

TCAEY-THAEY 118÷136 H.E.

Compact-Y Range



Radiant systems

Fan coil systems

C.O.P. > 3,7



High energy efficiency packaged air-cooled water chillers and reversible heat pumps with axial fans.

Range with hermetic Scroll compressors and R410A refrigerant gas.

Construction features

Compressor: hermetic, rotary Scroll compressor, complete with thermal protection and crankcase heater.

Water side heat exchanger: adequately insulated stainless steel plate exchanger, complete with antifreeze heater and water flow differential pressure switch.

Air side heat exchanger: finned coil exchanger, with copper pipes and aluminium fins.

Fan: electric axial fans with external rotor, equipped with internal thermal protection, protective grilles and proportional electronic device for continuous fan rotation speed regulation.

Control: microprocessor electronic control, **IDRHOSS** compatible, with evolved AdaptiveFunction logic.

Structure: in galvanized and painted sheet steel, complete with condensation drain pan for THAEY.

Models

TCAEY: unit designed for cooling only.

THAEY: heat pump unit.

PUMP unit

Pumping group complete with: standard circulation electric pump, expansion tank with membrane, manual bleed valve and safety valve.

TANK & PUMP unit

- With tank and electric pump.
- With tank for primary and secondary water circuit and electric pump for primary circuit.

Pumping group complete with: electric circulation pump on the primary circuit, water buffer tank or water buffer tank for primary and secondary water circuit (with the function of separating the two circuits), expansion tank with membrane, manual air bleed valve, automatic air bleed valve and safety valve.

Factory fitted accessories

- Antifreeze heater on the buffer tank.
- Protective coil grilles.
- Unit base antifreeze electric heater for operation in heat pump mode at external air temperature of below -5°C .
- Digital input for double set-point.
- 4-20 mA analogue input for shifting set-point.

Accessories supplied loose

- Antivibration rubber mountings.
- Remote keyboard with display.
- Clock card
- Serial interfaces for connection to BMS (proprietary protocol, Modbus RTU, LonWorks).
- RS485/RS232, RS485/USB serial converter in the event of centralised unit management.
- CAN-bus (Controller Area Network) serial interface for the **IDRHOSS** system.
- GSM 900/1800 modem kit for remote unit management.
- Rhoss supervision system for unit monitoring and remote management.



TCAEY-THAEY H.E. MODEL		118	120	125	129	132	136
❶ Nominal cooling capacity (radiating)	kW	17,4	20,1	24,6	28,9	31,5	36,5
❶ E.E.R. (radiating)		3,13	3,16	3,33	3,27	3,37	3,18
❶ Absorbed power (radiating) (*)	kW	5,57	6,35	7,39	8,85	9,36	11,46
❷ Nominal heating capacity (radiating)	kW	15,8	16,2	20,4	23,9	28,2	32,4
❷ C.O.P. (radiating)		3,94	3,89	4,19	4,02	4,08	3,96
❷ Absorbed power (radiating) (*)	kW	4,01	4,16	4,87	5,94	6,91	8,18
❸ Cooling capacity	kW	13,4	15,5	18,7	22,6	24,3	27,8
❸ E.E.R.		2,70	2,92	2,97	2,97	2,96	2,74
❸ E.S.E.E.R.		3,48	3,51	3,45	3,42	3,58	3,31
❸ Absorbed power (*)	kW	4,95	5,33	6,30	7,61	8,20	10,12
❹ Heating capacity	kW	15,6	16,1	20,3	23,8	27,7	31,7
❹ C.O.P.		3,14	3,09	3,32	3,19	3,20	3,13
❹ Absorbed power	kW	4,97	5,23	6,10	7,48	8,63	10,12
❺ Sound pressure	dB(A)	48	50	52	52	53	54
Scroll/step compressor	No.	1/1	1/1	1/1	1/1	1/1	1/1
Circuits	No.	1	1	1	1	1	1
Water tank content	l	35	35	45	45	45	45
❶ Available head pressure	kPa	110	80	140	130	130	130
Main 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

In the following conditions:

- ❶ Air: 35°C - Water: 18/23°C
- ❷ Air: 7°C B.S. - 6°C W.B. - Water 35/30°C
- ❸ Air: 35°C - Water: 7/12°C - ❹ Air: 7°C B.S. - 6°C W.B. - Water: 45/40°C.
- ❺ At 5 m from the unit, coil side, in free field (Q = 2).
- ESEER (European Seasonal EER) - European seasonal average efficiency

(*) Unit without electric pump

DIMENSIONS AND WEIGHTS		118	120	125	129	132	136
L - Width PUMP	mm	1.230	1.230	1.230	1.230	1.590	1.590
L - Width TANK & PUMP	mm	1.490	1.490	1.490	1.490	1.790	1.790
H - Height	mm	1.090	1.090	1.280	1.280	1.508	1.508
P - Depth	mm	500	500	500	500	600	600
❶ Weight TCAEY	kg	200	210	260	270	310	350
❶ Weight THAEY	kg	210	220	270	280	320	360

❶ The weight refers to the unit in its most complete form

