

CHA/K 726-P÷36012-P

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

FROM 199 kW TO 1051 kW.



UNIT DESCRIPTION

MULTIPOWER is an extremely flexible and reliable machine: an intelligent control module optimizes functioning times and supplied power from the Scroll compressors based on heat load demands in the system. The machine is equipped with R410A coolant, guaranteeing full adherence to the protocol standards in the Kyoto Treaty (O.D.P.=0) and providing elevated energy efficiency. In fact, this results in heat loads less than 50%, obtaining with MULTIPOWER, EER surpassing any traditional cooler. In this way, the machine can obtain high energy yield with decisively elevated ESEER values, elimination of generated power surges, elimination of inertial accumulation tanks and excellent silent functioning, since the fans adjust their speeds to the actual system load, providing benefits especially during nocturnal hours. The use of components built in large series, making them highly reliable, and management of an elevated number of compressors permits increased life span and reduction of machine stopping risks. In fact, a faulty compressor will not compromise cooler functioning, which will continue to function with decreased power levels. In addition, maintenance operations are decisively reduced due to the high reliability of the machines and their components.



VERSIONS

CHA/K

Cooling only

CHA/K/SSL

Super silenced cooling only

CHA/K/WP

Reversible heat pump

CHA/K/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.
- Evaporator in AISI 316 stainless steel braze welded plates type with two independent circuits on the refrigerant side and on the water side, complete with water differential pressure switch. On the heat pump units is always installed an antifreeze heater.
- Electronic thermostatic valve.
- R410A refrigerant.
- Electrical board includes: main switch with door safety interlock, fuses or magnetothermic switches, 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

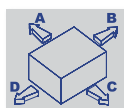
CHA/K			726-P	786-P	826-P	906-P	1048-P	1128-P	1208-P	13010-P	15010-P
Cooling	Cooling capacity (1)	kW	199	226	251	276	304	335	367	403	444
	Absorbed power (1)	kW	69	80	85	94	104	113	122	132	155
Heating	Heating capacity (2)	kW	228	255	283	310	338	369	401	441	510
	Absorbed power (2)	kW	73	83	90	103	108	121	132	141	164
Compressors	Quantity	n°	3+3	3+3	3+3	3+3	4+4	4+4	4+4	5+5	5+5
	Type		----- Scroll ----->								
	Refrigerant circuits	n°	2	2	2	2	2	2	2	2	2
	Capacity steps	n°	6	6	6	6	8	8	8	8	8
Evaporator	Water flow (1)	l/s	9,51	10,80	11,99	13,19	14,52	16,01	17,53	19,25	21,21
	Pressure drops (1)	kPa	40	51	62	54	50	49	59	47	59
	Water connections	"G	3"	3"	3"	3"	3"	3"	3"	3"	3"
Electrical characteristics	Power supply	V/Ph/Hz	----- 400 / 3 / 50 ----->								
	Max. running current	A	158	172	182	203	224	244	265	284	336
STD version and with SL accessory	Inrush current	A	182	304	311	332	356	373	394	416	465
	Fans	n°	4	4	4	4	4	4	4	6	6
	Air flow	m³/s	20,5	20,5	20,5	19,4	22,5	21,8	21,8	29,7	32,8
	Sound pressure (3)	dB(A)	66	66	67	69	67	69	70	68	69
SSL version	SL sound pressure (3)	dB(A)	63	63	64	66	64	65	66	65	66
	Fans	n°	4	4	4	4	6	6	6	6	6
Unit with pump	Air flow	m³/s	15,3	15,3	15,3	15,3	25,0	23,3	23,3	23,3	25,3
	Sound pressure (3)	dB(A)	57	57	59	61	58	60	62	59	61
	Pump nominal power	kW	3,0	3,0	4,0	4,0	5,5	5,5	5,5	5,5	5,5
Unit with pump	Pump static pressure	kPa	239	218	290	269	287	274	260	241	214
	Expansion vessel	l	18	18	18	18	18	18	18	18	18
	Water connections	DN	100	100	100	100	100	100	100	100	100
	Weights	Transport weight	Kg	1654	1674	1763	1961	2199	2457	2566	2610
	Operating weight	Kg	1670	1690	1780	1980	2220	2480	2590	2640	3210

CHA/K			16812-P	18012-P	21012-P	24012-P	27012-P	30012-P	33012-P	36012-P	
Cooling	Cooling capacity (1)	kW	495	546	602	671	751	845	942	1051	
	Absorbed power (1)	kW	170	184	211	243	275	303	336	365	
Heating	Heating capacity (2)	kW	564	620	684	776	861	962	1078	1210	
	Absorbed power (2)	kW	182	202	223	249	282	312	349	383	
Compressors	Quantity	n°	6+6	6+6	6+6	6+6	6+6	6+6	6+6	6+6	
	Type		----- Scroll ----->								
	Refrigerant circuits	n°	2	2	2	2	2	2	2	2	
	Capacity steps	n°	10	10	10	10	10	10	10	10	
Evaporator	Water flow (1)	l/s	23,65	26,09	28,76	32,06	35,88	40,37	45,01	50,21	
	Pressure drops (1)	kPa	49	60	58	49	41	51	42	52	
	Water connections	"G	3"	3"	3"	6"	6"	6"	6"	6"	
Electrical characteristics	Power supply	V/Ph/Hz	----- 400 / 3 / 50 ----->								
	Max. running current	A	367	398	458	528	602	667	718	761	
STD version and with SL accessory	Inrush current	A	496	527	632	702	810	875	979	1022	
	Fans	n°	6	6	6	8	10	10	12	12	
	Air flow	m³/s	31,7	31,7	31,7	38,6	47,8	47,8	57,2	57,2	
	Sound pressure (3)	dB(A)	68	70	72	73	73	73	73	74	
SSL version	SL sound pressure (3)	dB(A)	65	67	69	70	70	70	70	71	
	Fans	n°	8	8	8	8	12	12	---	---	
Unit with pump	Air flow	m³/s	30,7	30,7	30,7	32,8	46,1	46,1	---	---	
	Sound pressure (3)	dB(A)	60	62	64	65	64	65	---	---	
	Pump nominal power	kW	5,5	5,5	5,5	5,5	11,0	11,0	11,0	11,0	
Unit with pump	Pump static pressure	kPa	240	233	224	210	253	234	213	183	
	Expansion vessel	l	18	18	18	18	18	18	18	18	
	Water connections	DN	100	100	150	150	150	150	150	150	
	Weights	Transport weight	Kg	3294	3463	3517	3682	4200	4518	4918	5044
	Operating weight	Kg	3330	3500	3560	3730	4260	4580	5238	5354	

DIMENSIONS

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L	STD	mm	2800	2800	2800	2800	4000	4000	4000	4000	5000	5000	5000	5000	5000	6200	6200	7200	7200
	SSL	mm	2800	2800	2800	2800	4000	4000	4000	4000	5000	5000	5000	5000	6200	7200	7200	---	---
P	STD	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	SSL	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	---	---
H	STD	mm	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
	SSL	mm	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	---	---

DIMENSIONAL



CLERANCE AREA

CHA/K 726-P ÷ 36012-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.