

TECHNICAL DATASHEET



CHA/K 726-P

AIRCOOLED LIQUID CHILLERS WITH AXIAL FANS, SCROLL COMPRESSORS AND PLATE EXCHANGER



The picture and the descriptions are only a sample of the selected unit. The real unit configuration can change depending on versions and or accessories selected.

TECHNICAL FEATURES

General description.

Aircooled liquid Chillers with axial fans for outdoor installation.

Frame

Self-supporting galvanized steel frame further protected with polyester powder painting. Easy to remove panels allow access to the inside of the unit for maintenance and other necessary operations.

Compressors

Scroll with oil sight glass. They are fitted with internal overheat protection and crankcase heater. They are installed on rubber shock absorbers.

Fans.

Axial fans directly coupled to an Inverter three-phase electric motor with external rotor. A safety fan guard is fitted on the air flow discharge.

Condenser

Made up of two finned coils with copper pipes and aluminium fins. Circuits are made to create two independent circuits.

Evaporator

AISI 316 stainless steel braze welded plate type, with two independent circuits on the refrigerant side and one on the water side.

CHA/K 726-P

Electrical board

It includes: main switch with door safety interlock; fuses; thermal protection relays for compressors; thermocontacts for fans; interface relays; electrical terminals for external connections.

Microprocessor

For automatic control of the unit, allowing continuous display of the operational status of the unit, control set and real water temperature and, in case of partial or total block of the unit, indication of security device that intervened.

Refrigerant circuit.

Each unit includes two independent refrigerant circuits. Made of copper pipe, it includes the following components on all models: electronic thermostatic expansion valve; cooling circuit shut-off valve on liquid line; filter drier; liquid and humidity indicator; high and low pressure switch (with fixed setting); safety valve.

Water circuit.

It includes: evaporator; temperature sensor; antifreeze sensor; water differential pressure switch; circulating pump; expansion vessel; manual air vent; water drain; safety valve; thermal relay.

ACCESSORIES

EC - EC Inverter fans

PS - Single circulating pump

TECHNICAL DATASHEET



CHA/K 726-P

TECHNICAL DATA

Unit		CHA/K 726-P
Refrigerant		R410A
Refrigerant circuits	n°	2
Refrigerant charge	kg	30

Cooling conditions

Ambient air - Temperature	°C	35.0
Ambient air - Relative humidity	%	50
Fluid		Water
Inlet fluid temperature	°C	12.0
Outlet fluid temperature	°C	7.0
Flow rate	l/s	9.48
Pressure drops	kPa	40.0
Elevation	m	0

Cooling performances

Cooling capacity	kW	199.0
Compressors absorbed power	kW	60.6
Total absorbed power (1)	kW	68.0
EER		2.92
SEER (*)		4.13
Energy efficiency (*)	%	162

TECHNICAL DATASHEET



CHA/K 726-P

Compressors

Type		Scroll
Number	n°	6
Capacity steps	%	0/17/33/50/67/83/100
Minimum capacity step	%	17

Fan section

Exchanger coil		Finned coil Cu-Al
Type		EC Axial
Number	n°	4
Airflow	m ³ /s	20.6
Fans absorbed power	kW	7.4
Fans absorbed current	A	11.9
Fans available static pressure	Pa	0

Hydraulic section (User side)

Heat exchanger		Plate
Fouling factor	m ² °C/W	0.0000000
Minimum water circuit content	l	630
Water connections		DN100

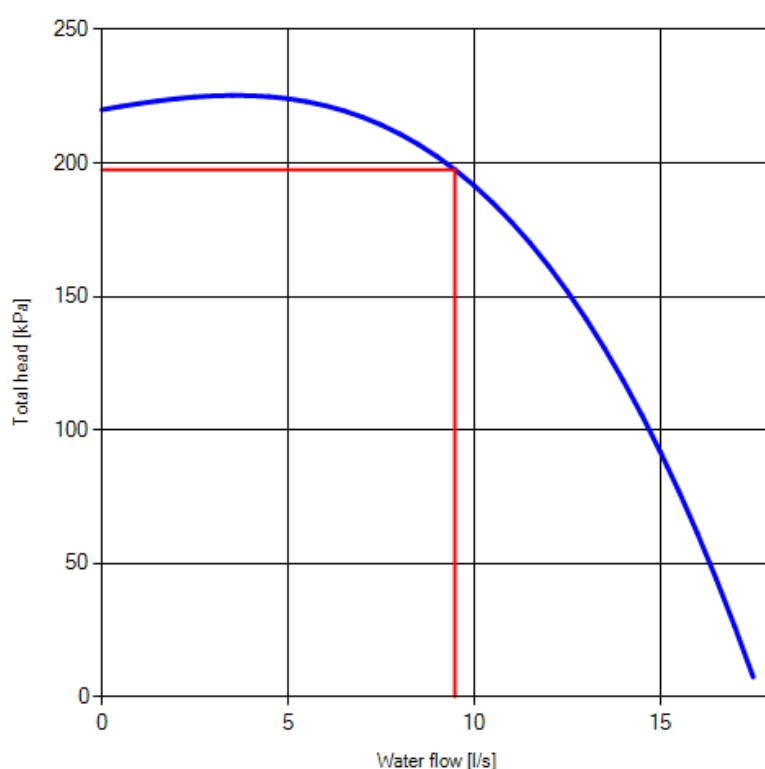
TECHNICAL DATASHEET



CHA/K 726-P

Hydraulic kit

Pumps	n°	1
Pump available static pressure	kPa	158
Pump nominal power	kW	3.0
Pump nominal current	A	5.9
Maximum working pressure	kPa	600
Expansion vessel content	l	18



Dimensions

Length	mm	2800
Width	mm	2200
Height	mm	2100

Weight

Transport weight	kg	1789
Operating weight	kg	1820

TECHNICAL DATASHEET

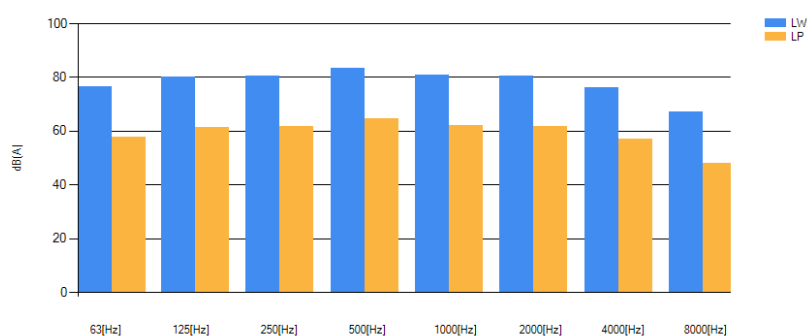


CHA/K 726-P

Sound data

Sound power (Lw) (2)	dB(A)	88.8
Sound pressure (Lp) (3)	dB(A)	70.0
Distance from the unit	m	1

Frequency	Lw	Lp
Hz	dB(A)	dB(A)
63	76.5	57.7
125	80.0	61.2
250	80.5	61.7
500	83.5	64.7
1000	81.0	62.2
2000	80.5	61.7
4000	76.0	57.2
8000	67.0	48.2
TOT	88.8	70.0



Electrical data

Absorbed current	A	123.9
Max running current	A	152.0
Unit max starting current	A	276.0
Power supply	V-Hz-ph	400/50/3
Auxiliary supply	V-Hz-ph	230/50/1

Notes

(1) Compressors and fans absorbed power

(2) Sound power according to Standard ISO 3744 and Eurovent 8/1.

(3) Sound pressure measured in free field conditions. Average value as defined by ISO 3744.

(*) Seasonal energy efficiency of cooling at low temperature. According to EU Regulation n. 2016/2281.

The reported performances are obtained from theoretical calculations and therefore affected by tolerances.

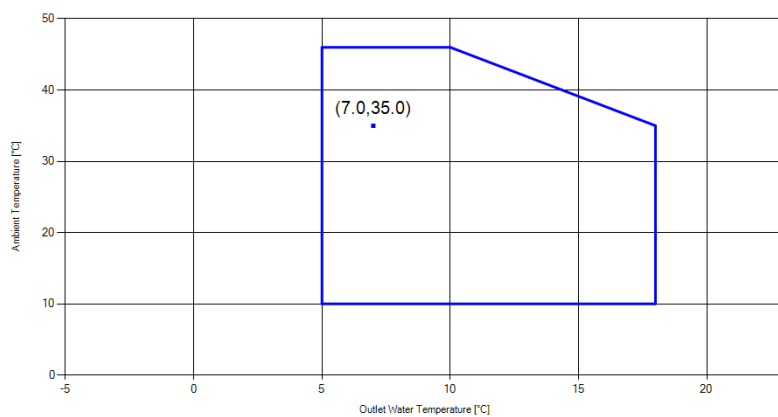
The manufacturer reserves the right to modify the data whenever it is considered necessary, without prior notice.

TECHNICAL DATASHEET



CHA/K 726-P

OPERATING RANGE: COOLING

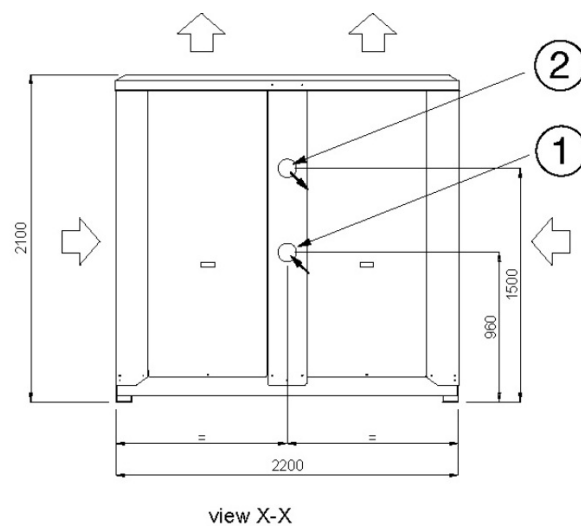
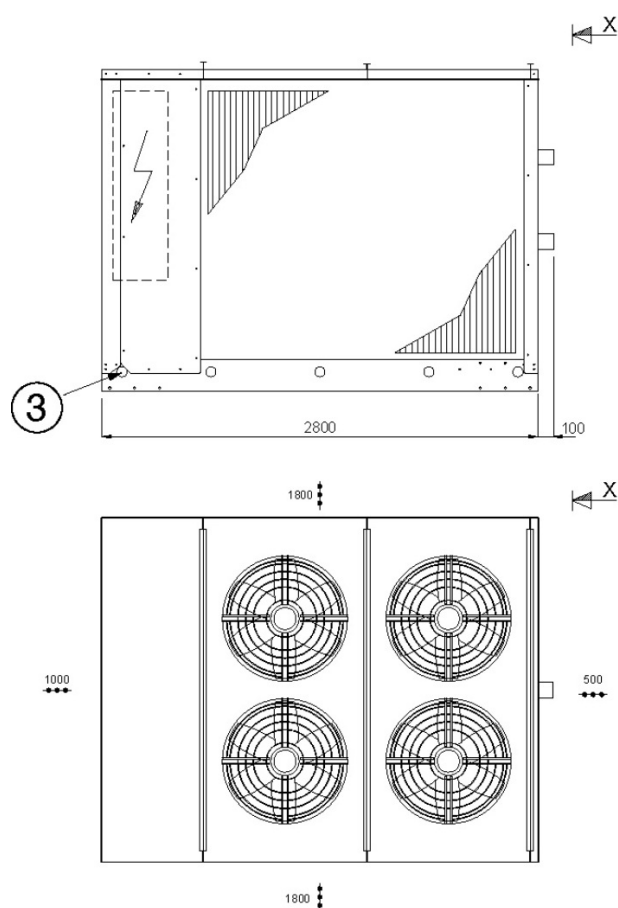


TECHNICAL DATASHEET



CHA/K 726-P

DIMENSIONAL DRAWING



- 1) Water inlet
- 2) Water outlet
- 3) Lifting points
- 4) Clearance area

TECHNICAL DATASHEET



CHA/K 726-P

PRODUCT FICHE according to European Regulation 2016/2281: Information requirements for comfort chillers								
Model:		CHA/K 726-P						
Outdoor side heat exchanger of chiller:								Air
Indoor side heat exchanger of chiller:								Water
Type: compressor driven vapour compression								
Driver of the compressor: electric motor								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	198.68	kW		Seasonal space cooling energy efficiency	η _{s,c}	162.2	%
Declared cooling capacity for part load at given outdoor temperatures T _j					Declared energy efficiency ratio or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T _j			
T _j =+ 35°C	P _{dc}	198.68	kW		T _j =+ 35°C	EER _d	2.89	-
T _j =+ 30°C	P _{dc}	146.57	kW		T _j =+ 30°C	EER _d	3.34	-
T _j =+ 25°C	P _{dc}	92.97	kW		T _j =+ 25°C	EER _d	4.83	-
T _j =+ 20°C	P _{dc}	41.38	kW		T _j =+ 20°C	EER _d	5.8	-
Degradation coefficient for air conditioners	C _{dc}	0.90	-					
Power consumption in modes other than "active mode"								
Off mode	P _{OFF}	0.10	kW		Crankcase heater mode	P _{CK}	0.48	kW
Thermostat-off mode	P _{TO}	0.71	kW		Standby mode	P _{SB}	0.10	kW
Other items								
Capacity control	variable				For air-to-water comfort chillers:air flow rate, outdoor measured	-	104607.2	m3/h
Sound power level, indoors	L _{WA}	-	dB(A)		For water/brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m3/h
Sound power level, outdoors	L _{WA}	88.8	dB(A)					
GWP of the R410A	1924		kg CO ₂ eq(100 years)					
Standard rating conditions used:			Low temperature application					