5	198.1	112.3	88.39	-	-	-	-	-	kW
Total Power Input		131.7	89.81	58.11	31.87	25.26	-	-	-	-	-	kW
Total Current		226	157	103	57	46	-	-	-	-	-	A
COP		2.719	3.012	3.410	3.523	3.499	-	-	-	-	-	kW/kW
Ambient Temperature		35.0	31.5	27.9	27.9	25.6	-	-	-	-	-	°C
EEWT		12.22	10.86	9.74	8.41	8.04	-	-	-	-	-	°C
ELWT		6.67	6.67	6.67	6.67	6.67	-	-	-	-	-	°C
Flow Rate		55.56	55.56	55.56	55.56	55.56	-	-	-	-	-	m ³ /h
Pressure Drop		55.1	55.1	55.1	55.1	55.1	-	-	-	-	-	kPa

Others

MCA		282	A
No. of Refrigerant Circuit		2	-
Refrigerant Type		R410A	-
Refrigerant Charge	System 1/2	35.0 / 35.0	kg/System
Chiller Dimension	W / D / H	2237 / 4163 / 2156	mm
Weight	Shipping	3048	kg
	Operating	3239	kg

Evaporator

Type		S&T	-
Inlet/Outlet Diameter		5" Victaulic Joint	-
Flow Rate	Min / Max	16.40 / 70.40	m ³ /h
Pressure Drop	Min / Max	7.00 / 79.0	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		15.36	m ² /Coil
Fan			
Type/ Drive		Axial / Direct	-
Quantity per System		4	-