

Low consumption Compact-Y NF Plus

THAETY 115÷127 NF



Cooling capacity: 15.5÷26.6 kW - Heating capacity: 16.6÷30.4 kW

✓ **Operation up to -15°C outdoor air**

✓ **Temperature of the produced water up to 60°C**

✓ **Plug&Play unit with integrated hydraulic module**

✓ **Included evaporating/condensing control**



Web code: CYP01

Packaged reversible air-cooled heat pumps with axial fans. Range with scroll hermetic compressors and R410A refrigerant gas.

Construction features

- Compressor: hermetic, rotary scroll compressor, complete with thermal protection and casing heater for mod. 127.
- Water side heat exchanger: adequately insulated stainless steel plates, complete with antifreeze heater and water flow differential pressure switch.
- Air side heat exchanger: featuring finned coil with copper pipes and aluminium fins with hydrophilic treatment and complete with protection grille.
- Fan: external rotor axial type electric fans equipped with internal thermal protection, accident protection grilles and proportional electronic device for continuous fan rotation speed regulation.
- Control: microprocessor electronic control with Adaptive Function Plus logic.
- Structure: made of galvanised and painted steel plate, complete with condensate drain pan and unit base antifreeze heater.

Version

- T - High efficiency/temperature version.

Models

- THAETY: heat pump unit.

PUMP set up

- Pump unit complete with: circulator or electric circulation pump, membrane expansion tank, manual air vent valve, safety valve and pressure gauge.

TANK&PUMP set up

- Pump unit complete with: inertial buffer tank, circulator or electric circulation pump, membrane expansion tank, manual air vent valve, automatic air vent valve, safety valve, and pressure gauge.

Factory fitted accessories

- Soft-start device.
- Silenced set up.
- Antifreeze heater on the tank.
- Compressor casing heater (mod. 115÷124).
- Digital input for double set-point.
- 4-20 mA analogue signal for shifting set-point.
- Low water set-point temperature.

Separately supplied accessories

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

THAETY NF MODEL		115	117	122	124	127
① Heating capacity	kW	16,6	17,7	23,4	25,9	30,4
① Absorbed power	kW	5,72	6,32	8,18	9,08	10,03
① C.O.P.		2,9	2,8	2,86	2,85	3,03
② Heating capacity	kW	18	19	24,8	27,8	32,3
② Absorbed power	kW	4,33	4,53	5,9	6,59	7,58
② C.O.P.		4,16	4,19	4,2	4,22	4,26
③ Heating capacity	kW	11,7	12	15,7	17,9	20,8
③ C.O.P.		2,77	2,77	2,8	2,77	2,84
④ Cooling capacity	kW	15,5	17,6	22,5	23,9	26,6
④ Absorbed power	kW	5,81	6,62	8,14	9,45	10,11
④ E.E.R.		2,67	2,66	2,75	2,53	2,63
⑤ Sound pressure	dB(A)	50	50	52	52	53
⑤ Silenced set up sound pressure	dB(A)	46	46	49	49	50
Scroll/step compressor	no.	1/1	1/1	1/1	1/1	1/1
Buffer tank water content	l	35	35	45	45	45
⑥ P0 circulator/P1 electric pump nominal available head	kPa	75/147	64/136	66/131	69/130	63/116
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
DIMENSIONS AND WEIGHTS		115	117	122	124	127
L - PUMP width	mm	1230	1230	1230	1230	1535
L - TANK&PUMP width	mm	1522	1522	1522	1522	1822
H - Height	mm	1090	1090	1280	1280	1510
P - Depth	mm	580	580	600	600	695
⑥ Weight	kg	215	225	278	288	320
SEASONAL ENERGY PERFORMANCE		115	117	122	124	127
THAETY NF MODEL SEASONAL PERFORMANCE IN HEATING MODE						
③ Pdesignh (EN 14825)	kW	18	18	24	27	32
③ SCOP (EN 14825)		3,62	3,74	3,72	3,74	3,68
④ η_s	%	142	146	146	146	144
④ Energy class		A+	A+	A+	A+	A+

Data at the following conditions:

- ① Air: 7°C D.B. - 6°C W.B. - Water: 40/45°C.
- ② Air: 7°C D.B. - 6°C W.B. - Water: 30/35°C.
- ③ Air: -7°C D.B. - Water: 30/35°C.
- ④ Air: 35° D.B. - Water: 12/7°C.
- ⑤ In open field (Q = 2) at 5 m from the unit.
- ⑥ Weight refers to most complete set up.

Performance according to EN 14511:2013. Set up with circulator.

Important note:

- With circulator (P0/ASP0 set up) the units are not suitable for radiant cooling operation.
- Permissible heat exchanger thermal gradient $\Delta T = 4\div 8^\circ\text{C}$.

- 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)



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