

# TCAEY-THAEY 115÷233

## Compact-Y Range



**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 for mod. 127÷233.

**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 fan with external rotor, equipped with internal thermal protection and complete with protection grille.

**Control:** microprocessor electronic control available in 2 versions: **standard**, with AdaptiveFunction logic, and **IDRHOSS** compatible, with evolved AdaptiveFunction logic.

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

### Models

**TCAEY:** unit designed for cooling only.

**THAEY:** heat pump unit.

**STANDARD unit** (for mod. 133-233 only)  
Without pump assembly and buffer tank.

### PUMP unit

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

### TANK & PUMP unit

Pumping group complete with: water buffer tank, electric circulation pump, expansion tank with membrane, manual air bleed valve, automatic air bleed valve and safety valve.

### Factory fitted accessories

- -10°C condensation control.
- Antifreeze electric heater on the buffer tank.
- Crankcase heater compressor (mod. 115÷124).
- Protective coil grilles.
- Desuperheater 15% (mod. 133-233).
- 100% heat recovery (mod. 133-233).
- Thermostat with display for desuperheater.
- Single electric pump with high head pressure (mod. 133-233).
- Single electric pump with high head pressure + buffer tank (mod. 133-233).

### Option with control



- Digital input for double set-point.
- 4-20 mA analogue input for shifting set-point.

### Accessories supplied loose

- Antivibration rubber mountings.
- -10°C condensation control.
- Remote keyboard with display.
- Serial interfaces for connection to BMS (proprietary protocol, Modbus RTU, LonWorks).
- RS485/RS232, RS485/USB serial converter in the event of centralised unit management.

### Option with control



- Clock card
- 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 MODEL		115	117	122	124	127	130	133	233
❶ Nominal cooling capacity	kW	15,4	17,4	22,7	24,3	26,9	29,1	34,0	32,5
❶ E.E.R.		2,76	2,67	2,76	2,62	2,60	2,44	2,56	2,64
❶ E.S.E.E.R.		3,14	3,12	3,43	3,07	3,16	2,90	2,84	2,93
❶ Absorbed power (*)	kW	5,6	6,5	8,2	9,3	10,4	11,9	13,3	12,3
❷ Nominal heating capacity	kW	16,8	17,9	23,9	26,1	30,7	34,4	39,1	37,5
❷ C.O.P.		3,05	2,94	3,02	2,92	3,07	3,10	2,94	3,05
❷ Absorbed power (*)	kW	5,5	6,1	7,9	8,9	10,0	11,1	13,3	12,3
❸ Sound pressure	dB(A)	50	50	52	52	53	54	57	57
Scroll/step compressor	No.	1/1	1/1	1/1	1/1	1/1	1/1	1/1	2/2
Circuits	No.	1	1	1	1	1	1	1	1
Water tank content	l	35	35	45	45	45	45	80	80
❹ Available head pressure	kPa	147	125	130	125	110	105	134	134
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	400-3+N-50	400-3+N-50

**In the following conditions:**

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

(\*) Unit without electric pump

DIMENSIONS AND WEIGHTS		115	117	122	124	127	130	133	233
L - Width <b>STANDARD</b>	mm	-	-	-	-	-	-	1660	1660
L - Width <b>PUMP</b>	mm	1230	1230	1230	1230	1590	1590	1660	1660
L - Width <b>TANK &amp; PUMP</b>	mm	1490	1490	1490	1490	1790	1790	1660	1660
H - Height	mm	1090	1090	1280	1280	1508	1508	1536	1536
P - Depth	mm	500	500	500	500	600	600	1000	1000
❹ Weight <b>TCAEY</b>	kg	200	210	260	270	310	350	460	470
❹ Weight <b>THAEY</b>	kg	210	220	270	280	320	360	470	480

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

