

Project : test 2
Created By : Nur Athirah Binti Abdullah

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 5.00 °C Country of Origin : Malaysia

Generated Outputs

Full Load Performance		Nominal Data (MS Standard)		Input Conditions	
Cooling Capacity		101.8		97.35	TR
		358.1		342.4	kW
Current	Compressor	202		199	A
	Fan	24		24	A
	Total	226		223	A
Power Input	Compressor	115.7		113.1	kW
	Fan	16.00		16.00	kW
	Total	131.7		129.1	kW
COP		2.719		2.653	kW/kW
Flow Rate		55.56		42.12	m ³ /h
Pressure Drop		55.1		35.8	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		97.35	76.24	69.79	55.13	48.68	42.22	27.57	21.11	-	-	TR
Total Cooling Capacity		342.4	268.1	245.4	193.9	171.2	148.5	96.95	74.25	-	-	kW
Total Power Input		129.1	99.97	93.62	70.88	64.53	58.19	35.44	29.09	-	-	kW
Total Current		223	173	162	122	112	101	61	51	-	-	A
COP		2.653	2.682	2.622	2.736	2.653	2.552	2.736	2.552	-	-	kW/kW
Ambient Temperature		34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	-	-	°C
EEWT		12.00	10.48	10.02	8.96	8.50	8.04	6.98	6.52	-	-	°C
ELWT		5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	-	-	°C
Flow Rate		42.12	42.12	42.12	42.12	42.12	42.12	42.12	42.12	-	-	m ³ /h
Pressure Drop		35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	-	-	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	-