

Termoplam Ltd. Testing laboratory

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TEST REPORT Nº290/28.06.2023

on the compliance of pellet fireplace HELENA AQUA with the requirements of COMMISSION REGULATION (EU) 2015/1185 of 24 April 2015 and BImSchV-norm.

I. NAME AND SIGNATURE OF THE TESTED SAMPLE:

Pellet fireplace fired by solid fuel - wood pellets model HELENA AQUA with total heat output 10,2 kW.

II. NAME AND DESCRIPTION OF THE TESTED SAMPLE:

Pellet fireplace model HELENA AQUA made of (steel sheet metal by welding).

III. LEGAL DOCUMENT: COMMISSION REGULATION (EU) 2015/1185 of April 2015 and BImSchV-norm.



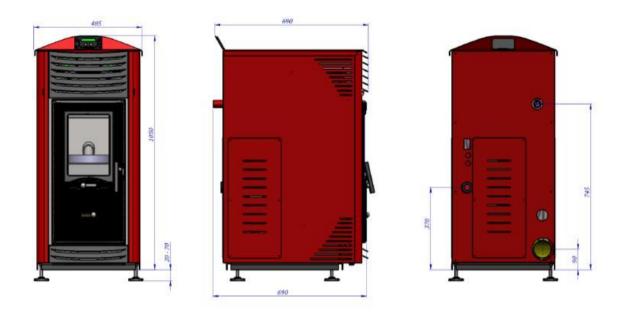
Picture of pellet fireplace HELENA AQUA

IV. QUANTITY OF THE TESTED SAMPLES: The pellet fireplace HELENA AQUA is arbitrarily selected unit of regular production, 1 piece.

V. CUSTOMER: "TERMOMONT" d.o.o, Prhovacka bb, 22310 Simanovci, R. Serbia

VI. PURPOSE AND OBJECT OF THE TASK: Evaluation the compliance of HELENA AQUA with the requirements of BImSchV-norm and COMMISSION REGULATION (EU) 2015/1185 of 24 April 2015.

VII. TECHNICAL FEATURES:



Scheme of pellet fireplace HELENA AQUA (general)

VIII. TEST CONDITIONS:

- 8.1. Working condition of the combustion device according to the requirements for tests at nominal output according to EN 14785:2006.
- 8.2. Processing of results calculate according to normal physical conditions and at 13% O₂.
- 8.3. Used results from the Test Report № 224/28.06.2023 of Laboratory Termoplam Sofia.

IX. RESULTS FROM AND OBSERVATIONS :

- 9.1. Emissions:
- 9.1. Dust content of exhaust gases: PM = 18 mg/Nm³ ≤ [PM] = 20 mg/Nm³;
 [PM] = 20 mg/Nm³ in accordance with point 2 (a) (iii), of Annex II of the REGULATION (EU) 2015/1185.
 - [PM] \leq 20 mg/Nm³ in accordance to BImSchV-norm (with water jacket).
- 9.2. CO of exhaust gases: $CO^* = 249 \text{ mg/Nm}^3 \leq [CO] = 300 \text{ mg/Nm}^3$;
 - [CO] = 300 mg/Nm³ in accordance with point 2 (c) (iii), of Annex II of the REGULATION (EU) 2015/1185.
 - [CO] \leq 250 mg/Nm³ in accordance to BImSchV-norm.
- 9.3. OGC of exhaust gases: OGC = 33 mg/Nm³ ≤ [OGC] = 60 mg/Nm³; [OGC] = 60 mg/Nm³ in accordance with point 2 (b) (ii), of Annex II of the REGULATION (EU) 2015/1185.
- 9.4. NO_x of exhaust gases: NO_x = 75 mg/Nm³ \leq [NO_x] = 200 mg/Nm³. [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 № 224/28.06.2023 of Laboratory Termoplam Sofia.
- 9.5. Seasonal space heating energy efficiency:

 η **s** = 81,8 % > [η **s**] = 79 %

Where:

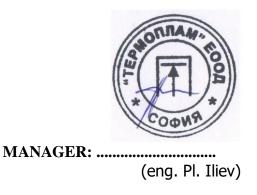
- $\eta_s = 81,8$ % the seasonal space heating energy efficiency in active mode is calculated as $\eta_{s,on}$.
- $\eta_{s,on} = \eta_{th,nom} = 92,4$ % is the useful efficiency at nominal heat output, based on NCV.
- [η s] ≥ 79 % in accordance with point 1 (a) (iii), of Annex II of the REGULATION (EU) 2015/1185.
- $[\eta_{th,nom}] \ge 90$ % in accordance to BImSchV-norm (with water jacket).

X. CONCLUSION:

Roomheater device HELENA AQUA is satisfying and fulfilling the requirements of REGULATION (EU) 2015/1185 and BImSchV-norm.

XI. ENCLOSURES:

10.1. Picture of sample: 1.10.2. Assembly drawing of the sample: 1.



NOTE:

The test results and conclusions relate only to the tested samples. Extracts from the test report can't be reproduced without written agreement of the testing laboratory.

This document is only informative.