

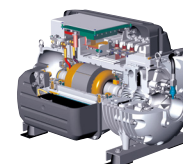
WTX

Water/Water Chiller - internal installation
Centrifugal oil-free compressors, Flooded heat exchangers
Cooling capacity 222 - 1950kW

HFC
 Refrigerant
R134a



Aermec participates in the EUROVENT program: LCP The products concerned up to 1500kW appear on the site www.eurovent-certification.com



- **HIGH EFFICIENCY UP TO 9**
- **EXTENDED OPERATING RANGE**
- **POSSIBILITY OF SELECTING BETWEEN HEAT EXCHANGERS WITH 1 OR 2 PASSES ON WATER SIDE**

Features

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.

Compatibility of accessories

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

(1) Accessory to be defined when placing the order

Choice of unit

By suitably combining the numerous options available, it is possible to configure each model in such a way as to meet the most specific system requirements.

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 (available from size 3300 to 4350)
10	Version ° Standard L Sound-proofed
11	Power supply ° 400V 3 ~ 50Hz with circuit breakers on compressors and auxiliary circuit

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.



Technical data

WTX - A			1300	1350	2300	2350	3300		3325		3350		4325*		4350*	
Passes on water side		no.	2	2	2	2	1	2	1	2	1	2	1	2	1	2
			400V 3 ~ 50Hz													
12°C/7°C	Cooling power	(1) kW	350,7	487,7	701,2	897,7	1053	1051	1212	1211	1464	1462	1714	1710	1952	1950
	Absorbed power	(1) kW	70,8	94,3	141,7	164,0	211,4	212,6	219,8	220,6	281,5	283,8	315,3	318,8	375,0	380,0
	EER	(1)	4,95	5,17	4,95	5,47	4,98	4,94	5,51	5,49	5,20	5,15	5,44	5,36	5,20	5,13
	ESEER	(1)	8,11	8,10	8,02	8,40	8,27	8,05	8,00	7,90	8,39	8,10	8,26	7,90	8,45	8,00
	Eurovent class - cold	(1)	B	A	B	A	B	B	A	A	A	A	A	A	A	A
	Evaporator water flow rate	(1) l/h	60489	84099	120978	154802	181467	181467	208982	208982	252296	252296	295297	295297	336395	336395
	pressure drops	(1) kPa	32	30	40	33	32	54	39	52	31	54	24	60	31	49
	Condenser water flow rate	l/h	71956	99378	143913	181443	215869	215869	244504	244504	298133	298133	346514	346514	397510	397510
		pressure drops	kPa	31	33	35	28	31	28	38	35	31	33	42	41	53
WTX - U			1300	1350	2300	2350	3300		3325		3350		4325		4350	
Passes on water side		no.	2	2	2	2	1	2	1	2	1	2	1	2	1	2
			400V 3 ~ 50Hz													
12°C/7°C	Cooling power	(1) kW	222,7	333,8	445,5	559,3	668,5	668,2	868,7	838,5	1002	1005	1179	1190	1336	1340
	Absorbed power	(1) kW	37,6	55,9	75,1	94,3	112,2	112,5	144,9	140,7	166,8	167,2	195,3	198,4	222,3	223,4
	EER	(1)	5,92	5,97	5,93	5,93	5,96	5,94	6,00	5,96	6,00	6,01	6,04	6,00	6,01	6,00
	ESEER	(1)	8,63	8,34	8,68	8,77	8,94	8,83	8,80	8,75	8,99	8,87	9,02	8,77	8,94	8,72
	Eurovent class - cold	(1)	A	A	A	A	A	A	A	A	A	A	A	A	A	A
	Evaporator water flow rate	(1) l/h	38377	57508	76754	96321	115132	115132	149642	144482	172524	173134	202962	205026	230032	230845
	pressure drops	(1) kPa	12	13	16	12	12	21	18	23	14	24	10	26	14	22
	Condenser water flow rate	l/h	44528	66656	89056	111838	133584	133584	173377	167508	199968	200500	235091	237447	266624	267334
		pressure drops	kPa	12	14	13	10	12	10	17	15	13	14	17	13	23

Data (14511:2013)

(1) Evaporator water (in/out) 12°C/7°C; Condenser water (in/out) 30°C/35°C

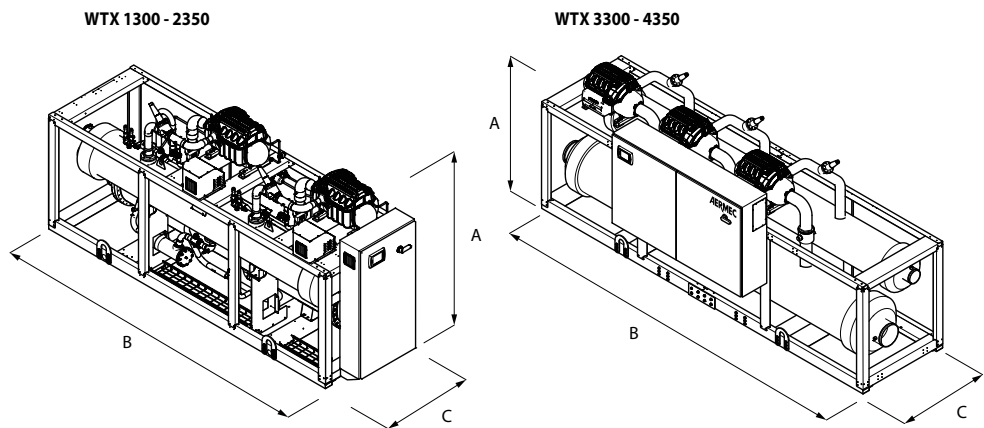
* Units not included in the EUROVENT certification programme because Cooling capacity > 1500 kW

			1300	1350	2300	2350	3300	3325	3350	4325	4350
Electrical Data											
Total current absorbed when cold	A	A	106	145	212	255	317	356	435	503	580
	U	A	60	91	120	158	180	237	273	316	364
Maximum current (FLA)		A	135	210	270	420	405	630	630	840	840
Starting current (LRA)		A	6	6	141	216	276	426	426	636	636
Oil Free Centrifugal Inverter Compressors											
Compressors / Circuit		no./no.	1/1	1/1	2/1	2/1	3/1	3/1	3/1	4/1	4/1
Coolant gas		Type	R134a								
Evaporator - Shell&tube											
Heat exchanger		no.	1								
Condenser - Shell&tube											
Heat exchanger		no.	1								
Sound Data											
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

Sound power (Cold operation) Aermec determines the sound power value based on measures in accordance with standard UNI EN ISO 9614-2, in compliance with Eurovent certification.

N.B.: For further information, please refer to the selection programme or the technical documentation available at www.aermec.com

Dimensions (mm)



WTX A/U		1300	1350	2300	2350	3300		3325		3350		4325		4350	
Passes on water side	no.	2	2	2	2	1	2	1	2	1	2	1	2	1	2
A	mm	1850	1950	1970	2010	1970	2240	2010	2280	2010	2280	2010	2280	2280	2280
B	mm	3040	3040	3340	3440	4966	3990	4966	3990	4966	3990	4966	4966	4966	4966
C	mm	1000	1000	1240	1240	1640	1732	1640	1732	1640	1836	1640	1836	1732	1836