GPS07 - technical data

under Commission Regulation (EU) No. 811-2013, 813-2013

The GPS07 is a micro-cogeneration unit producing both electrical and thermal energy simultaneously in any facility or building of the user. GPS units are devices that follow the demand for heat.

The unit consists mainly of an internal combustion engine, an electricity generator and a unit for recovering the heat produced, which can be used on the user's equipment. Everything is controlled by a unit which also allows monitoring of the entire facility during its operation.

We recommend that suitable technical water (or drinking water) is used with the GPS07 to achieve optimum thermal energy storage management.

PERFORMANCE

ELECTRICAL	
Net nominal power generation performance	7.5kW - three phase
Frequency	50Hz (60Hz export)
Voltage during production	400V
Own electricity consumption during operation	0.11 kW
Standby power consumption (max)	0.028 kW

HEAT	
Performance in heat production[1]	14.5 kW
Heat input (fuel)[2]	23,35 kW (± 2%)
Maximum temperature of technical water at the outlet	80°C
Minimum temperature of technical water at the outlet	30°C

YIELD (in relation to H_i of the fuel)	
Electrical yield	32.2%
Thermal yield	62.3%
Total yield	94.5%
Seasonal energy efficiency of indoor heating in relation to operating conditions (η_{son})[3]	172%

NOISE

Sound pressure at a distance of 1 m[4]	63 dB(A)

EXHAUST EMISSIONS

Maximum exhaust gas temperature	89°C
Precipitated water formation (max)	2 lt/h
CO emissions	30 mg/Nm^3
Nox emissions	10 mg/Nm^3

SERVICE STEPS

Coolant top-up, oil top-up	4500 h
Service inspection	8500 h (or once a year)

DIMENSIONS AND WEIGHT

Dimensions (length x height x depth)	(1300 mm including control panel)/1020mm x 1150mm x 700mm
Weight	380 kg
Occupied area	0.72 m ^{2} (0.91 m^2)

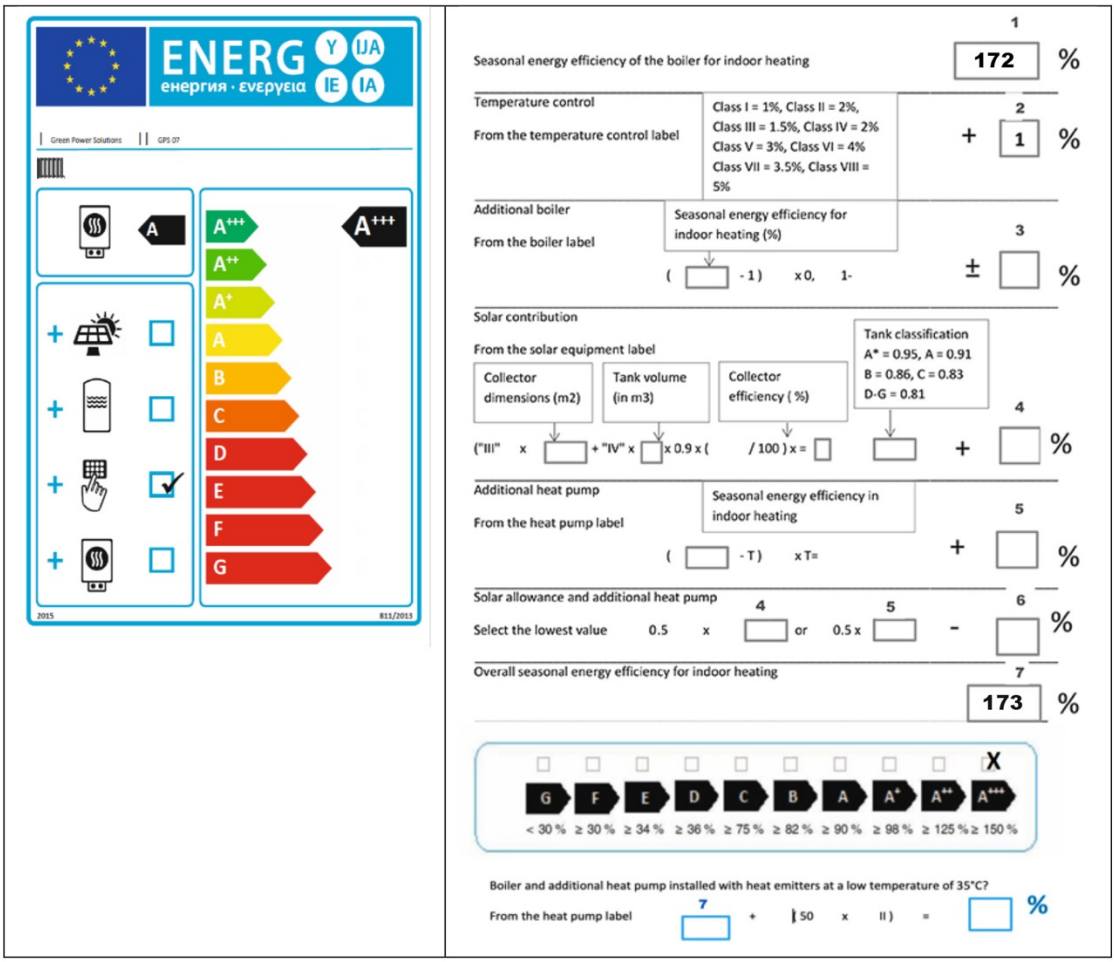
[1] Heat output : expressed at a process water temperature (inlet and outlet) of 42 - 50°C (dt 8°C)

[2] Heat input (fuel) : the power absorbed by the appliance when burning a given volume of fuel (natural gas or LPG). The value is calculated in relation to the lowest calorific value (H_i) of the fuel.

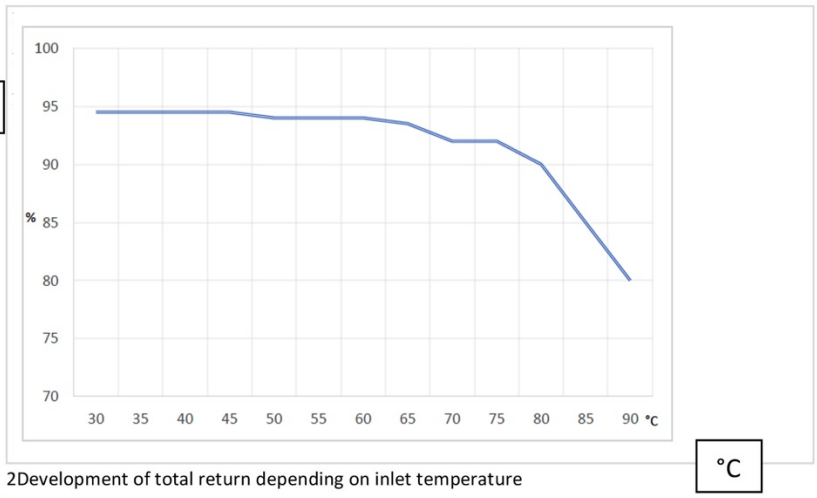
[3] son: as defined in Commission Regulation (EU) No. 813/2013

[4] This value is potentially variable depending on the environment in which the measurement is made.

LABEL DATA



EFFICIENCY and HEAT RETURN



2Development of total return depending on inlet temperature