

CHILLER SELECTION REPORT

Daikin Refrigeration Malaysia Sdn. Bhd.

Project : hop
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 11.00 °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	24.23	m ³ /h
Pressure Drop	:		51.2	51.2	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	2	3	4	-	-	-	-
Corresponding Capacity	:	100.0	100.0	62.5	55.7	59.2	-	-	-	-
Total Cooling Capacity	:	40.00	40.00	25.00	22.29	23.69	-	-	-	-
Total Cooling Capacity	:	140.7	140.7	87.93	78.41	83.32	-	-	-	-
Total Power Input	:	52.10	45.23	27.90	18.78	17.21	-	-	-	-
Total Current	:	90	81	50	35	33	-	-	-	-
COP	:	2.700	3.110	3.152	4.175	4.841	-	-	-	-
Ambient Temperature	:	35.0	27.0	27.0	19.0	13.0	-	-	-	-
EEWT	:	12.00	12.00	10.13	9.79	9.96	-	-	-	-
ELWT	:	7.00	7.00	7.00	7.00	7.00	-	-	-	-
Flow Rate	:	24.23	24.23	24.23	24.23	24.23	-	-	-	-
Pressure Drop	:	51.2	51.2	51.2	51.2	51.2	-	-	-	-

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								-