

# R134a Water-cooled Screw Chiller

Water cooled/Cooling only (normal efficiency series)

Cooling capacity range from 335kW up to 2087kW



## Options/Accessories

Accessories		Standard	Optional
Power supply		3/380V/50Hz	3/380V/60Hz; 3/400V/50Hz; 3/460V/60Hz
Communication protocol		X	Modbus/BACnet
Water inlet/outlet connection type	≤800RT	Victaulic	Flange
	>800RT	Flange	/
Thermal insulation thickness		30mm	25mm/40mm
Water side working pressure		1.0Mpa	1.6Mpa/2.5Mpa
ASME pressure vessel		X	√
Chilled water flowmeter		X	√
Automatic online rubber ball cleaning device		X	√
Channel steel base		X	√
Heat recovery		X	Partial heat recovery(Hot water outlet temperature is no more than 40°C, heat recovery efficiency is about 10%)

# Specification

MODEL			CI0335PWND	CI0410PWND	CI0530PWND	CI0660PWND	CI0735PWND
Cooling capacity	RT		95	117	150	188	209
	kW		335	410	528	660	735
Power input	kW		67	81	101	125	143
EER	kW/kW		5.00	5.06	5.23	5.28	5.14
Starting current	A		450	450	704	768	1010
Max power input	W		89	108	136	168	200
Max. running current	A		150	183	226	280	343
Safe protection	Overload protection; water-lack delay protection; automatic antifreezing protection, phase lack & sequence protection, low pressure protection; high pressure protection; Exhaust temperature protection; oil pressure difference protection, low oil level protection; pressure relief valve.						
Compressor	Type	Semi-Hermetic screw chiller					
	Quantity	1					
Power supply	3~/380V/50Hz						
Refrigerant throttle type	Orifice plate + butterfly valve						
Capacity control	25%, 50%, 75%, 100%						
Controller type	Fully automatic control by Microcomputer controller						
Refrigerant	Type	R134a					
	Type	Flooded type					
Evaporator	Water inlet/outlet temp	°C	12°C/7°C				
	Inlet/outlet pipe	DN(mm)	100	125	125	125	150
	Rated water flow	m³/h	58	71	91	114	126
	Water dirt coefficient	m².°C/kW	0.018				
	Standard pressure	MPa	1.0				
	Water side resistance	KPa	30	29	40	45	39
	Condenser	Type	Shell & Tube heat exchanger				
Water inlet/outlet temp		°C	30°C/35°C				
Inlet/outlet pipe		DN(mm)	100	125	125	125	150
Rated water flow		m³/h	69	84	108	135	151
Water dirt coefficient		m².°C/kW	0.044				
Standard pressure		MPa	1.0				
Water side resistance		KPa	27	29	54	55	41
External dimension	Unit length	mm	2850	2850	3400	3400	3650
	Unit width	mm	1600	1700	1850	1900	2050
	Unit height	mm	1900	1950	2000	2050	2150
Package dimension	Unit length	mm	3050	3050	3600	3600	3850
	Unit width	mm	1700	1800	1950	2000	2150
	Unit height	mm	2250	2300	2350	2400	2500
Weight	Unit weight	kg	2700	2850	3300	3450	3800
	Gross weight	kg	2800	2950	3400	3550	3920
	Operation weight	kg	2900	3070	3500	3670	4020

Note: Due to our policy of innovation, some specifications may be changed without notification.

# R134a Water-cooled Screw Chiller

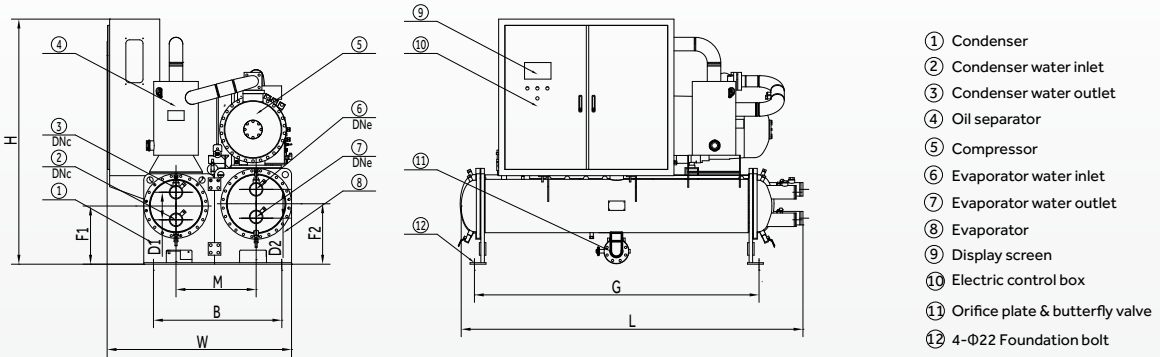
MODEL			CI0800PWND	CI0850PWND	CI0965PWND	CI1075PWND	CI1160PWND
Cooling capacity	RT		227	242	275	306	330
	kW		800	850	966	1075	1160
Power input	kW		149	160	181	200	216
EER	kW/kW		5.37	5.31	5.34	5.38	5.37
Starting current	A		619	633	909	930	946
Max power input	W		200	216	246	272	290
Max. running current	A		338	366	410	452	484
Safe protection			Overload protection; water-lack delay protection; automatic antifreezing protection, phase lack & sequence protection, low pressure protection; high pressure protection; Exhaust temperature protection; oil pressure difference protection, low oil level protection; pressure relief valve.				
Compressor	Type		Semi-Hermetic screw chiller				
	Quantity		2				
Power supply			3~/380V/50Hz				
Refrigerant throttle type			Orifice plate + butterfly valve				
Capacity control			12.5%, 25%, 37.5%, 50%, 62.5%, 75%, 87.5%, 100%				
Controller type			Fully automatic control by Microcomputer controller				
Refrigerant	Type		R134a				
	Type		Flooded type				
Evaporator	Water inlet/outlet temp	°C	12°C/7°C				
	Inlet/outlet pipe	DN(mm)	150	150	150	200	200
	Rated water flow	m <sup>3</sup> /h	138	146	166	185	200
	Water dirt coefficient	m <sup>2</sup> .°C/kW	0.018				
	Standard pressure	MPa	1.0				
	Water side resistance	KPa	78	97	96	99	98
	Type		Shell & Tube heat exchanger				
Condenser	Water inlet/outlet temp	°C	30°C/35°C				
	Inlet/outlet pipe	DN(mm)	150	150	150	200	200
	Rated water flow	m <sup>3</sup> /h	163	174	197	219	237
	Water dirt coefficient	m <sup>2</sup> .°C/kW	0.044				
	Standard pressure	MPa	1.0				
	Water side resistance	KPa	81	107	100	102	100
External dimension	Unit length	mm	4000	4600	4600	4850	4850
	Unit width	mm	2000	2050	2050	2100	2100
	Unit height	mm	2050	2150	2250	2400	2450
Package dimension	Unit length	mm	4200	4800	4800	5050	5050
	Unit width	mm	2100	2150	2150	2200	2200
	Unit height	mm	2400	2500	2600	2750	2800
Weight	Unit weight	kg	4800	5050	5350	7600	7900
	Gross weight	kg	4950	5200	5500	7780	8080
	Operation weight	kg	5100	5400	5720	8050	8370

MODEL			CI1350PWND	CI1540PWND	CI1680PWND	CI1970PWND	CI2085PWND
Cooling capacity	RT		384	438	478	560	593
	kW		1350	1540	1680	1970	2087
Power input	kW		250	274	305	344	376
EER	kW/kW		5.4	5.62	5.51	5.72	5.55
Starting current	A		1048	1353	1389	1560	1794
Max power input	W		336	400	444	500	540
Max. running current	A		560	686	758	800	920
Safe protection			Overload protection; water-lack delay protection; automatic antifreezing protection, phase lack & sequence protection, low pressure protection; high pressure protection; Exhaust temperature protection; oil pressure difference protection, low oil level protection; pressure relief valve.				
Compressor	Type		Semi-Hermetic screw chiller				
	Quantity		2				
Power supply			3~/380V/50Hz				
Refrigerant throttle type			Orifice plate + butterfly valve				
Capacity control			12.5%, 25%, 37.5%, 50%, 62.5%, 75%, 87.5%, 100%				
Controller type			Fully automatic control by Microcomputer controller				
Refrigerant	Type		R134a				
	Type		Flooded type				
Evaporator	Water inlet/outlet temp	°C	12°C/7°C				
	Inlet/outlet pipe	DN(mm)	200	200	200	200	200
	Rated water flow	m <sup>3</sup> /h	232	265	289	339	359
	Water dirt coefficient	m <sup>2</sup> .°C/kW	0.018				
	Standard pressure	MPa	1.0				
	Water side resistance	KPa	99	100	100	100	99
	Type		Shell & Tube heat exchanger				
Condenser	Water inlet/outlet temp	°C	30°C/35°C				
	Inlet/outlet pipe	DN(mm)	200	200	200	200	200
	Rated water flow	m <sup>3</sup> /h	275	312	341	398	424
	Water dirt coefficient	m <sup>2</sup> .°C/kW	0.044				
	Standard pressure	MPa	1.0				
	Water side resistance	KPa	109	101	99	100	105
External dimension	Unit length	mm	4850	6050	6050	6250	6250
	Unit width	mm	2150	2200	2250	2250	2300
	Unit height	mm	2450	2450	2450	2500	2500
Package dimension	Unit length	mm	5050	6250	6250	6450	6450
	Unit width	mm	2250	2300	2350	2350	2400
	Unit height	mm	2800	2800	2800	2850	2850
Weight	Unit weight	kg	8200	8900	10800	11300	11800
	Gross weight	kg	8380	9080	10980	11500	12000
	Operation weight	kg	8690	9400	11320	11840	12360

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## Unit Dimension Diagram

### Single compressor unit

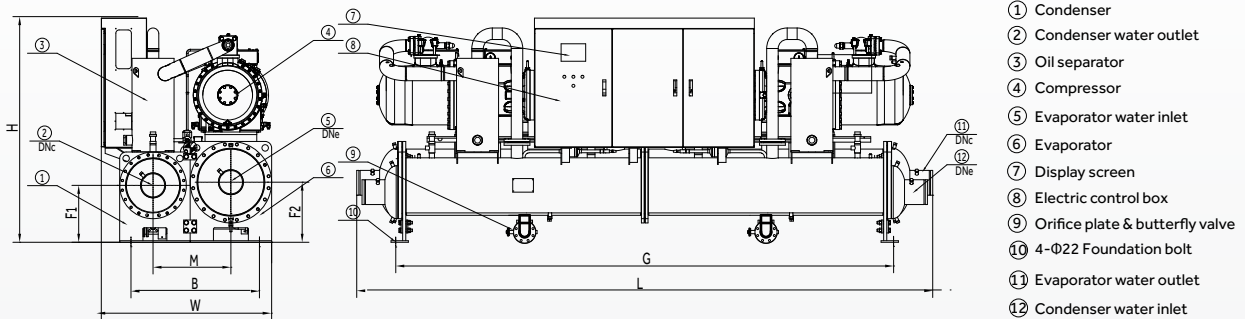


Dimension:mm

Code Model	Dimension			Installation dimension		Dimension of pipe						
	L	W	H	B	G	D1	D2	F1	F2	M	DNe	DNc
CI0335PWND	2850	1600	1900	985	2262	220	230	485	515	640	DN100	DN100
CI0410PWND	2850	1700	1950	1035	2262	220	240	485	515	640	DN125	DN125
CI0530PWND	3400	1850	2000	1085	2762	220	260	485	515	640	DN125	DN125
CI0660PWND	3400	1900	2050	1135	2762	220	260	520	590	685	DN125	DN125
CI0735PWND	3650	2050	2150	1135	2762	240	240	520	590	725	DN150	DN150

Note: In consideration of continuous improvement of products, the size of the unit may be changed

### The double compressores unit



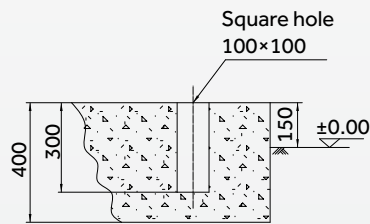
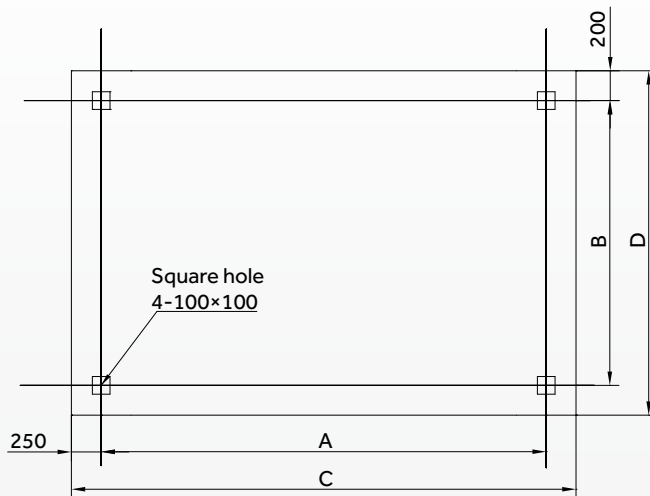
Dimension:mm

Code Model	Dimension			Installation dimension		Dimension of pipe						
	L	W	H	B	G	D1	D2	F1	F2	M	DNe	DNc
CI0800PWND	4000	2000	2050	1035	3235	230	240	680	700	700	DN150	DN150
CI0850PWND	4600	2050	2150	1035	3835	230	240	680	700	700	DN150	DN150
CI0965PWND	4600	2050	2250	1085	3835	240	260	680	725	725	DN150	DN150
CI1075PWND	4850	2100	2400	1085	3835	240	260	750	775	850	DN200	DN200
CI1160PWND	4850	2100	2450	1185	3835	260	330	700	750	775	DN200	DN200
CI1350PWND	4850	2150	2450	1185	3835	280	360	750	775	850	DN200	DN200
CI1540PWND	6050	2200	2450	1235	4435	300	360	750	775	850	DN200	DN200
CI1680PWND	6050	2250	2450	1235	4435	300	360	750	775	850	DN200	DN200
CI1970PWND	6250	2250	2500	1335	4435	320	380	750	775	850	DN200	DN200
CI2085PWND	6250	2300	2500	1335	4435	320	380	750	775	850	DN200	DN200

Note: In consideration of continuous improvement of products, the size of the unit may be changed

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## The Unit Installation Foundation Drawing



Reserved square hole on the base diagram

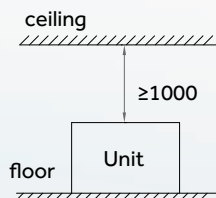
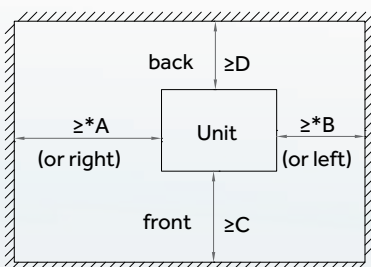
Dimension:mm

Model	Installation dimension			
	A	B	C	D
CI0335PWND	2262	985	2762	1385
CI0410PWND	2262	1035	2762	1435
CI0530PWND	2762	1085	3262	1485
CI0660PWND	2762	1135	3262	1535
CI0735PWND	2762	1135	3262	1535
CI0800PWND	3235	1035	3735	1435
CI0850PWND	3835	1035	4335	1435
CI0965PWND	3835	1085	4335	1485
CI1075PWND	3835	1085	4335	1485
CI1160PWND	3835	1185	4335	1585
CI1350PWND	3835	1185	4335	1585
CI1540PWND	4435	1235	4935	1635
CI1680PWND	4435	1235	4935	1635
CI1970PWND	4435	1335	4935	1735
CI2085PWND	4435	1335	4935	1735

## Reserved Space Size



Single compressor unit



Dimension:mm

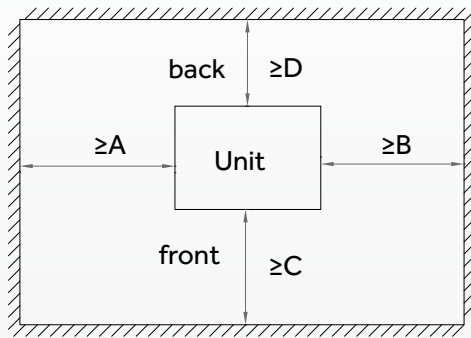
Model	Code	A	B	C	D
		CI0335PWND	2200	1000	1000
CI0410PWND	2200	1000	1000	800	
CI0530PWND	2700	1000	1000	800	
CI0660PWND	2700	1000	1000	800	
CI0735PWND	2700	1000	1000	800	

Note: Marking \* stands for the reserved size for the right side of the standard, the left side over to the contrary

## Reserved Space Size

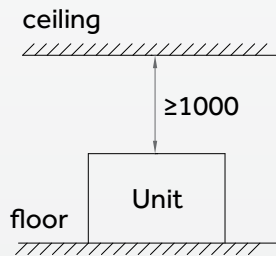


### Double compressor unit



Dimension:mm

Model	Code			
	A	B	C	D
CI0800PWND	1600	1600	1200	800
CI0850PWND	1900	1900	1200	800
CI0965PWND	1900	1900	1200	800
CI1075PWND	1900	1900	1200	800
CI1160PWND	1900	1900	1200	800
CI1350PWND	1900	1900	1200	800
CI1540PWND	2200	2200	1200	800
CI1680PWND	2200	2200	1200	800
CI1970PWND	2200	2200	1200	800
CI2085PWND	2200	2200	1200	800



Note: In consideration of continuous improvement of products, the size of the unit may be changed

## Cooling Capacity and Power Input Table

Chilled water outlet temp. (°C)	Condenser water inlet temperature(°C)											
	26		28		30		32		34		35	
	Cooling capacity	Power input	Cooling capacity	Power input	Cooling capacity	Power input	Cooling capacity	Power input	Cooling capacity	Power input	Cooling capacity	Power input
5	0.97	0.92	0.95	0.95	0.92	0.99	0.90	1.03	0.88	1.07	0.87	1.09
6	1.00	0.92	0.98	0.96	0.96	0.99	0.94	1.03	0.92	1.07	0.91	1.09
7	1.04	0.93	1.02	0.96	1.00	1.00	0.98	1.04	0.96	1.08	0.94	1.10
8	1.08	0.93	1.06	0.97	1.03	1.00	1.01	1.04	0.99	1.08	0.97	1.10
9	1.11	0.94	1.09	0.97	1.07	1.01	1.04	1.05	1.02	1.09	1.00	1.11