



CHILLER SELECTION REPORT

Daikin Refrigeration Malaysia Sdn. Bhd.

Project : THERMOEX
Created By : Siti Nor Aqilah binti Ahmad

Customer Input

Selected Model / Type : UAM60CFM / Fixed Speed Scroll Chiller Version C
Ambient Temperature : 35.0 °C Frequency : 50 Hz
Chilled Water : EWT 12.22 °C Voltage : 380-415 V
LWT 5.56 °C Country of Origin : Malaysia

Generated Outputs

Full Load Performance		Nominal Data (AHRI Standard)		Input Conditions	
Cooling Capacity		59.27		56.29	
		208.5		198.0	
Current	Compressor	115		115	
	Fan	18		18	
	Total	133		133	
Power Input	Compressor	67.18		67.13	
	Fan	12.00		12.00	
	Total	79.18		79.13	
COP		2.633		2.502	
Flow Rate		35.90		25.59	
Pressure Drop		37.9		21.7	

- 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		3.850										kW/kW
Point		1	2	3	4	5	6	7	8	9	10	
Corresponding Capacity		100.0	75.0	50.0	25.0	-	-	-	-	-	-	%
Total Cooling Capacity		56.29	42.21	28.14	14.07	-	-	-	-	-	-	TR
Total Cooling Capacity		198.0	148.5	98.98	49.49	-	-	-	-	-	-	kW
Total Power Input		79.13	60.35	39.57	20.78	-	-	-	-	-	-	kW
Total Current		133	101	67	35	-	-	-	-	-	-	A
COP		2.502	2.460	2.502	2.381	-	-	-	-	-	-	kW/kW
Ambient Temperature		35.0	35.0	35.0	35.0	-	-	-	-	-	-	°C
EEWT		12.22	10.56	8.89	7.23	-	-	-	-	-	-	°C
ELWT		5.56	5.56	5.56	5.56	-	-	-	-	-	-	°C
Flow Rate		25.59	25.59	25.59	25.59	-	-	-	-	-	-	m ³ /h
Pressure Drop		21.7	21.7	21.7	21.7	-	-	-	-	-	-	kPa

Others

MCA		164										A
No. of Refrigerant Circuit		2										-
Refrigerant Type		R410A										-
Refrigerant Charge	System 1/2	21.0 / 21.0										kg/System
Chiller Dimension	W / D / H	2237 / 3263 / 2156										mm
Weight	Shipping	2052										kg
	Operating	2174										kg

Evaporator

Type		S&T										-
Inlet/Outlet Diameter		4" Victaulic Joint										-
Flow Rate	Min / Max	13.70 / 61.20										m ³ /h
Pressure Drop	Min / Max	7.00 / 90.0										kPa

Compressor

Quantity	System 1/2	2 / 2										-
Type		Hermetic-sealed (Scroll)										-
Oil Charge	System 1/2	13.4 / 13.4										L/System

Condenser

Coil												
Tube	Type	Copper Tube										-
Fin	Type	Aluminium Fin										-
Surface Area/ Coil		11.52										m ² /Coil
Fan												
Type/ Drive		Axial / Direct										-
Quantity per System		3										-