

## 12 Energy consumption

### 12.1 Product data on energy consumption

The following product data comply with the requirements of the EU Regulations No. 811/2013, No. 812/2013, No. 813/2013 and No. 814/2013 supplementing the Regulation (EU) 2017/1369.

#### Natural Gas appliances

	Symbol	Unit	7 736 902 099	7 736 902 100
<b>Product data</b>			GR2300iW 25 C NG	GR2300iW 30 C NG
Product type	–	–	✓	✓
Condensing boiler	–	–	x	x
Low temperature boiler	–	–	x	x
B1 boiler	–	–	x	x
Cogeneration space heater	–	–	–	–
Equipped with a supplementary heater?	–	–	✓	✓
Combination heater	P <sub>rated</sub>	kW	20	20
Rated heat output	η <sub>s</sub>	%	93	93
Seasonal space heating energy efficiency	–	–	A	A
Energy Efficiency Class				
<b>Useful heat output</b>				
At rated heat output and high temperature regime <sup>1)</sup>	P <sub>4</sub>	kW	20	20
At 30 % of rated heat output and low temperature regime <sup>2)</sup>	P <sub>1</sub>	kW	6.7	6.7
<b>Useful efficiency</b>				
At rated heat output and high temperature regime	η <sub>4</sub>	%	87.7	87.7
At 30 % of rated heat output and low temperature regime	η <sub>1</sub>	%	97.9	97.9
<b>Auxiliary electricity consumption</b>				
At full load	e <sub>lmax</sub>	kW	0.0280	0.0280
At part load	e <sub>lmin</sub>	kW	0.0110	0.0110
In standby mode	P <sub>SB</sub>	kW	0.0027	0.0027
<b>Other items</b>				
Standby heat loss	P <sub>stby</sub>	kW	0.055	0.055
Ignition burner power consumption	P <sub>ign</sub>	kW	–	–
Emissions of nitrogen oxides (only gas- or oil fired)	NO <sub>x</sub>	mg/kWh	35	35
Annual energy consumption	Q <sub>HE</sub>	kWh	17,222	17,222
Annual energy consumption	Q <sub>HE</sub>	GJ	62	62
Sound power level, indoors	L <sub>WA</sub>	dB	43	43
<b>Additional data for combination heaters</b>				
Declared load profile	–	–	XL	XL
Water heating energy efficiency	η <sub>wh</sub>	%	84	84
Water heating energy efficiency class	–	–	A	A
Daily electricity consumption (average climate conditions)	Q <sub>elec</sub>	kWh	0.12	0.12
Annual electricity consumption	AEC	kWh	27	26
Daily fuel consumption	Q <sub>fuel</sub>	kWh	21.810	22.436
Annual fuel consumption	AFC	GJ	17	18
Indication about ability working only during off-peak hours	–	–	x	x
Other load profiles	–	–	–	–
Standing loss	S	W	–	–
Storage volume	V	l	–	–
Non-solar storage volume (V <sub>bu</sub> )	V <sub>bu</sub>	l	–	–

1) High-temperature regime means 60 °C return temperature at heater inlet and 80 °C feed temperature at heater outlet.

2) Low temperature means for condensing boilers 30 °C, for low-temperature boilers 37 °C and for other heaters 50 °C return temperature (at heater inlet).

Table 7 Product data on energy consumption Greenstar 2000