

Water chiller

▶ WRA: cooling only

▶ WRN: heat pump

Air cooled

Indoor installation

Capacity from 72,1 to 144 kW

The liquid chillers and heat pumps of the **WRA** and **WRN** series are units designed for indoor installation and best energy efficiency in relation to their reduced size.

Use of low-rev centrifugal fans and special thermal and acoustic insulation of the cabinet have resulted in highly reduced noise levels.

The head pressures available with centrifugal fans enable wide ducting for air return and cooled air discharge to be installed.

functions and featuresCooling only
(WRA)Heating-Cooling
(WRN)

Air cooled



Indoor inst.



Refrig. R-407C

Refrig. R-22
(Standard)

Herm. Scroll



Herm. reciprocating

Ice protection
system**available configurations**

WRA	(1) D	(2) B	404	(3) ST	(4) T	(5) C
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(1) ENERGY RECOVERY:

- ▶ - Not required
- ▶ **D** Partial recovery

Carried out using braze-welded plate-type exchangers suited for recovering the desuperheating heat up to a maximum of 25% of the total unit heat.

(2) LOW TEMPERATURE:

- ▶ **B** Low water temperature

This version allows unit operation within the water and glycol mixing temperature range between +5°C and -8°C inclusive.

Two versions are available:

- Unit for low temperatures only
- Unit with double operating set-point

The possibility of reducing the cooling capacity depends on the working temperature. Check with our sales office.

(3) ACOUSTIC CONFIGURATION:

- ▶ **ST** Standard

(4) ENERGY EFFICIENCY:

- ▶ **T** Temperate climate (Standard)

(5) EXCHANGER APPROVALS:

- ▶ **CE** PED (European test)
- ▶ **C** Clivet (In-house test)

accessories

- Condenser coil in copper/aluminium with acrylic coating
- Condenser coil in copper/aluminium with Fin Guard (Silver) treatment
- Copper/copper condenser coil
- Copper/tinned copper condenser coil
- ◆ ▸ Spring antivibration mounts
- ◆ ▸ Rubber antivibration mounts
- High and low pressure gauges
- ◆ ▸ Steel mesh filter on water side
- Uprated electric fan motor
- 4/8-pole electric fan motor
- Horizontal air supply
- Upward air supply
- Magnetohermal circuit breakers
- Compressor and fan thermal cutouts
- Phase monitor
- Daily and weekly programming clock
- Shunt capacitors (power factor > 0,9)
- Serial communication module PC/BMS MODBUS for 1 unit (Master)
- ◆ ▸ Remote control with remote microprocessor control

WRA only:

- Anti-ice electric heater to protect the internal exchanger

WRN only:

- Condensate collecting tray with electric heater

Key to symbols:

- ◆ Accessories supplied separately.

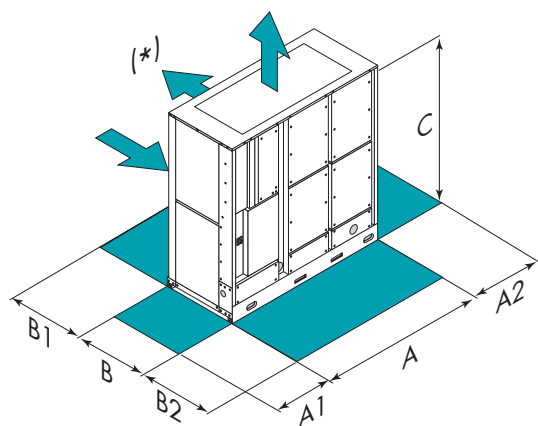
technical data

Sizes			292	322	362	422	404	464	524	564	604	
WRA												
▸ Cooling capacity	(1)	kW	72,1	81,5	93,5	109	100	111	121	137	144	
Total input		kW	34,1	38,7	47,8	57,8	45,5	50,1	56,7	60,9	68,2	
Total EER at 100%		-	2,11	2,10	1,95	1,89	2,20	2,22	2,14	2,25	2,11	
WRN												
▸ Cooling capacity	(1)	kW	71,9	82,3	105	105	100	109	118	132	140	
Total input		kW	32,9	38,1	58,1	58,2	43,7	49,4	55,5	62,1	68,0	
Total EER at 100%		-	2,19	2,16	1,80	1,80	2,28	2,21	2,13	2,13	2,07	
▸ Heating capacity	(2)	kW	82,0	94,6	109	128	112	124	137	152	163	
Total input		kW	33,9	39,1	46,6	56,7	42,7	48,2	54,1	60,6	66,3	
Max. working static pressure		Pa	90	90	120	90	90	90	90	120	90	
Number of refrigerant circuits		-					2					
Number and type of compressors	(3)	-	2 SCROLL		2 RCP		4 SCROLL					
Sound pressure level	(4)	dB(A)	59	64	66	66	61	61	61	63	64	
Power supply		V/Ph/Hz	400/3/50									

Data referred to the following conditions:

- (1) Internal exchanger water = 12/7°C; external air temperature 35°C;
 (2) External exchanger water = 40/45°C; ambient temperature = 7°C (R.H. = 85%)
 (3) RCP = reciprocating
 (4) Sound levels refer to units with full load under nominal test conditions. The sound pressure is measured at 1 m from the external surface of the unit in open field conditions.

dimensions and clearances



(*) Horizontal air supply for sizes 404-604 only

CAUTION! For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the green areas.

Sizes		292	322	362	422	404	464	524	564	604
Length (A)	mm	2478	2478	2478	2478	3308	3308	3308	3308	3308
Width (B)	mm	974	974	974	974	1155	1155	1155	1155	1155
Height (C)	mm	1676	1676	1676	1676	2275	2275	2275	2275	2275
▸ (A1)	mm	800	800	800	800	500	500	500	500	500
(A2)	mm	500	500	500	500	500	500	500	500	500
(B1)	mm	70	70	70	70	70	70	70	70	70
(B2)	mm	1300	1300	1300	1300	1300	1300	1300	1300	1300
Weight in oper.	Kg	940	972	1080	1100	1530	1590	1620	1710	1740

The above data refer to standard units.