

Screw Chiller Report

Project Name:New Project Tag Name:SCWG270EVN11Z*

Unit Information

Chiller Model ----- SCWG270EVN11Z* Refrigerant ----- R513A
Length ----- 11.85 ft Refrigerant Charge -----683.43 lbm
Width ----- 5.997 ft Running Weight ----- 11607.34 lbm
Height ----- 6.877 ft Shipping Weight ----- 10460.93 lbm
Refrigerant Circuits ----- 1

***Due to additional options and manufacturing deviation, the weight and dimension data in this report are for reference only, and the actual weight and dimension of the unit are subject to the actual product.**
***The refrigerant charge amount in this report is for reference only. The refrigerant charge amount is subject to the product nameplate.**

is the production serial number. The specific model please refer to the actual product.

***Type Number: MV130AW[RE]**

Duty 1

Performance Information

Cooling Capacity ----- 270.0 Tons Cooling Input Power -----169.2 kW
COP.R ----- 5.611 kW/kW NPLV.IP(kW/kW) ----- 8.442 kW/kW
NPLV.IP(kW/Ton) ----- 0.4165 kW/Ton

Compressor Information

Code ----- MV130AW (*1) Series
Capacity Control -----Variable Frequency Manufacturer----- Midea
Quantity ----- 1

Evaporator Information

Entering Fluid Temp ----- 54.00 °F Code----- SWE1737-DC Series
Leaving Fluid Temp -----44.00 °F Passes -----2
Flow Rate ----- 645.8 GPM Waterboxes ----- 145 Psi
Fluid Pressure Drop ----- 13.0 ft wg Nozzle -----DN200
Fouling Factor ----- 0.000100 h-ft2-°F/Btu Concentration ----- 0 %
Fluid Type ----- FreshWater

Condenser Information

Entering Fluid Temp ----- 85.00 °F Code----- SWN1737-FA Series
Leaving Fluid Temp -----95.00 °F Passes -----2
Flow Rate ----- 757.8 GPM Waterboxes ----- 145 Psi
Fluid Pressure Drop ----- 12.6 ft wg Nozzle -----DN200
Fouling Factor ----- 0.000250 h-ft2-°F/Btu Concentration ----- 0 %
Fluid Type ----- FreshWater Heat Rejection Capacity ----- 314.3 Ton

Electrical Information

Cooling Rated Load Amperes ----- 238.7 A
Starting Current ----- <238.7 A
Maximum Operating Current ----- 325.2 A

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Voltage ----- 440-3-60Hz Starting Type ----- VFD Starter
Screen Type ----- Touch Screen Protection ----- IP20

General

Refrigerant Shipment -----Shipped inside Chiller Stop Valve-----Not Installed
Packaging Options----- Shrink Wrap Anti-vibration Configuration -----Spring Isolator
Insulation Thickness-----20mm

Waterboxes

Evaporator
Nozzle Arrangements-----Cabinet Right Connection -----Victaulic
Condenser
Nozzle Arrangements-----Cabinet Right Connection -----Victaulic

Electrical

Communication ----- RS485 Control Type ----- Midea Controller
Protocol ----- Modbus-RTU Power Line Arrangement ----- Side in



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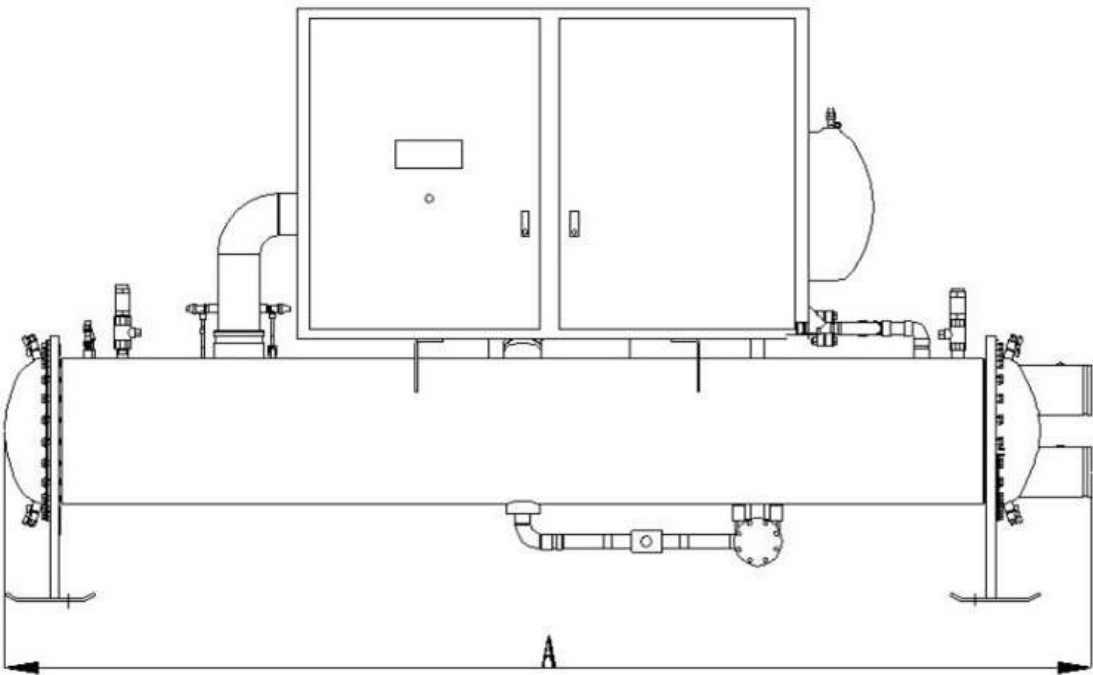
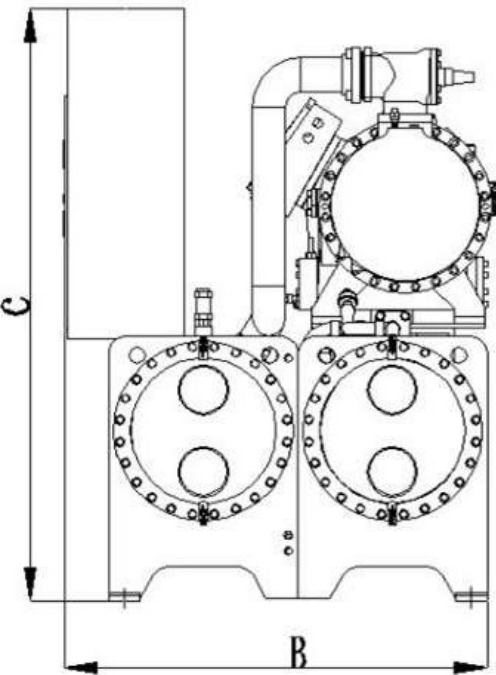
Tag Name:SCWG270EVN11Z*

Calculation:IPLV.IP

Percent age of Full Load	Cooling Capacit y	Input Power	Power Input per Capacit y	COP.R	Evaporator				Condenser				Weighti ng Factor	IPLV.IP	
					EEFT	ELFT	Flow Rate	Fluid Pressur e Drop	CEFT	CLFT	Flow Rate	Fluid Pressur e Drop			
	Ton	kW	kW/To n	kW/kW	°F	°F	GPM	ft wg	°F	°F	GPM	ft wg	-	kW/To n	kW/kW
100%	271.0	167.2	0.6168	5.700	54.00	44.00	648.2	13.1	85.00	94.30	816.1	14.4	0.01	0.4137	8.500
75%	203.3	94.91	0.4669	7.530	51.50	44.00	648.2	13.1	75.00	81.73	816.1	14.8	0.42		
50%	135.5	50.43	0.3721	9.448	49.00	44.00	648.2	13.2	65.00	69.38	816.1	15.3	0.45		
%	67.76	27.79	0.4102	8.572	46.50	44.00	648.2	13.2	65.00	67.21	816.1	15.4	0.12		

Calculation:NPLV.IP

Percent age of Full Load	Cooling Capacit y	Input Power	Power Input per Capacit y	COP.R	Evaporator				Condenser				Weighti ng Factor	NPLV.IP	
					EEFT	ELFT	Flow Rate	Fluid Pressur e Drop	CEFT	CLFT	Flow Rate	Fluid Pressur e Drop			
	Ton	kW	kW/To n	kW/kW	°F	°F	GPM	ft wg	°F	°F	GPM	ft wg	-	kW/To n	kW/kW
100%	270.0	169.2	0.6267	5.611	54.00	44.00	645.8	13.0	85.00	95.00	757.8	12.6	0.01	0.4165	8.442
75%	202.5	95.41	0.4711	7.463	51.50	44.00	645.8	13.0	75.00	82.22	757.8	13.0	0.42		
50%	135.0	50.53	0.3743	9.394	49.00	44.00	645.8	13.1	65.00	69.70	757.8	13.4	0.45		
25%	67.50	27.79	0.4117	8.540	46.50	44.00	645.8	13.1	65.00	67.37	757.8	13.5	0.12		



A	ft	11.85
B	ft	5.997
C	ft	6.877