

# Y-Flow TCHEY-THHEY 115÷240



Cooling capacity: 15.5÷41.7 kW - Heating capacity:  
17.4÷45.1 kW

√ **Applications with well water,  
water mains or geothermal  
probes**

√ **Plug&Play Unit with upward  
hydraulic connections**



Web code: YF051

**Packaged water-cooled water chillers and reversible heat pumps on the cooling circuit with water-cooling system. Range with scroll hermetic compressors and R410A refrigerant gas.**

## Construction features

- Compressor: hermetic rotary scroll complete with thermal protection and crankcase heater.
- Primary side (user) heat exchanger: adequately insulated stainless steel plates, complete with antifreeze heater and water flow differential pressure switch.
- Disposal unit side (well/mains/geothermal probes) heat exchanger: adequately insulated stainless steel plates, complete with antifreeze heater and water flow differential pressure switch (for THHEY).
- Control: microprocessor electronic control with Adaptive Function Plus logic.
- Structure: made of galvanised and painted steel plate with polyester powder coating, internally covered with soundproof panelling.

## Models

- TCHEY: unit designed for cooling only.
- THHEY: heat pump unit.

## STANDARD set up

Without electric circulation pump and hydraulic accessories.

## Factory fitted accessories

- PUMP:
  - Primary side (user): pump unit complete with electric circulation pump with standard or oversized head, membrane expansion tank, safety valve, water fill/drain valve, manual air vent valve and pressure gauge.
  - Disposal side (geothermal probes/dry cooler): pump unit complete with phase cutting electric pump, water fill/drain valve and manual air vent valve.
- Silenced set up.
- Pressure switch valve with water flow lock solenoid.
- Pressure switch valve with water flow lock solenoid and bypass solenoid valve.
- Water circuit heat pump (for TCHEY only).
- Soft-start device.
- Low temperature water production.
- Digital input for double set-point.
- 4-20mA analogue signal for shifting set-point.
- Refrigerant leak detector.
- Forced limit of power consumption.

## Separately supplied accessories

- 3-way valve for the production of domestic hot water.
- Additional electrical resistance for heat pump, managed by regulation.
- Outdoor air temperature probe for set-point compensation.
- Free-cooling kit.
- Water filter.

- Rubber anti-vibration mounts.
- 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

TCHEY MODEL		115	118	122	125	230	240
❶ Cooling capacity	kW	15,5	18,4	22,7	26,3	30,5	41,7
❶ Absorbed power	kW	3,27	3,49	4,5	5,01	6,64	8,07
❶ E.E.R.		4,74	5,27	5,04	5,25	4,59	5,17
THHEY MODEL		115	118	122	125	230	240
❷ Heating capacity	kW	17,4	20,2	25,1	28,9	35,9	45,1
❷ Absorbed power	kW	3,95	4,41	5,59	6,3	8,05	10,11
❷ C.O.P.		4,4	4,58	4,49	4,59	4,46	4,46
❸ Heating capacity	kW	18,6	21,5	26,6	30,7	38,5	47,9
❸ Absorbed power	kW	3,29	3,55	4,45	5,04	6,63	8,09
❸ C.O.P.		5,66	6,05	5,97	6,09	5,81	5,92
❹ Heating capacity (geothermal)	kW	13,4	15,3	18,6	21,7	27,7	33,8
❹ C.O.P. (geothermal)		4,12	4,21	4,37	4,49	4,23	4,3
❶ Cooling capacity	kW	13,9	16,3	20	23,1	27,3	35,9
❶ E.E.R.		3,81	4,13	4,15	4,19	3,79	4,09
TCHEY - THHEY MODEL		115	118	122	125	230	240
❺ Sound pressure	dB(A)	42	42	46	47	48	52
Scroll/step compressor	n.	1/1	1/1	1/1	1/1	2/2	2/2
Circuits	no.	1	1	1	1	1	1
❶ Std system side electric pump available head	kPa	88	81	73	113	105	115
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		115	118	122	125	230	240
L - Width	mm	700	700	700	700	700	700
H - STANDARD height - PUMP	mm	1140	1140	1140	1140	1140	1140
P - Depth	mm	560	560	780	780	780	780
❻ Weight	kg	193	193	230	254	278	298
SEASONAL ENERGY PERFORMANCE		115	118	122	125	230	240
TCHEY MODEL SEASONAL PERFORMANCE IN COOLING MODE							
❶ Pdesignc (EN 14825)	kW	15,5	18,4	22,7	26,3	30,5	41,7
❶ SEER (EN 14825)		5,33	5,57	5,55	5,7	6,06	5,81
❷ ηs,c	%	210	220	219	225	239	229
THHEY MODEL SEASONAL PERFORMANCE IN HEATING MODE							
❸ Pdesignh (EN 14825)	kW	23	27	33	38	48	59
❸ SCOP (EN 14825)		6,1	6,43	6,44	6,54	6,67	6,8
❹ ηs	%	236	249	249	254	259	264
❹ Energy class		A+++	A+++	A+++	A+++	A+++	A+++

Data at the following conditions:

- ❶ Chilled water: 12/7°C - Condenser water: 30/35°C.
  - ❷ Hot water: 40/45°C - Evaporator water: 10/7°C.
  - ❸ Hot water: 30/35°C - Evaporator water: 10/7°C.
  - ❹ Hot water: 30/35°C - Evaporator water: 0/-3°C, 30% glycol.
  - ❺ In open field (Q = 2) at 1 m from the unit, with silenced setup.
  - ❻ Weight refers to the most complete setup.
- Performance according to EN 14511.
- ❶ Low temperature application (7°C)
  - ❷ Seasonal energy efficiency: low temperature cooling (EU Regulation 2016/2281)
  - ❸ In Average climatic conditions, low temperature application (35°C)
  - ❹ Seasonal energy efficiency: low temperature heating in Average climate (EU Regulations No.811/2013 and No.813/2013)

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