

Water Cooled Chiller Unit (Low Temp. Glycol Type)

Nomenclature

	<u>ES</u>	<u>G</u>	<u>W</u>	<u>F</u>	<u>121</u>	<u>I</u>	<u>S</u>	<u>B</u>	<u>O</u>	<u>V</u>	<u>S</u>
	1	2	3	4	5	6	7	8	9	10	11
1	ES	ESACIR									
2	G	Compressor type G:Screw type									
3	W	Product series: W-Water cooled series									
4	F	Evaporator type: F-Flooded type P-Spray type or falling film type Dry type: omitted									
5	121	Product series NO:(USRT/KW/HP)									
6	I	Product type: I:Water-cooled industrial series									
7	S	Compressor quantity: S:Single type D:Double type									
8	B	Chilled liquid outlet temperature: B=0°C J=-5°C K=-10°C X=-15°C U=-20°C V=-25°C W=-30°C Z=-35°C UL=-40°C or lower									
9	O	Frame type C: Cabinet type O: Open type									
10	V	Function V:Heat Recovery Cooling only: omitted									
11	S	Refrigerant S:R22 Y: R404A									

Product Photos



Water Cooled Chiller Unit (Low Temp. Glycol Type)

Application Scope

Eurostars industrial water cooled screw low temp. chiller with heat recovery is our self design, research and develop new generation product utilizing advanced technology, with widely capacity, chilled liquid outlet temperature range

-35 °C ~0 °C , recovery can reach to 30%~80% of cooling capacity, it is widely applied in industrial fields such as freezing, cold storage, food processing and industrial refrigeration., etc.

Unit Features

High Efficiency

-Utilizing advanced high efficient 5:6 screw compressor, equipping with high efficient condenser and evaporator and imported expansion valve to realize high EER .

-Heat recover is optional,client can choose partial heat recovery or total heat recovery, maximum hot water can reach 70°C.

-Improve efficiency about 5% during heat recovery.

Reliability Operation

-Multi-protection device to keep units safety operation.

-Single compressor with 4 stages capacity control, double compressors with 8 stages capacity control, to ensure the best performance.

-All chiller units has passed national standard safety system test before leaving factory, to accord with national standard.

Intellectualized Control System

-Adopt SCM micro computer control,can operate via centralized manage system (PLC controller is optional);clients also can choose remote controller which can also indicate chiller running condition.

-Micro computer touch control system, simply operation interface, indicating maintenace information in time. Optional for remote service if needed.

-Chiller unit control system can connect with customer central control system to know about the unit's operation condition.



Easy and Simply Installation and Maintenance

-Refrigerant and refrigeration oil are charged well before leaving factory, just connecting with inlet/outlet water pipe and power on to start running it.

- Controller interface indicating fault information directly in order to know and maintain it in time.

Special Design Is Optional

-Optional for refrigerant R22, R404A according to customer's need;

-Optional for different kinds of power supply,such as 380/400/415V-3PH-50HZ,220~230/440/460V-3PH-60HZ;

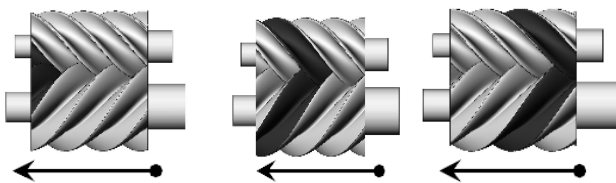
-Customized unit is optional,such anti-corrosion,salt water heat exchanger,etc.

Water Cooled Chiller Unit (Low Temp. Glycol Type)

Main Components

High Efficiency Screw Type Compressor

RC2 series screw compressors feature simple and robust construction by elimination of some components such as pistons, piston rings, valve plates, oil pumps which are found in reciprocating compressors. Without these components, screw compressors run with low noise level, minimized vibration, high reliability and durability. RC2 series screw compressors are of two-shaft rotary displacement design with the latest and advanced 5:6 patented screw rotors. Screw rotors are precisely installed with roller bearings, i.e. radial bearings at both suction and discharge ends as well as angular contact ball bearings i.e. axial bearings at discharge end. A three-phase, two-pole squirrel-cage induction motor drives the compressor. The motor rotor is located on the shaft of the male screw rotor. Cooling of the motor is achieved with suction refrigerant vapor.



Multinational patents of high-efficiency screw rotors

The new 5:6 high efficiency screw rotor profile is patented in Taiwan, UK, US, and China. This new large-volume, high-efficiency rotor profile is designed especially for modern refrigerant characteristics. High-efficiency screw rotors are accomplished by using precision CNC machining centers, rotor milling machines, rotor grinding machines. Strict ISO 9001 process controlling and the application of precise inspection equipments, such as ZEISS 3D coordinate measuring machines, ensure high-efficiency, high-quality, low-noise and low vibration RC2 series screw compressors.

High efficiency motor

Premium grade low-loss core steel with special motor cooling slot and refrigerant guide vane which pilot the cold suction refrigerant gas through the motor provides the highest operating efficiency possible no matter how strict operating conditions are.

Long life bearings and high reliability

The screw compressors utilize a combination of 10 axial and radial bearings and α axial balance piston to ensure longer bearing life and higher compressor reliability.

Double-walled rotor housing

Double casing structure with high strength inner ribs has been designed to minimize noise and ensure rigidity. The rotor housing is made of high-strength gray cast iron FC25 that is extremely stable, therefore no expansion will occur even at high-pressure condition. These casings are machined by computer aided machining centers and inspected by precision measuring machines to enhance reliability.

Direct flange-on oil separator

A vessel made of ductile material FC 500 specially designed to withstand high pressure and provide the highest efficiency of oil separation. Simple oil management, three-staged oil separator (models above RC2-1020), low-pressure-drop demister to ensure the minimum refrigerant dilution in the oil and maintain high oil viscosity.

Precise capacity control

The slide valve for capacity control is located in the compressor chamber. The slide valve is actuated by injection of pressurized oil into the cylinder from the oil sump as well as bypass of oil through solenoid valves in each oil lines with pressure differential.

Perceptive protection modules

RC2 series screw compressors are equipped with PTC thermistors and motor protection module which could monitor discharge and motor coil temperatures as well as phase sequence and phase loss. Accessories also include oil level switch to monitor the level of oil, pressure differential switch, and pressure relief valve for optional application.

Water Cooled Chiller Unit (Low Temp. Glycol Type)

Adaptable with additional cooling

Liquid injection connection port located at the motor casing and in the compression chamber, oil cooler connection port, and middle pressure economizer connection port for customer's desired application.

RC2 series compressors not only continue RC series compressors' characteristics of high efficiency & reliability design mentioned above, but are also designed with the following newly added advantages to meet customers' needs more adequately:

1. Design the fittest high-efficiency motor for respective refrigerant, operation condition and electrical power.
2. Dual capacity control of steps or continuous create more accurate and reliable mechanism (Option)
3. Part load effective economizer application.

High Efficiency Condenser and heat recovery

-Shell and tube type condenser with inner grooved copper tubes optimizes efficient heat exchange between the chiller and cooling tower.

-Shell and tube type heat recover with inner grooved copper tubes which can reclaim the heat should discharge outside to produce domestic hot water,save cost.



Throttling Device

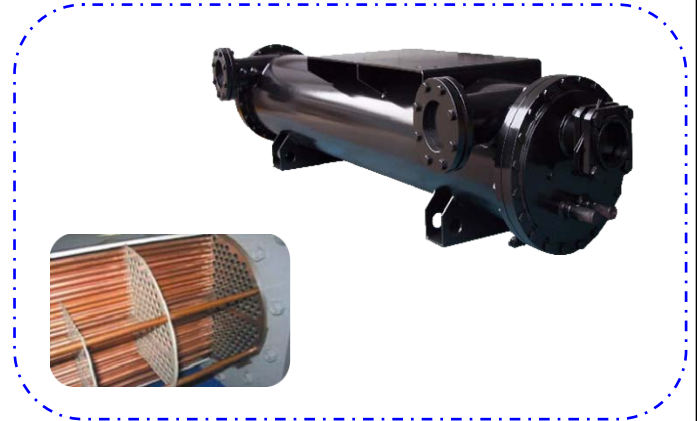
Adopt superior quality famous exterior balanced thermal expansion valve, which is high reliability and adjustability, can realize precise refrigerant and temperature control to ensure operating in precise and reliable status.

Electronic expansion valve is optional.



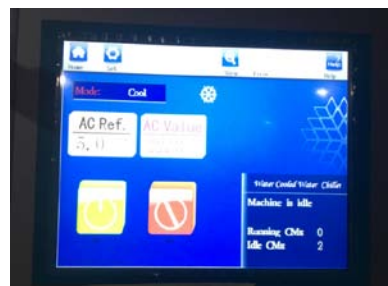
High Efficiency Evaporator

-Dry type shell and tube heat exchanger with inner grooved copper tubes optimizes the cooling and heating efficiency. Self-cleaning, high intensity, anti-shaking design and heat insulation covering material ensure shell and tube heat exchanger unstained, reliable, quiet, highly efficient.



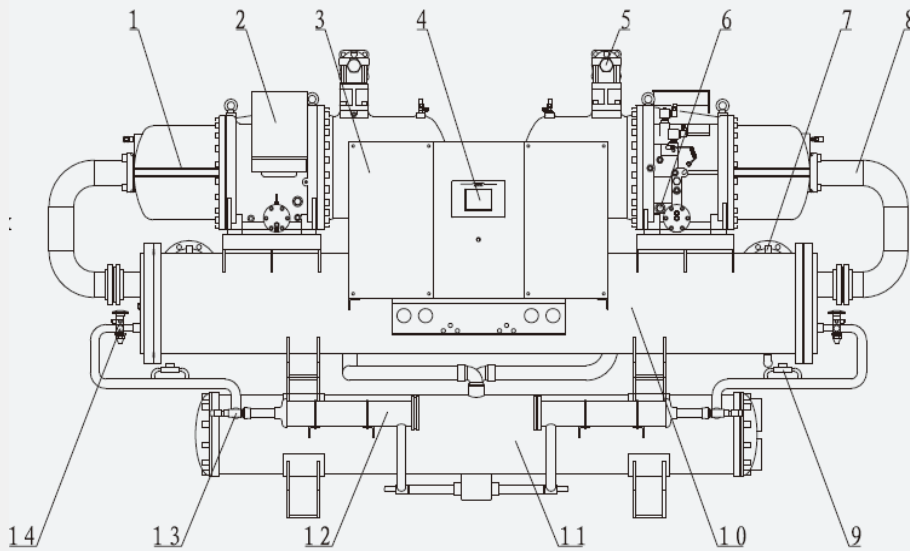
Intellectualized Controller

Adopt micro computer touch screen control, can operate via centralized manage system; whole system can realize remote operation. The system can monitor the water temperature, capacity status while running. The water temperature can be controlled according to the water outlet temperature. Trouble shooting code may display on the touch screen automatically when the system is abnormal.



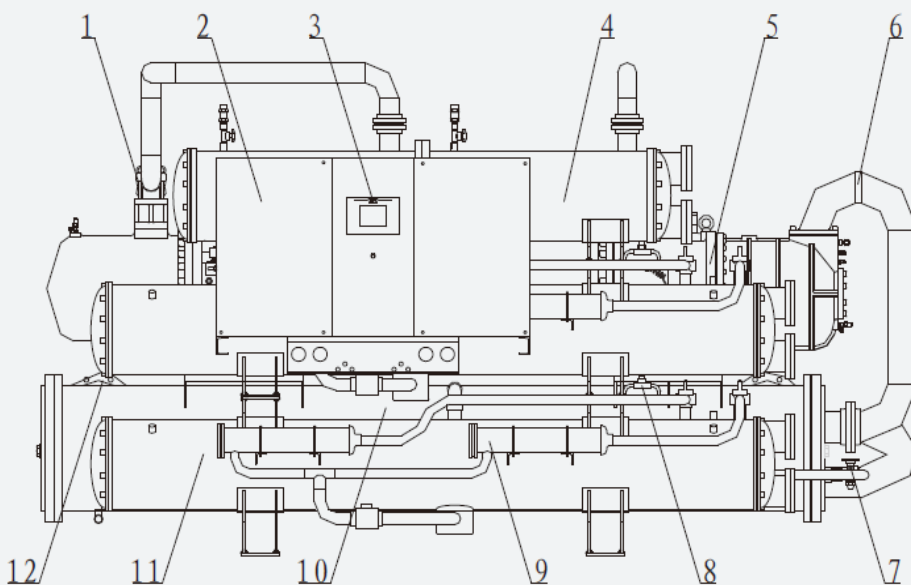
Water Cooled Chiller Unit (Low Temp. Glycol Type)

Unit Exploded View



1. Semi-hermetic screw compressor
2. Motor wiring box
3. Electrical control box
4. Control panel
5. Discharge stop valve
6. Oil indicator
7. Chilled liquid outlet
8. Suction pipe
9. Sight glass
10. Evaporator(shell and tube)
11. Condenser(shell and tube)
12. Dry filter
13. Angle valve
14. Expansion valve

Unit Exploded View (Heat Recovery)



1. Discharge stop valve
2. Electrical control box
3. Control panel
4. Heat recoverer(shell and tube)
5. Semi-hermetic screw compressor
6. Suction pipe
7. Expansion valve
8. Sight glass
9. Dry filter
10. Evaporator(shell and tube)
11. Condenser(shell and tube)
12. Chilled water inlet

Water Cooled Chiller Unit (Low Temp. Glycol Type, 0~10°C/R404A)

Model(Cooling only) ESGW-		031ISBOY	041ISBOY	055ISBOY	067ISBOY	075ISBOY	089ISBOY	101ISBOY	108ISBOY	121ISBOY	141ISBOY	162ISBOY	175ISBOY
Model(Heat recovery) ESGW-		031ISBOVY	041ISBOVY	055ISBOVY	067ISBOVY	075ISBOVY	089ISBOVY	101ISBOVY	108ISBOVY	121ISBOVY	141ISBOVY	162ISBOVY	175ISBOVY
Rated Cooling Capacity	KW	69.3	96.3	126.1	169.1	181.5	214.8	252.2	271.6	295.2	358.9	415.1	449.7
	USRT	19.7	27.4	35.9	48.1	51.6	61.1	71.7	77.2	84.0	102.1	118.1	127.9
	X1000 Kcal/h	59.6	82.8	108.4	145.4	156.1	184.7	216.9	233.6	253.9	308.7	357.0	386.7
Input Power	KW	26.4	34.9	43.9	57.9	63.2	71.6	83.0	90.1	99.4	118.9	136.9	146.4
Comp.Input Power XQTY (kw)		26.4*1	34.9*1	43.9*1	57.9*1	63.2*1	71.6*1	83*1	90.1*1	99.4*1	118.9*1	136.9*1	146.4*1
Power Supply/Refrigerant		3 φ-380/400/415V-50HZ R404A											
Protection Device		Phase reversion protection, Phase lack protection, Overload current protection, Discharge air temperature protection, Low&High pressure protection, Low temp protection, Reserved water flow protection interface.											
Number of Refrigeration Circuit		1											
Number of compressor		1											
Capacity Control (%)		0,66,100					0,50,75,100						
Refrigerant Charge (kg)		18	25	32	42	46	55	62	68	75	90	102	110
Condenser		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia.of Pipe to Condenser (inch)		2"	2-1/2"	3"	3"	3"	3"	4"	4"	4"	5"	5"	5"
Cooling Water Flow (m ³ /h)		16.5	22.6	29.2	39.0	42.1	49.3	57.6	62.2	67.9	82.2	94.9	102.5
Pressure drop (kPa)		39	45	43	50	50	49	47	48	48	49	48	49
Evaporator		Shell and Tube Type											
Liquid Side Max Pressure (MPa)		1											
Dia.of Pipe to Evaporator (inch)		2"	2-1/2"	3"	3"	3"	3"	4"	4"	4"	4"	5"	5"
20% Glycol Water Flow (m ³ /h)		12.8	17.8	23.3	31.2	33.5	39.6	46.5	50.1	54.5	66.2	76.6	82.9
Pressure drop (kPa)		24	31	35	39	50	49	47	73	70	47	52	69
Running Noise dB(A)		73.1	73.7	74.8	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Appro. Total weight (Kg)		980	1010	1200	1350	1540	1680	1800	1920	2030	2080	2520	2730
Appro. Running Weight (Kg)		1080	1120	1360	1530	1700	1850	1980	2080	2240	2660	2800	3020

Heat Recovery Parameters

Refrigerant charge(kg)		21	28	35	45	49	58	65	71	78	95	107	115
Heat Recovery Capacity	kW	20.8	28.9	37.8	50.7	54.5	64.4	75.7	81.5	88.6	107.7	124.5	134.9
	USRT	5.9	8.2	10.8	14.4	15.5	18.3	21.5	23.2	25.2	30.6	35.4	38.4
	X1000 Kcal/h	17.9	24.8	32.5	43.6	46.8	55.4	65.1	70.1	76.2	92.6	107.1	116.0
Heat Recoverer		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia of pipe to Heat Recoverer(inch)		1"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	2"	2"	2"	2"	2"	2-1/2"	2-1/2"
Hot Water Flow(m ³ /h)		3.6	5.0	6.5	8.7	9.4	11.1	13.0	14.0	15.2	18.5	21.4	23.2
Water Pressure drop(kPa)		21	24	23	24	27	27	26	26	26	26	27	26
Appro. Total weight (Kg)		1030	1060	1250	1400	1590	1730	1880	2020	2110	2460	2620	2830
Appro. Running Weight (Kg)		1130	1170	1410	1580	1750	1900	2060	2160	2320	2740	2900	3120

Note:

1. Rated cooling capacity based: Chilled Liquid water in/outlet 5 °C/ 0°C, cooling water in/outlet 30°C/35°C; Fouling factor: 0.088 m².°C/KW.
2. Chilled Liquid range: 0°C ~ 10°C; Cooling water range: 15°C ~ 40°C
3. Specifications are subject to change without notice for further improvement.



Water Cooled Chiller Unit (Low Temp. Glycol Type, 0~10°C/R404A)

Model(Cooling only) ESGW-		183ISBOY	208ISBOY	230ISBOY	234ISBOY	278ISBOY	297ISBOY	392ISBOY	443ISBOY	062IDBOY	134IDBOY	150IDBOY	202IDBOY
Model(Heat recovery) ESGW-		183ISBOYV	208ISBOYV	230ISBOYV	234ISBOYV	278ISBOYV	297ISBOYV	392ISBOYV	443ISBOYV	062IDBOYV	134IDBOYV	150IDBOYV	202IDBOYV
Rated Cooling Capacity	KW	467.0	543.9	585.5	636.7	718.5	810.7	1040.0	1206.3	138.6	338.1	363.1	504.0
	USRT	132.8	154.7	166.5	181.1	204.4	230.6	295.8	343.1	39.4	96.2	103.3	143.3
	X1000 Kcal/h	401.6	467.8	503.5	547.6	617.9	697.2	894.4	1037.4	119.2	290.8	312.3	433.4
Input Power	KW	153.3	174.7	188.5	205.6	232.3	260.9	324.1	374.3	52.8	115.8	126.4	166.0
Comp.Input Power XQTY (kw)		153.3*1	174.7*1	188.5*1	205.6*1	232.3*1	260.9*1	324.1*1	374.3*1	26.4*2	57.9*2	63.2*2	83*2
Power Supply/Refrigerant		3 φ-380/400/415V-50HZ R404A											
Protection Device		Phase reversion protection, Phase lack protection, Overload current protection, Discharge air temperature protection, Low&High pressure protection, Low temp protection, Reserved water flow protection interface.											
Number of Refrigeration Circuit		1						2					
Number of compressor		1						2					
Capacity Control (%)		0,50,75,100						0, 25,37.5,50,62.5,75,87.5,100					
Refrigerant Charge (kg)		115	134	148	158	177	218	256	292	36	84	92	124
Condenser		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia.of Pipe to Condenser (inch)		5"	5"	5"	5"	6"	6"	8"	8"	3"	4"	5"	5"
Cooling Water Flow (m ³ /h)		106.7	123.6	133.1	144.8	163.5	184.3	234.6	271.8	32.9	78.1	84.2	115.2
Pressure drop (kPa)		55	62	64	65	67	70	80	84	42	45	46	47
Evaporator		Shell and Tube Type											
Liquid Side Max Pressure (MPa)		1											
Dia.of Pipe to Evaporator (inch)		5"	5"	5"	5"	5"	8"	8"	8"	3"	5"	5"	5"
20% Glycol Water Flow (m ³ /h)		86.1	100.3	108.0	117.4	132.5	149.5	191.8	222.5	25.6	62.4	67.0	93.0
Pressure drop (kPa)		87	44	64	76	79	81	84	87	34	47	59	49
Running Noise dB(A)		75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Appro. Total weight (Kg)		2820	2980	3220	3400	3680	4150	4420	4780	1570	2510	2820	3250
Appro. Running Weight (Kg)		3240	3400	3750	4000	4250	4730	5020	5380	1990	3300	3700	4350

Heat Recovery Parameters

Refrigerant charge(kg)		120	140	154	164	185	228	266	306	42	90	98	130
Heat Recovery Capacity	kW	140.1	163.2	175.7	191.0	215.6	243.2	312.0	361.9	41.6	101.4	108.9	151.2
	USRT	39.8	46.4	50.0	54.3	61.3	69.2	88.7	102.9	11.8	28.8	31.0	43.0
	X1000 Kcal/h	120.5	140.3	151.1	164.3	185.4	209.2	268.3	311.2	35.8	87.2	93.7	130.0
Heat Recoverer		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia of pipe to Heat Recoverer(inch)		2-1/2"	3"	3"	3"	3"	4"	4"	4"	2"	2-1/2"	2-1/2"	2-1/2"
Hot Water Flow(m ³ /h)		24.1	28.1	30.2	32.9	37.1	41.8	53.7	62.2	7.2	17.4	18.7	26.0
Water Pressure drop(kPa)		26	26	27	30	32	34	35	35	23	26	26	28
Appro. Total weight (Kg)		2920	3080	3320	3500	3780	4710	5080	5470	1720	2790	3120	3700
Appro. Running Weight (Kg)		3340	3500	3850	4100	4350	5320	5700	6100	2170	3600	3980	4750

Note:

1. Rated cooling capacity based: Chilled Liquid water in/outlet 5 °C/ 0°C, cooling water in/outlet 30°C/35°C; Fouling factor: 0.088 m².°C/KW.
2. Chilled Liquid range: 0°C ~ 10°C; Cooling water range: 15°C ~ 40°C
3. Specifications are subject to change without notice for further improvement.

Water Cooled Chiller Unit (Low Temp. Glycol Type, 0~10°C/R404A)

Model(Cooling only) ESGW-		304IDBOY	324IDBOY	350IDBOY	366IDBOY	416IDBOY	460IDBOY	468IDBOY	556IDBOY	594IDBOY	784IDBOY	886IDBOY
Model(Heat recovery) ESGW-		304IDBOVY	324IDBOVY	350IDBOVY	366IDBOVY	416IDBOVY	460IDBOVY	468IDBOVY	556IDBOVY	594IDBOVY	784IDBOVY	886IDBOVY
Rated Cooling Capacity	KW	751.2	830.1	899.4	934.1	1087.8	1171.0	1273.4	1437.0	1621.4	2080.1	2412.7
	USRT	213.7	236.1	255.8	265.7	309.4	333.0	362.2	408.7	461.1	591.6	686.2
	X1000 Kcal/h	646.0	713.9	773.5	803.3	935.5	1007.1	1095.1	1235.8	1394.4	1788.9	2074.9
Input Power	KW	243.2	273.8	292.8	306.6	349.4	377.0	411.2	464.6	521.8	648.2	748.6
Comp.Input Power XQTY (kw)		121.6*2	136.9*2	146.4*2	153.3*2	174.7*2	188.5*2	205.6*2	232.3*2	260.9*2	324.1*2	374.3*2
Power Supply/Refrigerant		3 φ-380/400/415V-50HZ R404A										
Protection Device		Phase reversion protection, Phase lack protection, Overload current protection, Discharge air temperature protection, Low&High pressure protection, Low temp protection, Reserved water flow protection interface.										
Number of Refrigeration Circuit		2										
Number of compressor		2										
Capacity Control (%)		0, 25,37.5,50,62.5,75,87.5,100										
Refrigerant Charge (kg)		188	204	220	230	268	296	316	354	436	512	584
Condenser		Shell and Tube Type										
Water Side Max Pressure (MPa)		1										
Dia.of Pipe to Condenser (inch)		4" x 2	5" x 2	5" x 2	5" x 2	5" x 2	5" x 2	5" x 2	6" x 2	6" x 2	8" x 2	8" x 2
Cooling Water Flow (m ³ /h)		171.0	189.8	205.0	213.4	247.2	266.2	289.7	327.0	368.6	469.2	543.6
Pressure drop (kPa)		48	49	52	55	62	64	70	77	80	83	89
Evaporator		Shell and Tube Type										
Liquid Side Max Pressure (MPa)		1										
Dia.of Pipe to Evaporator (inch)		6"	6"	8"	8"	8"	8"	8"	8"	8"	10"	10"
20% Glycol Water Flow (m ³ /h)		138.6	153.1	165.9	172.3	200.6	216.0	234.9	265.1	299.1	383.7	445.0
Pressure drop (kPa)		52	58	57	61	66	86	83	80	77	85	92
Running Noise dB(A)		75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Appro. Total weight (Kg)		4150	4390	4800	5340	5850	6310	6540	6790	8200	8900	9500
Appro. Running Weight (Kg)		5370	5710	6150	6390	6630	6880	7220	7570	9360	10200	10800

Heat Recovery Parameters

Refrigerant charge(kg)		196	214	230	240	280	308	328	370	456	532	612
Heat Recovery Capacity	kW	225.4	249.0	269.8	280.2	326.3	351.3	382.0	431.1	486.4	624.0	723.8
	USRT	64.1	70.8	76.7	79.7	92.8	99.9	108.7	122.6	138.3	177.5	205.9
	X1000 Kcal/h	193.8	214.2	232.0	241.0	280.7	302.1	328.5	370.7	418.3	536.7	622.5
Heat Recoverer		Shell and Tube Type										
Water Side Max Pressure (MPa)		1										
Dia of pipe to Heat Recoverer(inch)		3"	3"	3"	3"	4"	4"	4"	4"	5"	5"	5"
Hot Water Flow(m ³ /h)		38.8	42.8	46.4	48.2	56.1	60.4	65.7	74.1	83.7	107.3	124.5
Water Pressure drop(kPa)		34	35	38	38	39	42	43	43	43	43	43
Appro. Total weight (Kg)		4340	4970	5460	5950	6470	6990	7350	7600	8450	9380	9980
Appro. Running Weight (Kg)		5520	6290	6580	6840	7190	7540	8020	8270	9620	10580	11200

Note:

1. Rated cooling capacity based: Chilled Liquid water in/outlet 5 °C/ 0°C, cooling water in/outlet 30°C/35°C; Fouling factor: 0.088 m².°C/KW.
2. Chilled Liquid range: 0°C ~ 10°C; Cooling water range: 15°C ~ 40°C
3. Specifications are subject to change without notice for further improvement.

Water Cooled Chiller Unit (Low Temp. Glycol Type, -5~5 °C/R404A)

Model(Cooling only) ESGW-		031ISJOY	041ISJOY	055ISJOY	067ISJOY	075ISJOY	089ISJOY	101ISJOY	108ISJOY	121ISJOY	141ISJOY	162ISJOY	175ISJOY
Model(Heat recovery) ESGW-		031ISJOYV	041ISJOYV	055ISJOYV	067ISJOYV	075ISJOYV	089ISJOYV	101ISJOYV	108ISJOYV	121ISJOYV	141ISJOYV	162ISJOYV	175ISJOYV
Rated Cooling Capacity	KW	65.7	91.4	119.7	160.4	172.3	203.8	239.3	257.8	280.1	340.6	393.9	426.7
	USRT	18.7	26.0	34.0	45.6	49.0	58.0	68.1	73.3	79.7	96.9	112.0	121.4
	X1000 Kcal/h	56.5	78.6	102.9	137.9	148.2	175.3	205.8	221.7	240.9	292.9	338.8	367.0
Input Power	KW	27.5	36.3	45.7	60.3	65.8	74.6	86.5	93.9	103.5	123.9	142.6	152.5
Comp.Input Power XQTY (kw)		27.5*1	36.3*1	45.7*1	60.3*1	65.8*1	74.6*1	86.5*1	93.9*1	103.5*1	123.9*1	142.6*1	152.5*1
Power Supply/Refrigerant		3 φ-380/400/415V-50HZ R404A											
Protection Device		Phase reversion protection, Phase lack protection, Overload current protection, Discharge air temperature protection, Low&High pressure protection, Low temp protection, Reserved water flow protection interface.											
Number of Refrigeration Circuit		1											
Number of compressor		1											
Capacity Control (%)		0,66,100				0,50,75,100							
Refrigerant Charge (kg)		21	28	35	45	49	55	62	68	75	90	102	110
Condenser		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia.of Pipe to Condenser (inch)		2"	2-1/2"	3"	3"	3"	3"	4"	4"	4"	5"	5"	5"
Cooling Water Flow (m ³ /h)		16.0	22.0	28.4	38.0	40.9	47.9	56.0	60.5	66.0	79.9	92.3	99.6
Pressure drop (kPa)		37	42	41	48	47	47	45	45	45	46	46	46
Evaporator		Shell and Tube Type											
Liquid Side Max Pressure (MPa)		1											
Dia.of Pipe to Evaporator (inch)		2"	2-1/2"	3"	3"	3"	3"	4"	4"	4"	4"	5"	5"
30% Glycol Water Flow (m ³ /h)		12.6	17.5	22.9	30.7	33.0	39.0	45.8	49.3	53.6	65.2	75.4	81.6
Pressure drop (kPa)		25	32	37	41	52	63	70	77	73	49	80	83
Running Noise dB(A)		73.1	73.7	74.8	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Appro. Total weight (Kg)		1040	1070	1260	1410	1600	1690	1920	2040	2150	2500	2640	2850
Appro. Running Weight (Kg)		1140	1180	1420	1590	1760	1860	2100	2200	2360	2780	2920	3140

Heat Recovery Parameters

Refrigerant charge(kg)		21	28	35	45	49	58	65	71	78	95	107	115
Heat Recovery Capacity	kW	19.7	27.4	35.9	48.1	51.7	61.1	71.8	77.3	84.0	102.2	118.2	128.0
	USRT	5.6	7.8	10.2	13.7	14.7	17.4	20.4	22.0	23.9	29.1	33.6	36.4
	X1000 Kcal/h	17.0	23.6	30.9	41.4	44.5	52.6	61.7	66.5	72.3	87.9	101.6	110.1
Heat Recoverer		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia of pipe to Heat Recoverer(inch)		1"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	2"	2"	2"	2"	2"	3"	3"
Hot Water Flow(m ³ /h)		3.4	4.7	6.2	8.3	8.9	10.5	12.3	13.3	14.5	17.6	20.3	22.0
Water Pressure drop(kPa)		21	24	23	28	27	27	26	26	26	26	30	32
Appro. Total weight (Kg)		1040	1070	1260	1410	1600	1740	2000	2140	2230	2580	3640	3920
Appro. Running Weight (Kg)		1140	1180	1420	1590	1760	1910	2180	2280	2440	2860	4240	4490

Note:

1. Rated cooling capacity based: Chilled Liquid water in/outlet 0°C/ -5°C,
cooling water in/outlet 30°C/35°C; Fouling factor: 0.088 m².°C/KW;
2. Chilled Liquid range: -5°C ~ 5°C; Cooling water range: 15°C ~ 40°C;
3. Specifications are subject to change without notice for further improvement.

Water Cooled Chiller Unit (Low Temp. Glycol Type, -5~5 °C/R404A)

Model(Cooling only) ESGW-		183ISJOY	208ISJOY	230ISJOY	234ISJOY	278ISJOY	297ISJOY	392ISJOY	443ISJOY	062IDJOY	134IDJOY	150IDJOY	202IDJOY
Model(Heat recovery) ESGW-		183ISJOYV	208ISJOYV	230ISJOYV	234ISJOYV	278ISJOYV	297ISJOYV	392ISJOYV	443ISJOYV	062IDJOYV	134IDJOYV	150IDJOYV	202IDJOYV
Rated Cooling Capacity	KW	443.2	516.2	555.7	604.3	681.9	769.3	987.0	1144.8	131.5	320.9	344.6	478.6
	USRT	126.1	146.8	158.0	171.9	193.9	218.8	280.7	325.6	37.4	91.3	98.0	136.1
	X1000 Kcal/h	381.2	443.9	477.9	519.7	586.4	661.6	848.8	984.5	113.1	276.0	296.4	411.6
Input Power	KW	159.7	182.0	196.3	214.2	242.0	271.8	337.6	389.9	55.0	120.6	131.6	173.0
Comp.Input Power XQTY (kw)		159.7*1	182*1	196.3*1	214.2*1	242*1	271.8*1	337.6*1	389.9*1	27.5*2	60.3*2	65.8*2	86.5*2
Power Supply/Refrigerant		3 φ-380/400/415V-50HZ R404A											
Protection Device		Phase reversion protection, Phase lack protection, Overload current protection, Discharge air temperature protection, Low&High pressure protection, Low temp protection, Reserved water flow protection interface.											
Number of Refrigeration Circuit		1						2					
Number of compressor		1						2					
Capacity Control (%)		0,50,75,100						0, 25,37.5,50,62.5,75,87.5,100					
Refrigerant Charge (kg)		115	134	148	158	177	218	256	292	36	84	92	124
Condenser		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia.of Pipe to Condenser (inch)		5"	5"	5"	5"	6"	6"	8"	8"	3"	4"	5"	5"
Cooling Water Flow (m ³ /h)		103.7	120.1	129.3	140.8	158.9	179.0	227.8	263.9	32.1	75.9	81.9	112.1
Pressure drop (kPa)		53	59	61	62	64	67	76	80	40	43	44	45
Evaporator		Shell and Tube Type											
Liquid Side Max Pressure (MPa)		1											
Dia.of Pipe to Evaporator (inch)		5"	5"	5"	5"	5"	8"	8"	8"	3"	5"	5"	5"
30% Glycol Water Flow (m ³ /h)		84.8	98.7	106.3	115.6	130.4	147.2	188.8	219.0	25.2	61.4	65.9	91.6
Pressure drop (kPa)		85	88	67	80	83	85	88	91	36	49	62	51
Running Noise dB(A)		75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Appro. Total weight (Kg)		2940	3120	3360	3540	3820	4250	4520	4880	1580	2520	2830	3480
Appro. Running Weight (Kg)		3370	3540	3890	4140	4390	4830	5120	5480	2010	3320	3740	4580

Heat Recovery Parameters

Refrigerant charge(kg)		120	140	154	164	185	228	266	306	42	90	98	130
Heat Recovery Capacity	KW	133.0	154.9	166.7	181.3	204.6	230.8	296.1	343.4	39.5	96.3	103.4	143.6
	USRT	37.8	44.0	47.4	51.6	58.2	65.6	84.2	97.7	11.2	27.4	29.4	40.8
	X1000 Kcal/h	114.3	133.2	143.4	155.9	175.9	198.5	254.6	295.4	33.9	82.8	88.9	123.5
Heat Recoverer		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia of pipe to Heat Recoverer(inch)		4"	4"	3"	3"	3"	4"	4"	4"	2"	2-1/2"	2-1/2"	2-1/2"
Hot Water Flow(m ³ /h)		22.9	26.6	28.7	31.2	35.2	39.7	50.9	59.1	6.8	16.6	17.8	24.7
Water Pressure drop(kPa)		34	35	27	30	32	34	35	35	23	26	26	28
Appro. Total weight (Kg)		4810	5180	3460	3640	3920	4810	5180	5570	1730	2800	3130	3930
Appro. Running Weight (Kg)		5420	5800	3990	4240	4490	5420	5800	6200	2180	3610	3990	4980

Note:

1. Rated cooling capacity based: Chilled Liquid water in/outlet 0°C/ -5°C,
cooling water in/outlet 30°C/35°C; Fouling factor: 0.088 m²·°C/KW;
2. Chilled Liquid range: -5°C ~ 5°C; Cooling water range: 15°C ~ 40°C;
3. Specifications are subject to change without notice for further improvement.



Water Cooled Chiller Unit (Low Temp. Glycol Type, -5~5 °C/R404A)

Model(Cooling only) ESGW-		304IDJOY	324IDJOY	350IDJOY	366IDJOY	416IDJOY	460IDJOY	468IDJOY	556IDJOY	594IDJOY	784IDJOY	886IDJOY
Model(Heat recovery) ESGW-		304IDJOVY	324IDJOVY	350IDJOVY	366IDJOVY	416IDJOVY	460IDJOVY	468IDJOVY	556IDJOVY	594IDJOVY	784IDJOVY	886IDJOVY
Rated Cooling Capacity	KW	712.7	787.7	853.4	886.4	1032.4	1111.3	1208.6	1363.7	1538.7	1974.0	2289.6
	USRT	202.7	224.0	242.7	252.1	293.6	316.1	343.7	387.9	437.6	561.4	651.2
	X1000 Kcal/h	612.9	677.4	733.9	762.3	887.9	955.7	1039.4	1172.8	1323.3	1697.6	1969.1
Input Power	KW	253.4	285.2	305.0	319.4	364.0	392.6	428.4	484.0	543.6	675.2	779.8
Comp.Input Power XQTY (kw)		126.7*2	142.6*2	152.5*2	159.7*2	182*2	196.3*2	214.2*2	242*2	271.8*2	337.6*2	389.9*2
Power Supply/Refrigerant		3 φ-380/400/415V-50HZ R404A										
Protection Device		Phase reversion protection, Phase lack protection, Overload current protection, Discharge air temperature protection, Low&High pressure protection, Low temp protection, Reserved water flow protection interface.										
Number of Refrigeration Circuit		2										
Number of compressor		2										
Capacity Control (%)		0, 25,37.5,50,62.5,75,87.5,100										
Refrigerant Charge (kg)		188	204	220	230	268	296	316	354	436	512	584
Condenser		Shell and Tube Type										
Water Side Max Pressure (MPa)		1										
Dia.of Pipe to Condenser (inch)		4" x 2	5" x 2	5" x 2	5" x 2	5" x 2	5" x 2	5" x 2	6" x 2	6" x 2	8" x 2	8" x 2
Cooling Water Flow (m ³ /h)		166.1	184.5	199.2	207.4	240.1	258.6	281.5	317.7	358.1	455.6	527.8
Pressure drop (kPa)		46	46	49	53	59	61	67	73	76	79	84
Evaporator		Shell and Tube Type										
Liquid Side Max Pressure (MPa)		1										
Dia.of Pipe to Evaporator (inch)		6"	6"	8"	8"	8"	8"	8"	8"	8"	10"	10"
30% Glycol Water Flow (m ³ /h)		136.3	150.7	163.3	169.6	197.5	212.6	231.2	260.9	294.3	377.6	438.0
Pressure drop (kPa)		55	61	60	64	70	90	87	84	81	89	97
Running Noise dB(A)		75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Appro. Total weight (Kg)		4380	4620	5030	5570	6120	6580	6810	7060	8800	9500	10100
Appro. Running Weight (Kg)		5600	5940	6380	6620	6900	7150	7490	7840	9960	10800	11400

Heat Recovery Parameters

Refrigerant charge(kg)		196	214	230	240	280	308	328	370	456	532	612
Heat Recovery Capacity	kW	213.8	236.3	256.0	265.9	309.7	333.4	362.6	409.1	461.6	592.2	686.9
	USRT	60.8	67.2	72.8	75.6	88.1	94.8	103.1	116.4	131.3	168.4	195.4
	X1000 Kcal/h	183.9	203.2	220.2	228.7	266.4	286.7	311.8	351.8	397.0	509.3	590.7
Heat Recoverer		Shell and Tube Type										
Water Side Max Pressure (MPa)		1										
Dia of pipe to Heat Recoverer(inch)		3"	3"	3"	3"	4"	4"	4"	4"	5"	5"	5"
Hot Water Flow(m ³ /h)		36.8	40.6	44.0	45.7	53.3	57.3	62.4	70.4	79.4	101.9	118.1
Water Pressure drop(kPa)		34	35	38	38	39	42	43	43	43	43	43
Appro. Total weight (Kg)		4570	5200	5690	6180	6740	7260	7620	7870	9050	9980	10580
Appro. Running Weight (Kg)		5750	6520	6810	7070	7460	7810	8290	8540	10220	11180	11800

Note:

1. Rated cooling capacity based: Chilled Liquid water in/outlet 0°C/ -5°C,
cooling water in/outlet 30°C/35°C; Fouling factor: 0.088 m²·°C/KW;
2. Chilled Liquid range: -5°C ~ 5°C; Cooling water range: 15°C ~ 40°C;
3. Specifications are subject to change without notice for further improvement.

Water Cooled Chiller Unit (Low Temp. Glycol Type,-10~0°C/R404A)

Model(Cooling only) ESGW-		031ISKOVY	041ISKOVY	055ISKOVY	067ISKOVY	075ISKOVY	089ISKOVY	101ISKOVY	108ISKOVY	121ISKOVY	141ISKOVY	162ISKOVY	175ISKOVY
Model(Heat recovery) ESGW-		031ISKOVY	041ISKOVY	055ISKOVY	067ISKOVY	075ISKOVY	089ISKOVY	101ISKOVY	108ISKOVY	121ISKOVY	141ISKOVY	162ISKOVY	175ISKOVY
Rated Cooling Capacity	KW	54.5	75.8	99.2	133.0	142.9	169.1	198.6	213.8	232.4	282.6	326.7	354.0
	USRT	15.5	21.6	28.2	37.8	40.6	48.1	56.5	60.8	66.1	80.4	92.9	100.7
	X1000 Kcal/h	46.9	65.2	85.3	114.4	122.9	145.4	170.8	183.9	199.9	243.0	281.0	304.4
Input Power	KW	26.7	35.2	44.3	58.4	63.8	72.3	83.8	91.0	100.3	120.1	138.2	147.8
Comp.Input Power XQTY (kw)		26.7*1	35.2*1	44.3*1	58.4*1	63.8*1	72.3*1	83.8*1	91*1	100.3*1	1201*1	138.2*1	147.8*1
Power Supply/Refrigerant		3 φ-380/400/415V-50HZ R404A											
Protection Device		Phase reversion protection, Phase lack protection, Overload current protection, Discharge air temperature protection, Low&High pressure protection, Low temp protection, Reserved water flow protection interface.											
Number of Refrigeration Circuit		1											
Number of compressor		1											
Capacity Control (%)		0,66,100				0,50,75,100							
Refrigerant Charge (kg)		18	25	32	42	46	55	62	68	75	90	102	110
Condenser		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia.of Pipe to Condenser (inch)		2"	2-1/2"	3"	3"	3"	3"	4"	4"	4"	5"	5"	5"
Cooling Water Flow (m ³ /h)		14.0	19.1	24.7	32.9	35.5	41.5	48.6	52.4	57.2	69.3	79.9	86.3
Pressure drop (kPa)		35	40	39	46	45	44	43	43	43	44	44	44
Evaporator		Shell and Tube Type											
Liquid Side Max Pressure (MPa)		1											
Dia.of Pipe to Evaporator (inch)		2"	2-1/2"	3"	3"	3"	3"	4"	4"	4"	4"	5"	5"
30% Glycol Water Flow (m ³ /h)		10.5	14.5	19.0	25.5	27.4	32.4	38.1	41.0	44.6	54.2	62.7	67.9
Pressure drop (kPa)		26	33	38	42	54	65	72	79	75	51	56	75
Running Noise dB(A)		73.1	73.7	74.8	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Appro. Total weight (Kg)		990	1020	1210	1360	1550	1690	1920	2040	2150	2500	2640	2850
Appro. Running Weight (Kg)		1090	1130	1370	1540	1710	1860	2100	2200	2360	2780	2920	3140

Heat Recovery Parameters

Refrigerant charge(kg)		21	28	35	45	49	58	65	71	78	95	107	115
Heat Recovery Capacity	kW	16.4	22.7	29.8	39.9	42.9	50.7	59.6	64.1	69.7	84.8	98.0	106.2
	USRT	4.7	6.5	8.5	11.3	12.2	14.4	16.9	18.2	19.8	24.1	27.9	30.2
	X1000 Kcal/h	14.1	19.6	25.6	34.3	36.9	43.6	51.2	55.2	60.0	72.9	84.3	91.3
Heat Recoverer		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia of pipe to Heat Recoverer(inch)		1"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	2"	2"	2"	2"	2"	2-1/2"	2-1/2"
Hot Water Flow(m ³ /h)		2.8	3.9	5.1	6.9	7.4	8.7	10.2	11.0	12.0	14.6	16.9	18.3
Water Pressure drop(kPa)		21	24	23	28	27	27	26	26	26	26	27	26
Appro. Total weight (Kg)		1040	1070	1260	1410	1600	1740	2000	2140	2230	2580	2740	2950
Appro. Running Weight (Kg)		1140	1180	1420	1590	1760	1910	2180	2280	2440	2860	3020	3240

Note:

1. Rated cooling capacity based: Chilled Liquid water in/outlet -5°C/ -10°C, cooling water in/outlet 30°C/35°C; Fouling factor: 0.088 m²·°C/KW;
2. Chilled Liquid range: -10°C ~ 0°C; Cooling water range: 15°C ~ 40°C;
3. Specifications are subject to change without notice for further improvement.

Water Cooled Chiller Unit (Low Temp. Glycol Type,-10~0°C/R404A)

Model(Cooling only) ESGW-		183ISKOY	208ISKOY	230ISKOY	234ISKOY	278ISKOY	297ISKOY	392ISKOY	443ISKOY	062IDKOY	134IDKOY	150IDKOY	202IDKOY
Model(Heat recovery) ESGW-		183ISKOYV	208ISKOYV	230ISKOYV	234ISKOYV	278ISKOYV	297ISKOYV	392ISKOYV	443ISKOYV	062IDKOYV	134IDKOYV	150IDKOYV	202IDKOYV
Rated Cooling Capacity	KW	367.6	428.2	460.8	501.3	565.6	638.1	818.7	949.5	109.0	266.1	285.8	397.1
	USRT	104.6	121.8	131.1	142.6	160.9	181.5	232.8	270.1	31.0	75.7	81.3	112.9
	X1000 Kcal/h	316.1	368.3	396.3	431.1	486.4	548.8	704.1	816.6	93.7	228.8	245.8	341.5
Input Power	KW	154.8	176.4	190.3	207.6	234.6	263.4	327.2	377.9	53.4	116.8	127.6	167.6
Comp.Input Power XQTY (kw)		154.8*1	176.4*1	190.3*1	207.6*1	234.6*1	263.4*1	327.2*1	377.9*1	26.7*2	58.4*2	63.8*2	83.8*2
Power Supply/Refrigerant		3 φ-380/400/415V-50HZ R404A											
Protection Device		Phase reversion protection, Phase lack protection, Overload current protection, Discharge air temperature protection, Low&High pressure protection, Low temp protection, Reserved water flow protection interface.											
Number of Refrigeration Circuit		1						2					
Number of compressor		1						2					
Capacity Control (%)		0,50,75,100						0, 25,37.5,50,62.5,75,87.5,100					
Refrigerant Charge (kg)		115	134	148	158	177	218	256	292	36	84	92	124
Condenser		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia.of Pipe to Condenser (inch)		5"	5"	5"	5"	6"	6"	8"	8"	3"	4"	5"	5"
Cooling Water Flow (m ³ /h)		89.8	104.0	112.0	121.9	137.6	155.0	197.1	228.3	27.9	65.8	71.1	97.1
Pressure drop (kPa)		50	56	58	59	61	64	72	76	38	41	42	42
Evaporator		Shell and Tube Type											
Liquid Side Max Pressure (MPa)		1											
Dia.of Pipe to Evaporator (inch)		5"	5"	5"	5"	5"	8"	8"	8"	3"	5"	5"	5"
30% Glycol Water Flow (m ³ /h)		70.5	82.1	88.4	96.2	108.5	122.4	157.1	182.1	20.9	51.0	54.8	76.2
Pressure drop (kPa)		94	47	69	82	85	88	91	94	37	50	64	53
Running Noise dB(A)		75	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75	75.0
Appro. Total weight (Kg)		2940	3120	3360	3540	3820	4250	4520	4880	1580	2520	2830	3480
Appro. Running Weight (Kg)		3370	3540	3890	4140	4390	4830	5120	5480	2010	3320	3740	4580

Heat Recovery Parameters

Refrigerant charge(kg)		120	140	154	164	185	228	266	306	42	90	98	130
Heat Recovery Capacity	kW	110.3	128.5	138.2	150.4	169.7	191.4	245.6	284.9	32.7	79.8	85.7	119.1
	USRT	31.4	36.5	39.3	42.8	48.3	54.4	69.9	81.0	9.3	22.7	24.4	33.9
	X1000 Kcal/h	94.8	110.5	118.9	129.3	145.9	164.6	211.2	245.0	28.1	68.7	73.7	102.5
Heat Recoverer		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia of pipe to Heat Recoverer(inch)		2-1/2"	3"	3"	3"	3"	4"	4"	4"	2"	2-1/2"	2-1/2"	2-1/2"
Hot Water Flow(m ³ /h)		19.0	22.1	23.8	25.9	29.2	32.9	42.2	49.0	5.6	13.7	14.7	20.5
Water Pressure drop(kPa)		26	26	27	30	32	34	35	35	23	26	26	28
Appro. Total weight (Kg)		3040	3220	3460	3640	3920	4810	5180	5570	1730	2800	3130	3930
Appro. Running Weight (Kg)		3460	3640	3990	4240	4490	5420	5800	6200	2180	3610	3990	4980

Note:

1. Rated cooling capacity based: Chilled Liquid water in/outlet -5°C/ -10°C, cooling water in/outlet 30°C/35°C; Fouling factor: 0.088 m²·°C/KW;
2. Chilled Liquid range: -10°C ~ 0°C; Cooling water range: 15°C ~ 40°C;
3. Specifications are subject to change without notice for further improvement.

Water Cooled Chiller Unit (Low Temp. Glycol Type,-10~0°C/R404A)

Model(Cooling only) ESGW-		304IDKOY	324IDKOY	350IDKOY	366IDKOY	416IDKOY	460IDKOY	468IDKOY	556IDKOY	594IDKOY	784IDKOY	886IDKOY
Model(Heat recovery) ESGW-		304IDKOVY	324IDKOVY	350IDKOVY	366IDKOVY	416IDKOVY	460IDKOVY	468IDKOVY	556IDKOVY	594IDKOVY	784IDKOVY	886IDKOVY
Rated Cooling Capacity	KW	591.2	653.3	707.9	735.2	856.4	921.7	1,002.5	1,131.3	1,276.2	1,637.4	1,899.0
	USRT	168.1	185.8	201.3	209.1	243.6	262.1	285.1	321.8	363.0	465.7	540.1
	X1000 Kcal/h	508.4	561.8	608.8	632.3	736.5	792.7	862.2	972.9	1,097.5	1,408.2	1,633.1
Input Power	KW	245.6	276.4	295.6	309.6	352.8	380.6	415.2	469.2	528.6	654.4	755.8
Comp.Input Power XQTY (kw)		122.8*2	138.2*2	147.8*2	154.8*2	176.4*2	190.3*2	207.6*2	234.6*2	263.4*2	327.2*2	377.9*2
Power Supply/Refrigerant		3 φ-380/400/415V-50HZ R404A										
Protection Device		Phase reversion protection, Phase lack protection, Overload current protection, Discharge air temperature protection, Low&High pressure protection, Low temp protection, Reserved water flow protection interface.										
Number of Refrigeration Circuit		2										
Number of compressor		2										
Capacity Control (%)		0, 25,37.5,50,62.5,75,87.5,100										
Refrigerant Charge (kg)		188	204	220	230	268	296	316	354	436	512	584
Condenser		Shell and Tube Type										
Water Side Max Pressure (MPa)		1										
Dia.of Pipe to Condenser (inch)		4"×2	5"×2	5"×2	5"×2	5"×2	5"×2	5"×2	6"×2	6"×2	8"×2	8"×2
Cooling Water Flow (m ³ /h)		143.9	159.9	172.6	179.7	207.9	224.0	243.8	275.2	310.4	394.1	456.5
Pressure drop (kPa)		43	44	47	50	56	58	63	69	72	75	80
Evaporator		Shell and Tube Type										
Liquid Side Max Pressure (MPa)		1										
Dia.of Pipe to Evaporator (inch)		6"	6"	8"	8"	8"	8"	8"	8"	8"	10"	10"
30% Glycol Water Flow (m ³ /h)		113.4	125.3	135.8	141.0	164.3	176.8	192.3	217.0	244.8	314.1	364.3
Pressure drop (kPa)		56	62	62	66	72	93	90	87	84	92	99
Running Noise dB(A)		75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75	75.0	75.0
Appro. Total weight (Kg)		4380	5200	5690	6180	6740	7260	6810	7060	8800	9500	10100
Appro. Running Weight (Kg)		5600	6520	6810	7070	7460	7810	7490	7840	9960	10800	11400

Heat Recovery Parameters

Refrigerant charge(kg)		196	214	230	240	280	308	328	370	456	532	612
Heat Recovery Capacity	kW	177.4	196.0	212.4	220.6	256.9	276.5	300.8	339.4	382.9	491.2	569.7
	USRT	50.4	55.7	60.4	62.7	73.1	78.6	85.5	96.5	108.9	139.7	162.0
	X1000 Kcal/h	152.5	168.6	182.6	189.7	221.0	237.8	258.6	291.9	329.3	422.4	489.9
Heat Recoverer		Shell and Tube Type										
Water Side Max Pressure (MPa)		1										
Dia of pipe to Heat Recoverer(inch)		3"	3"	3"	3"	4"	4"	4"	4"	5"	5"	5"
Hot Water Flow(m ³ /h)		30.5	33.7	36.5	37.9	44.2	47.6	51.7	58.4	65.9	84.5	98.0
Water Pressure drop(kPa)		34	35	38	38	39	42	43	43	43	43	43
Appro. Total weight (Kg)		4570	5200	5690	6180	6740	7260	7620	7870	9050	9980	10580
Appro. Running Weight (Kg)		5750	6520	6810	7070	7460	7810	8290	8540	10220	11180	11800

Note:

- Rated cooling capacity based:Chilled Liquid water in/outlet -5°C/ -10°C, cooling water in/outlet 30°C/35°C; Fouling factor: 0.088 m².°C/KW;
- Chilled Liquid range: -10°C ~ 0°C;Cooling water range: 15°C ~ 40°C;
- Specifications are subject to change without notice for further improvement.

Water Cooled Chiller Unit (Low Temp. Glycol Type, -15~-5°C/R404A)

Model(Cooling only) ESGW-		031ISXOY	041ISXOY	055ISXOY	067ISXOY	075ISXOY	089ISXOY	101ISXOY	108ISXOY	121ISXOY	141ISXOY	162ISXOY	175ISXOY
Model(Heat recovery) ESGW-		031ISXOVY	041ISXOVY	055ISXOVY	067ISXOVY	075ISXOVY	089ISXOVY	101ISXOVY	108ISXOVY	121ISXOVY	141ISXOVY	162ISXOVY	175ISXOVY
Rated Cooling Capacity	KW	44.5	62.0	81.1	108.7	116.8	138.1	162.2	174.6	189.8	230.8	266.9	289.2
	USRT	12.7	17.6	23.1	30.9	33.2	39.3	46.1	49.7	54.0	65.6	75.9	82.3
	X1000 Kcal/h	38.3	53.3	69.7	93.5	100.4	118.8	139.5	150.2	163.2	198.5	229.5	248.7
Input Power	KW	25.4	34.1	42.8	56.5	61.7	70.0	81.1	88.0	97.1	116.2	133.7	143.0
Comp.Input Power XQTY (kw)		25.4*1	34.1*1	42.8*1	56.5*1	61.7*1	70*1	81.1*1	88*1	97.1*1	116.2*1	133.7*1	143*1
Power Supply/Refrigerant		3 φ-380/400/415V-50HZ R404A											
Protection Device		Phase reversion protection, Phase lack protection, Overload current protection, Discharge air temperature protection, Low&High pressure protection, Low temp protection, Reserved water flow protection interface.											
Number of Refrigeration Circuit		1											
Number of compressor		1											
Capacity Control (%)		0,66,100				0,50,75,100							
Refrigerant Charge (kg)		18	25	32	42	46	55	62	68	75	90	102	110
Condenser		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia.of Pipe to Condenser (inch)		2"	2-1/2"	3"	3"	3"	3"	4"	4"	4"	5"	5"	5"
Cooling Water Flow (m ³ /h)		12.0	16.5	21.3	28.4	30.7	35.8	41.8	45.2	49.3	59.7	68.9	74.3
Pressure drop (kPa)		35	40	39	46	45	44	43	43	43	44	44	44
Evaporator		Shell and Tube Type											
Liquid Side Max Pressure (MPa)		1											
Dia.of Pipe to Evaporator (inch)		2"	2-1/2"	3"	3"	3"	3"	4"	4"	4"	4"	5"	5"
40% Glycol Water Flow (m ³ /h)		8.9	12.4	16.3	21.8	23.4	27.7	32.5	35.0	38.1	46.3	53.6	58.0
Pressure drop (kPa)		26	34	38	43	55	67	74	80	77	52	57	76
Running Noise dB(A)		73.1	73.7	74.8	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Appro. Total weight (Kg)		1070	1100	1290	1450	1640	1780	2010	2130	2300	2650	2800	3010
Appro. Running Weight (Kg)		1170	1210	1460	1630	1800	1950	2190	2290	2510	2930	3080	3300

Heat Recovery Parameters

Refrigerant charge(kg)		21	28	35	45	49	58	65	71	78	95	107	115
Heat Recovery Capacity	kW	13.4	18.6	24.3	32.6	35.0	41.4	48.7	52.4	56.9	69.2	80.1	86.8
	USRT	3.8	5.3	6.9	9.3	10.0	11.8	13.8	14.9	16.2	19.7	22.8	24.7
	X1000 Kcal/h	11.5	16.0	20.9	28.0	30.1	35.6	41.8	45.0	49.0	59.5	68.9	74.6
Heat Recoverer		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia of pipe to Heat Recoverer(inch)		1"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	2"	2"	2"	2"	2"	2-1/2"	2-1/2"
Hot Water Flow(m ³ /h)		2.3	3.2	4.2	5.6	6.0	7.1	8.4	9.0	9.8	11.9	13.8	14.9
Water Pressure drop(kPa)		21	24	23	28	27	27	26	26	26	26	27	26
Appro. Total weight (Kg)		1130	1160	1390	1550	1780	1920	2190	2310	2510	2900	3050	3350
Appro. Running Weight (Kg)		1230	1270	1560	1730	1940	2090	2370	2470	2720	3180	3330	3640

Note:

1. Rated cooling capacity based: Chilled Liquid water in/outlet -10°C/ -15°C, cooling water in/outlet 30°C/35°C; Fouling factor: 0.088 m²·°C/KW;
2. Chilled Liquid range: -15°C ~ -5°C; Cooling water range: 15°C ~ 40°C;
3. Specifications are subject to change without notice for further improvement.



Water Cooled Chiller Unit (Low Temp. Glycol Type, -15~-5°C/R404A)

Model(Cooling only) ESGW-		183ISXOY	208ISXOY	230ISXOY	234ISXOY	278ISXOY	297ISXOY	392ISXOY	443ISXOY	062IDXOY	134IDXOY	150IDXOY	202IDXOY
Model(Heat recovery) ESGW-		183ISXOYV	208ISXOYV	230ISXOYV	234ISXOYV	278ISXOYV	297ISXOYV	392ISXOYV	443ISXOYV	062IDXOYV	134IDXOYV	150IDXOYV	202IDXOYV
Rated Cooling Capacity	KW	300.3	349.8	376.5	409.5	462.1	521.3	668.9	775.7	89.0	217.4	233.5	324.5
	USRT	85.4	99.5	107.1	116.5	131.4	148.3	190.2	220.6	25.3	61.8	66.4	92.3
	X1000 Kcal/h	258.3	300.8	323.8	352.2	397.4	448.3	575.3	667.1	76.5	187.0	200.8	279.1
Input Power	KW	149.7	170.6	184.0	200.8	226.9	254.8	316.5	365.5	50.8	113.0	123.4	162.2
Comp.Input Power XQTY (kw)		149.7*1	170.6*1	184*1	200.8*1	226.9*1	254.8*1	316.5*1	365.5*1	25.4*2	56.5*2	61.7*2	81.1*2
Power Supply/Refrigerant		3 φ-380/400/415V-50HZ R404A											
Protection Device		Phase reversion protection, Phase lack protection, Overload current protection, Discharge air temperature protection, Low&High pressure protection, Low temp protection, Reserved water flow protection interface.											
Number of Refrigeration Circuit		1						2					
Number of compressor		1						2					
Capacity Control (%)		0,50,75,100						0, 25,37.5,50,62.5,75,87.5,100					
Refrigerant Charge (kg)		115	134	148	158	177	218	256	292	36	84	92	124
Condenser		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia.of Pipe to Condenser (inch)		5"	5"	5"	5"	6"	6"	8"	8"	3"	4"	5"	5"
Cooling Water Flow (m ³ /h)		77.4	89.5	96.4	105.0	118.5	133.5	169.5	196.3	24.0	56.8	61.4	83.7
Pressure drop (kPa)		50	56	58	59	61	63	72	76	38	41	42	42
Evaporator		Shell and Tube Type											
Liquid Side Max Pressure (MPa)		1											
Dia.of Pipe to Evaporator (inch)		5"	5"	5"	5"	5"	8"	8"	8"	3"	5"	5"	5"
40% Glycol Water Flow (m ³ /h)		60.2	70.2	75.5	82.2	92.7	104.6	134.2	155.6	17.9	43.6	46.8	65.1
Pressure drop (kPa)		96	48	70	84	87	90	92	95	38	51	65	54
Running Noise dB(A)		75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Appro. Total weight (Kg)		3100	3300	3540	3820	4000	4320	4580	4950	1740	2680	3010	3660
Appro. Running Weight (Kg)		3530	3720	4070	4320	4570	4900	5180	5550	2170	3480	3920	4760

Heat Recovery Parameters

Refrigerant charge(kg)		120	140	154	164	185	228	266	306	42	90	98	130
Heat Recovery Capacity	kW	90.1	104.9	113.0	122.9	138.6	156.4	200.7	232.7	26.7	65.2	70.1	97.4
	USRT	25.6	29.8	32.1	34.9	39.4	44.5	57.1	66.2	7.6	18.5	19.9	27.7
	X1000 Kcal/h	77.5	90.2	97.1	105.7	119.2	134.5	172.6	200.1	23.0	56.1	60.2	83.7
Heat Recoverer		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia of pipe to Heat Recoverer(inch)		2-1/2"	3"	3"	3"	3"	4"	4"	4"	2"	2-1/2"	2-1/2"	2-1/2"
Hot Water Flow(m ³ /h)		15.5	18.0	19.4	21.1	23.8	26.9	34.5	40.0	4.6	11.2	12.0	16.7
Water Pressure drop(kPa)		26	26	27	30	32	34	35	35	23	26	26	28
Appro. Total weight (Kg)		3440	3680	3920	4200	4380	4880	5240	5640	1870	2930	3280	4010
Appro. Running Weight (Kg)		3870	4100	4450	4700	4950	5490	5860	6270	2300	3730	4220	5110

Note:

1. Rated cooling capacity based: Chilled Liquid water in/outlet -10°C/ -15°C, cooling water in/outlet 30°C/35°C; Fouling factor: 0.088 m²·°C/KW;
2. Chilled Liquid range: -15°C ~ -5°C; Cooling water range: 15°C ~ 40°C;
3. Specifications are subject to change without notice for further improvement.



Water Cooled Chiller Unit (Low Temp. Glycol Type, -15~-5°C/R404A)

Model(Cooling only) ESGW-		304IDXOY	324IDXOY	350IDXOY	366IDXOY	416IDXOY	460IDXOY	468IDXOY	556IDXOY	594IDXOY	784IDXOY	886IDXOY
Model(Heat recovery) ESGW-		304IDXOVY	324IDXOVY	350IDXOVY	366IDXOVY	416IDXOVY	460IDXOVY	468IDXOVY	556IDXOVY	594IDXOVY	784IDXOVY	886IDXOVY
Rated Cooling Capacity	KW	483.0	533.8	578.3	600.6	699.5	753.1	819.0	924.2	1,042.7	1,337.7	1,551.5
	USRT	137.4	151.8	164.5	170.8	198.9	214.2	232.9	262.9	296.6	380.5	441.3
	X1000 Kcal/h	415.4	459.1	497.3	516.5	601.6	647.7	704.3	794.8	896.7	1,150.4	1,334.3
Input Power	KW	237.4	267.4	286.0	299.4	341.2	368.0	401.6	453.8	509.6	633.0	731.0
Comp.Input Power XQTY (kw)		118.7*2	133.7*2	143*2	149.7*2	170.6*2	184*2	200.8*2	226.9*2	254.8*2	316.5*2	365.5*2
Power Supply/Refrigerant		3 φ-380/400/415V-50HZ R404A										
Protection Device		Phase reversion protection, Phase lack protection, Overload current protection, Discharge air temperature protection, Low&High pressure protection, Low temp protection, Reserved water flow protection interface.										
Number of Refrigeration Circuit		2										
Number of compressor		2										
Capacity Control (%)		0, 25,37.5,50,62.5,75,87.5,100										
Refrigerant Charge (kg)		188	204	220	230	268	296	316	354	436	512	584
Condenser		Shell and Tube Type										
Water Side Max Pressure (MPa)		1										
Dia.of Pipe to Condenser (inch)		4"×2	5"×2	5"×2	5"×2	5"×2	5"×2	5"×2	6"×2	6"×2	8"×2	8"×2
Cooling Water Flow (m ³ /h)		123.9	137.8	148.6	154.8	179.0	192.8	209.9	237.0	266.9	338.9	392.5
Pressure drop (kPa)		43	44	47	50	56	58	63	69	72	75	80
Evaporator		Shell and Tube Type										
Liquid Side Max Pressure (MPa)		1										
Dia.of Pipe to Evaporator (inch)		6"	6"	8"	8"	8"	8"	8"	8"	8"	10"	10"
40% Glycol Water Flow (m ³ /h)		96.9	107.1	116.0	120.5	140.3	151.1	164.3	185.4	209.2	268.4	311.3
Pressure drop (kPa)		58	35	38	68	73	95	63	69	72	75	80
Running Noise dB(A)		75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Appro. Total weight (Kg)		4560	4940	5350	5890	6390	6850	7080	7330	9000	9700	10300
Appro. Running Weight (Kg)		5780	6260	6700	6940	7170	7430	7760	8110	10160	11000	11600

Heat Recovery Parameters

Refrigerant charge(kg)		196	214	230	240	280	308	328	370	456	532	612
Heat Recovery Capacity	kW	144.9	160.1	173.5	180.2	209.9	225.9	245.7	277.3	312.8	401.3	465.5
	USRT	41.2	45.5	49.3	51.2	59.7	64.3	69.9	78.9	89.0	114.1	132.4
	X1000 Kcal/h	124.6	137.7	149.2	155.0	180.5	194.3	211.3	238.4	269.0	345.1	400.3
Heat Recoverer		Shell and Tube Type										
Water Side Max Pressure (MPa)		1										
Dia of pipe to Heat Recoverer(inch)		3"	3"	3"	3"	4"	4"	4"	4"	5"	5"	5"
Hot Water Flow(m ³ /h)		24.9	27.5	29.8	31.0	36.1	38.9	42.3	47.7	53.8	69.0	80.1
Water Pressure drop(kPa)		34	35	38	38	39	42	43	43	43	43	43
Appro. Total weight (Kg)		4920	5520	5930	6540	7210	7670	7900	8150	9250	10180	10780
Appro. Running Weight (Kg)		6130	6840	7280	7590	7990	8250	8580	8930	10420	11380	12000

Note:

1. Rated cooling capacity based: Chilled Liquid water in/outlet -10°C/ -15°C,
cooling water in/outlet 30°C/35°C; Fouling factor: 0.088 m².°C/KW;
2. Chilled Liquid range: -15°C ~ -5°C; Cooling water range: 15°C ~ 40°C;
3. Specifications are subject to change without notice for further improvement.

Water Cooled Chiller Unit (Low Temp. Glycol Type, -35~-25°C/R404A)

Model(Cooling only) ESGW-		031ISZOY	041ISZOY	055ISZOY	067ISZOY	075ISZOY	089ISZOY	101ISZOY	108ISZOY	121ISZOY	141ISZOY	162ISZOY	175ISZOY
Model(Heat recovery) ESGW-		031ISZOYV	041ISZOYV	055ISZOYV	067ISZOYV	075ISZOYV	089ISZOYV	101ISZOYV	108ISZOYV	121ISZOYV	141ISZOYV	162ISZOYV	175ISZOYV
Rated Cooling Capacity	KW	16.0	22.3	29.2	39.2	42.0	49.8	58.5	63.0	68.5	83.3	96.3	104.4
	USRT	4.6	6.3	8.3	11.1	11.9	14.2	16.6	17.9	19.5	23.7	27.4	29.7
	X1000 Kcal/h	13.8	19.2	25.1	33.7	36.1	42.8	50.3	54.2	58.9	71.6	82.8	89.8
Input Power	KW	18.5	24.9	31.7	42.1	45.7	52.6	61.2	66.3	72.7	87.5	100.9	108.4
Comp.Input Power XQTY (kw)		18.5*1	24.9*1	31.7*1	42.1*1	45.7*1	52.6*1	61.2*1	66.3*1	72.7*1	87.5*1	100.9*1	108.4*1
Power Supply/Refrigerant		3 φ-380/400/415V-50HZ R404A											
Protection Device		Phase reversion protection, Phase lack protection, Overload current protection, Discharge air temperature protection, Low&High pressure protection, Low temp protection, Reserved water flow protection interface.											
Number of Refrigeration Circuit		1											
Number of compressor		1											
Capacity Control (%)		0,66,100				0,50,75,100							
Refrigerant Charge (kg)		18	25	32	42	46	55	62	68	75	90	102	110
Condenser		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia.of Pipe to Condenser (inch)		2"	2-1/2"	3"	3"	3"	3"	4"	4"	4"	5"	5"	5"
Cooling Water Flow (m ³ /h)		5.9	8.1	10.5	14.0	15.1	17.6	20.6	22.2	24.3	29.4	33.9	36.6
Pressure drop (kPa)		35	40	39	46	45	44	43	43	43	44	44	44
Evaporator		Shell and Tube Type											
Liquid Side Max Pressure (MPa)		1											
Dia.of Pipe to Evaporator (inch)		2"	2-1/2"	3"	3"	3"	3"	4"	4"	4"	4"	5"	5"
55% Glycol Water Flow (m ³ /h)		3.6	5.0	6.5	8.7	9.3	11.1	13.0	14.0	15.2	18.5	21.4	23.2
Pressure drop (kPa)		27	34	39	43	56	27	26	82	78	53	58	78
Running Noise dB(A)		75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Appro. Total weight (Kg)		1100	1160	1340	1500	1670	1820	2070	2190	2380	2720	2830	3060
Appro. Running Weight (Kg)		1200	1270	1510	1680	1830	1990	2260	2350	2590	3000	3120	3350

Heat Recovery Parameters

Refrigerant charge(kg)		18	25	32	42	46	55	62	68	75	90	102	110
Heat Recovery Capacity	KW	4.8	6.7	8.8	11.8	12.6	14.9	17.6	18.9	20.6	25.0	28.9	31.3
	USRT	1.4	1.9	2.5	3.3	3.6	4.2	5.0	5.4	5.8	7.1	8.2	8.9
	X1000 Kcal/h	4.1	5.8	7.5	10.1	10.8	12.8	15.1	16.3	17.7	21.5	24.8	26.9
Heat Recoverer		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia of pipe to Heat Recoverer(inch)		1"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	2"	2"	2"	2"	2"	2-1/2"	2-1/2"
Hot Water Flow(m ³ /h)		0.8	1.2	1.5	2.0	2.2	2.6	3.0	3.3	3.5	4.3	5.0	5.4
Water Pressure drop(kPa)		21	24	23	28	27	27	26	26	26	26	27	26
Appro. Total weight (Kg)		1140	1220	1440	1640	1810	1960	2250	2370	2590	2970	3080	3400
Appro. Running Weight (Kg)		1240	1330	1610	1820	1970	2130	2400	2530	2800	3250	3370	3690

Note:

1. Rated cooling capacity based: Chilled Liquid water in/outlet -30°C/-35°C, cooling water in/outlet 30°C/35°C; Fouling factor: 0.088 m²·°C/KW;
2. Chilled Liquid range: -35°C ~ -25°C; Cooling water range: 15°C ~ 40°C;
3. Specifications are subject to change without notice for further improvement.

Water Cooled Chiller Unit (Low Temp. Glycol Type, -35~-25°C/R404A)

Model(Cooling only) ESGW-		183ISZOY	208ISZOY	230ISZOY	234ISZOY	278ISZOY	297ISZOY	392ISZOY	443ISZOY	062IDZOY	134IDZOY	150IDZOY	202IDZOY
Model(Heat recovery) ESGW-		183ISZOVY	208ISZOVY	230ISZOVY	234ISZOVY	278ISZOVY	297ISZOVY	392ISZOVY	443ISZOVY	062IDZOVY	134IDZOVY	150IDZOVY	202IDZOVY
Rated Cooling Capacity	KW	108.4	126.3	136.0	147.8	166.8	188.3	241.7	280.5	31.9	78.3	84.0	117.0
	USRT	30.8	35.9	38.7	42.0	47.4	53.6	68.7	79.8	9.1	22.3	23.9	33.3
	X1000 Kcal/h	93.2	108.6	117.0	127.1	143.4	161.9	207.9	241.2	27.4	67.3	72.2	100.6
Input Power	KW	113.1	130.0	140.1	152.7	172.4	193.9	243.8	282.0	37.4	84.2	91.4	122.4
Comp.Input Power XQTY (kw)		113.1*1	130*1	140.1*1	152.7*1	172.4*1	193.9*1	243.8*1	282*1	18.7*2	42.1*2	45.7*2	61.2*2
Power Supply/Refrigerant		3 φ-380/400/415V-50HZ R404A											
Protection Device		Phase reversion protection, Phase lack protection, Overload current protection, Discharge air temperature protection, Low&High pressure protection, Low temp protection, Reserved water flow protection interface.											
Number of Refrigeration Circuit		1						2					
Number of compressor		1						2					
Capacity Control (%)		0,50,75,100						0, 25,37.5,50,62.5,75,87.5,100					
Refrigerant Charge (kg)		115	134	148	158	177	218	256	292	36	84	92	124
Condenser		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia.of Pipe to Condenser (inch)		5"	5"	5"	5"	6"	6"	8"	8"	3"	4"	5"	5"
Cooling Water Flow (m ³ /h)		38.1	44.1	47.5	51.7	58.3	65.7	83.5	96.7	11.9	27.9	30.2	41.2
Pressure drop (kPa)		50	56	58	59	61	63	72	76	38	41	42	42
Evaporator		Shell and Tube Type											
Liquid Side Max Pressure (MPa)		1											
Dia.of Pipe to Evaporator (inch)		5"	5"	5"	5"	5"	8"	8"	8"	3"	5"	5"	5"
55% Glycol Water Flow (m ³ /h)		24.1	28.0	30.2	32.8	37.0	41.8	53.7	62.3	7.1	17.4	18.6	26.0
Pressure drop (kPa)		98	49	71	85	88	91	94	97	39	52	67	55
Running Noise dB(A)		75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Appro. Total weight (Kg)		3160	3350	3590	3870	4050	4380	4640	5020	1820	2760	3100	3760
Appro. Running Weight (Kg)		3580	3770	4120	4370	4620	4960	5240	5610	2250	3560	4010	4860

Heat Recovery Parameters

Refrigerant charge(kg)		115	134	148	158	177	218	256	292	36	84	92	124
Heat Recovery Capacity	KW	32.5	37.9	40.8	44.3	50.0	56.5	72.5	84.2	9.6	23.5	25.2	35.1
	USRT	9.2	10.8	11.6	12.6	14.2	16.1	20.6	23.9	2.7	6.7	7.2	10.0
	X1000 Kcal/h	28.0	32.6	35.1	38.1	43.0	48.6	62.4	72.4	8.2	20.2	21.7	30.2
Heat Recoverer		Shell and Tube Type											
Water Side Max Pressure (MPa)		1											
Dia of pipe to Heat Recoverer(inch)		2-1/2"	3"	3"	3"	3"	4"	4"	4"	2"	2-1/2"	2-1/2"	2-1/2"
Hot Water Flow(m ³ /h)		5.6	6.5	7.0	7.6	8.6	9.7	12.5	14.5	1.6	4.0	4.3	6.0
Water Pressure drop(kPa)		26	26	27	30	32	34	35	35	23	26	26	28
Appro. Total weight (Kg)		3500	3730	3970	4250	4430	4760	5020	5400	1950	3010	3400	4110
Appro. Running Weight (Kg)		3920	4150	4500	4750	5060	5340	5620	5990	2380	3810	4320	5230

Note:

1. Rated cooling capacity based: Chilled Liquid water in/outlet -30°C/-35°C, cooling water in/outlet 30°C/35°C; Fouling factor: 0.088 m².°C/KW;
2. Chilled Liquid range: -35°C ~ -25°C; Cooling water range: 15°C ~ 40°C;
3. Specifications are subject to change without notice for further improvement.

Water Cooled Chiller Unit (Low Temp. Glycol Type, -35~-25°C/R404A)

Model(Cooling only) ESGW-		304IDZOY	324IDZOY	350IDZOY	366IDZOY	416IDZOY	460IDZOY	468IDZOY	556IDZOY	594IDZOY	784IDZOY	886IDZOY
Model(Heat recovery) ESGW-		304IDZOVY	324IDZOVY	350IDZOVY	366IDZOVY	416IDZOVY	460IDZOVY	468IDZOVY	556IDZOVY	594IDZOVY	784IDZOVY	886IDZOVY
Rated Cooling Capacity	KW	174.3	192.6	208.7	216.7	252.6	272.0	295.7	333.7	376.5	483.4	560.9
	USRT	49.6	54.8	59.4	61.6	71.8	77.4	84.1	94.9	107.1	137.5	159.5
	X1000 Kcal/h	52.3	57.8	62.6	65.0	75.8	81.6	88.7	100.1	113.0	145.0	168.3
Input Power	KW	180.4	201.8	216.8	226.2	260.0	280.2	305.4	344.8	387.8	487.6	564.0
Comp.Input Power XQTY (kw)		90.2*2	100.9*2	108.4*2	113.1*2	130*2	140.1*2	152.7*2	172.4*2	193.9*2	243.8*2	282*2
Power Supply/Refrigerant		3 φ-380/400/415V-50HZ R404A										
Protection Device		Phase reversion protection, Phase lack protection, Overload current protection, Discharge air temperature protection, Low&High pressure protection, Low temp protection, Reserved water flow protection interface.										
Number of Refrigeration Circuit		2										
Number of compressor		2										
Capacity Control (%)		0, 25,37.5,50,62.5,75,87.5,100										
Refrigerant Charge (kg)		188	204	220	230	268	296	316	354	436	512	584
Condenser		Shell and Tube Type										
Water Side Max Pressure (MPa)		1										
Dia.of Pipe to Condenser (inch)		4"×2	5"×2	5"×2	5"×2	5"×2	5"×2	5"×2	6"×2	6"×2	8"×2	8"×2
Cooling Water Flow (m ³ /h)		61.0	67.8	73.2	76.2	88.2	95.0	103.4	116.7	131.4	167.0	193.4
Pressure drop (kPa)		43	44	47	50	56	58	63	69	72	75	80
Evaporator		Shell and Tube Type										
Liquid Side Max Pressure (MPa)		1										
Dia.of Pipe to Evaporator (inch)		6"	6"	8"	8"	8"	8"	8"	8"	8"	10"	10"
55% Glycol Water Flow (m ³ /h)		38.7	42.8	46.3	48.1	56.1	60.4	65.6	74.1	83.6	107.3	124.5
Pressure drop (kPa)		59	65	64	69	75	97	93	90	87	96	104
Running Noise dB(A)		75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Appro. Total weight (Kg)		4650	5030	5440	6020	6510	6970	7200	7450	9120	9820	10450
Appro. Running Weight (Kg)		5870	6350	6790	7060	7290	7550	7880	8230	10280	11150	11720

Heat Recovery Parameters

Refrigerant charge(kg)		188	204	220	230	268	296	316	354	436	512	584
Heat Recovery Capacity	kW	52.3	57.8	62.6	65.0	75.8	81.6	88.7	100.1	113.0	145.0	168.3
	USRT	14.9	16.4	17.8	18.5	21.6	23.2	25.2	28.5	32.1	41.2	47.9
	X1000 Kcal/h	45.0	49.7	53.8	55.9	65.2	70.2	76.3	86.1	97.1	124.7	144.7
Heat Recoverer		Shell and Tube Type										
Water Side Max Pressure (MPa)		1										
Dia of pipe to Heat Recoverer(inch)		3"	3"	3"	3"	4"	4"	4"	4"	5"	5"	5"
Hot Water Flow(m ³ /h)		9.0	9.9	10.8	11.2	13.0	14.0	15.3	17.2	19.4	24.9	28.9
Water Pressure drop(kPa)		34	35	38	38	39	42	43	43	43	43	43
Appro. Total weight (Kg)		5050	5910	6090	6670	7330	7790	8020	8270	9940	10640	11270
Appro. Running Weight (Kg)		6270	6930	7440	7720	8110	8370	8700	9050	11100	11970	12540

Note:

1. Rated cooling capacity based: Chilled Liquid water in/outlet -30°C/-35°C, cooling water in/outlet 30°C/35°C; Fouling factor: 0.088 m²·°C/KW;
2. Chilled Liquid range: -35°C ~ -25°C; Cooling water range: 15°C ~ 40°C;
3. Specifications are subject to change without notice for further improvement.