

Air Cooled Chillers & Heat Pumps

Compact-I MD

TCAITY-THAITY 236-260



ÜNTES[®]
52
years

Compact-I MD

TCAITY-THAITY 236-260

- ❄️ Cooling capacity: 34,3-58,3 kW
- 🔥 Heating capacity: 39,9-68,9 kW

- Operation up to -15°C outdoor air
- Hot water production up to 60°C
- Plug&Play unit with integrated hydraulic module
- Optional EC fans and inverter-based circulation pump
- Multipurpose for systems with 2 pipes + DHW (with optional RC100)
- Integrated MASTER/SLAVE control



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

Construction features

- Compressor: scroll type, rotary, hermetic with Inverter actuation, complete with thermal protection and casing heater.
- 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 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: made of galvanised and painted steel plate
- The unit is also complete with:
 - outdoor air temperature probe for set-point compensation;
 - display of cooling circuit high and low pressure;
 - electronic expansion valve;
 - Master/Slave control up to 4 units in parallel;
 - clock board.

Version

T - High efficiency.

Models

TCAITY: unit designed for cooling only.
THAITY: heat pump unit.

PUMP set up

- Pump unit with single or double electric pump, including an automatic actuation pump in standby, complete with expansion tank, air vent valves, safety valve and water side pressure gauge. The pumps are available in low or high pressure head versions, and with INVERTER operation.

TANK&PUMP set up

- Pump unit complete with inertial buffer tank and single or double electric pump, including an automatic actuation pump in standby, complete with expansion tank, air vent valves, safety valve and water side pressure gauge. The pumps are available in low or high pressure head versions, and with INVERTER operation.

Factory fitted accessories

- Copper/pre-painted aluminium coils with hydrophilic treatment or copper/copper.
- Desuperheater.
- 100% heat recovery unit
- 3-way diverter valve for the production of domestic hot water, managed by regulation.
- -15°C condensing control with fans with EC motor.
- Base antifreeze heater
- Antifreeze heater for buffer tank and electric pumps
- Forced Download. Compressor partialisation or switch-off to limit power and current consumption (digital input).
- Refrigerant leak detector
- Digital input for double set-point.
- 4-20 mA analogue signal for shifting set-point.
- Energy parameters measurement.
- Silenced set up.
- Cooling circuit high and low pressure gauges.

Separately supplied accessories

- 3-way valve for the production of domestic hot water, managed by regulation.
- Remotely controllable outdoor air temperature probe for set-point compensation.
- Additional electrical resistance for heat pump, managed by regulation.
- Rubber anti-vibration mounts.
- Water filter.
- Thermostat with display.
- Remote keypad with display.
- Interfaces for serial communication with other devices.
- Serial converter (RS485/USB).
- Untes supervisors for unit monitoring and remote management.

TCAITY MODEL		236	245	250	260	
①	MIN/NOM/MAX cooling capacity	kW	11,0/34,3/35,2	14,7/45,7/46,9	16,0/50,0/51,3	18,2/58,3/59,9
①	NOM absorbed power		13,40	15,44	16,89	21,51
①	E.E.R. NOM		2,56	2,96	2,96	2,71
THAITY MODEL		236	245	250	260	
②	MIN/NOM/MAX heating capacity	kW	8,9/39,9/41,2	10,4/50,5/52,3	13,0/56,5/58,2	14,1/68,9/71,3
②	NOM absorbed power	kW	12,4	15,3	17,5	21,5
②	C.O.P. NOM		3,22	3,30	3,23	3,20
③	MIN/NOM/MAX heating capacity	kW	9,7/39,3/40,5	12,0/51,3/53,0	13,9/54,7/56,4	16,3/70,3/72,6
③	NOM absorbed power	kW	10,4	13,3	14,1	18,3
③	C.O.P. NOM		3,77	3,85	3,89	3,84
④	MIN/NOM/MAX heating capacity	kW	8,3/28,6/29,2	10,9/38,6/39,4	11,4/39,0/39,7	14,9/53,0/54,1
④	NOM absorbed power	kW	11,7	15,1	14,9	20,7
④	C.O.P. NOM		2,45	2,56	2,61	2,56
①	MIN/NOM/MAX cooling capacity	kW	11,0/34,3/35,2	14,7/45,7/46,9	16,0/50,0/51,3	18,2/58,3/59,9
①	E.E.R. NOM		2,56	2,96	2,96	2,71
TCAITY-THAITY MODEL		236	245	250	260	
⑤	Sound pressure	dB(A)	54	56	56	57
⑤	Silenced set up sound pressure	dB(A)	51	53	53	54
	Scroll inverter compressor	no.	1+i	1+i	1+i	1+i
	Circuits	no.	1	1	1	1
	Buffer tank water content (TANK&PUMP)	l	80	150	150	150
①	Basic head pump nominal available head	kPa	129	101	114	111
	Electrical supply	V-ph-Hz	400-3+N-50	400-3+N-50	400-3+N-50	400-3+N-50
DIMENSIONS AND WEIGHTS		236	245	250	260	
	L - Width	mm	1.660	2.660	2.660	2.660
	H - Height	mm	1.570	1.570	1.570	1.570
	P - Depth	mm	1.000	1.000	1.000	1.000
⑥	TCAITY weight	kg	497	697	712	740
⑥	THAITY weight	kg	507	717	732	760

Data at the following conditions:

- ① Air: 35° D.B. - Water: 12/7°C.
- ② Air: 7°C D.B. - 6°C W.B. - Water: 40/45°C.
- ③ Air: 7°C D.B. - 6°C W.B. - Water: 30/35°C.
- ④ Air: -7°C D.B. - Water: 30/35°C.
- ⑤ In open field (Q = 2) at 5 m from the unit.
- ⑥ Weight refers to most complete set up.

Performance according to EN 14511:2013.

SEASONAL ENERGY PERFORMANCE		236	245	250	260	
TCAITY MODEL SEASONAL PERFORMANCE IN COOLING MODE						
①	P _{designc} (EN 14825)	kW	34,3	45,7	50,0	58,3
①	SEER (EN 14825)		4,41	4,36	4,31	4,22
②	$\eta_{s,c}$	%	173	171	169	166
THAITY MODEL SEASONAL PERFORMANCE IN HEATING MODE						
③	P _{designh} (EN 14825)	kW	33	44	45	60
③	SCOP (EN 14825)		4,23	4,06	4,36	4,24
④	η_s	%	166	159	171	167
④	Energy class		A++	A++	A++	A++

- ① Low temperature application (7°C)
- ② Seasonal energy efficiency: low temperature cooling (EU Regulation 2016/2281)
- ③ In Average climatic conditions, low temperature application (35°C)
- ④ Seasonal energy efficiency: low temperature heating in Average climate (EU Regulations No.811/213 and No.813/2013)

ÜNTEŞ®

52
years

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