

WinPOWER ECO TWIN

THAEU 8900÷121320

Cooling capacity 859,3÷1309,2 kW

Heating capacity 868,7÷1308,8 kW



Features

Efficient and eco-friendly range in R454B

SEER up to 5,33 with FIEC accessory (EC fans)

**Heat pumps in high efficiency and
supersilenced version**

Extended operating limits

Up to 12 capacity steps

Tax incentives*



Air cooled reversible heat pumps with axial fans. Range with scroll hermetic compressors and R454B refrigerant.

Construction features

- Compressor: scroll type, rotary, hermetic complete with thermal protection and casing heater.
- Up to 12 capacity steps with high efficiency at partial loads.
- Water side heat exchanger: with stainless steel plates, complete with closed cell polyurethane foam rubber insulation, water flow differential pressure switch and Victaulic fittings.
- Air side heat exchanger: featuring finned coil with copper pipes and aluminium fins.
- Fan: external rotor axial type electric fans equipped with internal thermal protection, accident protection grilles and proportional electronic device for continuous fan rotation speed adjustment.
- Control: microprocessor electronic control with Adaptive Function Plus logic.
- Structure: load-bearing structure made of galvanised and painted steel plate with polyester powder coating.

• The unit is also complete with:

- fan and compressor circuit breaker switches;
- display of cooling circuit high and low pressure;
- electronic expansion valve;
- clock board;
- control of Variable Primary Flow (VPF_R).

Versions

- T - High efficiency version.
- Q - Super silenced version complete with compressor technical compartment soundproofing and reduced speed fans.

Models

- THAETU: high efficiency heat pump unit.
- THAEQU: super silenced heat pump unit.

Factory fitted accessories

- Shell and tube evaporator.
- PUMP with single or double electric pump, one of which automatic in standby. The electric pumps are available in the low or high head versions.
- TANK&PUMP with 700+700 or 1000+1000 litre integrated buffer tank (depending on size) and single or double electric pump, complete with expansion tank, air vent valves, safety valve and water side pressure gauge.
- Inverter pump control for unit start-up.
- Desuperheater.
- Condensing control with fans with EC motor.
- Condensing control with over-pressure fans (T version only).
- Power factor correction capacitors ($\cos\phi > 0.94$).
- Forced limit of power consumption.
- Forced noise limit.
- Energy parameter measuring device.
- Soft starter.
- Soundproofed compressor box or compressor box and soundproofed cooling circuit.
- Compressor soundproof enclosures.
- Cooling circuit outlet valves.
- Refrigerant leak detector.
- Cooling circuit high and low pressure gauges.
- Double safety valves
- Coil protection nets or buffer panels.
- Copper/copper, pre-painted copper/aluminium or with hydrophilic treatment coils.
- Control of min/max power supply voltage.
- Digital input for double set-point.
- 4-20 mA analogue signal for shifting set-point.

- Evaporator antifreeze heater, electrical panel, coil tanks, buffer tank, electric pumps and heat exchangers for heat recovery, if applicable.
- Low temperature water production.
- Interfaces for serial communication with other devices.
- Colour touch user keypad (fitted on the machine or remotely) with 7" display.
- Spring anti-vibration mounts.
- Protective packaging.

Separately supplied accessories

- Remote keypad with display.
- Thermostat with display.
- Rhoss supervisors for unit monitoring and remote management.
- Rhoss sequencer for integrated management of multiple chillers.

Technical data

THAETU-THAEQU MODEL		8900	10980	101040	101120	121200	121260	121320
② Nominal heating capacity	kW	880,7	976,8	1026,8	1104,9	1194,8	1256,8	1308,8
② Nominal heating capacity	kW	868,7	960,8	1010,8	1088,9	1176,8	1236,8	1290,8
② C.O.P.		3,31	3,35	3,33	3,33	3,34	3,32	3,32
② C.O.P.		3,35	3,4	3,39	3,38	3,39	3,37	3,37
① Nominal cooling capacity	kW	881,3	969,2	1011,2	1107,1	1195,2	1247,2	1309,2
① Nominal cooling capacity	kW	859,3	945,2	987,2	1077,1	1167,2	1215,2	1275,2
① E.E.R.		3,2	3,2	3,19	3,18	3,26	3,24	3,22
① E.E.R.		3,07	3,1	3,08	3,04	3,15	3,12	3,09
② Absorbed power	kW	266,1	291,6	308,3	331,8	357,7	378,6	394,2
② Absorbed power	kW	259,3	282,6	298,2	322,2	347,1	367	383
THAETU-THAEQU MODEL		8900	10980	101040	101120	121200	121260	121320
③ THAETU sound pressure	dB(A)	65	66	66	66	67	67	68
③ THAEQU sound pressure	dB(A)	57	58	58	58	59	59	59
④ THAETU sound power	dB(A)	98	99	99	99	100	100	101
④ THAEQU sound power	dB(A)	90	91	91	91	92	92	92
Scroll compressors/steps	n.	8/8	10/10	10/10	10/10	12/12	12/12	12/12
Circuits	n.	4	4	4	4	4	4	4
Electrical supply	V-ph-Hz	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50
DIMENSIONS AND WEIGHTS		8900	10980	101040	101120	121200	121260	121320
L – Width	mm	9400	11600	11600	11600	13330	13330	13330
H – Height	mm	2480	2480	2480	2480	2530	2530	2530
P – Depth	mm	2260	2260	2260	2260	2260	2260	2260
⑤ THAETU weight	kg	6980	8310	8390	8450	10170	10280	10340
⑤ THAEQU weight	kg	7790	9240	9320	9380	11210	11320	11380
SEASONAL ENERGY PERFORMANCE		8900	10980	101040	101120	121200	121260	121320
THAETU MODEL SEASONAL PERFORMANCE IN COOLING MODE								
① Pdesignc (EN 14825)	kW	881,3	969,2	1011,2	1107,1	1195,2	1247,2	1309,2
① SEER (EN 14825)		4,79	4,93	4,84	4,79	4,93	4,94	4,89
② ηs,c	%	188	194	190	188	194	195	193
THAEQU MODEL SEASONAL PERFORMANCE IN COOLING MODE								
① Pdesignc (EN 14825)	kW	859,3	945,2	987,2	1077,1	1167,2	1215,2	1275,2
① SEER (EN 14825)		4,76	4,87	4,78	4,73	4,93	4,92	4,87
② ηs,c	%	187	192	188	186	194	194	192

Data at the following conditions:

- ① Air: 35°C – Water: 12/7°C.
- ② Air: 7°C, D.B. 6°C W.B.- Water: 40/45°C.
- ③ In open field (Q = 2) at 10 m from the unit.
- ④ Total sound power level in dB(A) based on measurements carried out in accordance with regulation UNI EN-ISO 9614.
- ⑤ Weight referred to the unit without load and not accessorised.
- THAEQU super-silenced versions.
Performance according to EN 14511.
- ① Low temperature application (7°C)
- ② Seasonal energy efficiency: low temperature cooling (EU Regulation 2016/2281)



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