A+ 22 KW / 630 M³

A+ 32 KW / 915 M³

A+ 40 KW / 1145 M³

A+ 50 KW / 1430 M³

EN 303-5 / BImSchV 2
Ecodesign

Mareli Systems
STEP FORWARD



MADE IN
BULGARIA
PREMIUM
QUALITY

LCG LAMBDA

SOLID FUEL BOILER

The LCG Lambda is the standout solid fuel boiler in the portfolio of **Mareli Systems**, delivering maximum heat production while minimizing wood consumption. Its advanced gasification process, combined with an embedded lambda sensor, achieves up to 95% efficiency, ensuring optimal utilization of natural resources and a commitment to environmental sustainability.

The integrated automatic ignition system ensures the boiler is both user-friendly and highly autonomous.

MAIN FEATURES

- **Lambda sensor**

  The LCG Lambda solid fuel boiler is equipped with a high-tech sensor that monitors the percentage of residual oxygen in the exhaust gas. Using the information obtained, the electronic unit controls the primary and secondary air indicators to regulate the amount of air supplied to the combustion chamber. This allows the LCG Lambda to achieve 95% efficiency, reducing operating costs and the amount of pollution released into the atmosphere.

- **Gasification process**

  LCG Lambda uses a gasification process, or so-called "pyrolysis", to break down the wood. Instead of being burned directly, it begins to smolder, releasing wood gas. Due to its greater weight, it is taken to the lower combustion chamber where it burns at temperatures between 1000 and 1200 degrees Celsius.

- **Automatic ignition**

  All boilers of the LCG Lambda series are equipped with automatic wood firing technology for the combustion chamber. By means of a ceramic heater and a minimum amount of pellets, the functionality allows a high level of autonomy, delayed start and remote control via an optional Wi-Fi module.

- **Compact and modern design**

  Alongside its high-tech equipment, the LCG Lambda also stands out for its contemporary look. Thanks to years of experience in designing heaters, Mareli Systems` engineers have optimized the internal layout of key components to achieve maximum power in a reduced size. The steel construction and ceramic heat-resistant lining ensure a long operating life and minimal heat loss.

- **Integrated overheating safety coil**
- **Large fuel loading chamber**

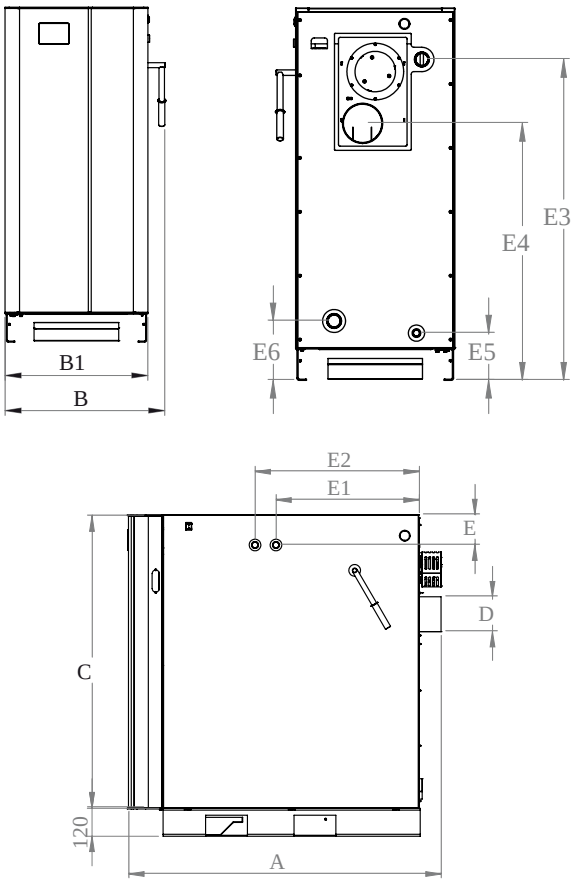
  It allows burning of firewood up to a length of 60 cm.

- **High efficiency turbulator cleaning system**
- **Easy to use touch screen display**
- **Servo-motors for automatic control of primary and secondary air**

CERTIFICATION

ACCREDITED MSCB-113 · G-CERTI GIBP-0048-QC ISO 9001:2015 · EN 303-5 / BImSchV 2 Ecodesign · carbon neutral · ECO-DESIGN

DIMENSIONS



KW/ MM	A	B	B1	C	D	E	E1	E2	E3	E4	E5	E6
22	1284	663	590	1380	Ø149	130	566	656	1190	953	175	220
32	1334	663	590	1380	Ø149	130	614	704	1190	953	175	220
40	1404	663	590	1380	Ø149	130	686	776	1190	953	175	220
50	1404	663	590	1530	Ø149	130	686	776	1340	1103	175	220

LCG LAMBDA



TECHNICAL SPECIFICATIONS

		22	32	40	50
Nominal heat output	kW	22	32	40	50
Heat output range	kW	11-22	16-32	20-40	25-50
Boiler class EN 303-5:2021	-	5			
Required chimney under-pressure	Pa	12			
Water amount in boiler	L	130	140	150	163
Exhaust gas temperature at nominal heat output	°C	165	160	150	150
Exhaust gas temperature at minimal heat output	°C	100	100	100	95
Minimum operating time at rated power (nominal Q)	H	3			
Min. inlet water temp. at the boiler supply water connection	°C	60			
Maximum water temperature	°C	90			
Fuel moisture content	%	max. 25			
Fuel type	A. wood logs. by norm 14964-5				
Fuel length	mm	600	600	600	600
Fuel loading chamber capacity	L	120	120	120	154
Combustion chamber type	Under-pressure				
Required minimum volume of water accumulation tank next to boiler	by EN 303-5:2021				
Supply voltage	V~	230			
Frequency	Hz	50			
Weight	kg	553	580	593	631
Max. operating pressure	bar	3			
Flue gas tube - external diameter	mm	149			
Heating appliance working	With a fan				
Heating appliance working	Under non-condensing conditions				
Energy efficiency class of boiler	A+				

Durable combustion chamber

It is made out of high quality refractory material, ensures a very long combustion area which reduces emissions.

High efficiency turbulator cleaning system

It enables easy and regular cleaning of the turbulators from accumulated soot, ensuring optimal boiler performance. This not only protects the environment but also reduces heating costs.



Easy cleaning

The boiler is designed for easy and quick cleaning of residual ash from the combustion process.

High water capacity

This enables the boiler to connect seamlessly to heating systems of varying capacities without compromising efficiency.

* The specified heated volumes м³ are indicative.