

Compact-Y MD

TCAEY 238÷265 /

THAEY 233÷265



Cooling capacity: 32.3÷64.6 kW - Heating capacity:
37.8÷68.3 kW



✓ 3 capacity steps (mod.
245-265)

✓ HT65 version for 65°C water
production (°)



Web code: CY011

Water chillers and packaged reversible air-cooled heat pumps with axial fans. Range with scroll hermetic compressors and R410A refrigerant gas.

Construction features

- Compressor: hermetic, rotary scroll type, complete with thermal protection and casing heater. 3 capacity steps with high efficiency at partial loads for models 245-265.
- Water side heat exchanger: adequately insulated stainless steel plates, complete with antifreeze heater and water flow differential pressure switch.
- Air side heat exchanger: finned coil with copper pipes and aluminium fins, complete with protection grilles.
- Fan: external rotor helical type electric fan equipped with internal thermal protection, accident protection grilles and proportional electronic device for continuous fan speed regulation.
- Control: microprocessor electronic control with Adaptive Function Plus logic.
- Structure: made of galvanised and painted sheet steel.
- The unit is also complete with:
 - Master/Slave control up to 4 units in parallel;
 - clock board.

Models

- TCAEY: unit designed for cooling only.
- THAEY: heat pump unit.

PUMP set-up

- Pump unit complete circulator, single or double electric pump,

including an automatic actuation pump in standby (mod. 245-265), expansion tank, air bleed valves, safety valve and water side pressure gauge.

TANK&PUMP set up

- Pump unit complete inertial buffer tank, circulator, single or double electric pump, including an automatic actuation pump in standby (mod. 245-265), expansion tank, air bleed valves, safety valve and water side pressure gauge.

Factory fitted accessories

- Soft-start device.
- Silenced set up.
- 15% desuperheater.
- 100% heat recovery unit.
- Condensing control with fans with EC motor.
- Refrigerant circuit high and low pressure gauges (mod. 245-265).
- Buffer tank antifreeze heater.
- Electric pump antifreeze heater (mod. 245-265).
- Forced limit of power consumption.
- Refrigerant leak detector.
- Digital input for double set-point
- 4-20 mA analogue signal for shifting set-point.
- Energy parameter measuring device.
- Low water set-point temperature.
- Pre-painted copper/coils or copper/copper coils.

Separately supplied accessories

- Outdoor air temperature probe for set-point compensation.
- Additional electrical resistance for heat pump, managed by regulation.
- Rubber anti-vibration mounts.
- Water filter.
- Remote keypad with display.
- Interfaces for serial communication with other devices.
- Serial converter (RS485/USB).
- Rhoss supervisors for unit monitoring and remote management.

Technical Data

TCAEY MODEL (P1 set up)		233	238	245	250	260	265
❶ Cooling capacity	kW	-	39,4	44,8	51,9	59,8	64,6
❶ Absorbed power	kW	-	12,83	17,43	19,73	22,15	24,01
❶ E.E.R.		-	3,07	2,57	2,63	2,7	2,65
THAEY MODEL		233	238	245	250	260	265
❷ Heating capacity	kW	37,8	42,1	48,1	56,2	62,6	68,3
❷ Absorbed power	kW	12,54	13,19	16,82	18,97	20,86	23,71
❷ C.O.P.		3,01	3,19	2,86	2,96	3	2,88
❶ Cooling capacity		32,3	38,5	42,3	50,3	57,8	61,6
❶ E.E.R.		2,59	2,95	2,49	2,68	2,64	2,54
TCAEY-THAEY MODEL		233	238	245	250	260	265
❸ Sound pressure	dB(A)	54	54	56	56	57	57
❸ Silenced setup sound pressure	dB(A)	51	51	53	53	54	54
Scroll/step compressor	n.	2/2	2/2	2/3	2/3	2/3	2/3
Circuits	no.	1	1	1	1	1	1
Buffer tank water content (TANK&PUMP)	l	80	150	150	150	150	150
❹ Available nominal head of standard electric pump (TCAEY)	kPa	106	87	113	102	87	74
Electrical supply	V-ph-Hz	400-3+N-50	400-3+N-50	400-3+N-50	400-3+N-50	400-3+N-50	400-3+N-50
DIMENSIONS AND WEIGHTS		233	238	245	250	260	265
L - Width	mm	1660	2315	2315	2315	2315	2315
H - Height	mm	1570	1570	1570	1570	1570	1570
P - Depth	mm	1000	1000	1000	1000	1000	1000
❺ TCAEY weight	kg	-	625	725	750	775	820
❺ THAEY weight	kg	475	645	745	770	795	840
SEASONAL ENERGY PERFORMANCE		233	238	245	250	260	265
TCAEY MODEL SEASONAL PERFORMANCE IN COOLING MODE (P1 set up)		233	238	245	250	260	265
❶ Pdesignc (EN 14825)	kW	-	39,4	44,8	51,9	59,8	64,6
❶ SEER (EN 14825)		-	4,26	4,24	4,35	4,31	4,27
❷ $\eta_{s,c}$	%	-	167	167	171	170	168
THAEY MODEL SEASONAL PERFORMANCE IN HEATING MODE		233	238	245	250	260	265
❸ Pdesignh (EN 14825)	kW	36	41	49	56	62	70
❸ SCOP (EN 14825)		3,72	3,72	3,61	3,58	3,56	3,66
❹ η_s	%	146	146	141	140	140	144
❹ Energy class		A+	A+	A+	A+	A+	A+

Data at the following conditions:

- ❶ Air: 35°C - Water: 12/7°C.
- ❷ Air: 7°C D.B. - 6°C W.B. - Water: 40/45°C.
- ❸ In open field (Q = 2) at 5 m from the unit.
- ❹ Weight refers to the most complete set up.
Performance according to EN 14511
- ❺ Low temperature application (7°C)
- ❻ Seasonal energy efficiency: low temperature cooling (EU Regulation 2016/2281)
- ❼ In Average climatic conditions, low temperature application (35°C)
- ❽ Seasonal energy efficiency: low temperature heating in Average climate (EU Regulations No.811/2013 and No.813/2013)

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