

GREEN 180 - GREEN 180 S

Monobloc heat pump water heater with domestic hot water storage with or without solar exchanger



Technical and construction characteristics

Following important investments in the development of new technologies aimed at the use of renewable energy and energy saving, A2B Accorroni E.G. has created a new range of high efficiency monobloc heat pump water heaters GREEN 180 - GREEN 180 S series.

The GREEN heat pump water heater represents the ecological evolution of the traditional water heater, which uses a renewable energy system that absorbs heat directly from the external air heated free of charge by the sun.

This innovative system allows you to obtain domestic hot water at 60 °C with average coefficients of performance (C.O.P.) > 3. Thanks to these high efficiency, all models in the GREEN series can access the 65% tax deduction introduced by the 2010 directive /31/EC issued to encourage all those interventions aimed at increasing the energy efficiency of existing buildings. The GREEN heat pump water heater is characterized by ease of installation, silent operation and great reliability. GREEN has the following technical characteristics:

- Condenser wrapped outside the boiler protected by any encrustation phenomenon that prevents the refrigerant gas - sanitary water contamination;
- Additional exchanger for possible integration with solar thermal system or boiler (GREEN 180 S version);
- Tank made of steel and internally treated with double layer vitrification;
- Anti-corrosion sacrificial magnesium anode (optional);
- External covering made of high quality expanded polyurethane thermal insulation coefficient;
- High efficiency rotary compressor that uses gas ecological R134A;
- Automatic activation of the electrical resistance thanks to a special external temperature probe;
- Radial inverter fans positioned directly on the part upper part of the storage together with the other components of the thermodynamic circuit in HP which communicate with the outside via special insulated PVC pipes.



Model	Code	€
GREEN 180	37010400	3.200,00
GREEN 180 S	37010500	3.470,00

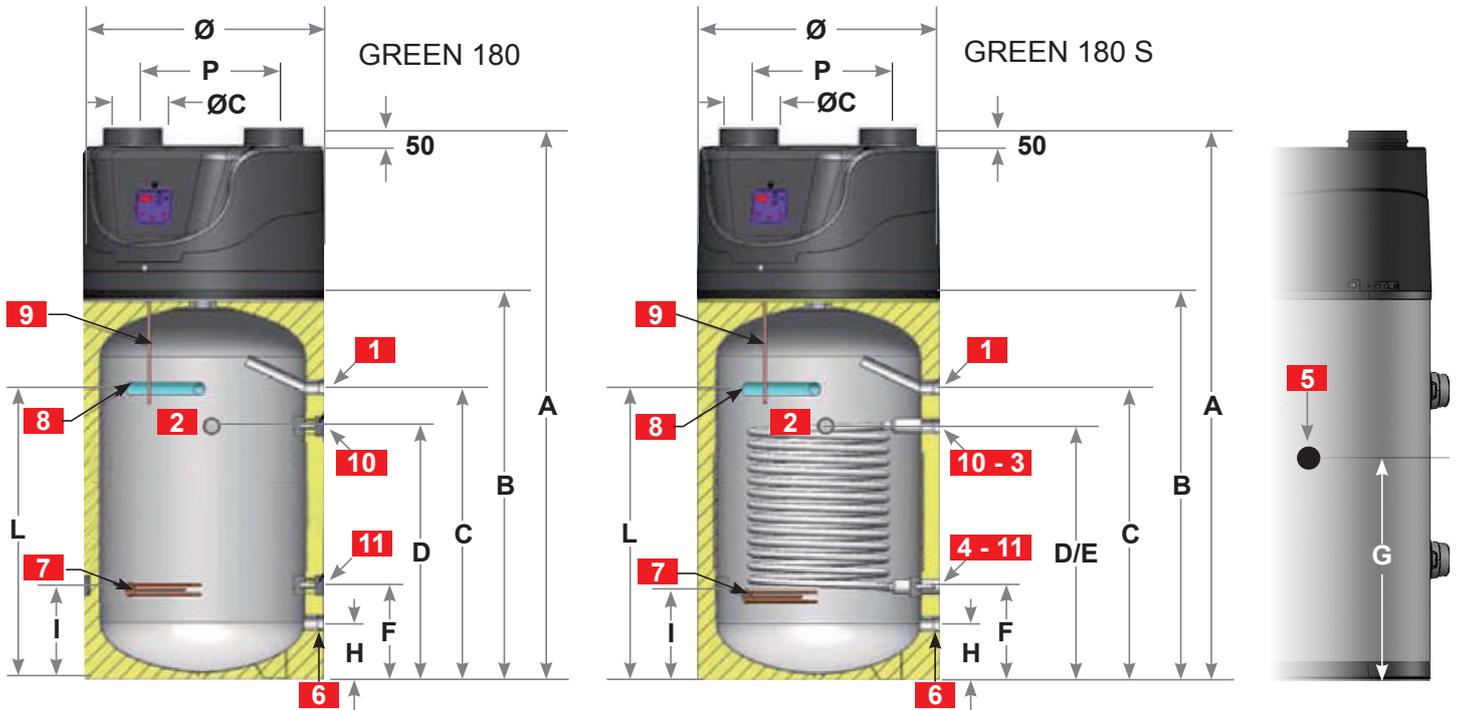
Accessories GREEN 180 - GREEN 180 S

	Electronic sacrificial magnesium anode	37010401	198,00
	Ultra flexible polyethylene ducted hose double thermal-phonic wall, internal diameter 160 mm, length 10 metres	37900196	180,00
	Square grille with built-in windproof protection in white ABS plastic mod. 152 with connection collar diameter 150 mm	37900260	30,00

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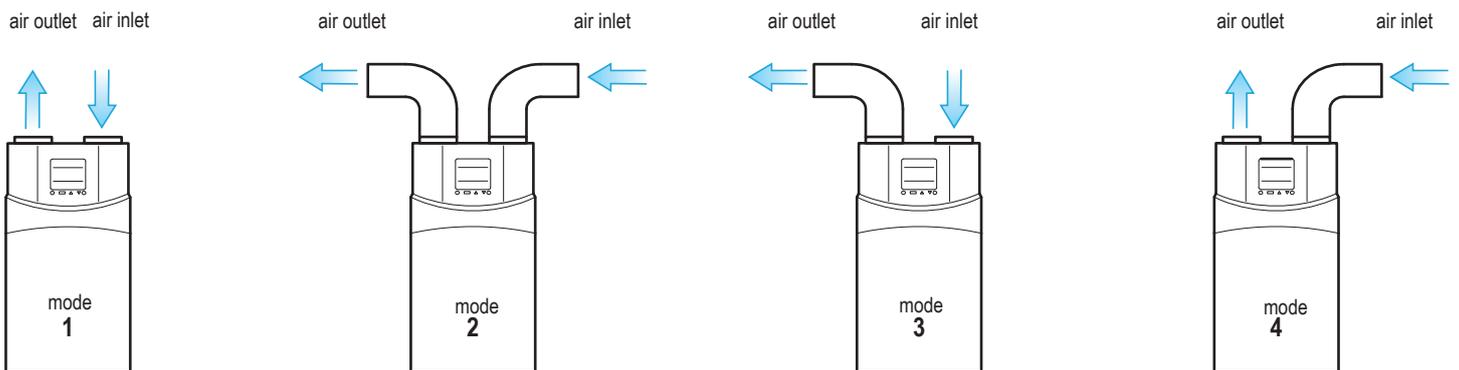
Dimensions and weights of heat pump water heaters GREEN 180 - GREEN 180 S



	U.M.	180	180 S
A	mm	1370	1370
B	mm	940	940
C	mm	760	760
D	mm	515	515
E	mm	-	515
F	mm	-	255
G	mm	490	490
H	mm	125	125
I	mm	260	260
L	mm	680	680
P	mm	425	425
ØC	mm	160	160
Ø	mm	660	660
Weight	Kg	115	120

	DESCRIPTION	DIMENSIONS
1	Hot water withdrawal	1"
2	Recirculation	1/2"
3	Solar delivery	1"
4	Solar return	1"
5	Condensate drain	1/2"
6	Cold water inlet	1"
7	Electrical resistance	1"1/4
8	Sacrificial anode	1"1/4
9	HP probe	1/2"
10	Probe	1/2"
11	Probe	1/2"

Installation methods GREEN 180 - GREEN 180 S



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Technical data table for heat pump water heaters GREEN 180 - GREEN 180 S

Model	U.M.	GREEN 180	GREEN 180 S
Tank capacity	l	180	175
Type of corrosion protection		Sacrificial magnesium anode	
Anode connection diameter		1"1/4 F	
Condensate drain diameter		1/2" F	
Max working pressure	bar	6	
Max working pressure on auxiliary coil	bar	10	
Flow rate required for the coil 80/60 °C	m ³ /h	-	0,8
Auxiliary coil surface	m ²	-	0,8
Domestic hot water production 80/60 °C - 10/45 °C (DIN4708)	m ³ /h	-	0,5
Minimum water hardness	°F	12	
Insulation thickness	mm	50	
Power absorbed in stand-by	W	43	
Power supply		230V/1/50Hz	
Power cable section	mm ²	3 x 1,5	
Magnetothermic type		16A - differential 30 mA	
Thermal power (1)	W	1950	
Electrical power absorbed (average) (1)	W	488	
Electrical power absorbed (max) (1)	W	700	
COP (2)		2,90	
Warm-up time (1)	hh:mm	04:58	07:22
Max usable DHW volume at 40 °C (Vmax) (2)	l	240	370
Max DHW temperature with heat pump	°C	60 (55 of the factory)	
Refrigerant charge	Kg	1,5	
Max refrigerant circuit pressure (high pressure side)	bar	25	
Electric resistance power	W	1500	
Current absorbed electrical resistance	A	6,3	
Air flow	m ³ /h	450	
Useful static pressure	Pa	80	
Intake air temperature min ⁽³⁾ /max	°C	+8 / +32	
Suction/expulsion pipe diameter	mm	160	
Maximum duct length (intake/exhaust)	m	10	
Sound power level (LwA)	dB(A)	60	
Sound pressure level (LpA) at 1 meter(4)	dB(A)	49	

1) values measured by heating the water from 10°C to 54°C with air intake temperature at 15°C and relative humidity of 71%.

2) value obtained over the entire L-type sampling cycle, at the reference temperature of 54°C, as required by UNI-EN16147.

3) minimum external air temperature (modifiable via parameter h05) below which domestic hot water heating occurs with the boiler or resistance; default: 8°C if defrost function not active, -5°C if defrost function active.

4) in free field with non-ducted suction/delivery ports.