

CHA/K/ST 91÷151

AIRCOOLED LIQUID CHILLERS AND HEAT PUMPS WITH AXIAL FANS, SCROLL COMPRESSORS, PLATE EXCHANGERS, PUMP KIT AND AQUALOGIK CONTROL SYSTEM.

FROM 25 kW TO 42 kW.



UNIT DESCRIPTION

The water coolers and heat pumps of the CHA/K/ST 91÷151 AQUALIGHT series, with R410A refrigerant fluid and AQUALOGIK technology, are intended to satisfy the needs of small and medium domestic and service sector environments.

With a peraluman structure, corrosion-resistant over time, thanks to AQUALOGIK technology that optimises the water set point and modulates the pump, and the fans, don't needing so the use of the inertial tank because the units can work even with low content of water in the system; in order to permit immediate and efficient use, energy efficiency and outstanding silence in functioning. Particular technical and design adjustments that enable an immediate and efficient use, in addition to remarkably quiet operation. A wide range of accessories, all supplied separately, complete the outstanding versatility and functionality of the series.



VERSIONS

CHA/K/ST

Cooling only with AQUALOGIK technology

CHA/K/WP/ST

Reversible heat pump with AQUALOGIK technology

FEATURES

- Structure with supporting frame, in peraluman and galvanized sheet.
- Scroll compressors with internal overheat protection and crankcase heater if needed.
- Axial fan type low ventilation and special wing profile, they are directly coupled to external rotor motors.
- Condenser with copper tube and aluminium finned coil.
- Evaporator in AISI 316 stainless steel brazewelded plates type, complete with water differential pressure switch and an antifreeze heater for WP versions.
- R410A refrigerant.
- Electrical panel includes: main switch with door lock device, fuses, compressor and pump remote control switch.
- Microprocessor control and regulation system with AQUALOGIK technology.
- Electronic proportional device to decrease the sound level, with a continuous regulation of the fan speed. This device allows also the cooling functioning of the unit by external temperature till -20°C.
- The hydraulic circuit includes variable speed circulation pump, safety valve, gauge and expansion vessel.

ACCESSORIES

Loose accessories:

CR	Remote control panel
IS	RS 485 serial interface
RP	Metallic guards for condenser
AG	Rubber shock absorbers

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Cooling	Cooling capacity (1)	kW	24,8	28,6	33,4	42,2
	Absorbed power (1)	kW	8,3	10,7	11,7	14,5
Heating	Heating capacity (2)	kW	30,6	36,7	41,6	55,3
	Absorbed power (2)	kW	9,7	11,8	12,8	17,3
Compressors	Quantity	n°	1	1	1	1
	Type		<----- Scroll ----->			
Evaporator	Water flow	l/s	1,18	1,37	1,60	2,02
	Pressure drops	kPa	39	51	37	39
	Water connections	"G	1"	1"	1"	1"
Condenser	Fans	n°	1	2	2	2
	Air flow	m³/s	2,13	4,40	4,40	4,40
Electrical characteristics	Power supply	V/Ph/Hz	<----- 400 / 3+N / 50 ----->			
	Max. running current	A	18	22	27	34
	Max. inrush current	A	111	118	118	198
Water circuit	Pump nominal power	kW	0,55	0,55	0,75	0,75
	Available static pressure	kPa	221	181	250	181
	Expansion vessel	l	5	5	5	5
	Water connections	"G	1"	1"	1"	1"
Sound pressure (3)	STD	dB(A)	51	52	52	52
Weights	Transport weight	Kg	230	245	280	294
	Operating weight	Kg	233	248	283	297

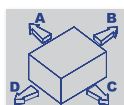
DIMENSIONS

CHA/K/ST			91	101	131	151
L	STD	mm	1850	1850	1850	1850
P	STD	mm	1000	1000	1000	1000
H	STD	mm	1300	1300	1300	1300

DIMENSIONAL



CLEREANCE AREA



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A (*)	mm	800
B	mm	800
C	mm	500
D	mm	800

NOTES

- (1) Chilled water from 12 to 7 °C, ambient air temperature 35 °C.
 - (2) Heated water from 40 to 45 °C, ambient air temperature 7 °C d.b./6 °C w.b.
 - (3) Sound pressure level measured in free field conditions at 1 m from the unit and. According to ISO 3744.
 - (*) A SIDE: Electrical board side.
- N.B. Weights of WP versions are indicated on the technical book.