

TurboPOWER ECO TCATTE-TCATQE 1330÷3950



Cooling capacity: 323.2÷948.6 kW

- ✓ High energy efficiency chillers
- ✓ Efficient, quiet and low start-up current oil-free compressor
- ✓ HFO R1234ze ecological gas
- ✓ Integrated MASTER/SLAVE control



Web code: TP014

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, equipped with magnetic levitation bearings and complete with integral protection and intake 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 helical 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;
 - control of Variable Primary Flow (VPF_R).

Versions

- T - High-efficiency version, soundproofed technical compressor compartment (TCATTE).
- Q - Super silenced version, 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, one of which automatic in standby. The electric pumps are available in the low or high head versions.
- Inverter pump control for unit start-up.
- 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 nets.
- 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.
- Rhoss supervisors for unit monitoring and remote management.
- Rhoss sequencer for integrated management of multiple chillers.

Technical Data

TCATTE-TCATQE MODEL		1330	2400	2470	2550	2660	3790	3950
① Nominal cooling capacity	kW	334,2	399,1	470	548,9	660,5	792,1	948,6
① Nominal cooling capacity	kW	323,2	386,1	450,1	536,9	639,7	767,3	916,9
① E.E.R.		3,45	3,44	3,5	3,45	3,4	3,49	3,46
① E.E.R.		3,45	3,39	3,46	3,37	3,38	3,45	3,43
① Absorbed power	kW	96,9	116	134,3	159,1	194,3	227	274,2
① 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
⑤ TCATTE sound pressure	dB(A)	62	62,5	62,5	63	64	64	65
⑤ TCATQE sound pressure	dB(A)	56	56,5	57	58	58	59	60
① TCATTE sound power	dB(A)	94	95	95	96	97	97	98
① TCATQE sound power	dB(A)	88	89	90	91	91	92	93
Compressor/steps	n.	1/ CONTINUOUS REGULATION	2/ CONTINUOUS REGULATION	2/ CONTINUOUS REGULATION	2/ CONTINUOUS REGULATION	2/ CONTINUOUS REGULATION	3/ CONTINUOUS REGULATION	3/ CONTINUOUS REGULATION
Circuits	n.	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	4940	6090	7250	8350	9450	11650	12810
H - Height	mm	2450	2450	2450	2450	2450	2450	2450
P - Depth	mm	2260	2260	2260	2260	2260	2260	2260
⑤ TCATTE weight	kg	2770	3410	3960	4270	4880	6280	6840
⑤ TCATQE weight	kg	2790	3440	3990	4300	4910	6310	6880
SEASONAL ENERGY PERFORMANCE		1330	2400	2470	2550	2660	3790	3950
TCATTE MODEL SEASONAL PERFORMANCE IN COOLING MODE								
① Pdesignc (EN 14825)	kW	334,2	399,1	470	548,9	660,5	792	948,6
① SEER (EN 14825)		5,73	5,77	5,77	5,82	5,83	6,01	6
② ηs,c	%	226	228	228	230	230	238	237
TCATQE MODEL SEASONAL PERFORMANCE IN COOLING MODE								
① Pdesignc (EN 14825)	kW	323,2	386,1	450,1	536,9	639,7	767,2	916,8
① SEER (EN 14825)		5,74	5,79	5,84	5,83	5,88	6,06	5,98
② ηs,c	%	226	229	231	230	232	239	236

Data at the following conditions:

- ① Air: 35°C - Water: 12/7°C
- ⑤ In open field (Q = 2) at 10 m from the unit.
- ④ Total sound power level in dB(A) based on measurements carried out in accordance with regulation UNI EN-ISO 9614.
- ⑥ Weight referred to the unit without load and not accessorised.
- TCATQE super silenced versions
Performance according to EN 14511.
- ① Low temperature application (7°C)
- ② Seasonal energy efficiency: low temperature cooling (EU Regulation 2016/2281)

RHOSS S.P.A. declines all responsibility for possible mistakes in this document and reserves the right to alter the features of their products without notice.

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