



## Water-cooled Central Water Chiller

SICC-725WD-R3

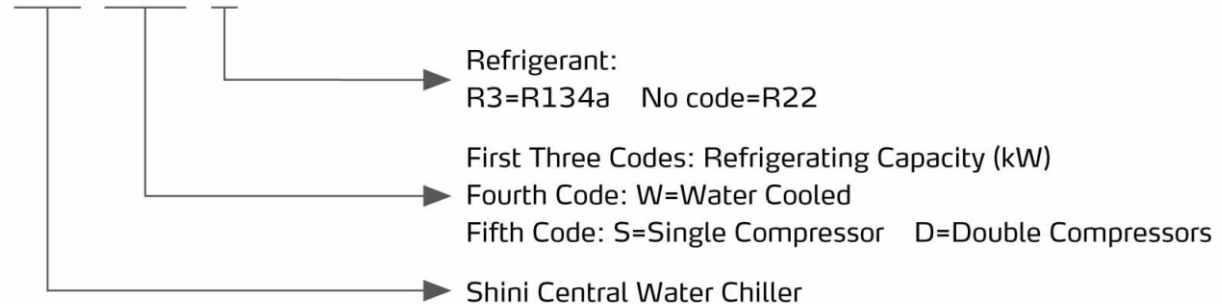


Refer carefully to this manual before operation.

# SICC-W Series

## ■ Coding Principle

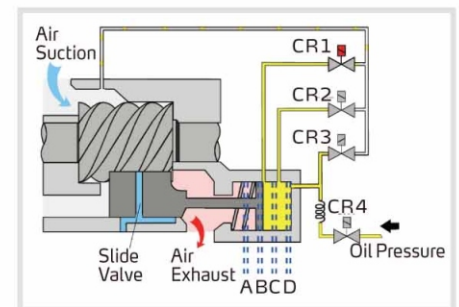
SICC - xxxWx - xx



## ■ Features

### Standard configuration

- Brand twin-screw compressor with long service life.
- Multi-level compressor output capacity adjusting function are designed to save power.
- Evaporator and condenser are strictly built according to national standards.
- Extendibility of the controller makes upgrade of both hardware and software much easier.
- Based on serial number, frequency and time of faults, the causes can be analyzed via both query and statistics functions to do the improvements.
- Standard equipped with high/low pressure switch, anti-freeze switch, fusible plug, overload protector, coil overheat protector, temperature auto switch, reverse protector.



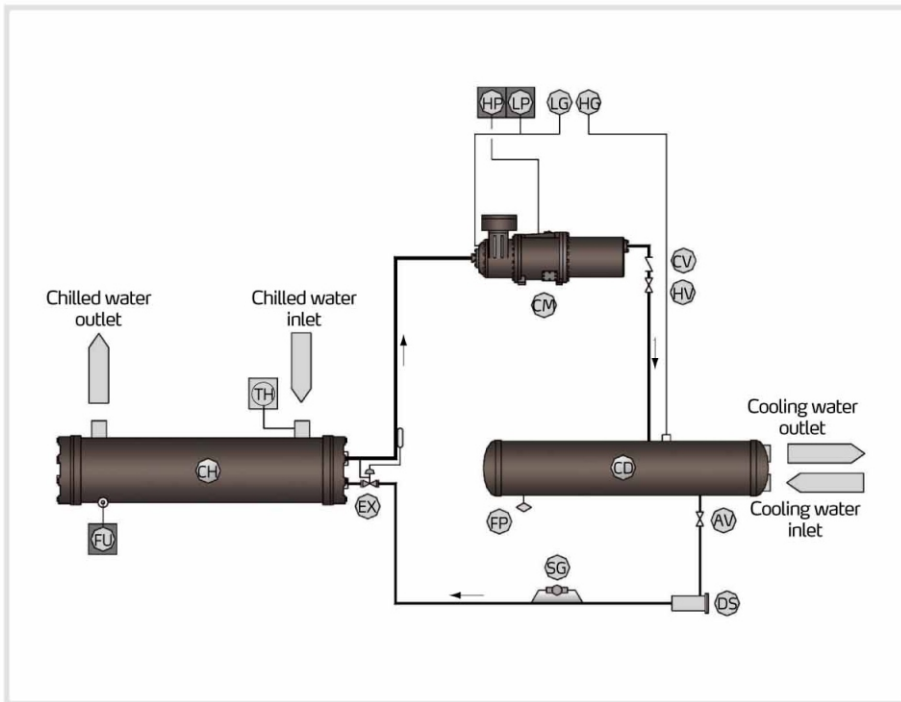
Stepless Adjustment Function

## ■ Application

SICC-W series water chillers are applicable for cooling moulds to reduce products molding cycle, also they are available in the cooling of equipments in order to maintain normal temperature. Besides, they are suitable for other industries with the need of cooling.

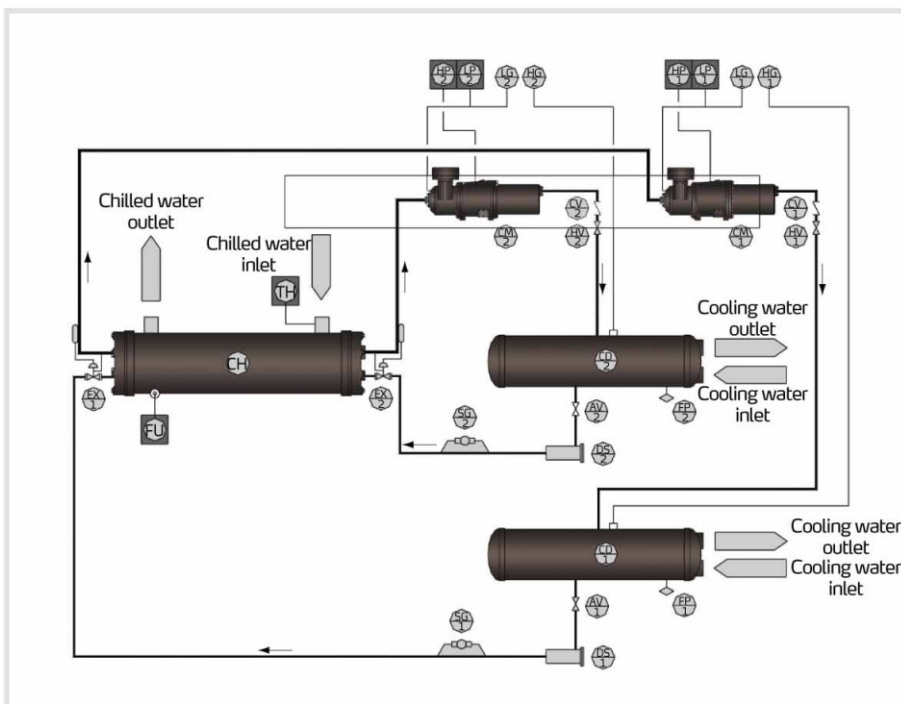
## ■ Working Principle

The SICC-W water-cooled central water chiller is mainly made up of four components which are compressor, condenser, thermostatic expansion valve and evaporator. It uses single stage vapor compression refrigeration system, and takes advantage of the mechanism of transformation between air and liquid status for absorbing and releasing heat by using of refrigerant to achieve the effectiveness of refrigeration.



Sign	Name	Amount	Remark
CM	Compressor	1	
CD	Condenser	1	
CH	Evaporator	1	
EX	Expansion valve	1	
FP	Fusible plug	1	
AV	Angle valve	1	
DS	Drier filter	1	
SG	Refrigerant indicator	1	
CV	Contrary stop value	1	
HV	High pressure valve	1	
HG	High pressure gauge	1	
LG	low pressure gauge	1	
HP	High pressure switch	1	
LP	Low pressure switch	1	
TH	Thermo switch	1	
FU	Anti-freezing switch	1	

One Compressor



Sign	Name	Amount	Remark
CM1-2	Compressor	2	
CD1-2	Condenser	2	
CH	Evaporator	1	
EX1-2	Expansion valve	2	
FP1-2	Fusible plug	2	
AV1-2	Angle valve	2	
DS1-2	Drier filter	2	
SG1-2	Refrigerant indicator	2	
CV1-2	Contrary stop value	2	
HV1-2	High pressure valve	2	
HG1-2	High pressure gauge	2	
LG1-2	low pressure gauge	2	
HP1-2	High pressure switch	2	
LP1-2	Low pressure switch	2	
TH	Thermo switch	1	
FU	Anti-freezing switch	1	

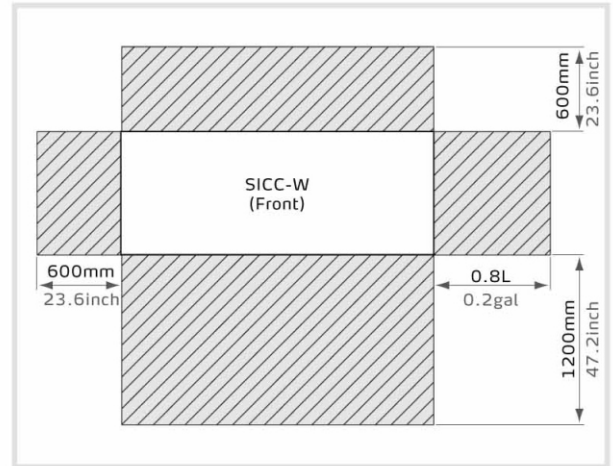
Two Compressors

# SICC-W Series

## ■ Fundation and Installation

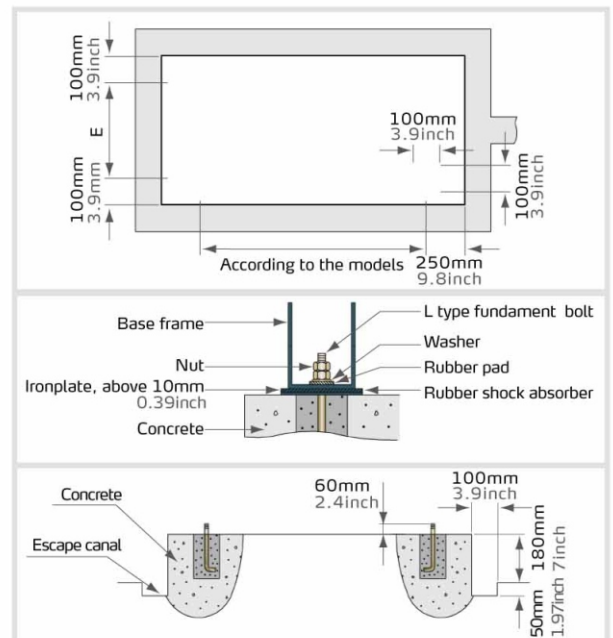
### Selection of Installation Environment

- 1) Please select a firm and solid ground which can fully support machine when running. The ground selection has also to avoid any happens of vibration and noisy environment.
- 2) The machine should be installed in a place without any exposures from wind, rain, sunlight, or any heat source occurrence.
- 3) Ambient temperature is within 0~40°C/0~104°F, relative humidity (RH) is 75%, good ventilation and with less dust and sand.
- 4) Installation should be carried through in a place with easy access to electrical power and convenient construction.
- 5) When install, please preserve a maintenance space, as shown on the right. For the cleaning of the condenser, please reserve space of 0.8L/0.2gal on either left or right side of the machine.

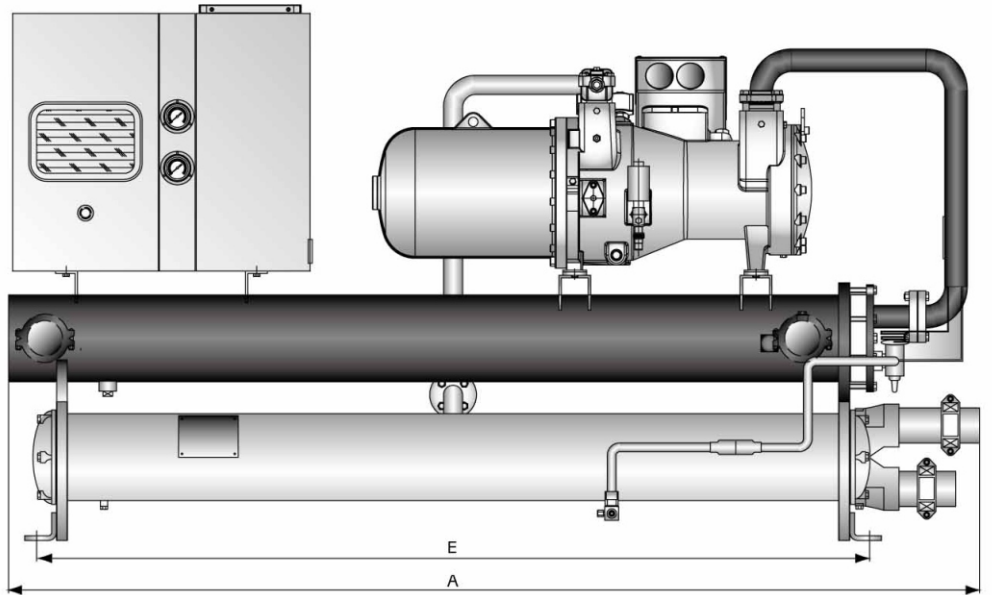
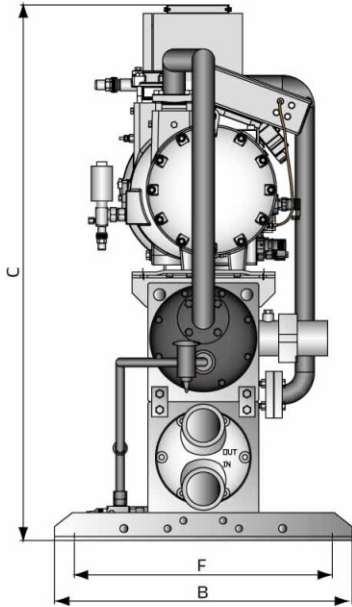


### Foundation Base

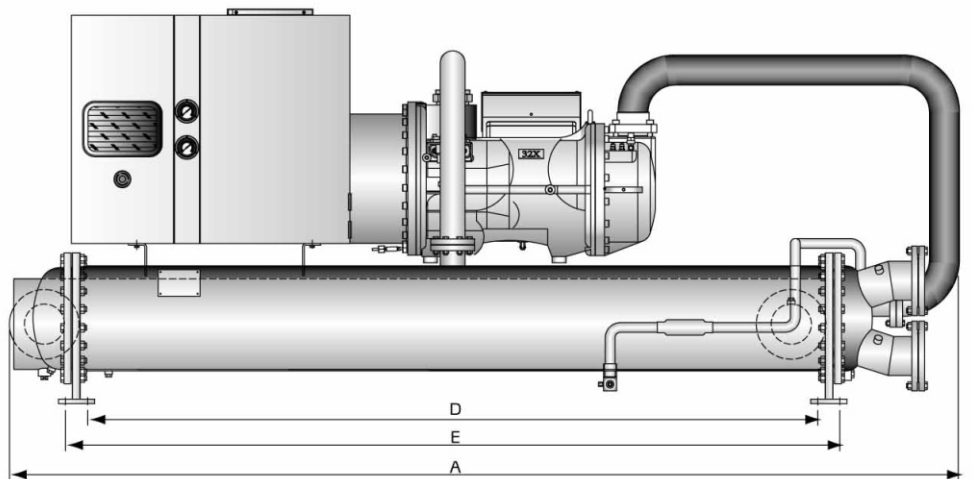
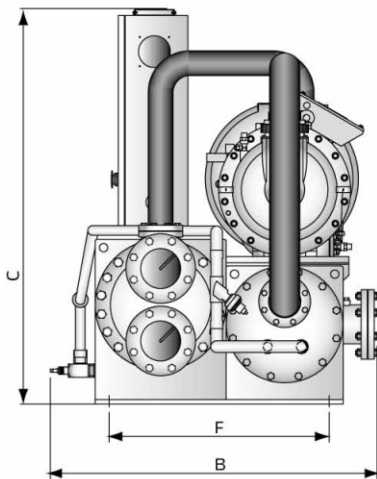
- 1) The foundation of the concrete base, according to the operation weight of the machines, will put on steel bars, diameter above 9.5mm/ $3/8$ " , and are clustered together on the upper and lower layer of the base, interspaced about 100mm/ $4$ " .
- 2) When making concrete floor to be foundation, it is necessary to rough the surface. Clean the floor before installation.
- 3) The concrete base has to be rigid; the mixing proportion of concrete is 1: 2: 4. Put required anchor bolts into base, according to the request. Polishing and flat the surface of the base when finished.
- 4) Put the machine on the base when it is fully dried out and rigid.
- 5) It has to be a well drainage works around the base to prevent water remaining.



■ Outline Drawings



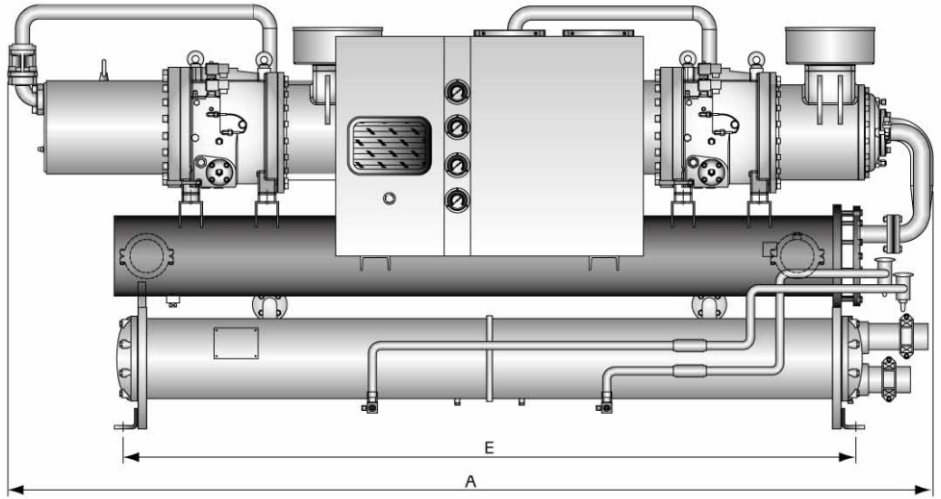
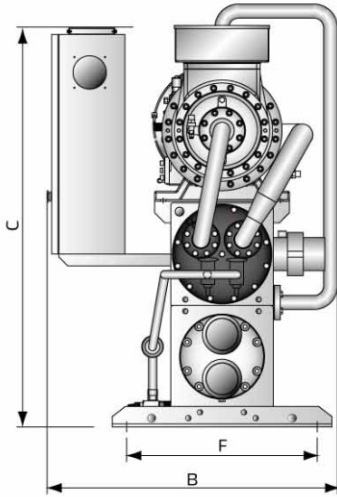
SICC-137WS~SICC-197WS  
&  
SICC-137WS-R3~SICC-212WS-R3



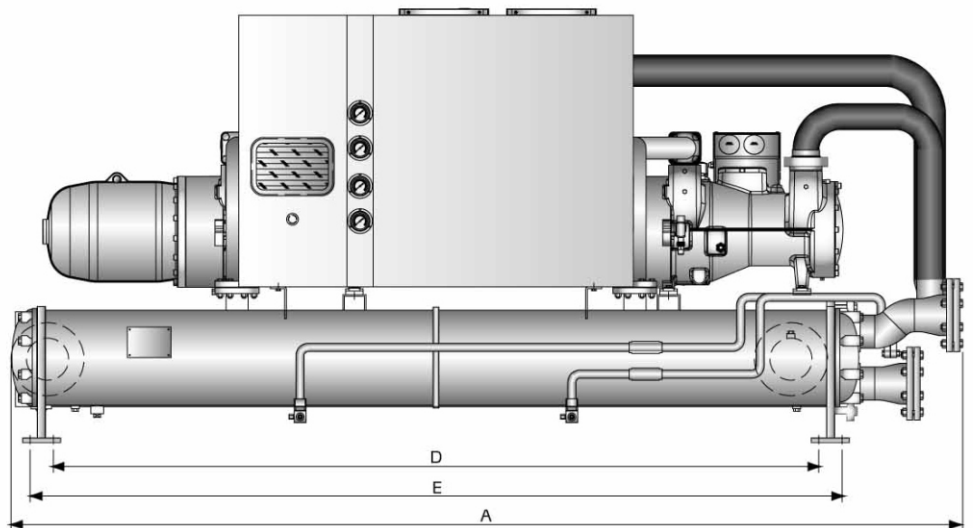
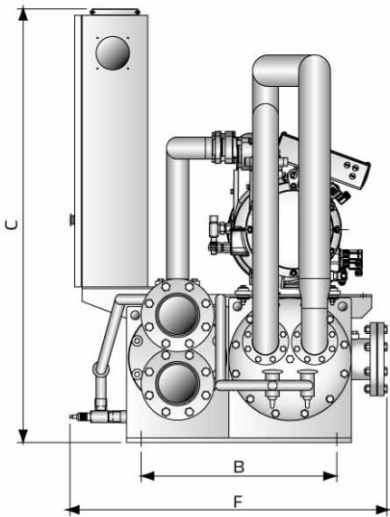
SICC-251WS~SICC-956WS  
&  
SICC-250WS-R3~SICC-632WS-R3

# SICC-W Series

## ■ Outline Drawings



SICC-274WD~SICC-394WD  
&  
SICC-258WD-R3~SICC-423WD-R3



SICC-503WD~SICC-1912WD  
&  
SICC-500WD-R3~SICC-1265WD-R3



## Specifications (Single Compressor R22)

Model		SICC-126WS	SICC-157WS	SICC-186WS	SICC-259WS	SICC-285WS	SICC-319WS	SICC-353WS	SICC-413WS	
Refrigeration Capacity	kW	137	157	186	259	285	319	353	413	
	kcal/hr	108,541	135,020	159,688	222,740	245,100	274,529	373,580	355,180	
Power Source	—	3Φ 380V 50Hz								
Power Consumption	kW	30.5	35.4	45.8	59.6	68.5	68	81.3	100.3	
Operation Current	A	55	63	82	107	122	122	145	179	
Start-up Current	A	218	269	290	423	479	516	562	579	
Power Adjustment	—	4-Step capacity control								
Refrigeration Oil Filling Quantity	L	11	11	13	13	13	17	17	17	
	gal	2.9	2.9	3.4	3.4	3.4	4.5	4.5	4.5	
Refrigerant Filling Quantity	kg	20	26	31	36	41	46	56	61	
	lb	44	57	68	79	90	101	123	134	
Evaporator	Type	U type tube-in-shell style								
	Process Flow	m <sup>3</sup> /hr	21.7	27	31.9	44.5	49.0	54.9	60.7	71.0
	Pressure Loss	kPa	46	48	48	52	52	54	60	63
	Pipe Coupler		Φ3"Clamp	Φ3"Clamp	Φ3"Clamp	Φ4"Clamp	Φ4"Clamp	Φ4"Clamp	Φ4"Clamp	Φ4"Clamp
Condenser	Type	Tube-in-shell style								
	Cooling Flow	m <sup>3</sup> /hr	27.1	33.8	42.3	54.1	61.3	68.6	75.9	88.8
	Pressure Loss	kPa	20	20	30	30	30	30	38	45
	Pipe Outlet		Φ3"Clamp	Φ3"Clamp	Φ3"Clamp	Φ4"Clamp	Φ4"Clamp	Φ4"Clamp	Φ4"Clamp	Φ4"Clamp
Unit Dimensions	A	mm	2500	2600	2850	3000	3000	3050	3450	3350
		inch	98.4	102.4	112.2	118.1	118.1	120	135.8	131.9
	B	mm	750	750	750	1100	1100	1150	1150	1250
		inch	29.5	29.5	29.5	43.3	43.3	45.3	45.3	49.2
	C	mm	1450	1500	1500	1260	1260	1370	1450	1450
		inch	57	59	59	49.6	49.6	53.9	57	57
Installing Dimensions	D	mm	-	-	-	2390	2390	2390	2620	2620
		inch	-	-	-	94	94	94	103.1	103.1
	E	mm	2100	2100	2400	2550	2550	2550	2780	2780
		inch	82.7	82.7	94.4	100.4	100.4	100.4	109.4	109.4
	F	mm	650	650	650	600	600	600	600	670
		inch	25.6	25.6	25.6	23.6	23.6	23.6	23.6	26.4
Net Weight	kg	1170	1220	1370	1480	1500	1770	1850	1900	
	lb	2579	2690	3020	3263	3307	3902	4079	4189	
Operating Weight	kg	1270	1370	1420	1630	1650	1970	2050	2150	
	lb	2800	3020	3130	3594	3638	4343	4519	4740	
Measures Exchange		1 kW = 860 kcal/hr		1 RT = 3,024 kcal/hr		10,000 Btu/hr = 2,520 kcal/hr				

Notes: 1) Parameter test condition: chilled water flow 0.172m<sup>3</sup>/(h.kW); chilled water outlet temperature 7°C/44.6°F; cooling water inlet temperature 30°C/86°F; cooling water flow 0.215m<sup>3</sup>/(h.kW).

2) Machine operation conditions: outlet chilling water temperature is at 5-15°C(41-59°F), inlet chilling water temperature is at 19-33°C(66.2-91.4°F), For special requirements, the machine can be customized.

3) The noise level is tested at 1m/40" in front of and 1.5m/59" above the machine.

4) As per application needs, stepless compressor output capacity adjusting function can be optionally available.

5) Please inform the special requirements to us before giving an order.

6) "S" stands for Single compressor.

We reserve the right to change specifications without prior notice.

# SICC-W Series

## Specifications (Single Compressor R22)

Model		SICC-450WS	SICC-538WS	SICC-611WS	SICC-695WS	SICC-767WS	SICC-854WS	SICC-954WS	
Refrigeration Capacity	kW	450	538	611	695	767	854	954	
	kcal/hr	387,181	462,594	525,056	598,053	659,680	734,354	820,182	
Power Source	—	3Φ 380V 50Hz							
Power Consumption	kW	95.0	120.9	125.9	142.6	156.7	172.5	196	
Operation Current	A	170	216	225	255	280	308	350	
Start-up Current	A	729	757	586	650	805	805	600	
Power Adjustment	—	4-Step capacity control							
Refrigeration Oil Filling Quantity	L	17	21	21	25	25	25	25	
	gal	4.5	5.5	5.5	6.6	6.6	6.6	6.6	
Refrigerant Filling Quantity	kg	66	76	91	101	111	126	136	
	lb	145	167	200	223	246	280	301	
Evaporator	Type	U type tube-in-shell style			Tube-in-shell style				
	Process Flow	m <sup>3</sup> /hr	77.4	92.5	105.0	119.6	131.9	146.9	164.0
	Pressure Loss	kPa	63	63	66	70	80	80	80
	Pipe Coupler		DN125	DN125	DN150	DN150	DN150	DN150	DN150
Condenser	Type	Tube-in-shell style							
	Cooling Flow	m <sup>3</sup> /hr	96.8	115.6	131.3	149.5	164.9	183.6	205.0
	Pressure Loss	kPa	45	45	45	45	58	58	58
	Pipe Outlet		DN125	DN125	DN150	DN150	DN150	DN150	DN150
Unit Dimensions	A	mm	3350	3450	3400	3750	3800	3700	3850
		inch	131.9	135.8	133.9	147.6	149.6	145.7	151.6
	B	mm	1200	1250	1350	1350	1400	1400	1500
		inch	47.2	49.2	53.1	53.1	55.1	55.1	59
	C	mm	1450	1500	1650	1650	1700	1650	1650
		inch	57	59	65	65	66.9	65	65
Installing Dimensions	D	mm	2620	2620	2620	2920	2920	2920	2920
		inch	103.1	103.1	103.1	115	115	115	115
	E	mm	2780	2780	2780	3080	3080	3080	3080
		inch	109.4	109.4	109.4	121.3	121.3	121.3	121.3
	F	mm	670	790	870	870	920	920	1030
		inch	26.4	31.1	34.3	34.3	36.2	36.2	40.6
Net Weight	kg	2050	2350	2600	2950	3130	3400	3500	
	lb	4519	5181	5732	6504	6900	7496	7716	
Operating Weight	kg	2350	2650	2900	3300	3480	3900	4000	
	lb	5181	5842	6393	7275	7672	8598	8818	
Measures Exchange		1 kW = 860 kcal/hr		1 RT = 3,024 kcal/hr		10,000 Btu/hr = 2,520 kcal/hr			

Notes: 1) Parameter test condition: chilled water flow 0.172m<sup>3</sup>/(h·kW); chilled water outlet temperature 7°C/44.6°F; cooling water inlet temperature 30°C/86°F; cooling water flow 0.215m<sup>3</sup>/(h·kW).

2) Machine operation conditions: outlet chilling water temperature is at 5~15°C(41~59°F), inlet chilling water temperature is at 19~33°C(66.2~91.4°F), For special requirements, the machine can be customized.

3) The noise level is tested at 1m/40" in front of and 1.5m/59" above the machine.

4) As per application needs, stepless compressor output capacity adjusting function can be optionally available.

5) Please inform the special requirements to us before giving an order.

6) "S" stands for Single compressor.

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## Specifications (Single Compressor R134a)

Model		SICC-252WD	SICC-314WD	SICC-371WD	SICC-518WD	SICC-570WD	SICC-638WD	SICC-706WD	SICC-826WD	
Refrigeration Capacity	kW	252	314	371	518	570	638	706	826	
	kcal/hr	217,082	270,040	319,377	445,480	490,200	549,058	607,160	710,360	
Power Source	—	3Φ 380V 50Hz								
Power Consumption	kW	61.1	70.8	91.6	119.2	137.0	136.0	162.6	200.6	
Operation Current	A	109	126	164	213	245	243	291	359	
Start-up Current	A	273	332	372	530	601	638	707	758	
Power Adjustment	—	8-Step capacity control								
Refrigeration Oil Filling Quantity	L	22	22	26	26	26	34	34	34	
	gal	5.8	5.8	6.9	6.9	6.9	9.0	9.0	9.0	
Refrigerant Filling Quantity	kg	41	51	56	71	81	91	111	121	
	lb	90	112	123	157	179	201	246	268	
Evaporator	Type	U type tube-in-shell style				Tube-in-shell style				
	Process Flow	m <sup>3</sup> /hr	43.4	54.0	63.9	89.1	98.0	109.8	121.4	142.1
	Pressure Loss	kPa	58	60	63	63	66	66	66	66
	Pipe Coupler		Φ4"Clamp	Φ4"Clamp	Φ4"Clamp	DN125	DN125	DN150	DN150	DN150
Condenser	Type	Tube-in-shell style								
	Cooling Flow	m <sup>3</sup> /hr	54.3	67.5	79.8	111.4	122.6	137.3	151.8	177.6
	Pressure Loss	kPa	40	40	40	40	50	57	57	57
	Pipe Outlet		Φ4"Clamp	Φ4"Clamp	Φ4"Clamp	DN125	DN125	DN150	DN150	DN150
Unit Dimensions	A	mm	3100	3180	3250	3300	3550	3900	3950	4000
		inch	122	125.2	128.0	129.9	137.8	153.5	155.5	157.5
	B	mm	1050	1050	1050	1150	1300	1300	1350	1450
		inch	41.3	41.3	41.3	45.3	51.2	51.2	53.1	57.0
	C	mm	1600	1700	1850	1550	1600	1600	1650	1650
		inch	63.0	66.9	72.8	61.0	63.0	63.0	65.0	65.0
Installing Dimensions	D	mm	-	-	-	2620	2620	2920	2920	2920
		inch	-	-	-	103.1	103.1	115	115	115
	E	mm	2500	2700	2830	2780	2780	3080	3080	3080
		inch	98.4	106.3	111.4	109.4	109.4	121.3	121.3	121.3
	F	mm	650	650	650	670	870	870	920	980
		inch	25.6	25.6	25.6	26.4	34.3	34.3	36.2	38.6
Net Weight	kg	1880	2010	2300	2610	2790	3300	3700	3880	
	lb	4145	4431	5070	5754	6151	7275	8157	8554	
Operating Weight	kg	2030	2210	2550	2910	3090	3600	4200	4380	
	lb	4475	4872	5622	6415	6812	7937	9259	9656	
Measures Exchange		1 kW = 860 kcal/hr		1 RT = 3,024 kcal/hr		10,000 Btu/hr = 2,520 kcal/hr				

Notes: 1) Parameter test condition: chilled water flow 0.172m<sup>3</sup>/(h·kW); chilled water outlet temperature 7°C/44.6°F; cooling water inlet temperature 30°C/86°F; cooling water flow 0.215m<sup>3</sup>/(h·kW).

2) Machine operation conditions: outlet chilling water temperature is at 5~15°C(41~59°F), inlet chilling water temperature is at 19~33°C(66.2~91.4°F). For special requirements, the machine can be customized.

3) The noise level is tested at 1m/40" in front of and 1.5m/59" above the machine.

4) As per application needs, stepless compressor output capacity adjusting function can be optionally available.

5) Please inform the special requirements to us before giving an order.

6) "S" stands for Single compressor.

We reserve the right to change specifications without prior notice.

# SICC-W Series

## Specifications (Double Compressor R22)

Model		SICC-900D	SICC-1076WD	SICC-1221WD	SICC-1391WD	SICC-1534WD	SICC-1708WD	SICC-1907WD	
Refrigeration Capacity	kW	900	1076	1221	1391	1534	1708	1907	
	kcal/hr	774,361	935,188	1,050,112	1,196,105	1,319,360	1,468,708	1,640,364	
Power Source	—	3Φ 380V 50Hz							
Power Consumption	kW	189.9	241.8	251.8	285.2	313.3	345.0	392.0	
Operation Current	A	339	432	450	510	560	617	701	
Start-up Current	A	899	973	811	892	1085	1113	1000	
Power Adjustment	—	8-Step capacity control							
Refrigeration Oil Filling Quantity	L	34	42	42	50	50	50	50	
	gal	9.0	11	11	13.2	13.2	13.2	13.2	
Refrigerant Filling Quantity	kg	136	151	176	200	226	241	276	
	lb	301	334	389	441	499	532	609	
Evaporator	Type	Tube-in-shell style							
	Process Flow	m <sup>3</sup> /hr	154.9	185.0	210.0	239.2	263.9	293.7	328.1
	Pressure Loss	kPa	66	80	90	90	90	90	90
	Pipe Coupler		DN150	DN200	DN200	DN200	DN200	DN200	DN200
Condenser	Type	Tube-in-shell style							
	Cooling Flow	m <sup>3</sup> /hr	193.6	231.3	262.5	299.0	329.8	367.2	410.0
	Pressure Loss	kPa	57	64	64	62	62	64	64
	Pipe Outlet		DN150	DN200	DN200	DN200	DN200	DN200	DN200
Unit Dimensions	A	mm	4000	4300	4300	4650	4800	4800	4800
		inch	157.5	169.3	169.3	183.	189	189	189
	B	mm	1450	1500	1600	1600	1700	1700	1800
		inch	57	59	63	63	66.9	66.9	70.9
	C	mm	1650	1700	1800	1900	2050	2050	2050
		inch	65	66.9	70.9	74.8	80.7	80.7	80.7
Installing Dimensions	D	mm	2920	3190	3190	3170	3170	3170	3170
		inch	115	125.6	125.6	124.8	124.8	124.8	124.8
	E	mm	3080	3350	3350	3370	3370	3370	3370
		inch	121.3	131.9	131.9	132.7	132.7	132.7	132.7
	F	mm	980	1030	1130	1130	1220	1220	1290
		inch	38.8	40.6	44.5	44.5	48	48	50.8
Net Weight	kg	4000	4350	4800	5500	5650	6000	6400	
	lb	8818	9590	10,582	12,125	12,456	13,228	14,110	
Operating Weight	kg	4500	4900	5500	6300	6450	6900	7400	
	lb	9921	10,803	12,125	13,889	14,220	15,212	16,314	
Measures Exchange		1 kW = 860 kcal/hr		1 RT = 3,024 kcal/hr		10,000 Btu/hr = 2,520 kcal/hr			

Notes: 1) Parameter test condition: chilled water flow 0.172m<sup>3</sup>/(h·kW); chilled water outlet temperature 7°C/44.6°F; cooling water inlet temperature 30°C/86°F; cooling water flow 0.215m<sup>3</sup>/(h·kW).

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3) The noise level is tested at 1m/40" in front of and 1.5m/59" above the machine.

4) As per application needs, stepless compressor output capacity adjusting function can be optionally available.

5) Please inform the special requirements to us before giving an order.

6) "D" stands for double compressor.

We reserve the right to change specifications without prior notice.



## ■ Specifications (Single Compressor R134a)

Model		SICC-137WS	SICC-164WS	SICC-212WS	SICC-232WS	SICC-274WS	SICC-299WS	
Refrigeration Capacity	kW	137	164	212	232	274	299	
	kcal/hr	117,820	140,954	182,062	199,176	235,382	256,710	
Power Source	—	3Φ 380V 50Hz						
Power Consumption	kW	29.2	33.9	43.3	50.3	57.2	60.4	
Operation Current	A	52	61	77	90	102	108	
Start-up Current	A	146	163	229	200	235	287	
Power Adjustment	—	4-Step capacity control						
Refrigeration Oil Filling Quantity	L	13	13	17	17	17	17	
	gal	3.4	3.4	4.5	4.5	4.5	4.5	
Refrigerant Filling Quantity	kg	20	25	31	36	41	46	
	lb	44	55	68	79	90	101	
Evaporator	Type	Tube-in-shell style						
	Process Flow	m <sup>3</sup> /hr	23.6	28.2	36.4	39.8	47.1	51.3
	Pressure Loss	kPa	46	48	52	52	52	56
	Pipe Coupler		Φ3"Clamp	Φ3"Clamp	Φ3"Clamp	Φ4"Clamp	Φ4"Clamp	Φ4"Clamp
Condenser	Type	Tube-in-shell style						
	Cooling Flow	m <sup>3</sup> /hr	29.5	35.2	45.5	49.8	58.8	64.2
	Pressure Loss	kPa	20	20	30	30	30	30
	Pipe Outlet		Φ3"Clamp	Φ3"Clamp	Φ3"Clamp	Φ4"Clamp	Φ4"Clamp	Φ4"Clamp
Unit Dimensions	A	mm	2500	2500	2850	2900	3100	2900
		inch	98.4	98.4	112.2	114.2	122	114.2
	B	mm	750	750	800	1150	1150	1200
		inch	29.5	29.5	31.3	45.3	45.3	47.2
	C	mm	1500	1600	1650	1300	1300	1300
		inch	59	63	65	51.2	51.2	51.2
Installing Dimensions	D	mm	-	-	-	2190	2390	2190
		inch	-	-	-	86.2	94.1	86.2
	E	mm	2100	2100	2400	2350	2550	2350
		inch	82.7	82.7	94.5	92.5	100.4	92.5
	F	mm	650	650	650	670	670	670
		inch	25.6	25.6	25.6	26.4	26.4	26.4
Net Weight	kg	1250	1300	1500	1600	1800	1850	
	lb	2756	2866	3307	3527	3968	4079	
Operating Weight	kg	1350	1400	1600	1700	1900	2000	
	lb	2976	3086	3527	3748	4189	4409	
Measures Exchange		1 kW = 860 kcal/hr		1 RT = 3,024 kcal/hr		10,000 Btu/hr = 2,520 kcal/hr		

Notes: 1) Parameter test condition: chilled water flow 0.172m<sup>3</sup>/(h·kW); chilled water outlet temperature 7°C/44.6°F; cooling water inlet temperature 30°C/86°F; cooling water flow 0.215m<sup>3</sup>/(h·kW).

2) Machine operation conditions: outlet chilling water temperature is at 5~15°C(41~59°F), inlet chilling water temperature is at 19~33°C(66.2~91.4°F). For special requirements, the machine can be customized.

3) The noise level is tested at 1m/40" in front of and 1.5m/59" above the machine.

4) As per application needs, stepless compressor output capacity adjusting function can be optionally available.

5) Please inform the special requirements to us before giving an order.

6) "D" stands for double compressor.

We reserve the right to change specifications without prior notice.

# SICC-W Series

## Specifications (Single Compressor R134a)

Model		SICC-340WS	SICC-404WS	SICC-460WS	SICC-508WS	SICC-565WS	SICC-632WS	
Refrigeration Capacity	kW	340	404	460	508	565	632	
	kcal/hr	292,400	347,698	395,772	436,536	485,900	543,864	
Power Source	—	3 $\phi$ 380V 50Hz						
Power Consumption	kW	70.5	80.4	91.2	100.4	111.3	123.8	
Operation Current	A	126	144	163	179	199	221	
Start-up Current	A	287	436	465	586	650	805	
Power Adjustment	—	4-Step capacity control			8-Step capacity control			
Refrigeration Oil Filling Quantity	L	21	21	25	25	25	25	
	gal	5.5	5.5	6.6	6.6	6.6	6.6	
Refrigerant Filling Quantity	kg	51	61	66	76	81	91	
	lb	112	134	148	167	180	200	
Evaporator	Type	Tube-in-shell style						
	Process Flow	m <sup>3</sup> /hr	58.5	69.5	79.2	87.3	97.2	108.8
	Pressure Loss	kPa	60	63	63	64	64	65
	Pipe Coupler		$\Phi$ 4"Clamp	$\Phi$ 4"Clamp	ND125	ND125	ND125	ND150
Condenser	Type	Tube-in-shell style						
	Cooling Flow	m <sup>3</sup> /hr	73.1	86.9	98.9	109.1	121.5	136
	Pressure Loss	kPa	38	45	45	45	45	45
	Pipe Outlet		$\Phi$ 4"Clamp	$\Phi$ 4"Clamp	ND125	ND125	ND125	ND150
Unit Dimensions	A	mm	3300	3300	3500	3500	3500	3450
		inch	129.9	129.9	137.8	137.8	137.8	135.8
	B	mm	1200	1200	1300	1300	1350	1350
		inch	47.2	47.2	51.2	51.2	53.1	53.1
	C	mm	1450	1450	1550	1550	1550	1650
		inch	57	57	61	61	61	65
Installing Dimensions	D	mm	2620	2620	2620	2620	2620	2620
		inch	103.1	103.1	103.1	103.1	103.1	103.1
	E	mm	2780	2780	2780	2780	2780	2780
		inch	109.4	109.4	109.4	109.4	109.4	109.4
	F	mm	670	670	750	870	870	920
		inch	26.4	26.4	29.5	34.2	34.2	36.2
Net Weight	kg	2050	2200	2600	2700	2850	3050	
	lb	4519	4850	5732	5952	6283	6724	
Operating Weight	kg	2200	2350	2750	2900	3050	3300	
	lb	4850	5180	6062	6393	6724	7275	
Measures Exchange		1 kW = 860 kcal/hr		1 RT = 3,024 kcal/hr		10,000 Btu/hr = 2,520 kcal/hr		

Notes: 1) Parameter test condition: chilled water flow 0.172m<sup>3</sup>/(h.kW); chilled water outlet temperature 7°C/44.6°F; cooling water inlet temperature 30°C/86°F; cooling water flow 0.215m<sup>3</sup>/(h.kW).

2) Machine operation conditions: outlet chilling water temperature is at 5~15°C(41~59°F), inlet chilling water temperature is at 19~33°C(66.2~91.4°F). For special requirements, the machine can be customized.

3) The noise level is tested at 1m/40" in front of and 1.5m/59" above the machine.

4) As per application needs, stepless compressor output capacity adjusting function can be optionally available.

5) Please inform the special requirements to us before giving an order.

6) "S" stands for Single compressor.

We reserve the right to change specifications without prior notice.



## ■ Specifications (Double Compressor R134a)

Model		SICC-258WD	SICC-328WD	SICC-386WD	SICC-423WD	SICC-463WD	SICC-547WD	SICC-597WD	
Refrigeration Capacity	kW	258	328	386	423	463	547	597	
	kcal/hr	221,880	281,908	332,304	364,124	398,352	470,764	513,420	
Power Source	—	3Φ 380V 50Hz							
Power Consumption	kW	58	67.8	79.2	86.6	100.6	114.4	120.8	
Operation Current	A	104	121	142	155	180	204	216	
Start-up Current	A	198	224	248	306	290	337	395	
Power Adjustment	—	8-Step capacity control							
Refrigeration Oil Filling Quantity	L	26	26	26	34	34	34	34	
	gal	6.9	6.9	6.9	9.0	9.0	9.0	9.0	
Refrigerant Filling Quantity	kg	41	51	56	61	71	81	91	
	lb	90	112	123	134	156	179	201	
Evaporator	Type	Tube-in-shell style							
	Process Flow	m <sup>3</sup> /hr	44.4	56.4	66.5	72.8	79.7	94.2	102.7
	Pressure Loss	kPa	58	60	63	63	63	65	66
	Pipe Coupler		Φ4"Clamp	Φ4"Clamp	Φ4"Clamp	Φ4"Clamp	DN125	DN125	DN150
Condenser	Type	Tube-in-shell style							
	Cooling Flow	m <sup>3</sup> /hr	55.5	70.5	83.1	91.0	99.6	117.7	128.4
	Pressure Loss	kPa	40	40	40	40	40	40	57
	Pipe Outlet		Φ4"Clamp	Φ4"Clamp	Φ4"Clamp	Φ4"Clamp	DN125	DN125	DN150
Unit Dimensions	A	mm	3400	3200	3550	3600	3700	3700	4000
		inch	133.9	126	139.8	141.7	145.7	145.7	157.5
	B	mm	1050	1100	1100	1100	1250	1300	1300
		inch	41.3	43.3	43.3	43.3	49.2	51.2	51.2
	C	mm	1650	1750	1750	1800	1500	1650	1650
		inch	65	68.9	68.9	70.9	59.0	65	65
Installing Dimensions	D	mm	-	-	-	-	2620	2620	2920
		inch	-	-	-	-	103	103	115
	E	mm	2700	2500	2830	2830	2780	2780	3080
		inch	106.3	98.4	111.4	111.4	109.4	109.4	121.3
	F	mm	650	650	650	650	750	870	870
		inch	25.6	25.6	25.6	25.6	29.5	34.3	34.3
Net Weight	kg	2200	2350	2450	2900	3050	3200	3450	
	lb	4850	5181	5401	6393	6724	7055	7606	
Operating Weight	kg	2300	2450	2550	3050	3200	3400	3650	
	lb	5070	5401	5621	6724	7055	7496	8047	
Measures Exchange		1 kW = 860 kcal/hr		1 RT = 3,024 kcal/hr		10,000 Btu/hr = 2,520 kcal/hr			

Notes: 1) Parameter test condition: chilled water flow 0.172m<sup>3</sup>/(h·kW); chilled water outlet temperature 7°C/44.6°F; cooling water inlet temperature 30°C/86°F; cooling water flow 0.215m<sup>3</sup>/(h·kW).

2) Machine operation conditions: outlet chilling water temperature is at 5~15°C(41~59°F), inlet chilling water temperature is at 19~33°C(66.2~91.4°F). For special requirements, the machine can be customized.

3) The noise level is tested at 1m/40" in front of and 1.5m/59" above the machine.

4) As per application needs, stepless compressor output capacity adjusting function can be optionally available.

5) Please inform the special requirements to us before giving an order.

6) "D" stands for double compressor.

We reserve the right to change specifications without prior notice.

# SICC-W Series

## Specifications (Double Compressors R134a)

Model		SICC-680WD	SICC-759WD	SICC-809WD	SICC-920WD	SICC-1015WD	SICC-1130WD	SICC-1265WD	
Refrigeration Capacity	kW	680	759	809	920	1015	1130	1265	
	kcal/hr	584,800	652,396	695,396	791,544	873,072	971,800	1,087,728	
Power Source	—								
Power Consumption	kW	141.0	152.8	160.8	182.4	200.8	222.6	247.6	
Operation Current	A	252	273	287	326	359	398	443	
Start-up Current	A	413	478	580	628	765	849	1,026	
Power Adjustment	—	8-Step capacity control							
Refrigeration Oil Filling Quantity	L	42	42	42	50	50	50	50	
	gal	11	11	11	13.2	13.2	13.2	13.2	
Refrigerant Filling Quantity	kg	101	111	121	136	151	166	176	
	lb	223	246	268	301	334	367	389	
Evaporator	Type	Tube-in-shell style							
	Process Flow	m <sup>3</sup> /hr	117.0	130.5	139.1	158.3	174.6	194.4	217.5
	Pressure Loss	kPa	66	66	68	68	76	76	78
	Pipe Coupler		DN150	DN150	DN150	DN150	DN200	DN200	DN200
Condenser	Type	Tube-in-shell style							
	Cooling Flow	m <sup>3</sup> /hr	146.2	163.1	173.8	197.9	218.3	243.0	271.9
	Pressure Loss	kPa	57	57	57	57	64	64	64
	Pipe Outlet		DN150	DN150	DN150	DN150	DN200	DN200	DN200
Unit Dimensions	A	mm	4200	4200	4200	4600	4700	4700	4700
		inch	165.4	165.4	165.4	181.1	185.0	185.0	185.0
	B	mm	1350	1350	1400	1450	1450	1550	1600
		inch	53.1	53.1	55.1	57.1	57.1	61	63
	C	mm	1650	1650	1650	1750	1750	1700	1850
		inch	65	65	65	68.9	68.9	66.9	72.8
Installing Dimensions	D	mm	2920	2920	2920	2920	3190	3190	3190
		inch	115	115	115	115	125.6	125.6	125.6
	E	mm	3080	3080	3080	3080	3350	3350	3350
		inch	121.3	121.3	121.3	121.3	131.9	131.9	131.9
	F	mm	920	920	980	1030	1030	1070	1130
		inch	36.2	36.2	38.6	40.6	40.6	42.1	44.5
Net Weight	kg	3750	3800	4100	4750	4900	5050	5400	
	lb	8267	8378	9039	10,472	10,802	11,133	11,905	
Operating Weight	kg	3950	4000	4300	4950	5100	5250	5600	
	lb	8708	8818	9480	10,913	11,244	11,574	12,345	
Measures Exchange		1 kW = 860 kcal/hr		1 RT = 3,024 kcal/hr		10,000 Btu/hr = 2,520 kcal/hr			

Notes: 1) Parameter test condition: chilled water flow 0.172m<sup>3</sup>/(h·kW); chilled water outlet temperature 7°C/44.6°F; cooling water inlet temperature 30°C/86°F; cooling water flow 0.215m<sup>3</sup>/(h·kW).

2) Machine operation conditions: outlet chilling water temperature is at 5~15°C(41~59°F), inlet chilling water temperature is at 19~33°C(66.2~91.4°F). For special requirements, the machine can be customized.

3) The noise level is tested at 1m/40" in front of and 1.5m/59" above the machine.

4) As per application needs, stepless compressor output capacity adjusting function can be optionally available.

5) Please inform the special requirements to us before giving an order.

6) "D" stands for double compressor.

We reserve the right to change specifications without prior notice.

## Shini Group

Addr: No. 23, Minhe St., Shulin Dist.,  
New Taipei, Taiwan

Tel: +886 2 2680 9119

Fax: +886 2 2680 9229

Email: [shini@shini.com](mailto:shini@shini.com)

### Factories:

- Taiwan
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