

Compact-Y NF Plus

THAETY 115÷127 NF

Cooling capacity 15,5÷26,6 kW

Heating capacity 16,6÷30,4 kW

Hot water 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

Integrated MASTER/SLAVE control

Tax incentives*



Features



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.
- The unit is also complete with:
 - outdoor air temperature probe for compensation of the Set-point;
 - display of cooling circuit high and low pressure;
 - Master/Slave control up to 4 units in parallel;
 - clock board.

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.
- 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 setup sound pressure	dB(A)	46	46	49	49	50
Scroll compressors/steps	no.	1/1	1/1	1/1	1/1	1/1
Buffer tank water content	l	35	35	45	45	45
④ P0 circulator/P1 electric pump nominal available head	kPa	75/155	64/136	66/131	68/130	63/120
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 WEIGHT		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	350
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°C D.B. – Water: 12/7°C.
- ⑤ In open field (Q = 2) at 5 m from the unit.
- ⑥ Weight refers to the most complete setup.

Performance according to EN 14511. Setup with circulator.

Important note:

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

- ③ In Average climatic conditions, low temperature application (35°C)

- ④ Seasonal energy efficiency: low temperature heating in Average climate (EU Regulations No.811/2013 and No.813/2013)



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