GREEN 220 - 220 S - 220 2S

Monobloc heat pump water heater with sanitary storage with or without additional exchangers

Technical and construction features

GREEN 220 - 220 S - 220 2S heat pump water heaters are divided into 3 versions:
GREEN 220
Standard that includes the heat pump and the electrical resistance.
GREEN 220 S
Auxiliary coil for use in combination with solar panels.
GREEN 220 2S
Double coil to have three energy sources at the same time.

- Carbon steel tank with double layer vitrification
- Anti-corrosion magnesium anode to ensure durability of thetank.
- Condenser wound externallyto the boiler free from incrustations and gas-water contamination.
- High thickness polyurethane foam (PU) thermal insulation.
- External covering in gray plastic material.
- Acoustically insulated plastic top cover.
- High efficiency compressor with R134a refrigerant.
- Safety devices for high and low gas pressure.
- Electric heater available in the unit as a back-up (with integrated safety thermostat at 90 °C), which ensures water warm at a constant temperature even in extreme winterconditions.
- ON-OFF contact to start the unit from an external switch.
- Weekly disinfection cycle.
- Possibility of managing the recirculation of domestic hot water or solar integration (presence of a dedicated temperature probe, flow switch input and command for an external pump).
- Electronic expansion valve for precise control.

ADVANTAGES

- The actual set of the heat pump is regulated by a curve climatic, to prevent high pressure alarms from occurring in the event of hot air drawn from the outside (over 25 °C with water at 65 °C, over 35 °C with water at 55 °C).
- The electric resistance automatically integrates the temperature of the tank to the desired set if the actual set is adjusted from the climatic curve.
- Preparation for integration with a photovoltaic system. Upon enabling the photovoltaic inverter, the temperature set is raised to the highest possible value (compatibly with climatic regulation).

FLEXIBILITY AND BENEFITS

- Heat recovery: the unit can be installed near the kitchen, in the technical room or garage. In practically any room with a fair amount of waste heat so that it has high energy efficiency even with very low outside temperatures.
- Hot water, cooling and dehumidification: the unit can be placed in the laundry room, in the garage, in the gym, in the basement. When it produces hot water, it cools and dehumidifies the room.
- Compatible with solar thermal: the unit can work with one second energy source such as solar panels, boilers or other different energy sources.

Model	Code	€
GREEN 220 standard heat pump water heater	**63000074**	**2.715,00**
GREEN 220 S heat pump water heater with auxiliary coil	**63000075**	**2.934,00**
GREEN 220 2S heat pump water heater with double coil	**63000076**	**3.178,00**

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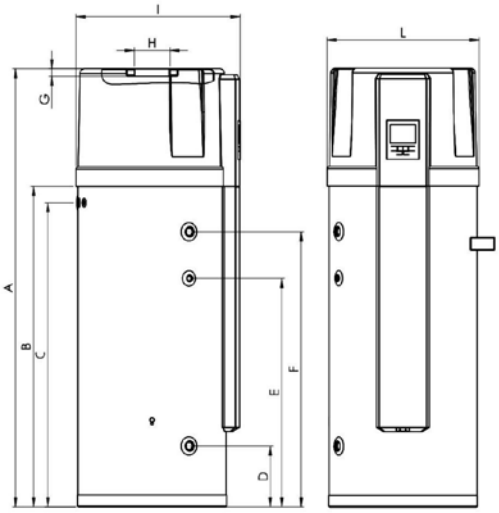
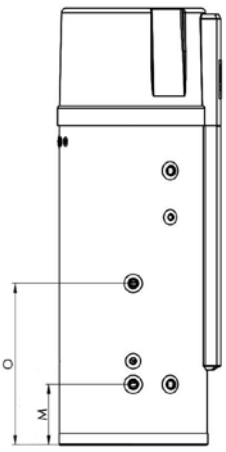
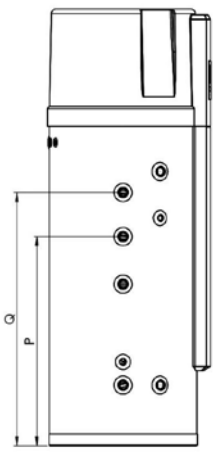
Dimensions and description GREEN 220 - 220 S - 220 2S



GREEN 200



GREEN 200 S



GREEN 200 2S

Dimensions	GREEN
	220 - 220 S - 220 2S
A	1638 mm
B	1124 mm
C	1062 mm
D	262 mm
E	747 mm
F	932 mm
G	30 mm
H	Ø160 mm
I	706 mm
L	Ø 655 mm
M	258 mm
O	692 mm
P	787 mm
Q	927 mm

Heat pump water heater technical data tableGREEN 220 - 220 S - 220 2S

DESCRIPTION	U.M.	GREEN 220	GREEN 220 S	GREEN 200 2S
Effective tank capacity	l	228	220	217
Lower solar exchanger surface	m^2	-	1,2	1,2
Upper auxiliary exchanger surface	m^2	-	-	0,5
Lower solar exchanger flow rate*	m^3/h	-	1,2	1,2
Upper auxiliary exchanger flow rate*	m^3/h	-	-	0,5
Solar exchanger inlet / outlet diameter		-	G 1" F	G 1" F
Auxiliary exchanger inlet / outlet diameter		-	-	G 1" F
Max heat exchangers pressure	bar	6		
Hot - cold water inlet / outlet diameter		G 1" F		
Energy rating (1)		A		
COP_{DHV}(ERP) (2)	W/W	2,64		
Heat pump heat output (3)	W	2060		
Absorbed electrical power heat pump	W	700		
Absorbed electrical power resistance	W	1200		
Nominal current of heat pump (3)	A	2,21		
Rated electrical resistance current	A	5,2		
Maximum absorbed current (resistance + HEAT PUMP at max power)	A	8,4		
Max electrical absorption (resistance + HP at max power)	W	1965		
Power supply		230V/1/50Hz		
HP fan nominal air flow	m^3/h	450		
Fan air flow HP 60 Pa	m^3/h	350		
Maximum outlet temperature without integration resistance	°C	65		
Refrigerant type		R134a		
Refrigerant charge	g	1000		
Maximum refrigerant pressure in delivery	bar	25		
Maximum refrigerant pressure in suction	bar	10		
Max tank pressure	bar	10		
Diameter of inlet and outlet air ducts	mm	DN 160		
Internal tank treatment		Vetrificazione doppio strato		
Sound power (4)	dB(A)	58,2		
Sound pressure (5)	dB(A)	42.8		
Degree of protection		IPX1		
Operating temperature	°C	-10 +43		
Packaging size(LxHxP)	mm	700 x 700 x 1760		
Net weight	kg	98	113	121
Gross weight (with filled tank)	kg	326	333	338

(1) Tank at 20 ° C ambient temperature, ducted inlet air 7 ° C DB, 6 ° C BU, inlet water temperature 10 ° C and tank set at 55 ° C (2) Measurement carried out with tank located in an ambient temperature of 20 ° C, external air inlet 7 ° C, in compliance with EN 16147
(3) Ambient temperature 20 ° C, water temperature from 15 ° C to 55 ° C, external temperature 7 ° C
(4) Measurement carried out according to EN 12102, under the boundary conditions established by the EN 16147 standard
(5) Calculated according to ISO 3744: 2010 algorithm at 1 meter from the unit
(*) data referred to DIN 4708 standards (primary 80/60 ° C, secondary 10/45 ° C)