

# CHA/Y 282÷604

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

FROM 46 kW TO 105 kW.



## UNIT DESCRIPTION

The water coolers and heat pumps of the CHA/Y 282÷604 series use the refrigerant HFC R134a, with minimum O.D.P. value, which allows for significant energy savings in respect of the environment. These units are particularly intended to satisfy the needs of medium/large-sized service sector or industrial rooms.

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 tube-bundle 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, internal overheat protection and crankcase heater if needed.
- Axial fans directly coupled to an electric motor with external rotor.
- Condenser with copper tube and aluminium finned coil.
- Shell and tube type evaporator, with two independent refrigerants circuits and one water circuit.
- R134a refrigerant.
- Electrical board includes: main switch with door safety interlock, fuses, overload protection for compressors and thermocontacts for fans.
- Microprocessor control and regulation system.

HR	Desuperheater
HRT/S	Total heat recovery in series
HRT/P	Total heat recovery in parallel
SP	Inertial tank
PU	Single circulating pump
PD	Double circulating pump
SPU	Inertial tank and single circulating pump
SPD	Inertial tank and double circulating pump
RF	Cooling circuit shut off valves
FE	Evaporator heater
FU	Evaporator heater for SPU
FD	Evaporator heater for SPD
SS	Soft start
CP	Potential free contacts

### Loose accessories:

MN	High and low gauges
CR	Remote display
IS	RS 485 serial interface
RP	Metallic guards for condenser
FP	Metallic guards for condenser with filter (except WP)
AG	Rubber shock absorbers
AM	Spring shock absorbers
FL	Flow switch

## ACCESSORIES

### Factory fitted accessories:

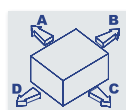
IM	Protection module
SL	Unit silencing
CT	Condensing control down to 0 °C
CC	Condensing control down to -20°C

CHAY			282	302	393	453	524	604
Cooling	Cooling capacity (1)	kW	46,5	53,5	68,4	79,4	93,2	105,4
	Absorbed power (1)	kW	14,4	17,6	24,5	27,5	31,2	37,4
Heating	Heating capacity (2)	kW	48,1	57,8	71,6	84,3	96,4	115,8
	Absorbed power (2)	kW	15,8	20,0	26,6	31,1	34,0	42,2
Compressors	Quantity	n°	2	2	3	3	4	4
	Type		<----- Scroll ----->					
	Refrigerant circuits	n°	2	2	2	2	2	2
	Capacity steps	n°	2	2	3	3	4	4
Evaporator	Water flow	l/s	2,22	2,56	3,27	3,79	4,45	5,04
	Pressure drops	kPa	34	31	13	17	23	27
	Water connections	"G	1½" G	2½" G	<----- PN16/DN80 ----->			
Electrical characteristics	Power supply	V/Ph/Hz	<----- 400 / 3 / 50 ----->					
	Max. running current	A	56	66	85	100	112	133
	Max. inrush current	A	196	232	225	266	252	299
STD version and with SL accessory	Fans	n°	1	1	2	2	2	3
	Air flow	m³/s	4,2	4,1	7,9	7,7	7,9	11,7
	Sound pressure (3)	dB(A)	61	61	62	63	62	63
	SL sound pressure (3)	dB(A)	57	57	57	58	58	58
SSL version	Fans	n°	2	2	2	2	3	3
	Air flow	m³/s	3,5	3,4	6,0	5,9	9,2	8,5
	Sound pressure (3)	dB(A)	51	51	52	53	52	53
Unit with tank and pump	Pump nominal power	kW	0,75	0,75	1,85	1,85	1,85	1,85
	Pump static pressure	kPa	129	124	159	151	143	133
	Storage water volume	l	190	190	470	470	470	470
	Expansion vessel	l	8	8	18	18	18	18
	Water connections	"G	1½"	1½"	2"	2"	2½"	2½"
Weights	Transport weight (4)	Kg	665	720	920	985	1200	1352
	Transport weight (5)	Kg	773	828	1100	1165	1380	1601
	Operating weight (4)	Kg	679	735	949	1014	1229	1383
	Operating weight (5)	Kg	963	1018	1570	1635	1850	2261

DIMENSIONS

CHAY			282	302	393	453	524	604
L	STD	mm	2350	2350	2350	2350 (*)	3550	3550
P	STD	mm	1100	1100	1100	1100	1100	1100
H	STD	mm	1920	1920	2220	2220	2220	2220

DIMENSIONAL



CLEREANCE AREA

CHAY 282 ÷ 604		
A	mm	800
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.
  - (\*) 3550 mm for WP version.
  - (\*\*) C SIDE: Electrical board side.
- N.B. Weights of SSL and WP versions are indicated on the technical book.