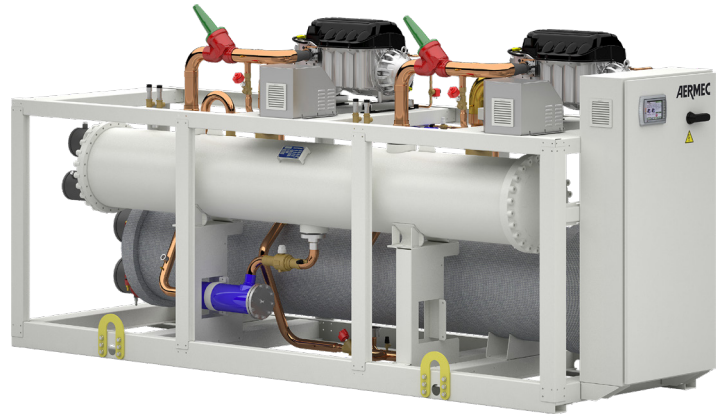


## WTX

## Water/water chiller

Cooling capacity 222,9 ÷ 1958,4 kW

- High efficiency up to 9
- Extended operating range
- Possibility of selecting between heat exchangers with 1 or 2 passes on water side



EUROVENT LCP

### DESCRIPTION

Indoor unit producing chilled water equipped with magnetic levitation centrifugal compressors and shell&tube heat exchangers.

The base and the structure are made of steel treated with polyester anti-corrosion paints.

The technological choices made always focus on maximum quality and efficiency, thereby achieving EER > 6 values (class A for Eurovent operating conditions).

### VERSIONS

**WTX\_A** High Efficiency Chiller

**WTX\_U** Ultra-High Efficiency Chiller

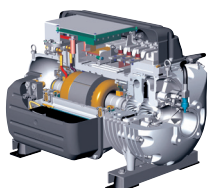
**Both versions can be sound-proofed**

### Operating range

Water produced at 15°C to 50°C on Condenser side and 5°C to 25°C on Evaporator side.

### Two-stage, oil-free centrifugal compressor with latest-generation magnetic levitation

- Oil-free operation without mechanical friction it is possible thanks to the use of magnetic levitation bearings that also ensure the total absence of vibration and low frequency noise
- The compressor is equipped with an inverter for continuous load modulation by varying rpm (from 30% to 100%)
- Built-in device to reduce starting current (**only 6 Amps!**)



### Flooded Evaporator with subcooler

#### Subcooler effect

- Superheats compressor gas intake;
- Subcools thermostatic valve fluid intake;
- Increases chiller yield and ensures gas suction from compressor.

#### Condenser

- With refrigerant on shell side and water on pipe side

**From size 1300 to 2350, heat exchangers have 2 passes on the water side**

**From size 3300 to 4350, configurations are available with heat exchangers with 1 or 2 passes on the water side**

- Extraordinary efficiency under partial loads (**ESEER up to 9 among the highest on the market**)
- Electronic thermostatic valves
- On-board control electronics for monitoring and proactive operating management
- Microprocessor unit control
- Touchscreen colour LCD user interface with very intuitive graphic menus
- Acoustic chiller enclosure (option): in galvanised sheet metal of suitable thickness insulated on the inside with sound-proofing material.

### ACCESSORIES

**AER485P1:** RS-485 interface for supervision systems with MODBUS protocol.

**MULTICHILLER\_EVO:** Control system to command, activate and deactivate the individual chillers in a system in which several units are installed in parallel, always ensuring constant delivery to the evaporators. **This accessory requires the inclusion of AER485P1 for each unit connected.**

**AVX:** Spring-type anti-vibration supports.

**FLOW SWITCH (installation always compulsory for the warranty to be valid):** It checks that there is circulation of water. If this is not the case, it blocks the unit.

## ACCESSORIES COMPATIBILITY

Size	vers.	1300	1350	2300	2350	3300	3325	3350	4325	4350
AER485P1		•	•	•	•	•	•	•	•	•
MULTICHILLER_EVO		•	•	•	•	•	•	•	•	•
AVX	(1)	•	•	•	•	•	•	•	•	•
FLOW SWITCH		•	•	•	•	•	•	•	•	•

(1) Accessory to be defined when placing the order

## CONFIGURATOR

Field	Description
1,2,3	WTX
4,5,6,7	Size 1300 - 1350 - 2300 - 2350 - 3300 - 3325 - 3350 - 4325 - 4350
8	Efficiency
A	High efficiency
U	Extra high efficiency
9	Heat exchangers
2	Two passes on water side
1	On pass on water side (1)
10	Version
°	Standard
L	Sound-proofed
11	Power supply
°	400V 3 ~ 50Hz with circuit breakers on compressors and auxiliary circuit

(1) Available from size 3300 to 4350

## HEAT EXCHANGERS

Over-sized tube core exchangers ensure excellent performances at full and partial loads.

**Flooded evaporator** with level adjustment through an electronic valve controlled by a level sensor.

**Backflow condenser** with refrigerant on shell side and water on tube side.

**From size 1300 to 2350, heat exchangers have 2 passes on the water side.**

Starting from size **WTX3300**, heat exchangers are available as versions with one or two passes on the water side to meet any plant installation requirement.

**The dimensions of the two configurations ensure similar performances** (same approach to heat exchangers). **The difference is that the version with two passes on the water side due offers the convenience of water connections all on the same side**, against a generally higher but nonetheless limited drop in pressure compared to the version with one pass on the water side.



## PERFORMANCE SPECIFICATIONS

### WTX - A

Size			1300	1350	2300	2350	3300	3325	3350	4325*	4350*					
Passes on water side	n°		2	2	2	2	1	2	1	2	1	2	1	2	1	2
Power supply			400V 3 ~ 50Hz													
Cooling capacity	(1)	kW	351,3	488,5	702,8	899,4	1054,4	1054,3	1214,3	1215,9	1466,1	1466,0	1716,2	1715,9	1955,0	1958,4
Input power	(1)	kW	70,8	94,3	141,8	164,1	211,4	212,6	219,9	220,6	281,6	283,8	315,3	318,8	375,1	380,0
Cooling total input current	(1)	A	106	145	212	255	317	317	356	356	435	435	503	503	580	580
EER	(1)	W/W	4,96	5,18	4,96	5,48	4,99	4,96	5,52	5,51	5,21	5,17	5,44	5,38	5,21	5,15
Water flow rate system side	(1)	l/h	60422	84006	120844	154630	181266	181266	208751	209053	252017	252017	294970	294970	336022	336647
Pressure drop system side	(1)	kPa	32	30	40	33	32	54	39	77	31	54	24	60	31	82
Water flow rate source side	(1)	l/h	72792	100515	145584	183481	218376	218376	247239	247235	301544	301544	350417	350417	402059	402062
Pressure drop source side	(1)	kPa	31	33	35	28	31	28	38	35	31	33	42	41	31	53

(1) Date 14511:2018; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

\* Units not included in the EUROVENT certification programme because Cooling capacity > 1500 kW

### WTX - U

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350					
Passes on water side	n°		2	2	2	2	1	2	1	2	1	2	1	2	1	2
Power supply			400V 3 ~ 50Hz													
Cooling capacity	(1)	kW	222,9	334,1	445,9	559,7	669,0	669,0	869,6	840,1	1002,7	1006,1	1179,6	1191,4	1336,9	1342,6
Input power	(1)	kW	37,5	55,9	75,1	94,3	112,2	112,5	144,9	140,7	166,9	167,2	195,3	198,4	222,3	223,4
Cooling total input current	(1)	A	60	91	120	158	180	180	237	237	273	273	316	316	364	364
EER	(1)	W/W	5,95	5,98	5,94	5,93	5,96	5,95	6,00	5,97	6,01	6,02	6,04	6,01	6,01	6,01
Water flow rate system side	(1)	l/h	38335	57444	76669	96214	115004	115004	149476	144425	172333	172942	202737	204799	229777	230804
Pressure drop system side	(1)	kPa	12	13	16	12	12	21	18	32	14	24	10	26	14	37
Water flow rate source side	(1)	l/h	45016	67385	90033	113067	135049	135049	175273	169344	202156	202690	237660	240041	269542	270255
Pressure drop source side	(1)	kPa	12	14	13	10	12	10	17	15	13	14	17	18	13	23

(1) Date 14511:2018; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

## ENERGY DATA

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
<b>Cooling capacity with low leaving water temp (UE n° 2016/2281)</b>											
SEER	A	W/W	8,23	8,40	8,12	8,58	8,71	8,40	8,85	8,53	8,84
	U	W/W	8,73	8,59	8,87	9,20	8,81	9,38	9,29	9,08	9,33
η <sub>sc</sub>	A	%	321,1	328,1	316,6	335,1	340,4	327,8	345,8	333,0	345,5
	U	%	341,3	335,5	346,7	360,1	344,5	367,1	363,5	355,3	365,3

## ELECTRIC DATA

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
<b>Electric data</b>											
Maximum current (FLA)	A		135	210	270	420	405	630	630	840	840
Peak current (LRA)	A		6	6	141	216	276	426	426	636	636

## GENERAL TECHNICAL DATA

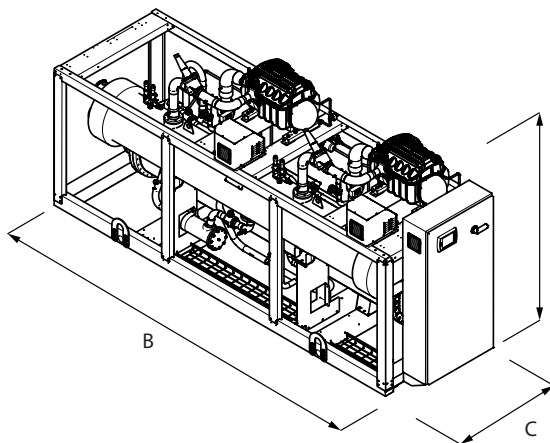
Size		1300	1350	2300	2350	3300	3325	3350	4325	4350	
<b>Oil Free Centrifugal Inverter Compressors</b>											
Compressors / Circuit	n°/n°	1/1	1/1	2/1	2/1	3/1	3/1	3/1	4/1	4/1	
Refrigerant	Type	R134a									
<b>Evaporator - Shell&amp;tube</b>											
Heat exchanger	n°	1									
<b>Condenser - Shell&amp;tube</b>											
Heat exchanger	n°	1									
<b>Sound data <sup>(1)</sup></b>											
Sound power level	A	dB(A)	90,0	91,0	93,0	93,5	96,0	95,5	97,0	98,5	100,0
Sound power level	U	dB(A)	87,0	88,0	90,0	88,0	90,0	91,0	94,0	94,0	97,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification

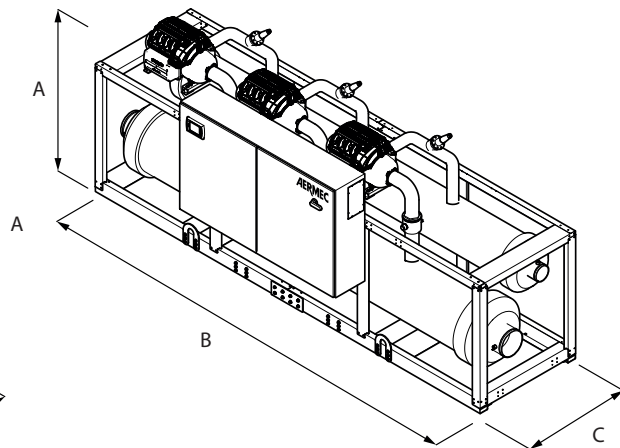
■ *N.B.: For further information, please refer to the selection programme or the technical documentation available at [www.aermec.com](http://www.aermec.com)*

## DIMENSIONS

WTX 1300 - 2350



WTX 3300 - 4350



Size		1300	1350	2300	2350	3300	3325	3350	4325	4350					
Passes on water side	n°	2	2	2	2	1	2	1	2	1	2	1	2		
A	mm	1850	1950	1970	2010	1970	2240	2010	2280	2010	2280	2010	2280	2280	
B	mm	3040	3040	3340	3440	4966	3990	4966	3990	4966	3990	4966	4966	4966	
C	mm	1000	1000	1240	1240	1640	1732	1640	1732	1640	1836	1640	1836	1732	1836

Aermec reserves the right to make any modifications deemed necessary.  
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

**Aermec S.p.A.**

Via Roma, 996 - 37040 Bevilacqua (VR) - Italia  
Tel. 0442633111 - Telefax 044293577  
[www.aermec.com](http://www.aermec.com)