

CHILLER CENTRIFUGO HFO

Water-cooled liquid chiller for indoor installation

Capacity from 808 to 1599 kW

INVERTER



Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com



Cooling only



Water cooled



Indoor
installation



R-1234ze



Centrifugal



Full
Inverter



Electronic
expansion
valve



INTELLIPLANT



ErP
compliant

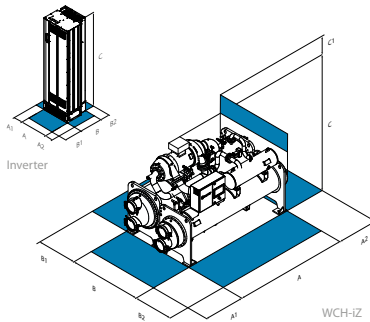
- ✓ Patented horizontal back to back centrifugal compressor with inverter regulation
- ✓ Solution for large commercial and industrial buildings, with quite zero environmental impact
- ✓ Refrigerant R1234ze - GWP = 7
- ✓ Very high full load and seasonal efficiency with SEER values up to 9.64
- ✓ Falling 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

Versions and configurations

HOT GAS BY PASS:

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

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue 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.

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_{sc}	(4) %	312,0	331,8	331,6	347,9	364,0	371,3	377,6
Refrigeration circuits	Nr	1						
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)	l/s	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 14825:2022 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	Spring anti-seismic antivibration mounts
2VBYX	ON/OFF motorized by-pass valve

Accessories whose code ends with "X" are supplied separately

CSIC	Shielded connection cables between inverter and compressor: length 4.5 metres
RPR	Refrigerant leak detector
QSGX	Main switch cabinet: shipped separately
CSSQX	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