

Project : UAM40CFM
Created By : KONG CHU YEE

Customer Input

Selected Model / Type : UAM40CRM / Fixed Speed Scroll Chiller Version B
Ambient Temperature : 35.0 °C Frequency : 60 Hz
Chilled Water : EWT 12.00 °C Voltage : 460 V
LWT 7.00 °C Country of Origin : Malaysia

Generated Outputs

Full Load Performance		Nominal Data (AHRI Standard)		Input Conditions	
Cooling Capacity		39.85		39.85	TR
		140.2		140.2	kW
Current	Compressor	65		65	A
	Fan	12		12	A
	Total	77		77	A
Power Input	Compressor	44.79		44.79	kW
	Fan	7.200		7.200	kW
	Total	51.99		51.99	kW
COP		2.696		2.696	kW/kW
Flow Rate		24.14		24.14	m ³ /h
Pressure Drop		50.8		50.8	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		3.722										kW/kW
Point		1	2	2	3	4	-	-	-	-	-	
Corresponding Capacity		100.0	111.7	61.5	55.0	58.3	-	-	-	-	-	%
Total Cooling Capacity		39.85	44.50	24.50	21.91	23.24	-	-	-	-	-	TR
Total Cooling Capacity		140.2	156.5	86.17	77.06	81.72	-	-	-	-	-	kW
Total Power Input		51.99	45.37	25.96	19.32	17.81	-	-	-	-	-	kW
Total Current		77	69	40	31	29	-	-	-	-	-	A
COP		2.696	3.450	3.319	3.988	4.587	-	-	-	-	-	kW/kW
Ambient Temperature		35.0	27.0	27.0	19.0	13.0	-	-	-	-	-	°C
EEWT		12.00	12.58	10.07	9.75	9.92	-	-	-	-	-	°C
ELWT		7.00	7.00	7.00	7.00	7.00	-	-	-	-	-	°C
Flow Rate		24.14	24.14	24.14	24.14	24.14	-	-	-	-	-	m ³ /h
Pressure Drop		50.8	50.8	50.8	50.8	50.8	-	-	-	-	-	kPa

Others

MCA		102	A
No. of Refrigerant Circuit		1	-
Refrigerant Type		R410A	-
Refrigerant Charge	System 1/2	25.0 / -	kg/System
Chiller Dimension	W / D / H	1146 / 3282 / 2290	mm
Weight	Shipping	1079	kg
	Operating	1088	kg

Evaporator

Type		BPHE	-
Inlet/Outlet Diameter		2.5" Male BSPT	-
Flow Rate	Min / Max	10.00 / 32.50	m ³ /h
Pressure Drop	Min / Max	5.80 / 94.7	kPa

Compressor

Quantity	System 1/2	2 / -	-
Type		Hermetic-sealed (Scroll)	-
Oil Charge	System 1/2	13.4 / -	L/System

Condenser

Coil			
Tube	Type	Copper Tube	-
Fin	Type	Aluminium Fin	-
Surface Area/ Coil		5.76	m ² /Coil
Fan			
Type/ Drive		Axial / Direct	-
Quantity per System		3	-