

Air Cooled Chillers & Heat Pumps

TurboPOWER


TCATBZ-TCATTZ-TCATQZ 1300-31100



ÜNTES®
52
years

TurboPOWER

TCATBZ-TCATTZ-TCATQZ 1300-31100

 Cooling capacity: 267,0-1.101 kW

- Efficient, quiet and low start-up current oil-free compressor
- Efficiency above Class A, with SEER up to 5.86
- Wide range of accessories
- Integrated MASTER/SLAVE control



TCATTZ 31100 with FIAP accessory

TCATBZ 1400 with PTL-RPE-FIAP accessories

ErP
READY
2021

APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS



Packaged air-cooled water chillers with axial fans. Range with oil-free centrifugal compressors and R134a refrigerant gas.

Construction features

- Compressor: high energy efficiency, oil-free, centrifugal compressor with limited start-up, equipped with magnetic levitation bearings and complete with integral protection and suction and delivery shut-off valves.
- Water side heat exchanger: flooded type shell and tube, complete with closed cell polyurethane foam rubber insulation, water flow differential pressure switch and Victaulic fittings.
- Air side heat exchanger: with micro-channels.
- Fan: external rotor axial type electric fans with internal thermal protection, accident protection grilles. Version B is equipped with a proportional electronic device for continuous fan rotation speed regulation, while versions T-Q are equipped with EC motor fans.
- Control: microprocessor electronic control.
- Structure: made of galvanised and painted steel plate with polyester powder coating.
- The unit is also complete with:
 - Display of cooling circuit high/low pressure;
 - Electronic expansion valve;
 - Double safety valve;
 - Clock board;
 - Master/Slave control up to 4 units in parallel.

Versions

- B - Basic version, efficiency class A, soundproofed technical compressor compartment (TCATBZ).
- T - High-efficiency version, above class A, soundproofed technical compressor compartment (TCATTZ).
- Q - Super silenced version, efficiency class A, super-soundproofed technical compartment, reduced speed fans (TCATQZ).

Models

- TCATBZ: standard unit designed for cooling only.
- TCATTZ: high efficiency unit designed for cooling only.
- TCATQZ: super silenced unit designed for cooling only.

Factory fitted accessories

- PUMP with single or double electric pump, including an automatic pump in standby. The pumps are available in the low or high head versions.
- VPF control.
- -15°C condensing control with fans with EC motor (standard in T-Q versions).
- Condensing control with over-pressure fans.
- Power factor correction capacitors ($\cos\phi > 0.94$).
- Compressor circuit breaker switches.
- Electro-mechanical flow switch.
- Forced limit of power consumption.
- Forced noise limit.
- Energy parameter measuring device.
- Soundproofed compressor box.
- Refrigerant leak detector.
- Cooling circuit high and low pressure gauges.
- Coil protection grilles.
- Micro-channel coils with E-coating treatment.
- Control of min/max power supply voltage.
- Digital input for double set-point.
- 4-20 mA analogue signal for shifting set-point.
- Evaporator antifreeze heater, electrical panel, electric pumps, if applicable.
- Interfaces for serial communication with other devices.
- Anti-vibration mounts.

Separately supplied accessories

- Remote keypad with display.
- Untes supervisors for unit monitoring and remote management.
- Untes sequencer for integrated management of multiple chillers.

TCATBZ-TCATTZ-TCATQZ MODEL		1300	1400	2500	2590	2680	2760	2820	2880	3990	31100
①	TCATBZ nominal cooling capacity	kW	284,9	376,6	489,2	577,8	675,1	749,2	808,9	874,4	1.089,1
①	TCATTZ nominal cooling capacity	kW	298,8	402,3	498,1	593,6	685,0	760,0	820,8	882,3	1.101,0
①	TCATQZ nominal cooling capacity	kW	267,1	369,7	463,4	541,2	639,5	721,5	792,1	871,6	970,4
①	E.E.R. TCATBZ		3,20	3,18	3,26	3,22	3,20	3,20	3,22	3,14	3,25
①	E.E.R. TCATTZ		3,46	3,42	3,46	3,48	3,37	3,52	3,50	3,33	3,47
①	E.E.R. TCATQZ		3,22	3,32	3,25	3,28	3,21	3,24	3,36	3,31	3,27
①	TCATBZ absorbed power	kW	89,0	118,4	150,1	179,4	211,0	234,1	251,2	278,5	302,2
①	TCATTZ absorbed power	kW	86,4	117,6	144,0	170,6	203,3	215,9	234,5	265,0	286,2
①	TCATQZ absorbed power	kW	83,0	111,4	142,6	165,0	199,2	222,7	235,7	263,3	296,8
TCATBZ-TCATTZ-TCATQZ MODEL		1300	1400	2500	2590	2680	2760	2820	2880	3990	31100
②	TCATBZ sound pressure	dB(A)	60	62	63	63	63	64	64	64	64
②	TCATTZ sound pressure	dB(A)	60	62	63	63	63	64	64	64	64
②	TCATQZ sound pressure	dB(A)	55	56	57	57	58	58	58	59	59
③	TCATBZ sound power	dB(A)	92	94	95	95	96	97	97	97	97
③	TCATTZ sound power	dB(A)	92	94	95	95	96	97	97	97	97
③	TCATQZ sound power	dB(A)	87	88	89	90	91	91	91	92	92
Compressor/steps	no.	1/ CONTINUOUS REGULATION	1/ CONTINUOUS REGULATION	2/ CONTINUOUS REGULATION	2/ CONTINUOUS REGULATION	2/ CONTINUOUS REGULATION	2/ CONTINUOUS REGULATION	2/ CONTINUOUS REGULATION	2/ CONTINUOUS REGULATION	3/ CONTINUOUS REGULATION	3/ CONTINUOUS REGULATION
Circuits	no.	1	1	1	1	1	1	1	1	2	2
Electrical supply	V-ph-Hz	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50
DIMENSIONS AND WEIGHTS		1300	1400	2500	2590	2680	2760	2820	2880	3990	31100
W - Width of version B	mm	3.840	4.940	6.090	7.250	8.350	9.450	9.450	10.550	11.650	12.810
W - Width of version T	mm	3.840	4.940	6.090	7.250	8.350	9.450	10.550	11.650	11.650	12.810
W - Width of version Q	mm	3.840	4.940	6.090	7.250	8.350	9.450	10.550	11.650	12.810	ND
H - Height	mm	2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450
P - Depth	mm	2.260	2.260	2.260	2.260	2.260	2.260	2.260	2.260	2.260	2.260
④	TCATBZ weight	kg	2.390	2.740	3.490	3.950	4.350	4.800	4.910	5.210	6.040
④	TCATTZ weight	kg	2.410	2.760	3.470	3.980	4.320	4.840	5.140	5.440	6.000
④	TCATQZ weight	kg	2.390	2.730	3.500	3.960	4.350	4.800	5.160	5.460	6.500

Data at the following conditions:

- ① Air: 35°C - Water: 12/7°C
- ② In open field (Q = 2) at 10 m from the unit on the coil side.
- ③ Total sound power level in dB(A) based on measurements carried out in accordance with regulation UNI EN-ISO 9614.
- ④ Weight referred to the unit without load and not accessorised.

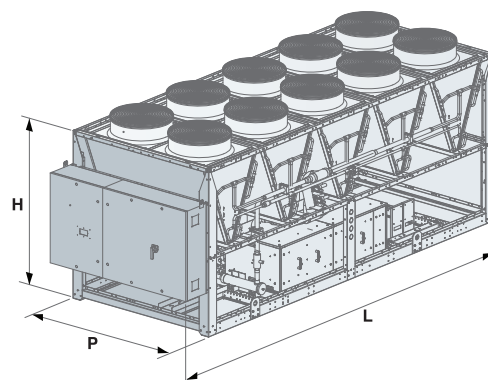
■ TCATQZ super silenced versions

Performance according to EN 14511:2013.

SEASONAL ENERGY PERFORMANCE		1300	1400	2500	2590	2680	2760	2820	2880	3990	31100
TCATBZ MODEL SEASONAL PERFORMANCE IN COOLING MODE											
①	P _{designc} (EN 14825)	kW	283,8	375,2	487,3	575,6	672,2	746,4	805,7	870,8	978,3
①	SEER (EN 14825)		5,14	5,02	5,16	5,13	5,13	5,20	5,13	5,07	5,21
②	η _{s,c}	%	202	198	203	202	202	205	202	200	205
TCATTZ MODEL SEASONAL PERFORMANCE IN COOLING MODE											
①	P _{designc} (EN 14825)	kW	297,5	400,6	496,3	591,2	682,1	757,2	817,6	878,7	989,2
①	SEER (EN 14825)		5,46	5,56	5,64	5,68	5,66	5,76	5,80	5,77	5,82
②	η _{s,c}	%	215	219	222	224	223	228	229	228	230
TCATQZ MODEL SEASONAL PERFORMANCE IN COOLING MODE											
①	P _{designc} (EN 14825)	kW	266,1	368,5	461,7	539,3	637,0	719,0	789,1	868,1	966,8
①	SEER (EN 14825)		5,47	5,57	5,69	5,66	5,66	5,76	5,82	5,81	5,86
②	η _{s,c}	%	216	220	224	224	223	227	230	229	231

① Low temperature application (7°C)

② Seasonal energy efficiency: low temperature cooling (EU Regulation 2016/2281)



ÜNTEŞ®

52
years

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