

MANUFACTURE, IMPORT, ASSEMBLY FULL ENGINEERING ACTIVITY



30 years of trust in the experience and professionalism of "LAKAL" Itd

HEATING INSTALLATIONS

O DUAL SOLID FUEL AND PELLET BOILERS DYNAMIC PEL - 25, 35 и 55 kW



- 1. Boiler
- 2. **Two doors**: upper for solid fuel loading and lower with closing flange for pellet burner
- 3. **Insulated decorative covers** /packed in separate boxes/
- 4. Fresh air mechanical thermostat /packed with the covers/
- 5. **Thermometer axial 120°C**/packed with the covers/
- 6. Pellet burner
- 7. Pellet feeding screw
- 8. Pellet silo optional

The "DYNAMIC PEL" boilers are manufactured by LAKAL EOOD – City of Plovdiv, the pellet burner is "MEGATHERM" – our direct import.

The product series comply with the requirements of the European norms EN 303-5:2012; BDS EN 303-5:2012; BDS EN 15036-1:2006 and EMC (2005/65/CE).

The boilers are intended for heating buildings, homes, villas, hotels and industrial spaces. They are designed for operation with wood, coal and pellets with maximum working temperature of the water of 85°-90°C.

The "DYNAMIC PEL" boilers are electrostatically powder painted, heat insulated with mineral fibers with thickness 50 mm with aluminum foil.

The combustion chamber has a large capacity, providing fuel supply for a continuous operation with a single load – from 2 to 5 hours on wood and from 8 to 10 hours using coal in upper position combustion.

The grate is water-cooled and is made of seamless pipes ø42/4 mm, thus ensuring both a larger heating surface and a much longer operating life. The flue is made of seamless steel pipes ø60/4 mm that are located at the top end of the combustion chamber.

This additionally increases the heating surface, ensures better draught and slower accumulation of soot, easier cleaning and guarantees a constant maximum efficiency of up to 78% for solid fuel and up to 88-89% for pellets.

At the outlet for exhaust gases is mounted a manual valve with stage closing that ensures that the maximum combustion is reached with a different cross section and height of the chimney.

- * The upper door, when used on solid fuel, is designed for wood or coal loading and is convenient for feeding much larger wood pieces.
- * The lower door when used on solid fuel, is designed for cleaning and removing of the ash (the ash compartment is located beneath the grate).

The lower door contains the mechanical thermostat air valve that controls the combustion process. t is designed for cleaning and removing of the ash (the ash compartment is located beneath the grate).

When using pellets, the lower door closing flange is removed and is replaced with the pellet flange of the burner.

The cleaning of the ash compartment needs to be carried out 1 to 3 times per week according to the pellet quality.

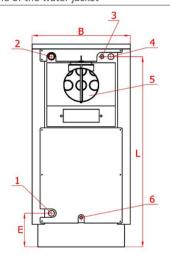


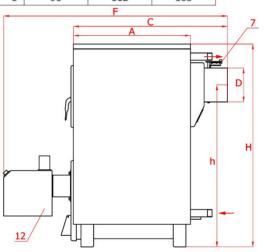
TECHNICAL DATA

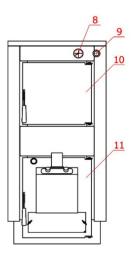
Boiler "DYNAMIC PEL"			25	35	55
1	Thermal output on pellets	kW	25-30	35	55
1	Thermal output on wood	kW	25	35	48-55
2	Pellet burner "MEGATHERM"		Nan	i 35	MPB 50
3	Maximum working pressure bar		2.5	2.5	2.5
4	Maximum temperature of the water		90°C	90°C	90°C
5	Working temperature of the water		80°C	80°C	80°C
6	Diameter of the of supply/return water-	M	1 1/4"	1 1/4"	1 1/2"
7	Dimensions of the boiler	A mm	590	650	760
		B mm	485	545	632
		C mm	791	855	954
		E mm	195	195	195
		H mm	1175	1175	1392
		L mm	1100	1100	1250
		D mm	Ø200	Ø200	Ø200
		h mm	937	937	1090
8	Weight of the boiler	kg	218	267	355
9	Volume of the water jacket	L	90	112	165

LEGEND

- 1. Return water exterior thread M
- 2. Muff 1" for serpentine installation / option/
- 3. Muff 1/2" for water shield probe /with serpentine installation/
- 4. Delivery water exterior thread M
- 5. Exhaust gases outlet
- 6. Drainage 1/2" M
- 7. Flange valve for air draught regulation
- 8. Thermometer up to 120°C
- 9. Mechanical air thermostat
- 10. Upper door for feeding fuel
- 11. Lower door combined for solid fuel, with opening for pellet burner with closing flange.
- 12. Pellet burner







NEW GENERATION PELLET BURNERS "MEGATHERM"

• Complete with:

- screw feeder with reducer L=1.5m.
- flexible connection between the burner and the feeding screw
- water temperature probe.



NANI 35 10-35kW

MPB60 25-60kW

- An external digital control panel, with detailed instruction manual;
- Precise control of the combustion by photosensor;
- ◆ Average electrical consumption during operation: 30-40W:
- Gravity controlled pellet loading for more balanced and even distribution in the combustion zone and breaking up of the accumulated ash and slag;
- Automatic restart of the burner after power failure:
- ◆ High combustion efficiency >95%:
- Low cost maintenance;
- Simple and easy service and cleaning.

"LAKAL" EOOD has been on the Bulgarian market for 30 years. The main field of operation is design, manufacturing, import and installation of heating and solar systems. The company has a team of highly qualified technicians, supplied with modern equipment that operate throughout the country. Since 1999 "LAKAL" has its own design and development department that constructs and manufactures steel combined solid fuel and pellet boilers with outputs 25, 35, 55kW, fireplaces with water shield from 10 up to 60kW.

The company is an authorized dealer and offers a whole range of necessary materials and equipment for your heating installation pellet, oil and gas boilers, oil, gas and pellet burners, radiators, armature and press fittings, pipe heat insulation, wall mounted and condensed boilers.

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