

CHA 18÷151

AIRCOOLED LIQUID CHILLERS AND HEAT PUMPS WITH AXIAL FANS, SCROLL COMPRESSORS AND PLATE EXCHANGERS.

FROM 5 kW TO 42 kW.



UNIT DESCRIPTION

The water coolers and heat pumps of the CHA 18÷151 series are intended to satisfy the needs of small and medium domestic and service sector environments.

With a peraluman structure, corrosion-resistant over time, these units can be combined with terminal units and, if necessary, the innovative monitoring and control system CLIMAFRIEND which allows to program and obtain a level of comfort intuitively and efficiently without compromises.

Available in the versions with or without pumping group, these units are equipped with 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

Cooling only

CHA/SP

Cooling only with tank and pump

CHA/WP

Reversible heat pump

CHA/WP/SP

Reversible heat pump with tank and pump

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.
- R407C refrigerant.
- Electrical panel includes: main switch with door lock device, fuses, compressor and pump remote control switch (18÷151).
- Microprocessor control and regulation system.
- Water circuit includes: insulated tank, circulator or pump, safety valve, gauge and plant expansion vessel.

ACCESSORIES

Loose accessories:

CC	Condensing control down to -20°C
PS	Circulating pump
MR	Hydronic remote module
PB	Low pressure switch (18÷71)
CR	Remote control panel
IS	RS 485 serial interface
CV	Drain pan (only for WP 18÷71)
RP	Metallic guards for condenser
AG	Rubber shock absorbers

CHA			18	21	25	31	41	51	61	71	81	91	101	131	151
Cooling	Cooling capacity (1)	kW	4,8	6,2	7,4	8,7	10,8	13,1	15,7	17,7	19,3	23,8	27,6	34,1	42,0
	Absorbed power (1)	kW	1,4	1,8	2,1	3,1	3,9	4,7	5,6	6,4	7,1	8,2	10,0	12,2	14,7
Heating	Heating capacity (2)	kW	5,7	7,9	8,7	10,5	12,9	15,7	19,4	21,0	23,8	29,4	35,1	42,3	55,0
	Absorbed power (2)	kW	1,6	2,2	2,3	3,4	4,1	5,0	5,8	6,5	7,8	9,5	11,0	13,3	17,3
Compressors	Quantity	n°	1	1	1	1	1	1	1	1	1	1	1	1	1
	Type		Scroll												
Evaporator	Water flow	l/s	0,23	0,30	0,35	0,42	0,52	0,63	0,75	0,85	0,92	1,14	1,32	1,63	2,01
	Pressure drops	kPa	20	23	20	18	30	27	26	21	23	31	27	25	27
	Water connections	"G	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"
Condenser	Fans	n°	1	1	1	1	2	2	2	2	1	1	2	2	2
	Air flow	m³/s	0,97	0,89	0,89	0,82	1,94	1,78	1,64	1,64	2,69	2,50	4,00	4,00	5,38
Electrical characteristics	Power supply	V/Ph/Hz	< - 230 / 1 / 50 - >			< - - - - - 400 / 3+N / 50 - - - - - >									
	Max. running current	A	12	16	18	8	10	14	16	17	17	20	24	29	35
	Max. inrush current	A	50	64	79	49	55	71	79	106	107	131	139	179	206
Version with tank and pump	Pump nominal power	kW	0,13	0,13	0,19	0,19	0,30	0,30	0,30	0,30	0,45	0,55	0,55	0,55	0,75
	Available static pressure	kPa	41	37	50	50	150	143	129	121	190	204	193	155	153
	Available pressure with additional pump	kPa	102	97	120	118	-	-	-	-	-	-	-	-	-
	Storage water volume	l	< - - - - - 50 - - - - - >			< - - - - - 150 - - - - - >					< - - - - - 300 - - - - - >				
	Expansion vessel	l	2	2	2	2	5	5	5	5	8	8	8	8	8
Water connections	"G	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"
Sound pressure (3)	STD	dB(A)	51	51	51	51	52	52	52	52	52	52	53	54	55
Weights	Transport weight (4)	Kg	89	90	94	98	114	116	118	120	220	230	245	265	279
	Transport weight (5)	Kg	119	120	124	128	185	187	189	191	310	320	335	355	369
	Operating weight (4)	Kg	90	91	95	99	116	118	120	122	223	233	248	268	282
	Operating weight (5)	Kg	170	171	175	179	337	339	341	343	613	623	638	658	672

DIMENSIONS

CHA			18	21	25	31	41	51	61	71	81	91	101	131	151
L	STD	mm	870	870	870	870	1160	1160	1160	1160	1850	1850	1850	1850	1850
P	STD	mm	320	320	320	320	500	500	500	500	1000	1000	1000	1000	1000
H	STD	mm	1100	1100	1100	1100	1270	1270	1270	1270	1300	1300	1300	1300	1300
	SP	mm	1460	1460	1460	1460	1790	1790	1790	1790	1300	1300	1300	1300	1300

DIMENSIONAL

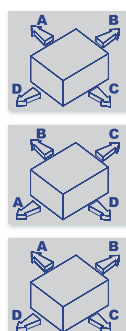


CLEREANCE AREA

CHA 18 ÷ 31		
A	mm	200
B	mm	200
C	mm	200
D (*)	mm	800

CHA 41 ÷ 71		
A	mm	200
B	mm	200
C	mm	200
D (*)	mm	800

CHA 81 ÷ 151		
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.
 - (4) Unit without tank and pump.
 - (5) Unit with tank and pump.
 - (*) D SIDE: Fan side.
 - (**) A SIDE: Electrical board side.
- N.B. Weights of WP versions are indicated on the technical book.