

WinPOWER SE

TCAEY 4360÷8860

Cooling capacity: 359.8÷861.8 kW



✓ **Version B compact and high-performance for replacement markets**

✓ **Up to 6 capacity steps**

✓ **Simplified installation thanks to pumping unit accessories**

✓ **Built-in MASTER/SLAVE control**



Web code: WP011

Air cooled water chillers with axial fans. Range with scroll hermetic compressors and R410A refrigerant.

Construction features

- Compressor: scroll type, rotary, hermetic complete with thermal protection and casing heater.
- Up to 6 capacity steps with high efficiency at partial loads.
- Water side heat exchanger: with stainless steel plates, 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 equipped with internal thermal protection, accident protection grilles and proportional electronic device for continuous fan rotation speed regulation.
- Control: microprocessor electronic control with Adaptive Function Plus logic.
- Structure: load-bearing structure made of galvanised and painted steel plate with polyester powder coating.
- The unit is also complete with:
 - fan and compressor circuit breaker switches;
 - display of cooling circuit high and low pressure;
 - electronic expansion valve;
 - clock board;
 - Master/Slave control up to 4 units in parallel;
 - control of Variable Primary Flow (VPF_R).

Versions

- B - Base version (TCAEY).

Models

- TCAEY: unit intended for cooling only.

Factory fitted accessories

- Shell and tube evaporator.
- 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.
- TANK&PUMP with 700 or 1000 litre integrated buffer tank (depending on size) and single or double electric pump, complete with expansion tank, air vent valves, safety valve and water side pressure gauge.
- Desuperheater.
- 100% heat recovery unit.
- Condensing control with fans with EC motor.
- Condensing control with over-pressure fans.
- Power factor correction capacitors ($\cos\phi > 0.94$).
- Forced limit of power consumption.
- Forced noise limit.
- Energy parameter measuring device.
- Soft starter.
- Soundproofed compressor box.
- Compressor soundproof enclosures.
- Cooling circuit outlet and inlet valves.
- Refrigerant leak detector.
- Cooling circuit high and low pressure gauges.
- Double safety valves.
- 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, buffer tank, electric pumps and heat exchangers for heat recovery, if applicable.
- Low temperature water production.
- Interfaces for serial communication with other devices.
- Anti-vibration mounts.

Separately supplied accessories

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

Technical Data

TCAEBY MODEL		4360	4390	4435	5500	6540	6590	6635	6670
① Nominal cooling capacity	kW	359,8	389,6	434,6	496,3	538,9	587,9	637,7	666,5
① E.E.R.		2,9	2,84	2,81	2,96	2,9	2,77	2,93	2,9
① Absorbed power	kW	124,1	137,2	154,7	167,7	185,9	212,3	217,7	229,9
TCAEBY MODEL		4360	4390	4435	5500	6540	6590	6635	6670
② Sound pressure	dB(A)	62	63	64	64	64	64	64,5	64,5
③ Sound power	dB(A)	94	95	96	96	96	96	97	97
Scroll/step compressor	n.	4/4	4/4	4/4	5/5	6/6	6/6	6/6	6/6
Circuits	n.	2	2	2	2	2	2	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
DIMENSIONS AND WEIGHTS		4360	4390	4435	5500	6540	6590	6635	6670
L - Width	mm	3740	3740	3740	4840	4840	4840	5940	5940
H - Height	mm	2450	2450	2450	2450	2450	2450	2450	2450
P - Depth	mm	2260	2260	2260	2260	2260	2260	2260	2260
④ TCAEBY weight	kg	2130	2140	2200	2670	2860	2890	3205	3230
SEASONAL ENERGY PERFORMANCE		4360	4390	4435	5500	6540	6590	6635	6670
TCAEBY MODEL SEASONAL PERFORMANCE IN COOLING MODE									
① Pdesignc (EN 14825)	kW	359,8	389,6	434,6	496,3	538,9	587,9	637,7	666,5
① SEER (EN 14825)		4,6	4,59	4,58	4,58	4,61	4,56	4,6	4,6
② ηs,c	%	181	180	180	180	181	179	181	181

TCAEBY MODEL		7730	8790	8830	8860
① Nominal cooling capacity	kW	732,4	784	827,1	861,8
① E.E.R.		2,93	2,84	2,81	2,8
① Absorbed power	kW	250	276,1	294,4	307,8
TCAEBY MODEL		7730	8790	8830	8860
② Sound pressure	dB(A)	64,5	64,5	65	66
③ Sound power	dB(A)	97	97	98	99
Scroll/step compressor	n.	7/6	8/6	8/6	8/6
Circuits	n.	2	2	2	2
Electrical supply	V-ph-Hz	400-3-50	400-3-50	400-3-50	400-3-50
DIMENSIONS AND WEIGHTS		7730	8790	8830	8860
L - Width	mm	7150	7150	7150	7150
H - Height	mm	2450	2450	2450	2450
P - Depth	mm	2260	2260	2260	2260
④ TCAEBY weight	kg	3870	4020	4100	4120
SEASONAL ENERGY PERFORMANCE		7730	8790	8830	8860
TCAEBY MODEL SEASONAL PERFORMANCE IN COOLING MODE					
① Pdesignc (EN 14825)	kW	732,4	784	827,1	861,8
① SEER (EN 14825)		4,57	4,58	4,57	4,57
② ηs,c	%	180	180	180	180

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.
 - 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.
- 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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