

CHILLER SELECTION REPORT

Daikin Refrigeration Malaysia Sdn. Bhd.

Project : CSS Dec 09
Created By : lee ming yang

Customer Input

Selected Model / Type : UAM40C3F / Fixed Speed Scroll Chiller Version C
Ambient Temperature : 33.0 °C Frequency : 50 Hz
Chilled Water : EWT 12.00 °C Voltage : 380-415 V
LWT 6.00 °C Country of Origin : Malaysia

Generated Outputs

Full Load Performance		Nominal Data (AHRI Standard)				Input Conditions			
Cooling Capacity	:		40.00			40.00			TR
			140.7			140.7			kW
Current	:	Compressor	81			78			A
		Fan	9			9			A
		Total	90			87			A
Power Input	:	Compressor	46.10			44.25			kW
		Fan	6.000			6.000			kW
		Total	52.10			50.25			kW
COP	:		2.700			2.799			kW/kW
Flow Rate	:		24.23			20.19			m ³ /h
Pressure Drop	:		51.2			34.5			kPa

- Note :
1. 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.
2. Input Condition data is based on customer's input condition of EWT/LWT , and ambient temperature.
3. Evaporator rating fouling factor = 0.018 m².K/kW, and rating altitude at 0 m.

Part Load Performance

IPLV	:	3.739										kW/kW
Point	:	1	2	3	4	5	6	7	8	9	10	
Corresponding Capacity	:	100.0	55.6	45.1	-	-	-	-	-	-	-	%
Total Cooling Capacity	:	40.00	22.23	18.03	-	-	-	-	-	-	-	TR
Total Cooling Capacity	:	140.7	78.19	63.42	-	-	-	-	-	-	-	kW
Total Power Input	:	50.25	28.65	23.61	-	-	-	-	-	-	-	kW
Total Current	:	87	50	41	-	-	-	-	-	-	-	A
COP	:	2.799	2.730	2.686	-	-	-	-	-	-	-	kW/kW
Ambient Temperature	:	33.0	33.0	33.0	-	-	-	-	-	-	-	°C
EEWT	:	12.00	9.33	8.70	-	-	-	-	-	-	-	°C
ELWT	:	6.00	6.00	6.00	-	-	-	-	-	-	-	°C
Flow Rate	:	20.19	20.19	20.19	-	-	-	-	-	-	-	m ³ /h
Pressure Drop	:	34.5	34.5	34.5	-	-	-	-	-	-	-	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								-
Fin	:	Type	Aluminium								-
Surface Area/ Coil	:		5.76								m ² /Coil
Fan	:										-
Type/ Drive	:		Axial / Direct								-
Quantity per System	:		3								-