

**KONTROL 94 Ltd.**

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**Notified Body according Regulation ( EC ) 305/2011**

**Identification number: 1879**

**DIN CERTCO Registration No: PL211**



**KONTROL 94 Ltd.**

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**TEST REPORT**

**For initial type test of an appliance in compliance with  
EN 13240:2001/A2:2004/AC:2007**

**No of test report: NB 1879-K-02-2016**

**Object for testing:** An inset appliance fired by solid fuel EN 13240:2001/A2:2004/AC:2007

Model: "TS-L Hydro"  
Serial No 011120101150028

Kind of the heating appliance: an appliance with intermittent  
burning regime for operation with  
closed door

Purpose: for heating of residential premises  
with water heater

Burning material: beech wood logs

**Applicant's name:** "Tim Sistem" d.o.o, Prva Industrijka br. 9, Nova Pazova, Serbia

**Producer:** "Tim Sistem" d.o.o, Prva Industrijka br. 9, Nova Pazova, Serbia

**Request:** No 15 / 07.10.2015

**Range of request:** Initial type test within the methods for assessment of CE conformity  
and assessment of the appliance regarding the meeting of require-  
ments in compliance with EN 13240:2001/A2:2004/AC:2007.

**Duration of test:** 13.01.2016 to 19.01.2016

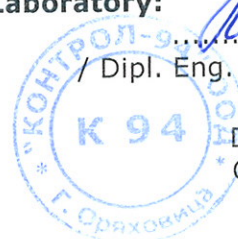
**Place for testing:** Testing laboratory "Kontrol 94" Ltd., Gorna Oryahovitsa

**Testing carried out by:**  
1. .....  
/ Dipl. Eng. M. Raev /

2. .....  
/ Dipl. Eng. P. Nikolova /

3. .....  
/ Dipl. Eng. Z. Yordanov /

**Head of Laboratory:** .....  
/ Dipl. Eng. Goran Gadjonov /



Date: 20.01.2016  
Gorna Oryahovitsa

**Test Report No NB 1879-K-02-2016****1. Description of tested appliance****1.1 Construction**

- A room heating appliance, consisting of a burning chamber, a boiler and flue gases collector – made of steel;
  - The fire door has an inbuilt fireproof glass and it is made of sheet steel. It is sealed with insulation tape;
  - The side and the rear walls of the combustion chamber are made of sheet steel and are part of boiler. The bottom part of rear wall is isolated with vermiculite plate with  $h = 100$  mm;
  - At the bottom are placed chamotte bricks, arranged around a cast iron grate size  $316 \times 246$  mm and an ashtray mounted under it and made of steel sheet with capacity of  $3.29 \text{ dm}^3$ ;
  - In the space to collect the flue gases are two deflectors to change the direction of the flue gas made of sheet steel. Above the first deflector are situated five pipes, part of the water heater;
  - Manually adjusted primary and secondary air;
  - Manual feeding of burning material and ash cleaning;
  - Operation is permissible only with a closed door;
  - On the back of the stove is installed metal screen providing ventilation distance;
  - The appliance is mounted on sheet steel base with legs –  $h = 180$  mm. The base is formed in front of the fire door as a threshold and preventing ash and embers to fall on the ground;
  - The vertical protector (grate) made of sheet steel.
- For additional data the wood stove plans presented by the producer have to be used.

**1.2 Overall dimensions in cm: 70.5 x 44.1 x 76.0**

( width x depth x height )

**1.3 Air for burning:**

**1.3.1 Primary air:** air for burning which enters through an opening located at the rear wall of the ash space and under the cast iron grate goes into the burning chamber. The regulation is by an automatic flap. The primary air can be regulated from a completely closed position to a  $59.40 \text{ cm}^2$  opened one.

**1.3.2 Secondary air:** air for burning which enters through a 17 elliptical openings situated above the burning chamber. The regulation is made manually by means of a regulator. The secondary air can be regulated from a completely closed position to a  $30.30 \text{ cm}^2$  opened one.

**1.4 Leading out the flue gases and connecting with the chimney:** Above the burning chamber (the place for burning) the flue gases change their direction of movement when reaching two deflectors made of sheet steel. Above the first deflector are situated five pipes, part of the water heater. The flue connector is mounted vertically and its inner  $\varnothing$  is 150 mm.

**1.5 Marking:** A printed design is presented at the moment of issuing the protocol for the appliance plate. The data on the appliance plate has to be fulfilled by the producer in accordance with the data in this test report. The plate of the appliance has to be clearly and durably marked and it has to be mounted on such a place that the marking is preserved.

**1.6 Electric safety:** not applicable

**Test Report No NB 1879-K-02-2016****2. Required documentation for testing:**

2.1 Grounds for testing: Requestor's documentation for the testing

2.2 Normative documents for the testing:

2.2.1 EN 13240:2001/A2:2004/AC:2007 "Roomheaters fired by solid fuel – requirements and test methods".

2.2.2 CEN / TS 15883:2009 "Residential solid fuel burning appliances – Emission test methods".

**3. Performance determined in the test**

Based on the submitted request for testing, initial type testing has been carried out in compliance with EN 13240:2001/A2:2004/AC:2007 regarding:

- Fire safety;
- Product emissions from burning;
- Surface temperature;
- Temperature of the flue gases;
- Heat capacity / energy efficiency;

As according to the presented documents (certificates) during the appliance manufacturing, materials are used which are not expected to release dangerous substances. The producer has to keep this information as a proof.

**4. Summary results (interpretation) of the measurement and calculation of the performance of the appliance**

<b>Model:</b> "TS-L Hydro"	<b>Serial No</b> 011120101150028	
<b>Nominal heating output</b>		
	<b>Unit</b>	<b>Data</b>
Fuel	-	beech wood logs
Fuel consumption	kg/h	3.520
Nominal heating output	kW	11.85
Water heating output	kW	5.61
Space heating output	kW	6.24
CO at 13%O <sub>2</sub>	%	0.2861
Efficiency	%	69.90
Flue gases temperature	°C	220
Mass of flue gases	g/s	17.51
Draught 12 ± 2	Pa	11.8
Maximum working pressure	bar	1.5
<b>Minimum distances of the heating appliance to burning materials:</b>		
At the rear	mm	400
At the side	mm	400
At the front	mm	800
From the floor ( legs )	mm	180

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The description of testing stages and the received results are given in Appendixes A of the Test report.

**5. A list of enclosed documents**

- A1** – Verification of conformity of materials, design and construction.
  - A2** – Test requirements for safety.
  - A3** – Conditions and requirements for measuring performance.
  - A4** – Verification of compliance with the instructions of the appliance.
  - A5** – Verification of conformity marking the appliance.
  - A6** – Trihedron, test fuels and list of technical means used for test and measurement during the test.
  - A7** – Test conditions and results obtained from the measurement of performance at nominal heat.
  - A8** and **A9** – Heating test and temperature safety test and the results from measurement.
  - A10** – Testing the water boiler under pressure and testing the thermal discharge control.
  - A11** – Photos of product.
- Plans (drawings) and specifications  
Instruction for mounting and operation

**CONCLUSION!**

The basic characteristics of the appliance have been tested in compliance with EN 13240:2001/A2:2004/AC:2007 when using beech wood logs as fuelling in conformity with the producer's instruction for exploitation. The test showed that the requirements to the wood stove for heating with closed door of the burning chamber are met.

The requirements, given in the instruction for mounting and operation as well as all legal national norms concerning the appliance, have to be observed.

The initial type testing within the range of usage of the CE assessment methods – the conformity ended positively.

**ATTENTION!**

The results from the test refer only to the tested sample.  
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