

Centrifugal Chiller

Water chiller
 Water cooled
 Indoor installation
Capacity from 876 to 1927 kW



Unit listed on
www.eurovent-certification.com



ErP
 compliant

Centrifugal units **WCH-i** are high-efficiency chillers ideal for high-powered commercial and industrial buildings. Designed for indoor installation, they guarantee maximum energy efficiency throughout the entire operating cycle.

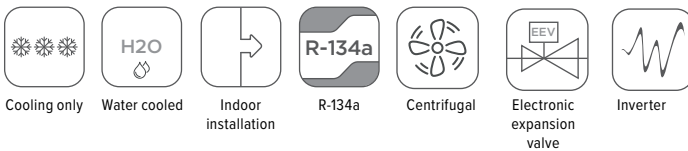
■ ADVANCED TECHNOLOGY:

the centrifugal WCH-i 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 :

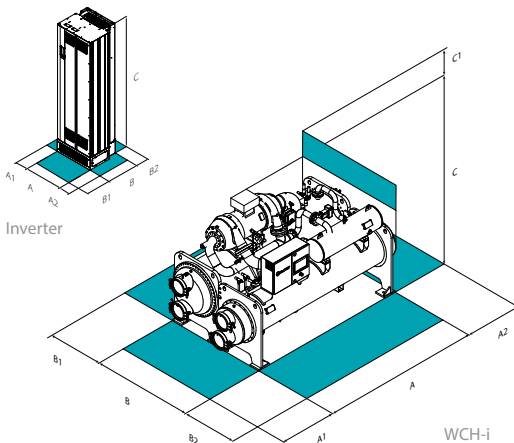
the use of the inverter technology allows to adapt the rotation speed of the compressor to the real request of the system. The minimum reachable modulation is equal to 15% of the total capacity, that means a very high seasonal efficiency, SEER up to 9.06.

functions and features



Cooling only Water cooled Indoor installation R-134a Centrifugal Electronic expansion valve Inverter

dimensions and clearances



SIZE - WCH-i	250	300	350	400	450	500	550
UNIT DIMENSIONS							
A - Lunghezza	mm	3820	3870	3870	3770	3810	3770
B - Profondità	mm	1760	1760	1760	1970	1970	1970
C - Altezza	mm	2128	2128	2128	2170	2170	2170
A1	mm	1200	1200	1200	1200	1200	1200
A2	mm	1200	1200	1200	1200	1200	1200
B1	mm	1000	1000	1000	1000	1000	1000
B2	mm	1200	1200	1200	1200	1200	1200
C1	mm	1200	1200	1200	1200	1200	1200
Peso in funzionamento	kg	5780	5852	6020	7264	7688	8364

SIZE - WCH-i	250	300	350	400	450	500	550
INVERTER DIMENSIONS							
A - Length	mm	420	420	420	420	602	602
B - Width	mm	378	378	378	378	514	514
C - Height	mm	1100	1100	1100	1100	2043	2043
B1	mm	600	600	600	600	800	800
C1	mm	225	225	225	225	225	225
Operating weight	kg	125	125	125	125	300	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-i			250	300	350	400	450	500	550
COOLING									
▶ Cooling capacity (EN14511:2018)	(1)	kW	876	1051	1227	1402	1577	1752	1927
Compressor power input (EN14511:2018)	(1)	kW	157	183	213	234	257	288	322
EER (EN14511:2018)	(1)	-	5,56	5,75	5,76	6,00	6,13	6,09	5,99
SEER	(4)	-	7,66	7,99	8,36	8,82	8,97	9,01	9,06
Refrigeration circuits		Nr				1			
No. of compressors		Nr				1			
Type of compressors	(3)	-				CFGi			
Refrigerant		-				R-134a			
Water flow (User side)		l/s	42,0	50,4	58,8	67,2	75,6	84,0	92,4
Water flow (Source side)		-	49,2	58,8	68,5	77,9	87,3	97,1	107
Standard power supply		V				400/3/50			
Sound pressure level	(2)	dB(A)	80	80	80	80	80	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 14825:2016

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

- EVR2** 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
- CMSC9** Serial communication module for Modbus supervisor
- CMSC8** Serial communication module for Bacnet supervisor
- ✓ **AMMX** Anti-vibration mount supports
- ✓ **AMMSX** Anti-seismic spring antivibration mounts
- ✓ **2VBYX** ON/OFF motorized by-pass valve

Key to symbols:

- ✓ Accessories separately supplied