

### NEW PRODUCT

HYDRONIC



## Centrifugal Chiller HFO

**Water chiller**  
Water cooled  
Indoor installation  
**Capacity from 808 to 1599 kW**

Centrifugal units **WCH-iZ** are high-efficiency chillers with HFO R-1234ze refrigerant ideal for high-powered commercial and industrial buildings. Designed for indoor installation, they guarantee maximum energy efficiency throughout the entire operating cycle.

#### ■ REFRIGERANT HFO WITH REDUCED ENVIRONMENTAL IMPACT

Clivet's constant search for solutions for sustainable comfort and environmental well-being has led to the development of the WDAT-iZ range of chillers with the R-1234ze refrigerant, which stands out for its nearly zero environmental impact (GWP < 1).

#### ■ ADVANCED TECHNOLOGY:

the centrifugal WCH-iZ is based on a combination of technologies, designed to reduce energy consumption, limit the refrigerant charge, ensure reliable and silent operation. Direct drive compressor with opposed impellers, falling film evaporator, economizer, recovery oil circuit.

#### ■ EXTREMELY HIGH ENERGY EFFICIENCY :

the use of the inverter technology allows to adapt the rotation speed of the compressor to the real request of the system. The minimum reachable modulation is equal to 15% of the total capacity, that means a very high seasonal efficiency, SEER up to 9.64.

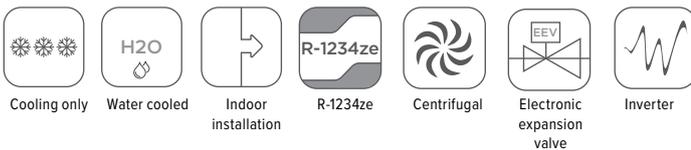


Unit listed on [www.eurovent-certification.com](http://www.eurovent-certification.com)

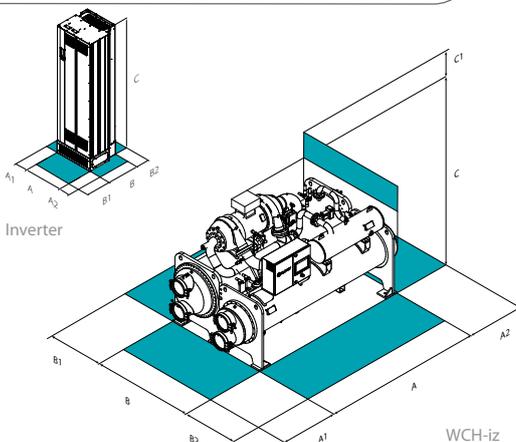


ErP compliant

### functions and features



### dimensions and clearances



SIZE - WCH-iZ		230	270	300	350	380	420	450
<b>UNIT DIMENSIONS</b>								
A - Lunghezza	mm	3820	3870	3770	3770	3770	3810	3810
B - Profondità	mm	1760	1760	1940	1940	1970	1970	1970
C - Altezza	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
Peso in funzionamento	kg	5700	5785	6269	6469	7546	7546	7648
<b>SIZE - WCH-iZ</b>								
<b>INVERTER DIMENSIONS</b>								
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.

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

## 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
<b>COOLING</b>									
▶ Cooling capacity (EN14511:2018)	(1)	kW	808	949	1069	1229	1353	1476	1599
Compressor power input (EN14511:2018)	(1)	kW	144	169	184	211	226	249	272
EER (EN14511:2018)	(1)	-	5,61	5,61	5,81	5,82	5,99	5,93	5,88
SEER	(4)	-	8,00	8,49	8,49	8,90	9,30	9,48	9,64
Refrigeration circuits		Nr				1			
No. of compressors		Nr				1			
Type of compressors	(3)	-				CFGi			
Refrigerant		-				R1234ze			
Water flow (User side)		l/s	38,6	45,3	51,0	58,6	64,6	70,4	76,3
Water flow (Source side)		-	45,3	53,1	59,6	68,4	75,1	81,9	88,9
Standard power supply		V				400/3/50			
Sound pressure level	(2)	dB(A)	79	82	79	79	82	80	81

- (1) Data calculated according to EN 14511:2018 referred to the following conditions: Internal exchanger water = 12/7 °C. External exchanger water = 30/35°C
- (2) Sound levels refer to full load units, in test nominal conditions. The sound pressure level refers to 1 m. from the standard unit outer surface operating in open field. Measurements are carried out according to the UNI EN ISO 9614-2 standard, in compliance with the EUROVENT 8/1 certification. Data referred to the following conditions: Internal exchanger water temperature = 12/7°C; Internal exchanger water = 30/35°C.
- (3) CFGi = Inverter driven centrifugal compressor
- (4) Data calculated according to EN 14825:2018

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** Anti-vibration mount supports
- ✓ **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: metres 4.5 length
- RPR** Refrigerant leak detector in the casing
- QS6X** Electrical panel with main switch
- CCSQX** Connection cables from electrical panel with main switch (QS6X) to inverter and unit electrical panel

### Key to symbols:

- ✓ Accessories separately supplied