

Comby-Flow

THHEY 105÷112



Cooling capacity: 5.3÷11.9 kW - Heating capacity:
6.6÷13.7 kW



√ **Extremely compact and silent units**



Web code: CF001

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

Construction features

- Compressor: hermetic, rotary scroll type, complete with thermal protection.
- Primary side (user) heat exchanger: adequately insulated stainless steel plates, complete with antifreeze heater and water flow differential pressure switch.
- Well or mains side (disposal) heat exchanger: with suitably insulated stainless steel plates, complete with antifreeze heater and water flow differential pressure switch.
- Control: microprocessor electronic control with Adaptive Function Plus logic.
- Structure: made of galvanised and painted steel plate with polyester powder coating, complete with soundproofed compressor.

Models

- THHEY: heat pump unit.

STANDARD set up

- Without electric circulation pump.
Primary side (user): membrane expansion tank, safety valve, water drain valve, manual air vent valve, and pressure gauge.

PUMP set up

- With electric circulation pump.
Primary side (user): pump unit complete with electric circulation pump, membrane expansion tank, safety valve, water drain valve,

manual air vent valve and pressure gauge.

Factory fitted accessories

- Pressure switch valve and bypass solenoid valve (only THHEY).
- Low temperature water production.
- Digital input for double set-point
- 4-20mA analogue signal for shifting set-point.

Separately supplied accessories

- Buffer tank.
- Buffer tank connection pipes.
- Water filter.
- Rubber anti-vibration mounts.
- Antifreeze heater on the buffer tank.
- Low pressure switch.
- 3-way valve for the production of domestic hot water.
- Outdoor air temperature probe for set-point compensation.
- Additional electrical resistance for heat pump, managed by regulation.
- Remote keypad with display.
- Clock board.
- Interfaces for serial communication with other devices.
- Serial converter (RS485/USB).
- Rhoss supervisors for unit monitoring and remote management.

Technical Data

THEY MODEL		105	107	109	112
① Heating capacity	kW	6,58	8,1	10,9	14
① Absorbed power	kW	2,08	2,8	3,35	4,5
① C.O.P.		3,16	2,89	3,03	3,1
② Heating capacity	kW	7,5	9,7	12,7	15
② Absorbed power	kW	1,6	2,1	2,72	3,33
② C.O.P.		4,68	4,61	4,67	4,51
③ Heating capacity (geothermal)	kW	5,4	7,3	9,4	11,3
③ Absorbed power (geothermal)	kW	1,5	2,15	2,78	3,34
③ C.O.P. (geothermal)		3,62	3,39	3,38	3,39
④ Cooling capacity	kW	5,3	6,8	9,2	11,9
④ Absorbed power	kW	1,6	2,19	2,79	3,67
④ E.E.R.		3,31	3,11	3,3	3,24
⑤ Sound pressure	dB(A)	49	51	51	53
Scroll/step compressor	no.	1/1	1/1	1/1	1/1
KA buffer tank water content	l	20	20	30	30
④ Available circulator head	kPa	47	55	82	77
Electrical supply	V-ph-Hz	230-1-50	230-1-50 / 400-3+N-50	230-1-50 / 400-3+N-50	230-1-50 / 400-3+N-50
DIMENSIONS AND WEIGHTS		105	107	109	112
L - Width	mm	585	585	660	660
H - STANDARD height - PUMP	mm	535	535	535	535
H - STANDARD height - PUMP + KA	mm	855	855	855	855
P - Depth	mm	386	386	420	420
⑥ Weight	kg	78	83	94	97
KA Weight	kg	28	28	33	33
SEASONAL ENERGY PERFORMANCE		105	107	109	112
THEY MODEL SEASONAL PERFORMANCE IN HEATING MODE					
③ Pdesignh (EN 14825)	kW	9	12	16	19
③ SCOP (EN 14825)		5,38	5,56	5,54	5,18
④ η_s	%	207	214	214	199
④ Energy class		A+++	A+++	A+++	A+++

Data at the following conditions:

- ① Hot water: 40/45°C - Evaporator water: 10/7°C.
- ② Hot water: 30/35°C - Evaporator water: 10/7°C.
- ③ Hot water: 30/35°C - Evaporator water: 0/-3°C, 30% glycol.
- ④ Chilled water: 12/7°C - Condenser water: 30/35°C.
- ⑤ In open field (Q = 2) at 1 m from the unit.
- ⑥ Weight refers to the most complete setup.
Performance according to EN 14511. Standard Setup
KA = buffer tank.
KTC = connecting pipe.
- ③ In Average climatic conditions, low temperature application (35°C)
- ④ Seasonal energy efficiency: low temperature heating in Average climate (EU Regulations No.811/2013 and No.813/2013)

RHOSS S.P.A. declines all responsibility for possible mistakes in this document and reserves the right to alter the features of their products without notice.

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