

Project : checking 20230829
Created By : Cheong Siang Ting

Customer Input

Selected Model / Type : UAM40CFM / Fixed Speed Scroll Chiller Version C
Ambient Temperature : 30.0 °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 (AHRI Standard)		Input Conditions	
Cooling Capacity		40.49		43.53	TR
		142.4		153.1	kW
Current	Compressor	81		75	A
	Fan	9		9	A
	Total	90		84	A
Power Input	Compressor	46.10		41.61	kW
	Fan	6.000		6.000	kW
	Total	52.10		47.61	kW
COP		2.734		3.216	kW/kW
Flow Rate		24.53		26.36	m ³ /h
Pressure Drop		52.5		61.2	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		3.868										kW/kW
Point		1	2	3	4	5	6	7	8	9	10	
Corresponding Capacity		100.0	55.2	44.8	-	-	-	-	-	-	-	%
Total Cooling Capacity		43.53	24.04	19.50	-	-	-	-	-	-	-	TR
Total Cooling Capacity		153.1	84.53	68.57	-	-	-	-	-	-	-	kW
Total Power Input		47.61	27.20	22.41	-	-	-	-	-	-	-	kW
Total Current		84	48	39	-	-	-	-	-	-	-	A
COP		3.216	3.108	3.059	-	-	-	-	-	-	-	kW/kW
Ambient Temperature		30.0	30.0	30.0	-	-	-	-	-	-	-	°C
EEWT		12.00	9.76	9.24	-	-	-	-	-	-	-	°C
ELWT		7.00	7.00	7.00	-	-	-	-	-	-	-	°C
Flow Rate		26.36	26.36	26.36	-	-	-	-	-	-	-	m ³ /h
Pressure Drop		61.2	61.2	61.2	-	-	-	-	-	-	-	kPa

Others

MCA		118	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 / 2156	mm
Weight	Shipping	1130	kg
	Operating	1139	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	-