

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 : 91.4 °F Frequency : 50 Hz
Chilled Water : EWT 53.60 °F Voltage : 380-415 V
LWT 42.80 °F 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	46.08	44.25	kW
		Fan	6.000	6.000	kW
		Total	52.08	50.25	kW
COP	:		2.701	2.799	kW/kW
Flow Rate	:		96.01	88.89	gpm
Pressure Drop	:		13.7	11.6	ft H ₂ O

Note :
1. Nominal data is based on the AHRI (550/590) standard condition of EWT/LWT of 54.00/44.00°F, and ambient temperature of 95.0°F.
2. Input Condition data is based on customer's input condition of EWT/LWT, and ambient temperature.
3. Evaporator rating fouling factor = 0.000100 h.ft².°F/Btu, and rating altitude at 0 ft.

Part Load Performance

IPLV	:	3.750										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	:	91.4	91.4	91.4	-	-	-	-	-	-	-	°F
EEWT	:	53.60	48.80	47.67	-	-	-	-	-	-	-	°F
ELWT	:	42.80	42.80	42.80	-	-	-	-	-	-	-	°F
Flow Rate	:	88.89	88.89	88.89	-	-	-	-	-	-	-	gpm
Pressure Drop	:	11.6	11.6	11.6	-	-	-	-	-	-	-	ft H ₂ O

Others

MCA	:	118										A
No. of Refrigerant Circuit	:	1										-
Refrigerant Type	:	R410A										-
Refrigerant Charge	:	System 1/2	55.1 / -									lb/System
Chiller Dimension	:	W / D / H	3.8 / 10.8 / 7.1									ft
Weight	:	Shipping	2492									lb
	:	Operating	2511									lb

Evaporator

Type	:	BPHE										-
Inlet/Outlet Diameter	:	2.5" Male BSPT										-
Flow Rate	:	Min / Max	44.03 / 143.1									gpm
Pressure Drop	:	Min / Max	1.94 / 31.7									ft H ₂ O

Compressor

Quantity	:	System 1/2	2 / -	-
Type	:		Hermetic-sealed (Scroll)	
Oil Charge	:	System 1/2	3.5 / -	

Condenser

Coil				
Tube	:	Type	Copper	-
Fin	:	Type	Aluminium	-
Surface Area/ Coil	:		62.00	ft²/Coil
Fan				
Type/ Drive	:		Axial / Direct	-
Quantity per System	:		3	-