

Project : KPJ LAB
Created By : Nur Athirah Binti Abdullah

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 5.55 °C Country of Origin : Malaysia

Generated Outputs

Full Load Performance		Nominal Data (AHRI Standard)		Input Conditions	
Cooling Capacity		59.27		56.27	TR
		208.5		197.9	kW
Current	Compressor	115		115	A
	Fan	18		18	A
	Total	133		133	A
Power Input	Compressor	67.18		67.13	kW
	Fan	12.00		12.00	kW
	Total	79.18		79.13	kW
COP		2.633		2.501	kW/kW
Flow Rate		35.90		25.55	m ³ /h
Pressure Drop		37.9		21.6	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 m ² .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		56.27	42.20	28.13	14.07	-	-	-	-	-	-	TR
Total Cooling Capacity		197.9	148.4	98.94	49.47	-	-	-	-	-	-	kW
Total Power Input		79.13	60.35	39.57	20.78	-	-	-	-	-	-	kW
Total Current		133	101	67	35	-	-	-	-	-	-	A
COP		2.501	2.459	2.501	2.380	-	-	-	-	-	-	kW/kW
Ambient Temperature		35.0	35.0	35.0	35.0	-	-	-	-	-	-	°C
EEWT		12.22	10.55	8.89	7.22	-	-	-	-	-	-	°C
ELWT		5.55	5.55	5.55	5.55	-	-	-	-	-	-	°C
Flow Rate		25.55	25.55	25.55	25.55	-	-	-	-	-	-	m ³ /h
Pressure Drop		21.6	21.6	21.6	21.6	-	-	-	-	-	-	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	-