

Project : MUZAMAL FACTORY
Created By : Nur Athirah Binti Abdullah

Customer Input

Selected Model / Type : UAM100CFM / Fixed Speed Scroll Chiller Version C
Ambient Temperature : 35.0 °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		103.0	TR
		358.1		362.4	kW
Current	Compressor	202		202	A
	Fan	24		24	A
	Total	226		226	A
Power Input	Compressor	115.7		115.8	kW
	Fan	16.00		16.00	kW
	Total	131.7		131.8	kW
COP		2.719		2.750	kW/kW
Flow Rate		55.56		62.41	m ³ /h
Pressure Drop		55.1		65.9	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	4	5	6	7	8	9	10	
Corresponding Capacity		100.0	78.3	71.7	56.6	50.0	43.4	28.3	21.7	-	-	%
Total Cooling Capacity		103.0	80.68	73.89	58.31	51.52	44.73	29.16	22.37	-	-	TR
Total Cooling Capacity		362.4	283.8	259.9	205.1	181.2	157.3	102.5	78.66	-	-	kW
Total Power Input		131.8	102.1	95.56	72.48	65.90	59.32	36.24	29.66	-	-	kW
Total Current		226	175	164	125	113	102	63	51	-	-	A
COP		2.750	2.778	2.720	2.830	2.750	2.652	2.830	2.652	-	-	kW/kW
Ambient Temperature		35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	-	-	°C
EEWT		12.00	10.91	10.59	9.83	9.50	9.17	8.41	8.09	-	-	°C
ELWT		7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	-	-	°C
Flow Rate		62.41	62.41	62.41	62.41	62.41	62.41	62.41	62.41	-	-	m ³ /h
Pressure Drop		65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	-	-	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	-