

CHA 182-P÷604-P

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

FROM 47 kW TO 162 kW.



UNIT DESCRIPTION

The water coolers and heat pumps of the CHA 182-P÷604-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, Scroll 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.
- Scroll compressors with oil sight glass, furnished with an internal overheat protection and crankcase.
- 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.

ACCESSORIES

Factory fitted accessories:

IM	Protection module
SL	Unit silencing
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:

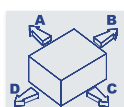
MN	High and low gauges
CR	Remote control panel
IS	RS 485 serial interface
RP	Metallic guards for condenser
AG	Rubber shock absorbers

CHA			182-P	202-P	262-P	302-P	364-P	404-P	524-P	604-P
Cooling	Cooling capacity (1)	kW	46,8	54,4	71,2	82,0	96,0	111,3	140,3	161,6
	Absorbed power (1)	kW	14,9	17,2	22,4	26,1	29,4	34,2	44,8	54,0
Heating	Heating capacity (2)	kW	53,0	61,6	80,6	92,9	108,8	126,1	158,8	182,9
	Absorbed power (2)	kW	15,0	17,6	23,2	27,1	30,5	35,5	45,0	56,8
Compressors	Quantity	n°	2	2	2	2	4	4	4	4
	Type		<----- Scroll ----->							
	Refrigerant circuits	n°	2	2	2	2	2	2	2	2
	Capacity steps	n°	2	2	2	2	4	4	4	4
Evaporator	Water flow	l/s	2,24	2,60	3,40	3,92	4,60	5,32	6,70	7,72
	Pressure drops	kPa	31	37	39	41	33	36	47	48
	Water connections	"G	1½"	1½"	1½"	1½"	2½"	2½"	2½"	2½"
Electrical characteristics	Power supply	V/Ph/Hz	<----- 400 / 3 / 50 ----->							
	Max. running current	A	42	46	58	58	84	93	113	139
	Max. inrush current	A	145	151	198	234	187	198	253	305
STD version and with SL accessory	Fans	n°	1	1	2	2	2	3	3	3
	Air flow	m³/s	4,15	4,10	7,89	7,66	7,50	11,66	11,66	15,55
	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	57	63
SSL version	Fans	n°	2	2	2	2	3	3	3	---
	Air flow	m³/s	3,55	3,45	6,05	5,65	9,20	8,50	8,50	---
	Sound pressure (3)	dB(A)	50	50	51	51	51	51	51	---
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	136	125	103	137	162	146	111	102
	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	563	623	698	816	1086	1166	1225	1414
	Transport weight (5)	Kg	713	773	848	966	1326	1406	1465	1654
	Operating weight (4)	Kg	569	630	707	826	1098	1179	1240	1430
	Operating weight (5)	Kg	1113	1173	1248	1366	1926	2006	2065	2254

DIMENSIONS

CHA			182-P	202-P	262-P	302-P	364-P	404-P	524-P	604-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
	SSL	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 182-P ÷ 604-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.