

### CRW Series Water-cooled Central Chiller

### **Standard Features**

- ✓ Range from 38-563 tons
- Set temperature range from 7 °C to 30 °C
- Bitzer screw compressor or Danfoss scroll compressor
- Siemens PLC Controller provides more precise mission control and complete protection on both chiller and production process
- Schneider electricity parts
- Generous shell and tube condensers with large heat exchanging surface. Bigger inner space avoids it from being blocked easily
- Shell and tube evaporator gives consideration to both high efficiency and easy maintenance
- Reserved port for chilled water pump and condenser water pump control

# HOW DO WE MAKE IT RELIABLE?



#### Manufacturing

Every Senho chiller comes from strict established production process, which is detailed to every welding spot, pipe connection and screw fastening.

Every component, before put in our products, went through strict calculation and repeated trials.



#### **Quality Testing**

120+ incoming inspection rules 80+ final QC rules 72hr, 18 Bar nitrogen pressure holding testing

48hr running testing



### **Optional Features**

- Economizer for getting same cooling energy with less power consumption
- 316L stainless steel food grade(or higher) fluid circuit
- Remote control panel
- Plate type evaporator and condenser(only recommendhigh water quality application)
- Flooded shell and tube type evaporator to get higher heat exchanging efficiency
- Hot gas by-pass to get more stable temperature control



#### Warranty Protection

24 months warranty on optional PLC control system

18 months warranty on complete stainless steel watter cotact parts

12 months warranty on unit

Extended warranty up to 5 years



## Specifications 38ton~43.67ton

Model			CRW40W1	CRW40L2	CRW4L4	CRW50W1	CRW50L2	CRW50L4			
Cooling	-	Ton	38.38	37.70	37.53	44.64	44.47	43.67			
Capacity	-	Kcal/h	408,240	114,040	113,520	474,770	134,500	132,100			
Unit electrical	Power supply	V/ph/Hz	400/3/50								
	Rated power	KW	37	36,4	34	38	45.6	43.2			
Specifications	Max Current	Amps	78	76	72.2	97	96.1	91.6			
	Туре	-	Screw	Scroll		Screw	Scroll				
	Refrigerant	- R407c									
Compressor	Rated power	KW	30	18.2×2	8.51×4	38	22.8×2	10.8×4			
	Qty./Ref. circuit	-	1	2	2	1	2	2			
Condenser	Туре	-	Shell and tube								
Condenser	Rated water flow	m³/h	29.8	29.3	28.9	35.1	35	33.9			
	Туре	-	- Shell and tube								
Evaporator	Rated water flow	m³/h	23.1	22.8	22.7	27	26.9	26.41			
	Chilled water in	inch	3	3	3	3	3	3			
	Chilled water out	inch	3	3	3	3	3	3			
Connection size	Condenser in	inch	3	3	3	3	3	3			
	Condenser out	inch	3	3	3	3	3	3			
Dimension	Length	mm	2000	2000	2000	2000	2000	2000			
	Width	mm	980	980	980	980	980	980			
	Height	mm	1700	1700	1700	1700	1700	1700			
Weight	Dry weight	kg	900	870	870	1050	980	980			
	Running weight	kg	960	930	930	1150	1080	1080			

• Cooling capacity based on 50Hz power supply, 7°C supply water, 25°C condenser water temperature in, R407c refrigerant, and operating at sea level.

• Evaporator rated flow is calculated based on  $5^{\circ}$  supply/return water temperature difference.

• Set point range from 7 °C to 35 °C. For lower temperature requirement please refer to PL or CL series.

• Evaporator rated flow is minimum flow required for reference of pump sizing.

• Max current is minimum unit ampacity for wire sizing.

• Units for other power supply are available on request.

## Specifications 54ton~118ton

Model			CRW60W1	CRW70W1	CRW75W1	CRW85W1	CRW100W1	CRW100W2	CRW120W1		
Cooling	-	Ton	54.02	65.40	72.50	85.30	99.52	99.52	118.00		
Capacity	-	Kcal/h	163400	197800	219300	258000	301000	301000	356900		
	Power supply	V/ph/Hz		400/3/50							
Unit electrical	Rated power	KW	42	51	56	65	75	74	90		
Specifications	Max Current	Amps	82	99	108	126	145	143	175		
	Туре	-		Screw type							
Compressor	Refrigerant	-		R407c							
	Rated power	KW	42	51	56	65	75	37×2	90		
	Qty./Ref. circuit	-	1	1	1	1	1	2	1		
Condenser	Туре	-		Shell and tube							
	Rated water flow	m³/h	40	48.3	53.5	62.8	73	73	86.8		
E	Туре	-		Shell and tube							
Evaporator	Rated water flow	m³/h	32.7	40	43.9	51.6	60.2	60	71.4		
	Chilled water in	inch	3	4	4	4	4	4	4		
Connection	Chilled water out	inch	3	4	4	4	4	4	4		
size	Condenser in	inch	4	4	4	4	4	4	5		
	Condenser out	inch	4	4	4	4	4	4	5		
Dimension	Length	mm	2600	2750	2800	2800	2900	2800	3000		
	Width	mm	680	780	950	950	950	780	1200		
	Height	mm	1650	1650	1800	1950	1950	1650	1580		
Weight	Dry weight	kg	1200	1550	1800	1900	2050	1850	2350		
	Running weight	kg	1400	1800	2100	2200	2350	2240	2530		

• Cooling capacity based on 50Hz power supply, 7°C supply water, 25°C condenser water temperature in, R407c refrigerant, and operating at sea level.

• Evaporator rated flow is calculated based on  $5^{\circ}$ C supply/return water temperature difference.

• Set point range from 7 °C to 35 °C. For lower temperature requirement please refer to PL or CL series.

• Evaporator rated flow is minimum flow required for reference of pump sizing.

• Max current is minimum unit ampacity for wire sizing.

• Units for other power supply are available on request.



## Specifications 108ton~250ton

Model			CRW120W2	CRW150W1	CRW150W2	CRW180W1	CRW200W1	CRW200W2	CRW240W1		
Cooling	-	Ton	108.05	147.85	145.01	181.97	213.25	199.03	250.21		
Capacity	-	Kcal/h	326800	447200	438600	550400	645000	602000	756800		
Unit electrical Specifications	Power supply	V/ph/Hz	400/3/50								
	Rated power	KW	84	109	112	131	151	150	177		
	Max Current	Amps	162	211	216	253	292	290	342		
	Туре	-	Screw type								
Comproseer	Refrigerant	-	R407c								
Compressor	Rated power	KW	42×2	109	56×2	131	151	75×2	177		
	Qty./Ref. circuit	-	2	1	2	1	1	2	1		
Condenser	Туре	-	Shell and tube								
Condenser	Rated water flow	m³/h	80	108.2	107	132.6	155	146	181.8		
Evaporator	Туре	-	Shell and tube								
Evaporator	Rated water flow	m³/h	65	89.4	88	110	129	120	151.3		
	Chilled water in	inch	5	5	6	6	8	8	10		
Connection	Chilled water out	inch	5	5	6	6	8	8	10		
size	Condenser in	inch	5	5	4×2	6	8	4×2	10		
	Condenser out	inch	5	5	4×2	6	8	4×2	10		
Dimension	Length	mm	2950	3100	3150	3800	3900	3480	4300		
	Width	mm	810	1250	850	1380	1380	875	1480		
	Height	mm	1650	1630	1750	1750	1750	1850	1780		
Weight	Dry weight	kg	2200	2500	2650	3150	3350	2800	3850		
	Running weight	kg	2660	3000	3200	3750	4000	3580	4600		

• Cooling capacity based on 50Hz power supply, 7°C supply water, 25°C condenser water temperature in, R407c refrigerant, and operating at sea level.

• Evaporator rated flow is calculated based on 5°C supply/return water temperature difference.

• Set point range from 7 °C to 35 °C. For lower temperature requirement please refer to PL or CL series.

- Evaporator rated flow is minimum flow required for reference of pump sizing.
- Max current is minimum unit ampacity for wire sizing.
- Units for other power supply are available on request.

## Specifications 108ton~250ton

Model			CRW240W2	CRW270W1	CRW300W2	CRW360W2	CRW400W2	CRW480W2	CRW540W2		
Cooling	-	Ton	236.00	281.49	295.71	363.95	426.50	500	563		
Capacity	-	Kcal/h	713800	851400	894400	1100800	1290000	1513600	1702800		
Unit electrical	Power supply	V/ph/Hz		400/3/50							
	Rated power	KW	180	199	218	262	302	354	398		
Specifications	Max Current	Amps	348	385	421	506	584	684	769		
	Туре	-	Screw type								
Commercer	Refrigerant	-	R407c								
Compressor	Rated power	KW	90×2	199	109×2	131×2	151×2	177×2	199×2		
	Qty./Ref. circuit	-	2	1	2	2	2	2	2		
Condenser	Туре	-	Shell and tube								
	Rated water flow	m³/h	174	204.5	216	265	310	364	409		
Evaporator	Туре	-	Shell and tube								
Evaporator	Rated water flow	m³/h	143	170.4	179	220	258	303	340		
	Chilled water in	inch	8	10	8	10	10	12	12		
Connection	Chilled water out	inch	8	10	8	10	10	12	12		
size	Condenser in	inch	5"×2	10"	5"×2	6"×2	8"×2	10"×2	10"×2		
	Condenser out	inch	5"×2	10"	5"×2	6"×2	8"×2	10"×2	10"×2		
Dimension	Length	mm	3650	4500	3650	4230	4230	4350	4420		
	Width	mm	1120	1480	1220	1380	1480	1560	1650		
	Height	mm	1950	1780	1950	2150	2250	2300	2450		
Weight	Dry weight	kg	3750	4160	4100	5000	5250	5750	6000		
	Running weight	kg	4360	5000	4770	5800	6100	6680	6970		

• Cooling capacity based on 50Hz power supply, 7°C supply water, 25°C condenser water temperature in, R407c refrigerant, and operating at sea level.

• Evaporator rated flow is calculated based on 5°C supply/return water temperature difference.

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