TECHNICAL DATA SHEET
№ 10-6-1

Victoria-05 Ltd
1B Ivan Momchilov Str, 5100 Gorna Oryahovitsa,
phone: +359 618 60200, e-mail: info@v05.bg, http://www.v05.bg

Freestanding roomheater for intermittent burning with firedoors closed

Designation:	**Modena F-w**
Types of appliance:	Type BE (BDS EN 16510-1:2023)
Fuel type:	Dry cleaved wood logs humidity level 25%
Heating volume:	206 m^3

Technical data and stove design.

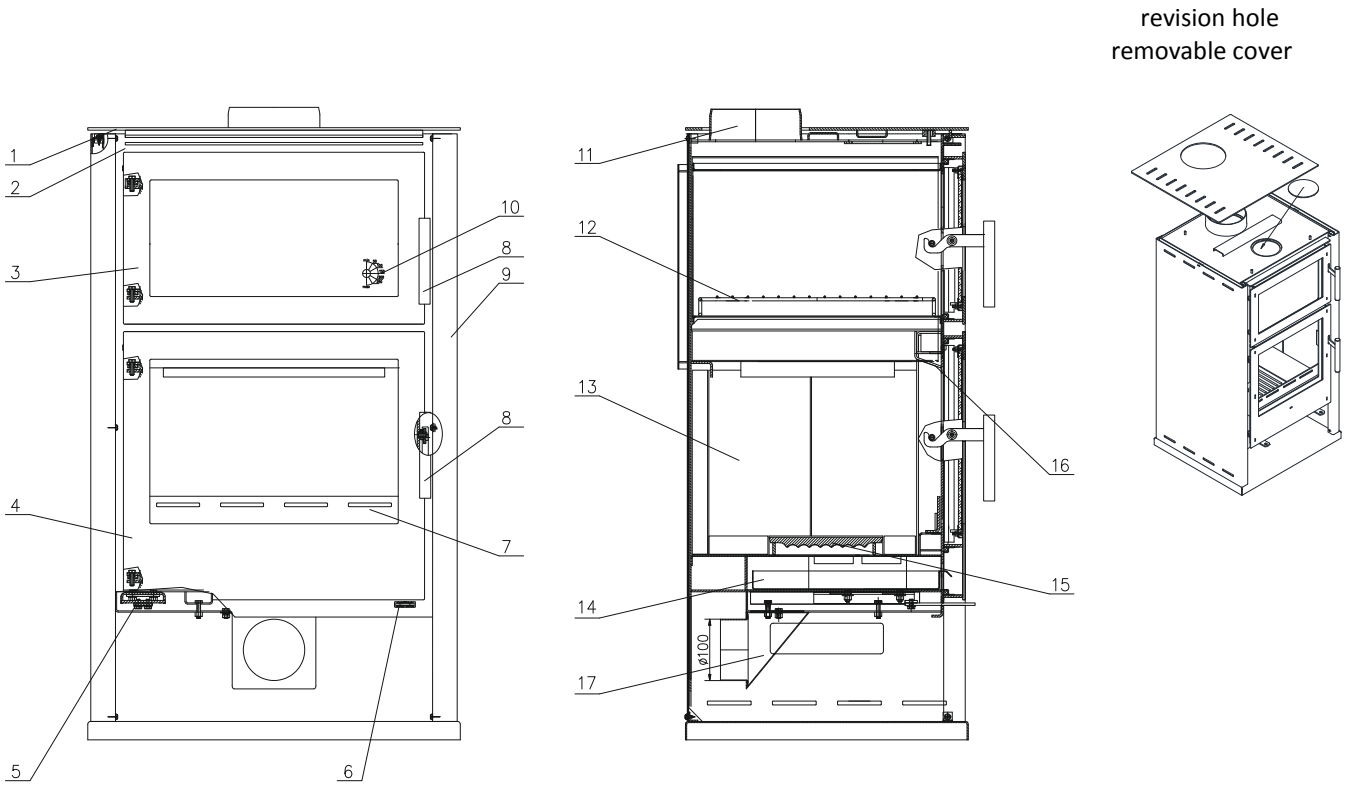


Fig. 1.

1. Top; 2. Body; 3. Oven door; 4. Fire door; 5. Secondary air regulator; 6. Primary air regulator; 7. Fuse; 8. Handle; 9. Side; 10. Thermometer 11. Flue; 12. Oven grate; 13. Brick set; 14. Ashtray; 15. Grate; 16. Reflector; 17. Air Box(Fig.3).

QR code to the required product information on the manufacturer's freely accessible website.

- Declaration of performance
- Declaration of conformity
- Technical documentation
- Energy efficiency label
- Product information sheet
- Instruction manual

The fireplace is manufactured and tested in accordance with the requirements of standard BDS EN 16510-2-1:2023

TECHNICAL DATA SHEET
for wood burning stove Modena F-w

in accordance with table 22 (EN 16510-1:2023)

Parameters at 13% O2	Unit	Explanation	Value for wood logs
P_{SHnom}	kW	The nominal space heat output or a range of outputs (dependent on fuel types)	11,5
η_{nom}	%	The appliance efficiency at nominal heat output	≥75
η_s	%	The appliance seasonal space heating efficiency at nominal heat output	≥ 65
EEI	-	The energy efficiency index	101
CO_{nom}	mg/m^3	CO emission at 13 % oxygen content at nominal heat output	≤ 1500
NOx_{nom}	mg/m^3	NOx emission at 13 % oxygen content at nominal heat output	≤ 200
OGC_{nom}	mg/m^3	Hydrocarbon emission at 13 % oxygen content at nominal heat output	≤ 120
PM_{nom}	mg/m^3	Particulate matter emission at 13 % oxygen content at nominal heat output.	≤ 40
p_{nom}	Pa	Minimum flue draught at nominal heat output	12
T_{snom}	°C	The flue gas outlet temperature at nominal heat output	320
T_{class}	-	Chimney designation according to the appropriate chimney standard	T400G
$\Phi_{f,g\ nom}$	g/s	The flue gas mass flow at nominal heat output	12
CON or INT	-	Whether the appliance is capable of continuous operation (CON) Whether the appliance is capable of intermittent operation (INT)	INT
d_{out}	mm	The diameter of the flue gas outlet	150
L, H, W	cm	The overall dimensions of the appliance (length, height, width)	61/103/52
m	kg	Mass of the appliance	132
m_{chim}	kg	The maximum load of a chimney the appliance may carry	20
d_R	mm	The minimum distances from the rear to combustible material	500
d_S	mm	The minimum distances from the sides to combustible material	700
d_C	mm	The minimum distances from the top to combustible material in the ceiling	750
d_P	mm	The minimum distances from the front to combustible material	2000
d_F	mm	The minimum distances from the front to combustible material in bottom front radiation area	1500
d_L	mm	The minimum distances from the front to combustible material in side front radiation area	1500
d_B	mm	The minimum distances below the bottom (not regarding feet) to combustible material	40
d_{non}	mm	The minimum distances to non-combustible walls	200
	-	**Read and follow the user manual!**	

Required safety distances during installation and operation of the wood burning stove for preventing fire hazard:

Fig. 2. **Required safety distances scheme**

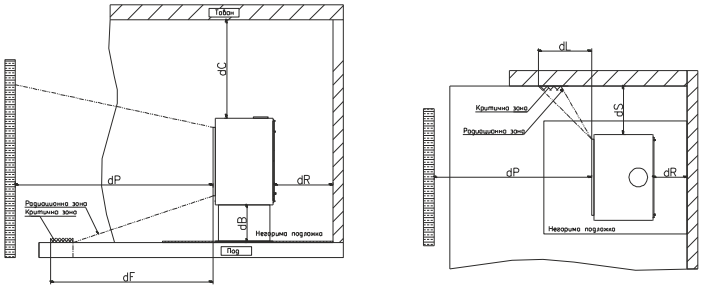
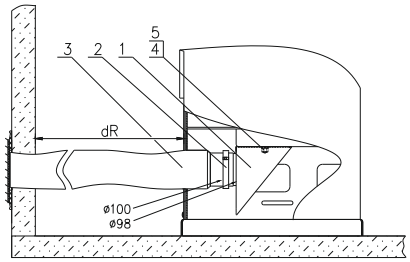


Fig. 3. **External air connection scheme**



1. Air Box ; 2. Hose Clamp; 3. Flexible Tube;
4. Spring Washer M6-2 pcs; 5. Nut M6-2pcs.

Appliance operation.

Common operational requirements for the room heater are specified in sections 2 and 3 of the Manual.
Your room heater is constructed with a built-in oven intended only for warming up dishes. The temperature in the oven depends on the burning intensity and the amount of loaded wood. A thermometer is installed on the oven door (Fig.1, Pos.3), which facilitates temperature control.
Oven dimensions: width - 408 mm, depth - 404 mm, height - 237 mm.

- **The niche is decorative and should not be used for storing flammable materials.**

When using a fireproof hearth pad to prevent fire, it must extend 50 cm forward and 30 cm sideways, measured from the heater's door. If flammable materials and structures are present, the heater must be at least 100 cm away from them or have a non-combustible screen.
The chimney to which the room heater is connected must be well insulated and suitable for a flue gas temperature of at least 400 °C, with a minimum diameter of ø150 mm or a clear cross-section of at least 200 cm². Chimney fire safety class - T400G.

- The room heater must not be connected to a common chimney if a central heating boiler is connected to it.
- Your room heater, if equipped with a spring for self-closing of the fire door, can operate in a common chimney. The presence of such a spring is noted on the packaging label, and you can also see it mounted on the fire door.

Under the top plate (pos.1, Fig.1) there is a revision hole, which is closed with a removable cover. This hole is for cleaning the surface above the muffle. It is advisable to remove the accumulated soot at least 2 times during the heating season.

Control of the Combustion Process.

Before the first ignition of the heating appliance, you should familiarize yourself with the function of all control elements.
The combustion process is regulated by the supplied primary and secondary air via the regulators (Fig.1, Fig. 4).
The primary air is used for kindling the room heater and regulating the combustion intensity. It is controlled by the position of the regulator (Fig.1, Pos.6). Pulling the regulator out increases the combustion intensity, and vice versa. When kindling the heater, it is advisable for the regulator (Fig.1, Pos.6) to be pulled out completely, and after kindling to be pushed in completely.
The primary air passes through openings to the ash pan, under the grate, and enters the combustion chamber. The ash pan should not be completely filled with ash so that the primary air can enter the combustion chamber without problems. It is necessary to clean it regularly.
The ashpan should only be removed for cleaning when it is cold.

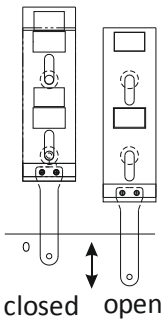


Fig.4

The secondary air serves for the complete combustion of the fuel and to protect the glass from sooting. It supplies the fire with the oxygen necessary for combustion and contributes to better fuel combustion, increases the efficiency, and prevents soot deposits on the glass, chimney, and the release of harmful emissions into the atmosphere.

The secondary air is regulated by the position of the regulator (Fig.1, Pos.5). By pulling the regulator out, fresh air enters through the rectangular profile on the left of the combustion chamber and flows in front of the fire door glass. It is advisable for the regulator (Fig.1, Pos.5) to be pulled out completely. It should not be closed during the combustion process. Often, to save fuel, the secondary air regulator is closed slightly after ignition, despite our instructions. This limits the oxygen supply, which hinders combustion and the glass gets dirty with soot. Harmful emissions are also released, which could lead to deposits in the chimney.

Initial Ignition.

- During the first ignition of the heating appliance, pay attention to the following:
- Remove all additional accessories from the ash pan.
- The primary and secondary air regulators must be open (pulled out completely forward).
- Before the initial lighting, peel off the colored energy efficiency label from the heater's glass.
- The first ignition should proceed slowly and calmly, with a small amount of kindling and paper.

- **Only during the first ignition is it necessary for the combustion chamber door to be slightly open to prevent the door seal from sticking to the paint.**

Ignition during regular exploitation.

Your heating appliance is designed and intended for intermittent burning operation.
For each ignition, the following must be done:

- The primary and secondary air regulators must be open (pulled out completely forward).
- The main fuel materials and kindling are placed, lit, and the door is closed tightly.
- After the kindling has burned, wait a few minutes for embers to form, then rake them towards the center and place two to three small logs on top.
- Once the wood is well lit, close the primary air regulator.
- The desired heat output is achieved by regulating the amount of combustion air.
- Since the power of your heating appliance also depends on the chimney height, the precise regulation of the air supply required for the combustion process is established through experience.

Fuel quantity and reloading period.

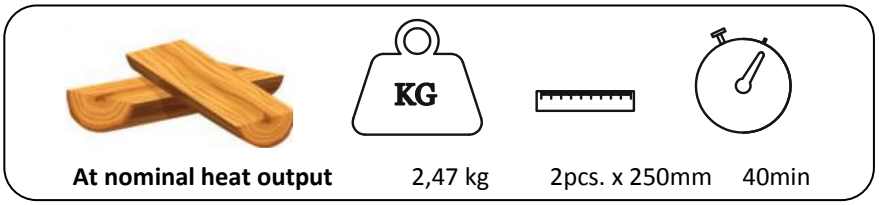


Fig.5.



Fig.6.

- The maximum permissible height of placed fuel in the combustion chamber is 150 mm (Fig.6).
- If more fuel than the maximum permissible is placed, there is a risk of overheating, unpredictable deformations, and deterioration of the heater's appearance.

Spare Parts.

Exploded view of the bricks and grate used.

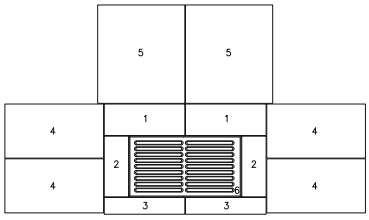


Fig.7.

N	Designation	Size/Part No.	Material	Qty
1	Brick	30 x 96 x 245	Fireclay	2
2	Side brick	30 x 74 x 185	Fireclay	2
3	Front brick	30 x 50 x 245	Fireclay	2
4	Rear side brick	25 x 165 x 300	Vermiculite	4
5	Left brick	25 x 265 x 300	Vermiculite	2
6	Grate	402.00.00.09	Cast iron	1
7	Ceramic glass	4x424x288		1
8	Oven glass	223F.00.00.24	Tempered glass	1
9	Oven grate	225F.50.00.00	Metal	1
10	Thermometer		Bimetallic	1
11	Handle set	225F.80.00.00		2
12	Door seal	Rope ø12	Glass textile	2
13	Glass seal	Tape 10x2	Fiber glass	2

Tabl. 2