

CHA 666-P÷18012-P

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

FROM 192 kW TO 534 kW.



UNIT DESCRIPTION

MultiPower is an extremely flexible and reliable machine: by means of an intelligent control module it optimizes the operation times and power supplied by the Scroll compressors, following the heat load requirement of the system.

In this manner it obtains high energy efficiency with clearly high average seasonal EER values, abatement of the starting currents generated, elimination of the inertial accumulation tanks and excellent noiselessness since the fans adjust their rotation speed to the real load of the system, especially advantageous during the night. The use of components built in large series, thus highly reliable, and the management of a large number of compressors extends the machine's useful life and reduces the risk of a breakdown. In fact, the non-operation of a compressor does not jeopardize the functionality of the refrigerator which continues to work, although at a reduced power. Furthermore, the required maintenance work, precisely due to the high reliability of the machine and its components, is remarkably reduced.

multi power



VERSIONS

CHA

Cooling only

CHA/SSL

Super silenced cooling only

CHA/WP

Reversible heat pump

CHA/WP/SSL

Super silenced reversible heat pump

CARATTERISTICHE

- 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.
- 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
PS	Single circulating pump
PD	Double circulating pump

Loose accessories:

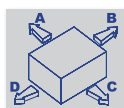
MN	High and low gauges
CR	Remote control panel
IS	RS 485 serial interface
RP	Metallic guards for condenser
AG	Rubber shock absorbers

CHA			666-P	786-P	826-P	906-P	1048-P	1128-P	1208-P	13810-P	15010-P	16812-P	18012-P
Cooling	Cooling capacity (1)	kW	192	218	242	268	295	325	358	400	442	486	534
	Absorbed power (1)	kW	68	79	88	98	106	118	131	147	166	178	196
Heating	Heating capacity (2)	kW	212	241	275	316	324	374	423	456	522	558	633
	Absorbed power (2)	kW	72	82	90	98	110	121	132	151	167	182	197
Compressors	Quantity	n°	3+3	3+3	3+3	3+3	4+4	4+4	4+4	5+5	5+5	6+6	6+6
	Type		----- Scroll ----->										
	Refrigerant circuits	n°	2	2	2	2	2	2	2	2	2	2	2
	Capacity steps	n°	6	6	6	6	8	8	8	8	8	10	10
Evaporator	Water flow	l/s	9,17	10,42	11,56	12,80	14,09	15,53	17,10	19,11	21,12	23,22	25,51
	Pressure drops	kPa	48	46	47	49	51	46	53	56	56	57	55
	Water connections	"G	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"	3"
Electrical characteristics	Power supply	V/Ph/Hz	----- 400 / 3 / 50 ----->										
	Max. running current	A	153	178	188	203	232	252	272	314	344	378	406
	Max. inrush current	A	293	313	354	369	372	418	438	480	510	544	572
STD version and with SL accessory	Fans	n°	4	4	4	4	4	4	4	6	6	6	8
	Air flow	m³/s	19,4	19,4	21,2	18,4	23,6	22,8	22,8	38,4	33,3	33,3	36,6
	Sound pressure (3)	dB(A)	67	67	69	67	68	68	68	70	70	70	69
	SL sound pressure (3)	dB(A)	64	64	66	64	65	6	65	67	67	67	66
SSL version	Fans	n°	4	4	4	4	6	6	6	8	8	8	---
	Air flow	m³/s	13,6	13,6	15,3	15,3	21,6	20,8	20,8	26,4	26,4	30,5	---
	Sound pressure (3)	dB(A)	58	58	59	59	60	60	60	61	61	62	---
Unit with tank and pump	Pump nominal power	kW	3,0	3,0	4,0	4,0	5,5	5,5	5,5	5,5	7,5	7,5	7,5
	Pump static pressure	kPa	150	145	160	155	170	175	155	145	170	155	145
	Expansion vessel	l	18	18	18	18	18	18	18	18	18	18	18
	Water connections	DN	100	100	100	100	100	100	100	100	100	100	100
Weights	Transport weight	Kg	1847	1885	1944	2062	2481	2677	2737	3094	3351	3529	3684
	Operating weight	Kg	1860	1900	1960	2080	2500	2700	2760	3120	3380	3560	3720

DIMENSIONS

CHA			666-P	786-P	826-P	906-P	1048-P	1128-P	1208-P	13810-P	15010-P	16812-P	18012-P
L	STD	mm	2800	2800	2800	2800	4000	4000	4000	5000	5000	5000	5000
	SSL	mm	2800	2800	2800	2800	4000	4000	4000	5000	5000	5000	---
P	STD	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	SSL	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	---
H	STD	mm	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
	SSL	mm	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	---

DIMENSIONAL



CLEREANCE AREA

CHA 666-P ÷ 18012-P		
A	mm	500
B	mm	1800
C (*)	mm	1000
D	mm	1800

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.
 - (*) C SIDE: Electrical board side.
- N.B. Weights of SSL and WP versions are indicated on the technical book.