

## CRW Series Water-cooled Central Chiller

### Standard Features

- ✓ Range from 30-162 tons
- ✓ Bitzer screw type compressor or Danfoss scroll type compressor
- ✓ Siemens PLC Controller provides more precise mission control and complete protection on both chiller and production process
- ✓ Schneider electricity parts
- ✓ Oversized air-cooled condensers for industrial environments with ambient temperatures up to 45 °C
- ✓ Quiet condenser fan with motor separated from the fan guard
- ✓ Shell and tube evaporator gives consideration to both high efficiency and easy maintenance
- ✓ Reserved port for chilled 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
- Enlarged condenser or R134a system for high running ambient
- 316L stainless steel food grade(or higher) fluid circuit
- Remote control panel
- Plate type evaporator and condenser(only recommend high 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 water contact parts  
12 months warranty on unit  
Extended warranty up to 5 years

# Specifications 31.28ton~38.67ton

Model			CRA40W1	CRA40L2	CRA40L4	CRA50W1	CRA50L2	CRA50L4
<b>Cooling Capacity</b>	-	Ton	31.28	32.41	32.98	38.61	39.35	38.67
	-	Kcal/h	94,580	98,020	99,740	116,760	119,000	116,940
<b>Unit electrical Specifications</b>	Power supply	V/ph/Hz	400/3/50					
	Rated power	KW	43.6	43.7	41.34	54.7	56.2	53.8
	Max Current	Amps	85	82.2	77.8	106	105.7	101.2
<b>Compressor</b>	Type	-	Screw	Scroll		Screw	Scroll	
	Refrigerant	-	R407c					
	Rated power	KW	37	18.2×2	8.51×4	45.8	22.8×2	10.8×4
	Qty./Ref. circuit	-	1	2	4	1	2	4
<b>Condenser</b>	Type	-	Aluminum fin with copper tube					
	Fan rated power	KW	0.55×6	0.55×6	0.55×6	0.85×6	0.85×6	0.85×6
	Rated air flow	m³/h	40000	40000	40000	50000	50000	50000
<b>Evaporator</b>	Type	-	Shell and tube					
	Rated water flow	m³/h	18.9	19.6	19.95	24.6	23.8	23.4
<b>Connection size</b>	Inlet	inch	3	3	3	3	3	3
	Outlet	inch	3	3	3	3	3	3
<b>Dimension</b>	Length	mm	2350	2350	2350	2600	2600	2600
	Width	mm	1350	1350	1350	1500	1500	1500
	Height	mm	2000	2000	2000	2100	2100	2100
<b>Weight</b>	Dry weight	kg	1300	1112	1112	1600	1320	1320
	Running weight	kg	1500	1312	1312	1840	1560	1560

- Cooling capacity based on 50Hz power supply, 7°C supply water, 35°C ambient temperature, R407c refrigerant, and operating at sea level.
- Set point range from 7°C to 35°C. For lower temperature requirement please refer to PL and CL series.
- Standard CRA series central chiller is with no built-in tank and water pump.
- Evaporator rated flow is calculated based on 5°C supply/return water temperature difference.
- 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 44.64ton~81.32ton

Model			CRA60W1	CRA70W1	CRA80W1	CRA80W2	CRA90W1	CRA100W1	CRA100W2
<b>Cooling Capacity</b>	-	Ton	44.64	54.31	59.71	62.55	70.23	81.03	81.32
	-	Kcal/h	134,992	164,226	180,563	189,161	212,376	245,050	245,910
<b>Unit electrical Specifications</b>	Power supply	V/ph/Hz	400/3/50						
	Rated power	KW	59.7	73.6	79.6	86.6	88.2	101.2	106.2
	Max Current	Amps	116	142	154	168	171	196	205
<b>Compressor</b>	Type	-	Screw						
	Refrigerant	-	R407c						
	Rated power	KW	55	67	73	40×2	82	95	50×2
	Qty./Ref. circuit	-	1	1	1	2	1	1	2
<b>Condenser</b>	Type	-	Aluminum fin with copper tube						
	Fan rated power	KW	0.78×6	1.1×6	1.1×6	1.1×6	0.78×8	0.78×8	0.78×8
	Rated air flow	m <sup>3</sup> /h	60000	70000	80000	80000	90000	100000	100000
<b>Evaporator</b>	Type	-	Shell and tube						
	Rated water flow	m <sup>3</sup> /h	27.0	32.8	36.1	37.8	42.5	49.0	49.1
<b>Connection size</b>	Inlet	inch	4	4	4	4	4	4	4
	Outlet	inch	4	4	4	4	4	4	4
<b>Dimension</b>	Length	mm	2600	2650	2650	2650	3400	3400	3400
	Width	mm	1500	1900	1900	1900	1700	1700	1700
	Height	mm	2100	2200	2200	2200	2200	2200	2200
<b>Weight</b>	Dry weight	kg	1900	2200	2350	2520	2550	2800	2980
	Running weight	kg	2200	2530	2700	2870	2950	3250	3420

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# Specifications 44.64ton~281.32ton

Model			CRA120W1	CRA120W2	CRA140W2	CRA160W2	CRA180W2	CRA200W2
Cooling Capacity	-	Ton	96.67	89.28	108.62	119.42	140.46	162.07
	-	Kcal/h	292,340	269,990	328,450	361,130	424,750	490,100
Unit electrical Specifications	Power supply	V/ph/Hz	400/3/50					
	Rated power	KW	123.8	118.8	145	159.2	177.2	207.6
	Max Current	Amps	240	230	280	308	343	436
Compressor	Type	-	Screw					
	Refrigerant	-	R407c					
	Rated power	KW	115	55×2	67×2	73×2	82×2	95×2
	Qty./Ref. circuit	-	1	2	2	2	2	2
Condenser	Type	-	Aluminum fin with copper tube					
	Fan rated power	KW	1.1×8	1.1×8	1.1×10	1.1×12	1.1×12	1.1×16
	Rated air flow	m <sup>3</sup> /h	116000	116000	145000	165000	180000	205000
Evaporator	Type	-	Shell and tube					
	Rated water flow	m <sup>3</sup> /h	58.4	54	65.7	72.2	85	98
Connection size	Inlet	inch	5	5	6	6	6	6
	Outlet	inch	5	5	6	6	6	6
Dimension	Length	mm	3800	3800	4800	5800	5800	7800
	Width	mm	1900	1900	1900	1900	2200	2000
	Height	mm	2200	2200	2200	2200	2300	2250
Weight	Dry weight	kg	2950	3180	3420	3730	3950	4330
	Running weight	kg	3560	3690	3780	4180	4380	4650

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- Standard CRA series central chiller is with no built-in tank and water pump.
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