



## Water-cooled Central Water Chiller

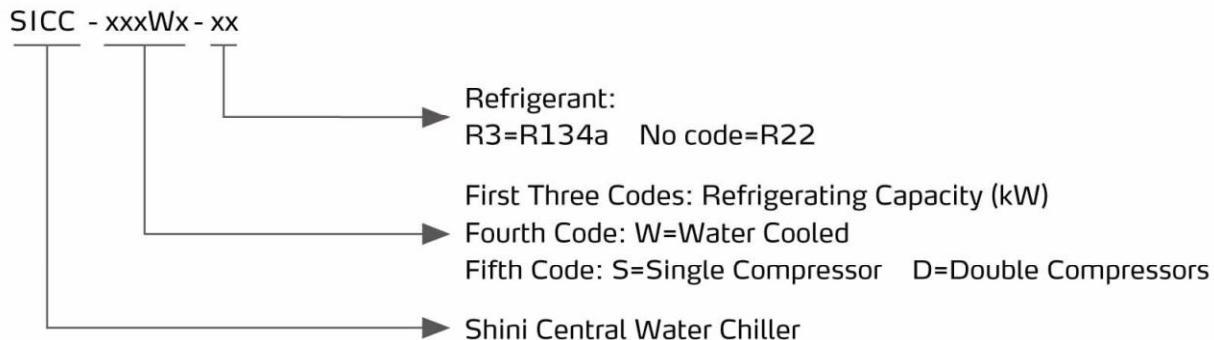
SICC-725WD-R3



Refer carefully to this manual before operation.

# SICC-W Series

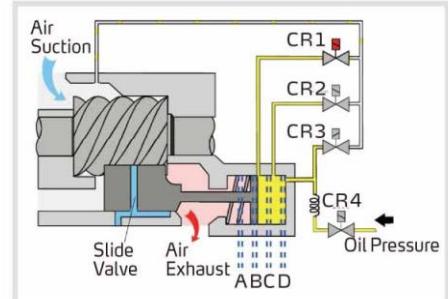
## ■ Coding Principle



## ■ 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.



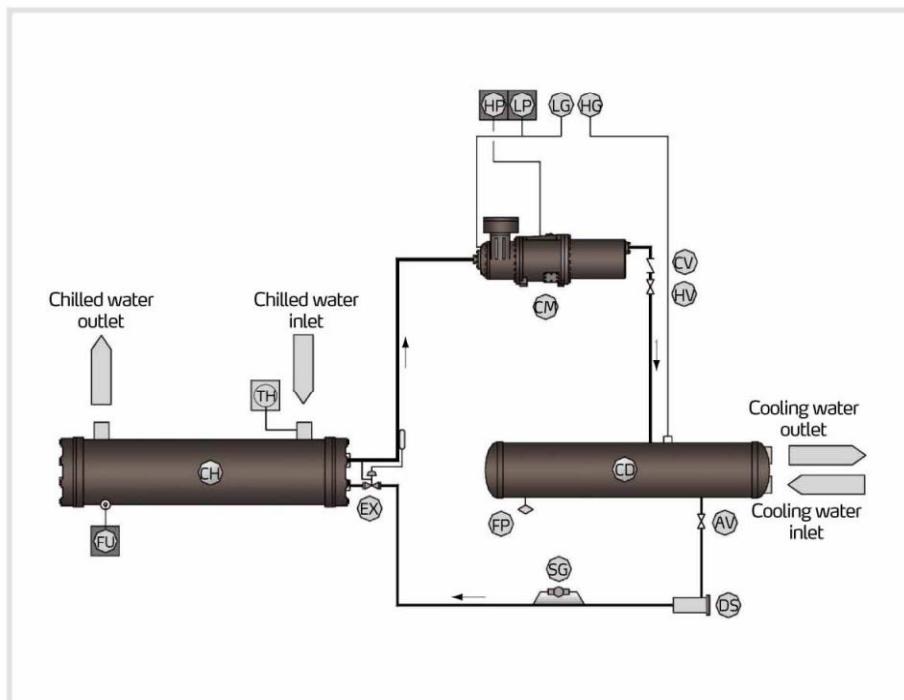
Stepless Adjustment Function

## ■ 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.

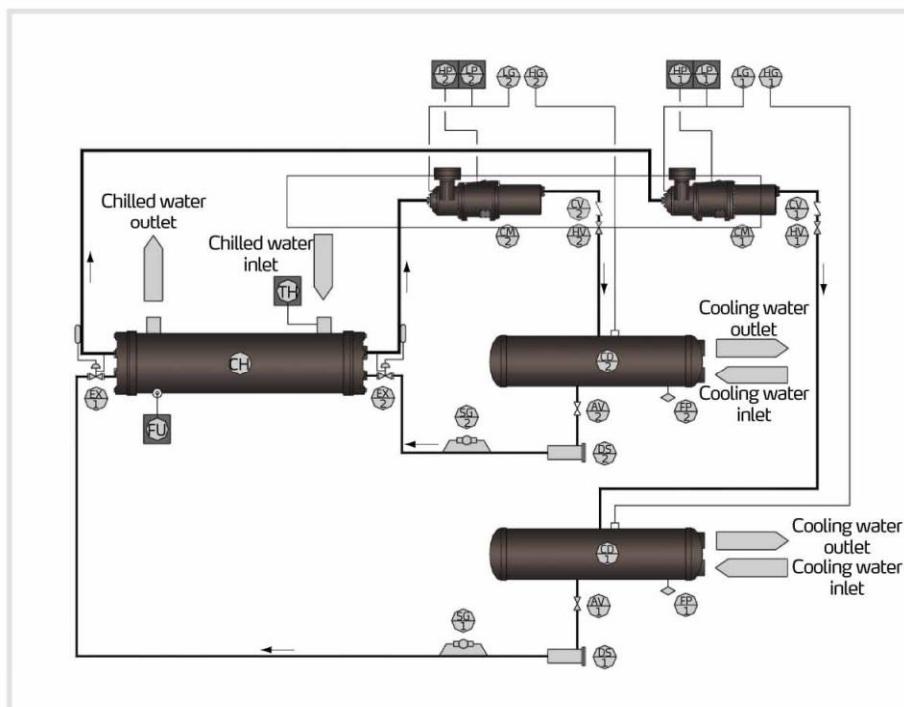
## ■ Working Principle

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

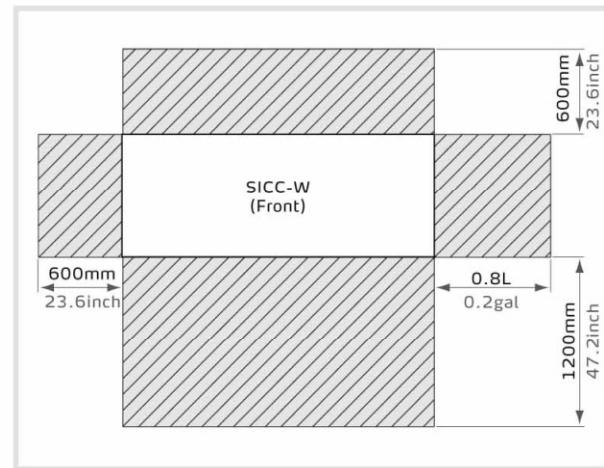
Two Compressors

# SICC-W Series

## ■ Fundation and Installation

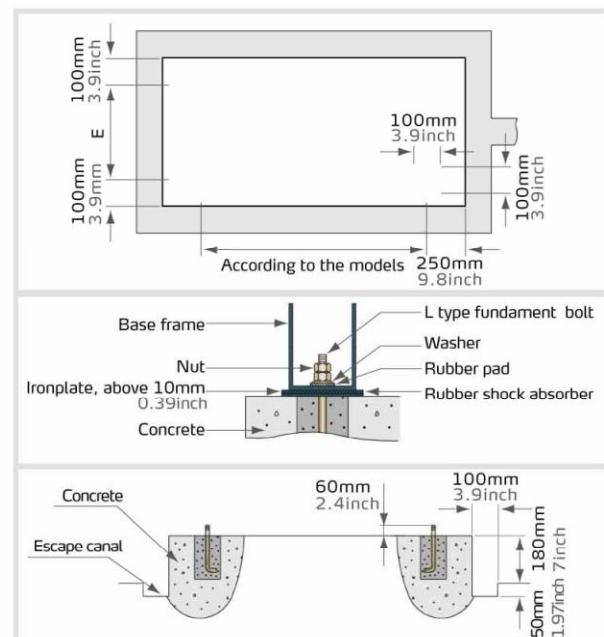
### Selection of Installation Environment

- 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.

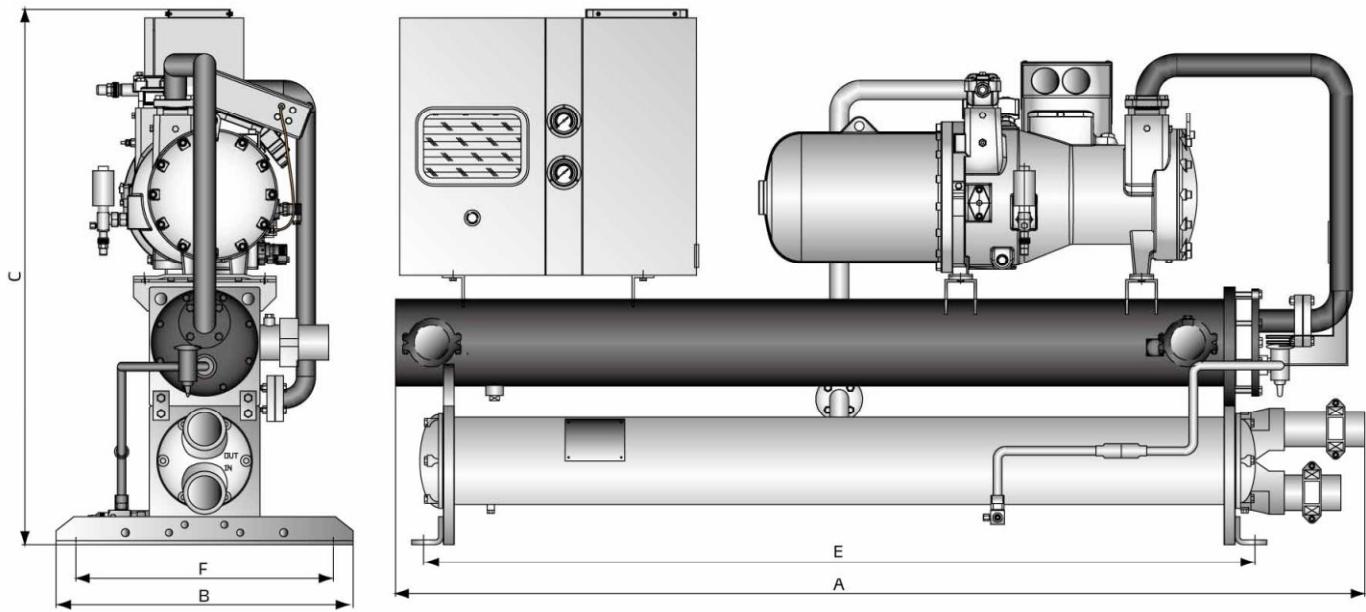


### Foundation Base

- 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.



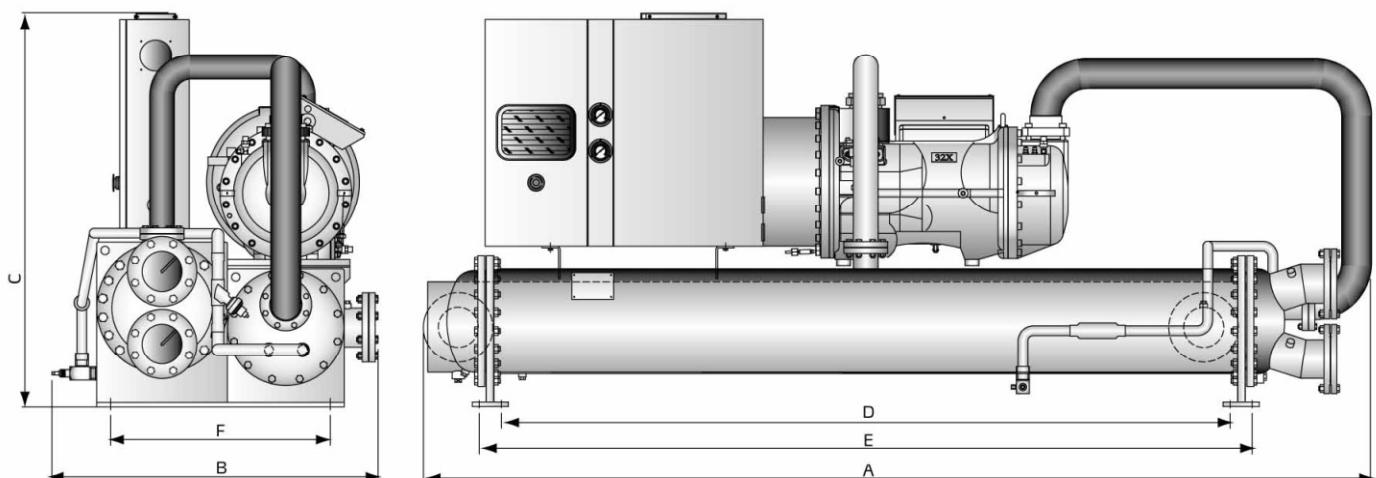
## ■ Outline Drawings



SICC-137WS~SICC-197WS

&

SICC-137WS-R3~SICC-212WS-R3



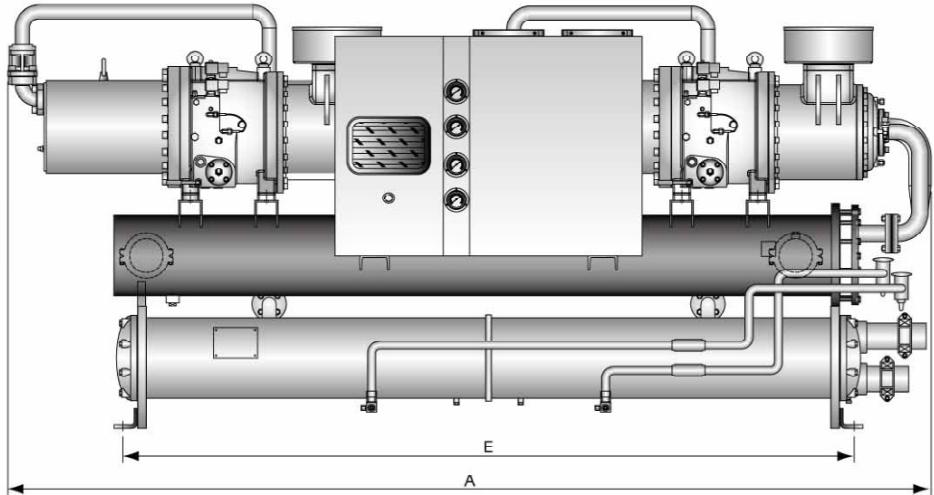
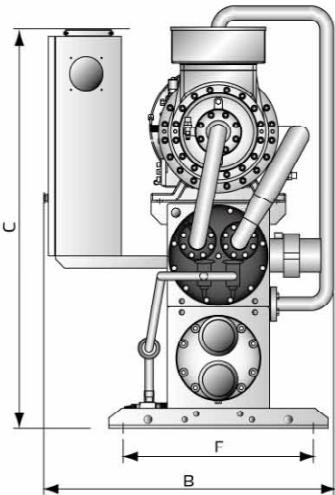
SICC-251WS~SICC-956WS

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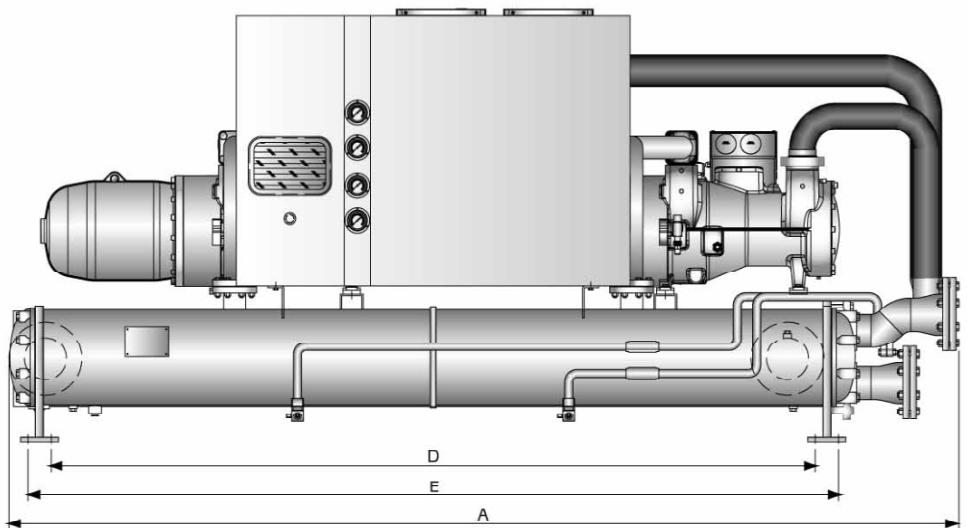
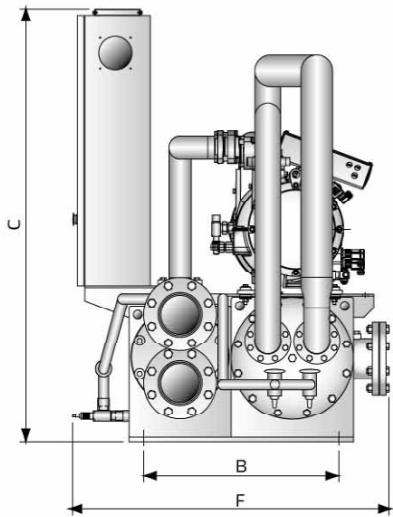
SICC-250WS-R3~SICC-632WS-R3

# 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 Item		SICC-126WS	SICC-157WS	SICC-186WS	SICC-259WS	SICC-319WS
Refrigeration Capacity	kW	137	157	186	259	319
	kcal/hr	108,541	135,020	159,688	222,740	274,529
Power Source	—		3Φ 380V 50Hz			
Power Consumption	kW	30.5	35.4	45.8	59.6	68
Operation Current	A	55	63	82	107	122
Start-up Current	A	218	269	290	423	516
Power Adjustment	—		4-Step capacity control			
Refrigeration Oil	Filling Quantity	L	11	11	13	17
		gal	2.9	2.9	3.4	4.5
Refrigerant Filling Quantity	Type	—		KL320SH		
	kg	20	26	31	36	46
	lb	44	57	68	79	101
	Type	—	U type tube-in-shell style			
Evaporator	Process Flow	m³/hr	21.7	27	31.9	44.5
	Pressure Loss	kPa	46	48	48	52
	Pipe Coupler	Φ3"Clamp	Φ3"Clamp	Φ3"Clamp	Φ4"Clamp	Φ4"Clamp
Condenser	Type	—	Tube-in-shell style			
	Cooling Flow	m³/hr	27.1	33.8	42.3	54.1
	Pressure Loss	kPa	20	20	30	30
	Pipe Outlet	Φ3"Clamp	Φ3"Clamp	Φ3"Clamp	Φ4"Clamp	Φ4"Clamp
Unit Dimensions	A	mm	2500	2600	2850	3000
		inch	98.4	102.4	112.2	118.1
	B	mm	750	750	750	1100
		inch	29.5	29.5	29.5	43.3
	C	mm	1450	1500	1500	1260
		inch	57	59	59	49.6
Installing Dimensions	D	mm	-	-	-	2390
		inch	-	-	-	94
	E	mm	2100	2100	2400	2550
		inch	82.7	82.7	94.4	100.4
	F	mm	650	650	650	600
		inch	25.6	25.6	25.6	23.6
Net Weight	kg	1170	1220	1370	1480	1770
	lb	2579	2690	3020	3263	3902
Operating Weight	kg	1270	1370	1420	1630	1970
	lb	2800	3020	3130	3594	4343
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  $0.172\text{m}^3/(\text{h}\cdot\text{kW})$ ; chilled water outlet temperature  $7^\circ\text{C}/44.6^\circ\text{F}$ ; cooling water inlet temperature  $30^\circ\text{C}/86^\circ\text{F}$ ; cooling water flow  $0.215\text{m}^3/(\text{h}\cdot\text{kW})$ .

We reserve the right to change specifications without prior notice.

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

3) The noise level is tested at  $1\text{m}/40"$  in front of and  $1.5\text{m}/59"$  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.

# SICC-W Series

## ■ Specifications (Single Compressor R22)

Item \ Model	SICC-353WS	SICC-413WS	SICC-538WS	SICC-611WS	SICC-767WS	
Refrigeration Capacity	kW kcal/hr	353 373,580	413 355,180	538 462,594	611 525,056	767 659,680
Power Source	—					
Power Consumption	kW	81.3	100.3	120.9	125.9	156.7
Operation Current	A	145	179	216	225	280
Start-up Current	A	562	579	757	586	805
Power Adjustment	—		4-Step capacity control			
Refrigeration Oil	Filling Quantity	L gal	17 4.5	17 4.5	21 5.5	21 5.5
	Type	—		KL320SH		
	Refrigerant Filling Quantity	kg lb	56 123	61 134	76 167	91 200
Evaporator	Type	—		U type tube-in-shell style		Tube-in-shell style
	Process Flow	m³/hr	60.7	71.0	92.5	105.0
	Pressure Loss	kPa	60	63	63	66
	Pipe Coupler	Φ4"Clamp	Φ4"Clamp	DN125	DN150	DN150
Condenser	Type	—		Tube-in-shell style		
	Cooling Flow	m³/hr	75.9	88.8	115.6	131.3
	Pressure Loss	kPa	38	45	45	45
	Pipe Outlet	Φ4"Clamp	Φ4"Clamp	DN125	DN150	DN150
Unit Dimensions	A	mm inch	3450 135.8	3350 131.9	3450 135.8	3400 133.9
	B	mm inch	1150 45.3	1250 49.2	1250 49.2	1350 53.1
	C	mm inch	1450 57	1450 57	1500 59	1650 65
	D	mm inch	2620 103.1	2620 103.1	2620 103.1	2620 103.1
	E	mm inch	2780 109.4	2780 109.4	2780 109.4	2780 109.4
	F	mm inch	600 23.6	670 26.4	790 31.1	870 34.3
Net Weight	kg	1850	1900	2350	2600	3130
	lb	4079	4189	5181	5732	6900
Operating Weight	kg	2050	2150	2650	2900	3480
	lb	4519	4740	5842	6393	7672
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  $0.172\text{m}^3/(\text{h}\cdot\text{kW})$ ; chilled water outlet temperature  $7^\circ\text{C}/44.6^\circ\text{F}$ ; cooling water inlet temperature  $30^\circ\text{C}/86^\circ\text{F}$ ; cooling water flow  $0.215\text{m}^3/(\text{h}\cdot\text{kW})$ .

We reserve the right to change specifications without prior notice.

- 2) Machine operation conditions: outlet chilling water temperature is at  $5\sim15^\circ\text{C}(41\sim59^\circ\text{F})$ , inlet chilling water temperature is at  $19\sim33^\circ\text{C}(66.2\sim91.4^\circ\text{F})$ . For special requirements, the machine can be customized.
- 3) The noise level is tested at  $1\text{m}/40"$  in front of and  $1.5\text{m}/59"$  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.



## ■ Specifications (Double Compressor R22)

Model		SICC-252WD	SICC-314WD	SICC-371WD	SICC-518WD	SICC-638WD
Item						
Refrigeration Capacity	kW	252	314	371	518	638
	kcal/hr	217,082	270,040	319,377	445,480	549,058
Power Source	—		3Φ 380V 50Hz			
Power Consumption	kW	61.1	70.8	91.6	119.2	136.0
Operation Current	A	109	126	164	213	243
Start-up Current	A	273	332	372	530	638
Power Adjustment	—		8-Step capacity control			
Refrigeration Oil	Filling Quantity	L	22	22	26	34
		gal	5.8	5.8	6.9	9.0
Evaporator	Type	—		KL320SH		
	Process Flow	m³/hr	43.4	54.0	63.9	89.1
	Pressure Loss	kPa	58	60	63	66
	Pipe Coupler	Φ4"Clamp	Φ4"Clamp	Φ4"Clamp	DN125	DN150
Condenser	Type	—		Tube-in-shell style		
	Cooling Flow	m³/hr	54.3	67.5	79.8	111.4
	Pressure Loss	kPa	40	40	40	57
	Pipe Outlet	Φ4"Clamp	Φ4"Clamp	Φ4"Clamp	DN125	DN150
Unit Dimensions	A	mm	3100	3180	3250	3300
		inch	122	125.2	128.0	129.9
	B	mm	1050	1050	1050	1150
		inch	41.3	41.3	41.3	45.3
Installing Dimensions	C	mm	1600	1700	1850	1550
		inch	63.0	66.9	72.8	61.0
	D	mm	-	-	-	2620
		inch	-	-	-	103.1
Net Weight	E	mm	2500	2700	2830	2780
		inch	98.4	106.3	111.4	109.4
	F	mm	650	650	650	670
		inch	25.6	25.6	25.6	26.4
Operating Weight	kg	1880	2010	2300	2610	3300
	lb	4145	4431	5070	5754	7275
Measures Exchange	kg	2030	2210	2550	2910	3600
	lb	4475	4872	5622	6415	7937
		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  $0.172\text{m}^3/(\text{h}\cdot\text{kW})$ ; chilled water outlet temperature  $7^\circ\text{C}/44.6^\circ\text{F}$ ; cooling water inlet temperature  $30^\circ\text{C}/86^\circ\text{F}$ ; cooling water flow  $0.215\text{m}^3/(\text{h}\cdot\text{kW})$ .

We reserve the right to change specifications without prior notice.

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

3) The noise level is tested at  $1\text{m}/40"$  in front of and  $1.5\text{m}/59"$  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.

# SICC-W Series

## ■ Specifications (Double Compressor R22)

Item \ Model	SICC-706WD	SICC-826WD	SICC-1076WD	SICC-1391WD	SICC-1534WD		
Refrigeration Capacity	kW kcal/hr	706 607,160	826 710,360	1076 935,188	1391 1,196,105	1534 1,319,360	
Power Source	—		3Φ 380V 50Hz				
Power Consumption	kW	162.6	200.6	241.8	285.2	313.3	
Operation Current	A	291	359	432	510	560	
Start-up Current	A	707	758	973	892	1085	
Power Adjustment	—		8-Step capacity control				
Refrigeration Oil	Filling Quantity Type	L gal	34 9.0	34 9.0	42 11	50 13.2	50 13.2
					KL320SH		
Refrigerant Filling Quantity	kg lb	111 246	121 268	151 334	200 441	226 499	
Evaporator	Type	—	Tube-in-shell style	Tube-in-shell style			
	Process Flow	m³/hr	121.4	142.1	185.0	239.2	263.9
	Pressure Loss	kPa	66	66	80	90	90
	Pipe Coupler		DN150	DN150	DN200	DN200	DN200
Condenser	Type	—		Tube-in-shell style			
	Cooling Flow	m³/hr	151.8	177.6	231.3	299.0	329.8
	Pressure Loss	kPa	57	57	64	62	62
	Pipe Outlet		DN150	DN150	DN200	DN200	DN200
Unit Dimensions	A	mm inch	3950 155.5	4000 157.5	4300 169.3	4650 183.	4800 189
	B	mm inch	1350 53.1	1450 57.0	1500 59	1600 63	1700 66.9
	C	mm inch	1650 65.0	1650 65.0	1700 66.9	1900 74.8	2050 80.7
	D	mm inch	2920 115	2920 115	3190 125.6	3170 124.8	3170 124.8
Installing Dimensions	E	mm inch	3080 121.3	3080 121.3	3350 131.9	3370 132.7	3370 132.7
	F	mm inch	920 36.2	980 38.6	1030 40.6	1130 44.5	1220 48
Net Weight	kg lb	3700 8157	3880 8554	4350 9590	5500 12,125	5650 12,456	
Operating Weight	kg lb	4200 9259	4380 9656	4900 10,803	6300 13,889	6450 14,220	
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  $0.172\text{m}^3/(\text{h}\cdot\text{kW})$ ; chilled water outlet temperature  $7^\circ\text{C}/44.6^\circ\text{F}$ ; cooling water inlet temperature  $30^\circ\text{C}/86^\circ\text{F}$ ; cooling water flow  $0.215\text{m}^3/(\text{h}\cdot\text{kW})$ .

We reserve the right to change specifications without prior notice.

- 2) Machine operation conditions: outlet chilling water temperature is at  $5\sim15^\circ\text{C}(41\sim59^\circ\text{F})$ , inlet chilling water temperature is at  $19\sim33^\circ\text{C}(66.2\sim91.4^\circ\text{F})$ . For special requirements, the machine can be customized.
- 3) The noise level is tested at  $1\text{m}/40''$  in front of and  $1.5\text{m}/59''$  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.



## ■ Specifications (Single Compressor R134a)

Item \ Model	SICC-137WS	SICC-164WS	SICC-212WS	SICC-232WS	SICC-274WS	SICC-340WS	SICC-404WS	SICC-460WS		
Refrigeration Capacity	kW	137	164	212	232	274	340	404	460	
	kcal/hr	117,820	140,954	182,062	199,176	235,382	292,400	347,698	395,772	
Power Source	—				3Φ 380V 50Hz					
Power Consumption	kW	29.2	33.9	43.3	50.3	57.2	70.5	80.4	91.2	
Operation Current	A	52	61	77	90	102	126	144	163	
Start-up Current	A	146	163	229	200	235	287	436	465	
Power Adjustment	—				4-Step capacity control					
Refrigeration Oil	Filling Quantity	L	13	13	17	17	21	21	25	
		gal	3.4	3.4	4.5	4.5	5.5	5.5	6.6	
Type	—				KL170-L					
Refrigerant Filling Quantity	kg	20	25	31	36	41	51	61	66	
	lb	44	55	68	79	90	112	134	148	
Evaporator	Type	—			Tube-in-shell style					
	Process Flow	m³/hr	23.6	28.2	36.4	39.8	47.1	58.5	69.5	79.2
	Pressure Loss	kPa	46	48	52	52	52	60	63	63
	Pipe Coupler	Φ3"Clamp	Φ3"Clamp	Φ3"Clamp	Φ4"Clamp	Φ4"Clamp	Φ4"Clamp		ND125	
Condenser	Type	—			Tube-in-shell style					
	Cooling Flow	m³/hr	29.5	35.2	45.5	49.8	58.8	73.1	86.9	98.9
	Pressure Loss	kPa	20	20	30	30	30	38	45	45
	Pipe Outlet	Φ3"Clamp	Φ3"Clamp	Φ3"Clamp	Φ4"Clamp	Φ4"Clamp	Φ4"Clamp		ND125	
Unit Dimensions	A	mm	2500	2500	2850	2900	3100	3300	3300	3500
		inch	98.4	98.4	112.2	114.2	122	129.9	129.9	137.8
	B	mm	750	750	800	1150	1150	1200	1200	1300
		inch	29.5	29.5	31.3	45.3	45.3	47.2	47.2	51.2
Installing Dimensions	C	mm	1500	1600	1650	1300	1300	1450	1450	1550
		inch	59	63	65	51.2	51.2	57	57	61
	D	mm	-	-	-	2190	2390	2620	2620	2620
		inch	-	-	-	86.2	94.1	103.1	103.1	103.1
F	E	mm	2100	2100	2400	2350	2550	2780	2780	2780
		inch	82.7	82.7	94.5	92.5	100.4	109.4	109.4	109.4
	F	mm	650	650	650	670	670	670	670	750
		inch	25.6	25.6	25.6	26.4	26.4	26.4	26.4	29.5
Net Weight	kg	1250	1300	1500	1600	1800	2050	2200	2600	
	lb	2756	2866	3307	3527	3968	4519	4850	5732	
Operating Weight	kg	1350	1400	1600	1700	1900	2200	2350	2750	
	lb	2976	3086	3527	3748	4189	4850	5180	6062	
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  $0.172\text{m}^3/(\text{h}\cdot\text{kW})$ ; chilled water outlet temperature  $7^\circ\text{C}/44.6^\circ\text{F}$ ; cooling water inlet temperature  $30^\circ\text{C}/86^\circ\text{F}$ ; cooling water flow  $0.215\text{m}^3/(\text{h}\cdot\text{kW})$ .

We reserve the right to change specifications without prior notice.

- 2) Machine operation conditions: outlet chilling water temperature is at  $5\text{--}15^\circ\text{C}(41\text{--}59^\circ\text{F})$ , inlet chilling water temperature is at  $19\text{--}33^\circ\text{C}(66.2\text{--}91.4^\circ\text{F})$ . For special requirements, the machine can be customized.
- 3) The noise level is tested at  $1\text{m}/40"$  in front of and  $1.5\text{m}/59"$  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.

# SICC-W Series

## ■ Specifications (Double Compressor R134a)

Item	Model	SICC-258WD	SICC-328WD	SICC-386WD	SICC-423WD
Refrigeration Capacity	kW	258	328	386	423
	kcal/hr	221,880	281,908	332,304	364,124
Power Source	—		3Φ 380V 50Hz		
Power Consumption	kW	58	67.8	79.2	86.6
Operation Current	A	104	121	142	155
Start-up Current	A	198	224	248	306
Power Adjustment	—		8-Step capacity control		
Refrigeration Oil	Filling Quantity L	26	26	26	34
	gal	6.9	6.9	6.9	9.0
Refrigerant Type	—				KL170-L
	kg	41	51	56	61
Refrigerant Filling Quantity	lb	90	112	123	134
Evaporator	Type	—	Tube-in-shell style		
	Process Flow m³/hr	44.4	56.4	66.5	72.8
	Pressure Loss kPa	58	60	63	63
	Pipe Coupler	Φ4"Clamp	Φ4"Clamp	Φ4"Clamp	Φ4"Clamp
Condenser	Type	—	Tube-in-shell style		
	Cooling Flow m³/hr	55.5	70.5	83.1	91.0
	Pressure Loss kPa	40	40	40	40
	Pipe Outlet	Φ4"Clamp	Φ4"Clamp	Φ4"Clamp	Φ4"Clamp
Unit Dimensions	A mm	3400	3200	3550	3600
	inch	133.9	126	139.8	141.7
	B mm	1050	1100	1100	1100
	inch	41.3	43.3	43.3	43.3
Installing Dimensions	C mm	1650	1750	1750	1800
	inch	65	68.9	68.9	70.9
	D mm	-	-	-	-
	inch	-	-	-	-
E	mm	2700	2500	2830	2830
	inch	106.3	98.4	111.4	111.4
F	mm	650	650	650	650
	inch	25.6	25.6	25.6	25.6
Net Weight	kg	2200	2350	2450	2900
	lb	4850	5181	5401	6393
Operating Weight	kg	2300	2450	2550	3050
	lb	5070	5401	5621	6724
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  $0.172\text{m}^3/(\text{h}\cdot\text{kW})$ ; chilled water outlet temperature  $7^\circ\text{C}/44.6^\circ\text{F}$ ; cooling water inlet temperature  $30^\circ\text{C}/86^\circ\text{F}$ ; cooling water flow  $0.215\text{m}^3/(\text{h}\cdot\text{kW})$ .

We reserve the right to change specifications without prior notice.

- 2) Machine operation conditions: outlet chilling water temperature is at  $5\text{--}15^\circ\text{C}(41\text{--}59^\circ\text{F})$ , inlet chilling water temperature is at  $19\text{--}33^\circ\text{C}(66.2\text{--}91.4^\circ\text{F})$ . For special requirements, the machine can be customized.
- 3) The noise level is tested at  $1\text{m}/40"$  in front of and  $1.5\text{m}/59"$  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.



## ■ Specifications (Double Compressors R134a)

Model		SICC-597WD	SICC-680WD	SICC-920WD	SICC-1130WD
Item					
Refrigeration Capacity	kW	597	680	920	1130
	kcal/hr	513,420	584,800	791,544	971,800
Power Source	—		3Φ 380V 50Hz		
Power Consumption	kW	120.8	141.0	182.4	222.6
Operation Current	A	216	252	326	398
Start-up Current	A	395	413	628	849
Power Adjustment	—		8-Step capacity control		
Refrigeration Oil	Filling Quantity L	34	42	50	50
	gal	9.0	11	13.2	13.2
Refrigerant Filling Quantity	Type	—		KL170-L	
	kg	91	101	136	166
	lb	201	223	301	367
	Type	—	Tube-in-shell style		
Evaporator	Process Flow m³/hr	102.7	117.0	158.3	194.4
	Pressure Loss kPa	66	66	68	76
	Pipe Coupler	DN150	DN150	DN150	DN200
	Type	—	Tube-in-shell style		
Condenser	Cooling Flow m³/hr	128.4	146.2	197.9	243.0
	Pressure Loss kPa	57	57	57	64
	Pipe Outlet	DN150	DN150	DN150	DN200
	A mm	4000	4200	4600	4700
Unit Dimensions	A inch	157.5	165.4	181.1	185.0
	B mm	1300	1350	1450	1550
	B inch	51.2	53.1	57.1	61
	C mm	1650	1650	1750	1700
Installing Dimensions	C inch	65	65	68.9	66.9
	D mm	2920	2920	2920	3190
	D inch	115	115	115	125.6
	E mm	3080	3080	3080	3350
Net Weight	E inch	121.3	121.3	121.3	131.9
	F mm	870	920	1030	1070
Operating Weight	F inch	34.3	36.2	40.6	42.1
	kg	3450	3750	4750	5050
	lb	7606	8267	10,472	11,133
	kg	3650	3950	4950	5250
Measures Exchange	lb	8047	8708	10,913	11,574
	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  $0.172\text{m}^3/(\text{h}\cdot\text{kW})$ ; chilled water outlet temperature  $7^\circ\text{C}/44.6^\circ\text{F}$ ; cooling water inlet temperature  $30^\circ\text{C}/86^\circ\text{F}$ ; cooling water flow  $0.215\text{m}^3/(\text{h}\cdot\text{kW})$ .

We reserve the right to change specifications without prior notice.

- 2) Machine operation conditions: outlet chilling water temperature is at  $5\text{--}15^\circ\text{C}(41\text{--}59^\circ\text{F})$ , inlet chilling water temperature is at  $19\text{--}33^\circ\text{C}(66.2\text{--}91.4^\circ\text{F})$ . For special requirements, the machine can be customized.
- 3) The noise level is tested at  $1\text{m}/40\text{"}$  in front of and  $1.5\text{m}/59\text{"}$  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.

# SICC-W Series

## ■ Specifications (Double Compressors R134a)

Model		SICC-680WD	SICC-759WD	SICC-809WD	SICC-920WD	SICC-1015WD	SICC-1130WD	SICC-1265WD
Item								
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				
Refrigerant Oil	Filling Quantity	L	42	42	42	50	50	50
		gal	11	11	11	13.2	13.2	13.2
Refrigerant Filling Quantity	Type	—			KL170-L			
	kg	101	111	121	136	151	166	176
Evaporator	lb	223	246	268	301	334	367	389
	Type	—		Tube-in-shell style				
Condenser	Process Flow	m³/hr	117.0	130.5	139.1	158.3	174.6	194.4
	Pressure Loss	kPa	66	66	68	68	76	78
Unit Dimensions	Pipe Coupler	DN150	DN150	DN150	DN150	DN200	DN200	DN200
	Type	—		Tube-in-shell style				
Installing Dimensions	Cooling Flow	m³/hr	146.2	163.1	173.8	197.9	218.3	243.0
	Pressure Loss	kPa	57	57	57	57	64	64
Net Weight	Pipe Outlet	DN150	DN150	DN150	DN150	DN200	DN200	DN200
	A	mm	4200	4200	4200	4600	4700	4700
Operating Weight	inch	165.4	165.4	165.4	181.1	185.0	185.0	185.0
	B	mm	1350	1350	1400	1450	1450	1550
Measures Exchange	inch	53.1	53.1	55.1	57.1	57.1	61	63
	C	mm	1650	1650	1650	1750	1750	1700
Net Weight	inch	65	65	65	68.9	68.9	66.9	72.8
	D	mm	2920	2920	2920	2920	3190	3190
Operating Weight	inch	115	115	115	115	125.6	125.6	125.6
	E	mm	3080	3080	3080	3080	3350	3350
Measures Exchange	inch	121.3	121.3	121.3	121.3	131.9	131.9	131.9
	F	mm	920	920	980	1030	1030	1070
Net Weight	inch	36.2	36.2	38.6	40.6	40.6	42.1	44.5
	kg	3750	3800	4100	4750	4900	5050	5400
Operating Weight	lb	8267	8378	9039	10,472	10,802	11,133	11,905
	kg	3950	4000	4300	4950	5100	5250	5600
Measures Exchange	lb	8708	8818	9480	10,913	11,244	11,574	12,345
	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  $0.172\text{m}^3/(\text{h}\cdot\text{kW})$ ; chilled water outlet temperature  $7^\circ\text{C}/44.6^\circ\text{F}$ ; cooling water inlet temperature  $30^\circ\text{C}/86^\circ\text{F}$ ; cooling water flow  $0.215\text{m}^3/(\text{h}\cdot\text{kW})$ .

We reserve the right to change specifications without prior notice.

- 2) Machine operation conditions: outlet chilling water temperature is at  $5\text{--}15^\circ\text{C}(41\text{--}59^\circ\text{F})$ , inlet chilling water temperature is at  $19\text{--}33^\circ\text{C}(66.2\text{--}91.4^\circ\text{F})$ . For special requirements, the machine can be customized.
- 3) The noise level is tested at  $1\text{m}/40\text{"}$  in front of and  $1.5\text{m}/59\text{"}$  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.

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