

Air Cooled Chillers & Heat Pumps

TurboPOWER ECO


TCATTE-TCATQE 1330-3950



ÜNTES[®]
52
years

TurboPOWER ECO

TCATTE-TCATQE 1330-3950

 Cooling capacity: 323,2-948,6 kW

- Efficiency above Class A, with SEER up to 5.85
- Efficient, quiet and low start-up current oil-free compressor
- HFO R1234ze ecological gas
- Integrated MASTER/SLAVE control



Packaged air-cooled water chillers with axial fans. Range with oil-free centrifugal compressors and R1234ze 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. The compressor was specifically designed for R1234ze gas with zero environmental impact.
- Water side heat exchanger: spray flooded type shell and tube exchanger, 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 EC motor electric fans with internal thermal protection and accident protection grilles.
- 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;
 - Leak detector;
 - Clock board;
 - Master/Slave control up to 4 units in parallel.

Versions

- T - High-efficiency version, above class A, soundproofed technical compressor compartment (TCATTE).
- Q - Super silenced version, efficiency class A, super-soundproofed technical compartment, reduced speed fans (TCATQE).

Models

- TCATTE: high efficiency unit designed for cooling only.
- TCATQE: 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.
- 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.
- 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.

TCATTE-TCATQE MODEL		1330	2400	2470	2550	2660	3790	3950	
❶	Nominal cooling capacity	kW	334,2	399,1	470,0	548,9	660,5	792,1	948,6
❶	Nominal cooling capacity	kW	323,2	386,1	450,1	536,9	639,7	767,3	916,9
❶	E.E.R.		3,45	3,44	3,50	3,45	3,40	3,49	3,46
❶	E.E.R.		3,45	3,39	3,46	3,37	3,38	3,45	3,43
❶	Absorbed power	kW	96,9	116,0	134,3	159,1	194,3	227,0	274,2
❶	Absorbed power	kW	93,7	113,9	130,1	159,3	189,3	222,4	267,3
TCATTE-TCATQE MODEL		1330	2400	2470	2550	2660	3790	3950	
❸	TCATTE sound pressure	dB(A)	62	63	63	63	64	64	65
❸	TCATQE sound pressure	dB(A)	56	57	57	58	58	59	60
❹	TCATTE sound power	dB(A)	94	95	95	96	97	97	98
❹	TCATQE sound power	dB(A)	88	89	90	91	91	92	93
Compressor/steps		no.	1/ CONTINUOUS REGULATION	2/ CONTINUOUS REGULATION	2/ CONTINUOUS REGULATION	2/ CONTINUOUS REGULATION	3/ CONTINUOUS REGULATION	3/ CONTINUOUS REGULATION	CONTINUOUS REGULATION
Circuits	no.	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	
DIMENSIONS AND WEIGHTS		1330	2400	2470	2550	2660	3790	3950	
L - Width	mm	4.940	6.090	7.250	8.350	9.450	11.650	12.810	
H - Height	mm	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	
❺	TCATTE weight	kg	2.770	3.410	3.960	4.270	4.880	6.280	6.840
❺	TCATQE weight	kg	2.790	3.440	3.990	4.300	4.910	6.310	6.880

Data at the following conditions:

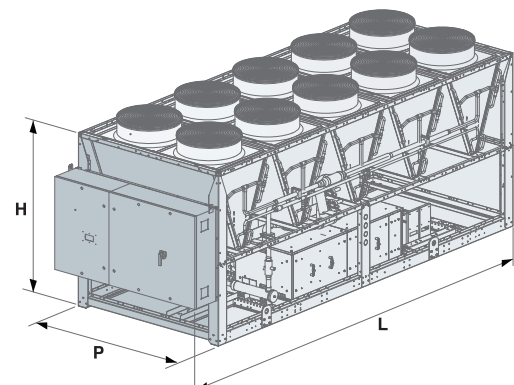
- ❶ Air: 35°C - Water: 12/7°C
- ❸ In open field (Q = 2) at 10 m from the unit on the coil side.
- ❹ Total sound power level in dB(A) based on measurements carried out in accordance with regulation UNI EN-ISO 9614.
- ❺ Weight referred to the unit without load and not accessorised.

■ TCATQE super silenced versions

Performance according to EN 14511:2013.

SEASONAL ENERGY PERFORMANCE		1330	2400	2470	2550	2660	3790	3950	
TCATTE MODEL SEASONAL PERFORMANCE IN COOLING MODE									
❶	P _{design,c} (EN 14825)	kW	333,3	398,1	468,9	547,7	658,0	789,2	945,2
❶	SEER (EN 14825)		5,61	5,63	5,66	5,68	5,66	5,85	5,84
❷	η _{s,c}	%	221	222	223	224	223	231	230
TCATQE MODEL SEASONAL PERFORMANCE IN COOLING MODE									
❶	P _{design,c} (EN 14825)	kW	322,5	385,2	449,1	535,8	637,4	764,6	913,7
❶	SEER (EN 14825)		5,62	5,66	5,74	5,70	5,72	5,90	5,83
❷	η _{s,c}	%	222	223	227	225	226	233	230

- ❶ Low temperature application (7°C)
- ❷ Seasonal energy efficiency: low temperature cooling (EU Regulation 2016/2281)



ÜNTEŞ®

52
years

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