

CHILLER SELECTION REPORT

Daikin Refrigeration Malaysia Sdn. Bhd.

Project : CSS Dec-28
Created By : lee ming yang

Customer Input

Selected Model / Type : UAM40C3F / Fixed Speed Scroll Chiller Version C
Ambient Temperature : 30.0 °C Frequency : 50 Hz
Chilled Water : EWT 14.00 °C Voltage : 380-415 V
LWT 8.00 °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	75	A
		Fan	9	9	A
		Total	90	84	A
Power Input	:	Compressor	46.10	41.67	kW
		Fan	6.000	6.000	kW
		Total	52.10	47.67	kW
COP	:		2.700	2.951	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	62.3	50.5	-	-	-	-	-	-	-	%
Total Cooling Capacity	:	40.00	24.93	20.21	-	-	-	-	-	-	-	TR
Total Cooling Capacity	:	140.7	87.68	71.08	-	-	-	-	-	-	-	kW
Total Power Input	:	47.67	27.23	22.44	-	-	-	-	-	-	-	kW
Total Current	:	84	48	39	-	-	-	-	-	-	-	A
COP	:	2.951	3.220	3.168	-	-	-	-	-	-	-	kW/kW
Ambient Temperature	:	30.0	30.0	30.0	-	-	-	-	-	-	-	°C
EEWT	:	14.00	11.74	11.03	-	-	-	-	-	-	-	°C
ELWT	:	8.00	8.00	8.00	-	-	-	-	-	-	-	°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	m²/Coil
Fan				
Type/ Drive	:		Axial / Direct	-
Quantity per System	:		3	-