

CHA 201-P÷702-P

AIRCOOLED LIQUID CHILLERS AND HEAT PUMPS WITH AXIAL FANS, SEMI-HERMETIC COMPRESSORS AND PLATE EXCHANGERS.

FROM 48 kW TO 181 kW.



UNIT DESCRIPTION

The water coolers and heat pumps of the CHA 201-P÷702-P series are intended to satisfy the needs of medium-large service sector or industrial environments.

They are used, combined with terminal units, for the air conditioning of the rooms or to remove the heat developed during industrial processes; they can be supplied with RS 485 ModBus connection to integrate, if necessary, the innovative monitoring and control system CLIMAFRIEND that allows to program up to 30 different environments in order to obtain a level of comfort intuitively and efficiently without compromises.

Equipped with axial fans, semihermetic compressors and plate-type exchangers, even in the super silent version, these units can be completed by a hydraulic circuit with tank, with pump, or with tank and pump. A wide range of accessories, factory-assembled or supplied separately, complete the outstanding versatility and functionality of the series.



VERSIONS

CHA

Cooling only

CHA/SSL

Super silenced cooling only

CHA/WP

Reversible heat pump

CHA/WP/SSL

Super silenced reversible heat pump

FEATURES

- Self-supporting galvanized steel frame protected with polyester powder painting.
- Semi-hermetic compressors with built-in oil separator, crankcase heater, oil sight glass, thermal protection and intercepting valves.
- Axial fans directly coupled to an electric motor with external rotor.
- Condenser with copper tube and aluminium finned coil.
- Evaporator in AISI 316 stainless steel braze welded plates type with one or two independent circuits on the refrigerant side and on the water side. On the heat pump units is always installed an antifreeze heater.
- R407C refrigerant.
- Electrical board includes: main switch with door safety interlock, fuses, overload protection for compressors and thermocontacts for fans.
- Microprocessor control and regulation system.

CT	Condensing control down to 0 °C
CC	Condensing control down to -20°C
DS	Desuperheater
RT	Total heat recovery
SI	Inertial tank
PS	Single circulating pump
PD	Double circulating pump

Loose accessories:

MN	High and low gauges
MO	Compressor oil gauges
CR	Remote control panel
IS	RS 485 serial interface
RP	Metallic guards for condenser
AG	Rubber shock absorbers

ACCESSORIES

Factory fitted accessories:

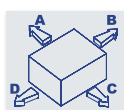
IM	Protection module
SL	Unit silencing

CHA			201-P	251-P	301-P	351-P	402-P	502-P	602-P	702-P
Cooling	Cooling capacity (1)	kW	48,3	59,5	70,8	89,7	100,6	124,7	141,5	180,7
	Absorbed power (1)	kW	15,6	19,8	24,5	30,6	31,2	40,6	48,0	63,2
Heating	Heating capacity (2)	kW	53,3	65,6	78,1	95,3	110,9	137,6	156,1	199,4
	Absorbed power (2)	kW	16,4	20,6	25,6	31,9	32,8	42,2	50,2	65,8
Compressors	Quantity	n°	1	1	1	1	2	2	2	2
	Type		<----- Semi-hermetics ----->							
	Refrigerant circuits	n°	1	1	1	1	2	2	2	2
	Capacity steps	n°	2	2	2	2	4	4	4	4
Evaporator	Water flow	l/s	2,31	2,84	3,38	4,29	4,81	5,96	6,76	8,63
	Pressure drops	kPa	41	43	49	46	36	44	47	55
	Water connections	"G	<----- 1½" ----->			<----- 2½" ----->				
Electrical characteristics	Power supply	V/Ph/Hz	<----- 400 / 3 / 50 ----->							
	Max. running current	A	36	50	60	76	72	101	117	156
	Max. inrush current	A	100	116	130	157	136	168	188	237
STD version and with SL accessory	Fans	n°	1	1	2	2	2	3	3	3
	Air flow	m³/s	4,2	4,1	7,9	7,6	7,9	11,7	11,1	15,6
	Sound pressure (3)	dB(A)	60	60	62	62	62	62	62	66
	SL sound pressure (3)	dB(A)	56	56	57	57	57	57	58	63
SSL version	Fans	n°	2	2	2	2	3	3	3	---
	Air flow	m³/s	3,5	3,4	6,0	5,3	9,2	8,5	8,5	---
	Sound pressure (3)	dB(A)	50	50	52	52	52	52	52	---
Unit with tank and pump	Pump nominal power	kW	0,75	0,75	0,75	1,10	1,50	1,50	1,50	1,85
	Pump static pressure	kPa	129	117	101	129	164	131	113	82
	Storage water volume	l	400	400	400	400	600	600	600	600
	Expansion vessel	l	12	12	12	12	18	18	18	18
	Water connections	"G	2½"	2½"	2½"	2½"	2½"	2½"	2½"	2½"
Weights	Transport weight (4)	Kg	545	605	680	830	1050	1115	1235	1410
	Transport weight (5)	Kg	695	755	830	980	1290	1355	1475	1650
	Operating weight (4)	Kg	552	612	692	844	1064	1129	1250	1426
	Operating weight (5)	Kg	1095	1155	1230	1380	1890	1955	2075	2250

DIMENSIONS

CHA			201-P	251-P	301-P	351-P	402-P	502-P	602-P	702-P
L	STD	mm	2350	2350	2350	2350	3550	3550	3550	3550
	SSL	mm	2350	2350	2350	2350	3550	3550	3550	---
P	STD	mm	1100	1100	1100	1100	1100	1100	1100	1100
	WP	mm	1100	1100	1100	1100	1100	1100	1100	---
H	STD	mm	1920	1920	2220	2220	2220	2220	2220	2275
	SSL	mm	1920	1920	2220	2220	2275	2275	2275	---

DIMENSIONAL



CLEREANCE AREA

CHA 201-P ÷ 702-P		
A	mm	300
B	mm	1800
C (*)	mm	800
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.
 - (*) C SIDE: Electrical board side.
- N.B. Weights of SSL and WP versions are indicated on the technical book.