



**Termoplam Ltd.
Testing laboratory**

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TEST REPORT №148/07.02.2020

on the compliance of Roomheater fired by solid fuel (fireplace) LAVA with the requirements of COMMISSION REGULATION (EU) 2015/1185 of 24 April 2015.

I. NAME AND SIGNATURE OF THE TESTED SAMPLE:

Roomheater device (fireplace) fired by solid fuel - wood model LAVA.

II. NAME AND DESCRIPTION OF THE TESTED SAMPLE:

Roomheater device (fireplace) LAVA made of cast iron by casting with rated heating output 12,5 kW.

III. LEGAL DOCUMENT: COMMISSION REGULATION (EU) 2015/1185 of April 2015

Lava



Picture of the sample

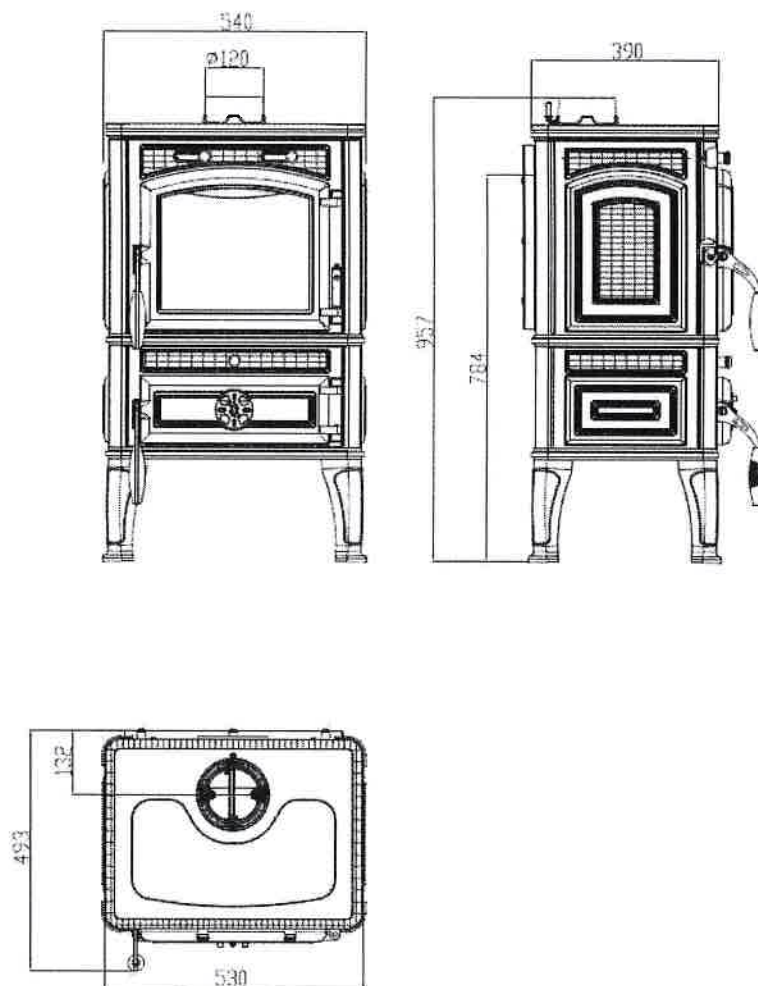
IV. QUANTITY OF THE TESTED SAMPLES: The Room heater device LAVA is arbitrarily selected unit of regular production.

V. CUSTOMER:

IKL - Industrijski Kombinat Livnica DOO Guča; Albanske spomenice bb, 32230 Guča, Serbia.

VI. PURPOSE AND OBJECT OF THE TASK: Evaluation the compliance of firebox LAVA with the requirements of COMMISSION REGULATION (EU) 2015/1185 of 24 April 2015.

VII. TECHNICAL FEATURES:



Scheme (draft of the sample)

VIII. TEST CONDITIONS:

- 8.1. Working condition of the combustion device - according to the requirements for tests at nominal output according to EN 13240:2001.
- 8.2. Processing of results – calculate according to normal physical conditions and at 13% O₂.
- 8.3. Used results of the Test Report № 0068/02.03.2011 of TERMOTEST KONSULT LTD, Sofia.
- 8.4. Used results from the Test Report № 1977T.1/ 12.02.2020 of Laboratory testing calibration "LIPGEI" Sofia.

IX. RESULTS AND OBSERVATIONS :

9.1. Seasonal space heating emissions:

- 9.1.1. Dust content of exhaust gases: $PM^* = 35 \text{ mg/Nm}^3 \leq [PM] = 40 \text{ mg/Nm}^3$;
[PM] = 40 mg/Nm³ in accordance with point 2 (a) (ii), of Annex II of the REGULATION (EU) 2015/1185.
- 9.1.2. CO of exhaust gases: $CO^* = 1221 \text{ mg/Nm}^3 \leq [CO] = 1500 \text{ mg/Nm}^3$;
[CO] = 1500 mg/Nm³ in accordance with point 2 (c) (ii), of Annex II of the REGULATION (EU) 2015/1185.
- 9.1.3. OGC of exhaust gases: $OGC^* = 74 \text{ mg/Nm}^3 \leq [OGC] = 120 \text{ mg/Nm}^3$;
[OGC] = 120 mg/Nm³ in accordance with point 2 (b) (i), of Annex II of the REGULATION (EU) 2015/1185.
- 9.1.4. NO_x of exhaust gases: $NO_x^* = 129 \text{ mg/Nm}^3 \leq [NO_x] = 200 \text{ mg/Nm}^3$;
[NO_x] = 200 mg/Nm³ in accordance with point 2 (d) (i), of Annex II of the REGULATION (EU) 2015/1185.

* Results from the Test Report № 1977T.1/ 12.02.2020 of Laboratory testing calibration "LIPGEI" Sofia.

9.2. Seasonal space heating energy efficiency:

$$\eta_s = 69,1 \% > [\eta_s] = 65 \%$$

Where:

- $\eta_s = 69,1 \%$ - the seasonal space heating energy efficiency in active mode is calculated as $\eta_{th,nom}$:

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- $\eta_{th,nom} = 78,1$ % is the useful efficiency at nominal heat output, based on NCV. Result from the Report № 0068/02.03.2011 of TERMOTEST KONSULT LTD, Sofia.
- $[\eta_s] \geq 65$ % in accordance with point 1 (a) (ii), of Annex II of the REGULATION (EU) 2015/1185.

X. CONCLUSION:

Room heater device LAVA is satisfying and fulfilling the requirements of REGULATION (EU) 2015/1185.

XI. ENCLOSURES:

- 11.1. Picture of residential cooker: 1
- 11.2. Assembly drawing of the sample: 1.

07.02.2020

MANAGER:



NOTE:

The test results and conclusions relate only to the tested samples.
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This document is only informative.