



## CHILLER CENTRIFUGO HFO

**Liquid chiller**

Water cooled

Indoor installation

**Capacity from 808 to 1599 kW**

- ✓ Patented horizontal back to back centrifugal compressor with inverter regulation
- ✓ Solution for large commercial and industrial buildings, with quite zero environmental impact
- ✓ Refrigerant R1234ze - GWP = 7
- ✓ Very high full load and seasonal efficiency with SEER values up to 9.64
- ✓ Falling film evaporator, economizer, oil recovery system
- ✓ Low noise operation and almost total absence of vibrations
- ✓ Compact size: length measure less than 4 meters
- ✓ Condenser water temperature up to 40°C, evaporator water temperature down to 4°C



Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps". The products concerned feature on the website [www.eurovent-certification.com](http://www.eurovent-certification.com)



compliant  
ErP

## functions and features



Cooling only



Water cooled



Indoor  
installation



R-1234ze



Centrifugal



Full  
Inverter

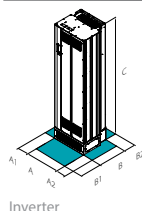


Electronic  
expansion  
valve

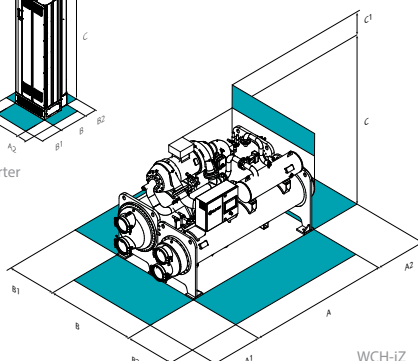


Intelligent

## dimensions and clearances



Inverter



WCH-iZ

### CAUTION!

For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the green areas.

Size	►► WCH-iZ	230	270	300	350	380	420	450
Unit dimensions								
A - Length	mm	3820	3870	3770	3770	3770	3810	3810
B - Width	mm	1760	1760	1940	1940	1970	1970	1970
C - Height	mm	2128	2128	2170	2170	2170	2170	2170
A1	mm	1200	1200	1200	1200	1200	1200	1200
A2	mm	1200	1200	1200	1200	1200	1200	1200
B1	mm	1000	1000	1000	1000	1000	1000	1000
B2	mm	1200	1200	1200	1200	1200	1200	1200
C1	mm	1200	1200	1200	1200	1200	1200	1200
Operating weight	kg	5700	5785	6269	6469	7546	7546	7648
Size	►► WCH-iZ	230	270	300	350	380	420	450
Inverter dimensions								
A - Length	mm	420	420	420	420	420	420	602
B - Width	mm	378	378	378	378	378	378	514
C - Height	mm	1100	1100	1100	1100	1100	1100	2043
B1	mm	600	600	600	600	600	600	800
C1	mm	225	225	225	225	225	225	225
Operating weight	kg	125	125	125	125	125	125	300

The above mentioned data are referred to standard units for the constructive configurations indicated. For all the other configurations, refer to the relative Technical Bulletin.

versions and configurations

HOT GAS BY PASS:

- Hot gas by pass: not required (Standard)
- B Hot gas by pass

technical data

Size	►► WCH-iZ	230	270	300	350	380	420	450
Cooling								
♦ Cooling capacity (EN 14511:2022)	(1) kW	808	949	1069	1229	1353	1476	1599
Total power input (EN 14511:2022)	(1) kW	144	169	185	212	227	249	272
EER (EN 14511:2022)	(1) -	5,61	5,61	5,78	5,81	5,97	5,92	5,87
SEER	(4) -	8,00	8,49	8,49	8,90	9,30	9,48	9,64
η <sub>s,c</sub>	(4) %	312,0	331,8	331,6	347,9	364,0	371,3	377,6
Refrigeration circuits	Nr							
No. of compressors	Nr	1						
Type of compressors	(3) -	CFGi						
Refrigerant	-	R-1234ze						
Water flow-rate (User side)	l/s	38,4	45,1	50,8	58,4	64,3	70,2	76,0
Water flow (Source side)	-	45,6	53,6	60,1	69,0	75,7	82,6	89,6
Standard power supply	V	400/3~/50						
Sound power level	(2) dB(A)	99	101	99	99	101	100	100

(1) Data calculated according to EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; External exchanger water temperature = 30/35°C

(2) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.

Sound power level are not Eurovent certified.

(3) CFGi = Inverter driven centrifugal compressor

(4) Data calculated according to the EN 14825:2018 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

accessories

- EV2R

Two-stage evaporator and right connections
- EV10P

One-stage evaporator and opposing connections
- EV30P

Three-stage evaporator and opposing connection
- EV16

Evaporator water pressure 16 bar
- IS40

Insulation for evaporator with thickness of 40mm
- CO2R

Two-stage condenser and right connections
- CO10P

One-stage condenser and opposing connections
- CO30P

Three-stage condenser and opposing connection
- CO16

Condenser water pressure 16 bar
- AMMX

Spring antivibration mounts
- AMRX

Rubber antivibration mounts
- AMMSX

Anti-seismic spring antivibration mounts
- 2VBYX

ON/OFF motorized by-pass valve
- CSIC

Shielded connection cables between inverter and compressor: length 4.5 metres
- RPR

Refrigerant leak detector
- QSGX

Main switch cabinet: shipped separately
- CCSQX

Connection cables from electrical panel with main switch (QS6X) to inverter and unit electrical panel
- EVMAG

Larger size evaporator
- COMAG

Increased condenser
- CTAS

Larger size compressor
- IOTX

IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately