

# Air Cooled Chillers & Heat Pumps

**EasyPACK**



TCAEY-THAEY 269-2146



**ÜNTES®**  
**52**  
years

# EasyPACK

TCAEY-THAEY 269-2146

-  Cooling capacity: 63,7-144,4 kW
-  Heating capacity: 70,3-151,7 kW

- Complete and flexible range of accessories and set-ups
- Multipurpose for systems with 2 pipes+DHW (with optional RC100)
- Integrated MASTER/SLAVE control
- HT65 version for 65°C water production (°)



TCAEY 289 with coil protection  
metal filters accessory



Water chillers and packaged reversible air-cooled heat pumps 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.
- 3 capacity steps with high efficiency at partial loads.
- Water side heat exchanger: with stainless steel plates, complete with closed cell polyurethane foam rubber insulation and water flow differential pressure switch.
- Air side heat exchanger: featuring finned coil with copper pipes and aluminium fins
- Fan: external rotor axial type electric fans with internal thermal protection, accident protection grilles.
- Control: microprocessor electronic control with Adaptive Function Plus logic.
- Structure: load bearing structure made of galvanised and painted steel plate coated with polyester powders.
- The unit is also complete with:
  - compressor and fan circuit breaker switches;
  - display of cooling circuit high and low pressure;
  - Master/Slave control up to 4 units in parallel;
  - clock board.

### Versions

- B - Standard version (TCAEBY).
- T - High efficiency version with oversized condensing section (TCAEY-THAEY).
- S - Silenced version complete with compressor compartment soundproofing, reduced speed fans, and oversized condensing section (TCAESY-THAESY).
- Q - Super-silenced version complete with compressor technical compartment soundproofing, super-reduced speed fans and oversized condensing section (TCAEQY-THAEQY).

### Models

- TCAEBY: standard unit designed for cooling only.
- TCAEY: high efficiency unit designed for cooling only.
- TCAESY: silenced unit designed for cooling only.
- TCAEQY: super silenced unit designed for cooling only.
- THAEY: heat pump unit.
- THAESY: silenced heat pump unit.
- THAEQY: super silenced heat pump unit.

### Factory fitted accessories

- Shell and tube evaporator.
- PUMP with single or double electric pump, including an automatic pump in standby. The pumps are available in the low or high head versions.
- TANK&PUMP with 230 to 440 litre integrated buffer tank (depending on models) and single or double electric pump, complete with expansion tank, air vent valves, safety valve, and water side pressure gauge.
- VPF control.
- Desuperheater.
- 100% heat recovery unit.
- Electronic expansion valve.
- -10°C condensing control (standard in S-Q versions).
- -15°C condensing control with fans with EC motor.
- Condensing control with over-pressure fans (B-T version only).
- Power factor correction capacitors ( $\cos\phi > 0.94$ ).
- Forced limit of power consumption.
- Forced noise limit.
- Energy parameter measuring device.
- Optimised energy efficiency.
- Soft starter.
- Technical compartment soundproofing.
- Compressor soundproof enclosures.
- Cooling circuit delivery and intake valves.
- Refrigerant leak detector.
- Cooling circuit high and low pressure gauges.
- Double safety valves.
- Metal filters or Coil protection grilles.
- Copper/copper or copper/pre-painted aluminium coils.
- 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.
- Buffer tank integrative heaters
- Low temperature water production.
- Interfaces for serial communication with other devices.
- Rubber anti-vibration mounts.

### Separately supplied accessories

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

TCAEY MODEL		269	279	289	296	2112	2125	w	
❶	Nominal cooling capacity	kW	65,6	72,1	77,6	86,5	105,5	-	
❶	E.E.R.		2,74	2,81	2,81	2,62	2,79	-	
❶	Absorbed power	kW	23,94	25,66	27,62	33,02	37,81	-	
TCAEY-TCAESY-TCAEQY MODEL		269	279	289	296	2112	2125	2146	
❶	Nominal cooling capacity	kW	69,2	79,1	90,1	96,1	112,0	125,5	144,4
❶	Nominal cooling capacity	kW	67,7	76,7	87,6	92,1	108,0	122,0	138,9
❶	Nominal cooling capacity	kW	64,7	71,2	84,6	89,6	101,1	116,5	131,0
❶	E.E.R.		3,12	3,18	3,12	3,11	3,10	3,12	3,12
❶	E.E.R.		2,92	3,05	2,95	2,92	2,94	2,99	2,94
❶	E.E.R.		2,82	2,72	2,80	2,72	2,53	2,72	2,59
❶	Absorbed power	kW	22,18	24,87	28,88	30,90	36,13	40,22	46,28
❶	Absorbed power	kW	23,18	25,15	29,69	31,54	36,73	40,80	47,24
❶	Absorbed power	kW	22,94	26,18	30,21	32,94	39,96	42,83	50,58
THAEY-THAESY-THAEQY MODEL		269	279	289	296	2112	2125	2146	
❷	Nominal heating capacity	kW	73,4	82,4	92,4	100,5	118,5	133,1	151,7
❷	Nominal heating capacity	kW	70,8	80,4	90,4	98,0	115,0	129,1	147,6
❷	Nominal heating capacity	kW	70,3	77,3	88,4	95,4	111,0	125,5	143,6
❷	C.O.P.		3,35	3,36	3,31	3,28	3,31	3,25	3,23
❷	C.O.P.		3,32	3,36	3,31	3,29	3,30	3,27	3,27
❷	C.O.P.		3,31	3,30	3,27	3,26	3,21	3,23	3,22
❶	Nominal cooling capacity	kW	67,2	76,7	86,6	93,6	107,5	121,5	139,4
❶	Nominal cooling capacity	kW	66,2	74,7	85,7	89,6	104,6	119,0	136,9
❶	Nominal cooling capacity	kW	63,7	69,7	82,7	86,6	99,1	112,1	128,5
❷	Absorbed power	kW	21,91	24,52	27,92	30,64	35,80	40,95	46,97
❷	Absorbed power	kW	21,33	23,93	27,31	29,79	34,85	39,48	45,14
❷	Absorbed power	kW	21,24	23,42	27,03	29,26	34,58	38,85	44,6
TCAEY-THAEY MODEL		269	279	289	296	2112	2125	2146	
❸	TCAEY sound pressure	dB(A)	50	50	50	50	52	-	-
❸	TCAEY-THAEY sound pressure	dB(A)	50	51	51	51	53	54	54
❸	TCAESY-THAESY sound pressure	dB(A)	46	47	47	47	49	50	50
❸	TCAEQY-THAEQY sound pressure	dB(A)	42	42	43	43	46	47	47
❹	TCAEY sound power	dB(A)	82	82	82	82	84	-	-
❹	TCAEY-THAEY sound power	dB(A)	82	83	83	83	85	86	86
❹	TCAESY-THAESY sound power	dB(A)	78	79	79	79	81	82	82
❹	TCAEQY-THAEQY sound power	dB(A)	74	74	75	75	78	79	79
	Scroll/step compressor	no.	2/3	2/3	2/3	2/3	2/3	2/3	2/3
	Circuits	no.	1	1	1	1	1	1	1
	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	400-3+N-50
DIMENSIONS AND WEIGHTS		269	279	289	296	2112	2125	2146	
	W - Width of version B	mm	2.650	2.650	2.650	2.650	3.250	-	
	W - Width of version T - S - Q	mm	3.250	3.250	3.250	3.250	3.450	3.450	
	H - Height of version B	mm	1.700	1.700	1.700	1.700	1.700	-	
	H - Height of version T - S	mm	1.700	1.700	1.700	1.700	2.000	2.000	
	H - Height of version Q	mm	1.520	1.520	1.520	1.520	2.000	2.000	
	D - Depth of version B	mm	1.210	1.210	1.210	1.210	1.210	-	
	D - Depth of version T - S - Q	mm	1.210	1.210	1.210	1.210	1.520	1.520	
❺	TCAEY Weight	kg	755	760	795	800	980	-	
❺	TCAEY weight	kg	850	865	870	905	1.160	1.195	
❺	THAEY weight	kg	915	930	935	980	1.240	1.280	

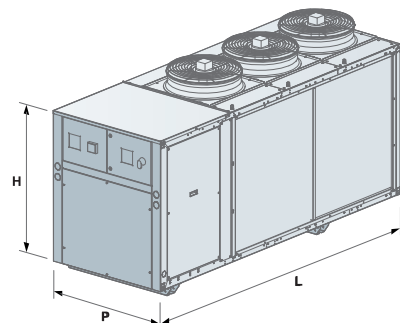
Data at the following conditions:

- 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 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.

■ TCAESY-THAESY silenced versions.

■ TCAEQY-THAEQY super-silenced versions.

Performance according to EN 14511:2013.



SEASONAL ENERGY PERFORMANCE		269	279	289	296	2112	2125	2146
<b>TCAEY MODEL SEASONAL PERFORMANCE IN COOLING MODE</b>								
① P <sub>designc</sub> (EN 14825)	kW	65,6	72,1	77,6	86,5	105,5	-	-
① SEER (EN 14825)		4,11	3,95	3,96	3,92	4,11	-	-
② $\eta_{s,c}$	%	161	155	156	154	161	-	-
<b>TCAEY MODEL SEASONAL PERFORMANCE IN COOLING MODE</b>								
① P <sub>designc</sub> (EN 14825)	kW	69,2	79,1	90,1	96,1	112,0	125,5	144,4
① SEER (EN 14825)		4,29	4,22	4,30	4,32	4,29	4,26	4,27
② $\eta_{s,c}$	%	169	166	169	170	169	167	168
<b>TCAEY MODEL SEASONAL PERFORMANCE IN COOLING MODE</b>								
① P <sub>designc</sub> (EN 14825)	kW	67,7	76,7	87,6	92,1	108,0	122,0	138,9
① SEER (EN 14825)		4,21	4,22	4,24	4,24	4,25	4,28	4,25
② $\eta_{s,c}$	%	165	166	167	166	167	168	167
<b>TCAEQY MODEL SEASONAL PERFORMANCE IN COOLING MODE</b>								
① P <sub>designc</sub> (EN 14825)	kW	64,7	71,2	84,6	89,6	101,1	116,5	131,0
① SEER (EN 14825)		4,17	4,07	4,19	4,12	4,04	4,05	3,99
② $\eta_{s,c}$	%	164	160	164	162	159	159	157
<b>THAEY MODEL SEASONAL ENERGY PERFORMANCE IN HEATING MODE</b>								
③ P <sub>designh</sub> (EN 14825)	kW	66	74	84	91	108	121	138
③ SCOP (EN 14825)		3,99	3,97	3,91	3,90	4,03	3,89	3,87
④ $\eta_s$	%	157	156	153	153	158	153	152
④ Energy class		A++	-	-	-	-	-	-
<b>THAEY MODEL SEASONAL ENERGY PERFORMANCE IN HEATING MODE</b>								
③ P <sub>designh</sub> (EN 14825)	kW	64	73	82	89	104	117	134
③ SCOP (EN 14825)		3,97	3,99	3,92	3,92	4,02	3,96	3,93
④ $\eta_s$	%	156	157	154	154	158	155	154
④ Energy class		A++	-	-	-	-	-	-
<b>THAEQY MODEL SEASONAL ENERGY PERFORMANCE IN HEATING MODE</b>								
③ P <sub>designh</sub> (EN 14825)	kW	64	70	80	86	100	114	130
③ SCOP (EN 14825)		3,99	3,97	3,91	3,91	3,93	3,92	3,88
④ $\eta_s$	%	157	156	154	154	154	154	152
④ Energy class		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

#### Export Sales Office

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