

# BIOMASS HEATING

**BURNiT**<sup>®</sup>  
by **SUNSYSTEM**

## Combined boiler **BURNiT WBS AC-UB**

Universal boiler for heating of medium and large premises.

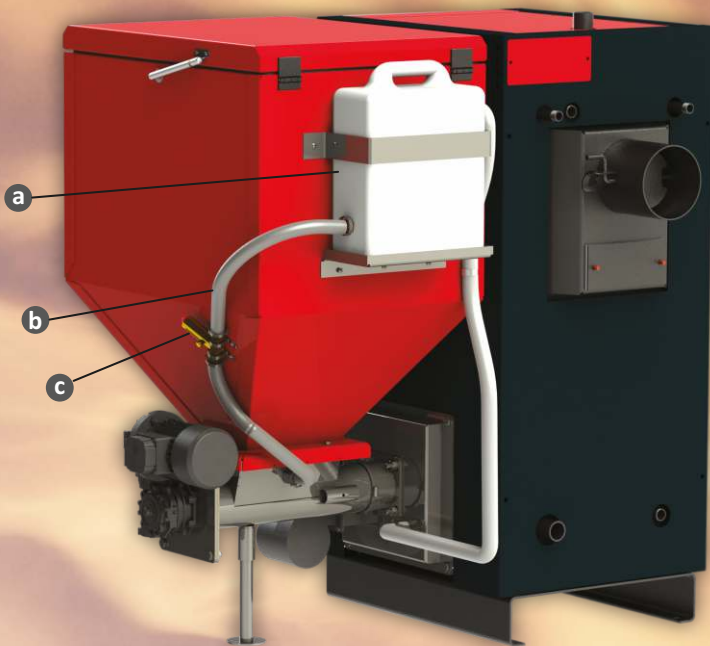
Thanks to the universal burner UB is possible burning of different fuel types as coal, wood-pellets and agri-pellets (straw pellets and sunflower pellets).

Constructed in accordance to standard EN 303-5.

Set includes:

Combined boiler WBS AC-UB,  
Universal burner UB and Fuel hopper UB .

Heat output, kW: 25, 40



### Recommended fuels:



coal,  
diamter  $\varnothing$  5-25mm



wood-pellets  
 $\varnothing$  6÷8 mm EN 14961-2:2011



agri-pellets ( straw pellets)  
 $\varnothing$  6÷8 mm

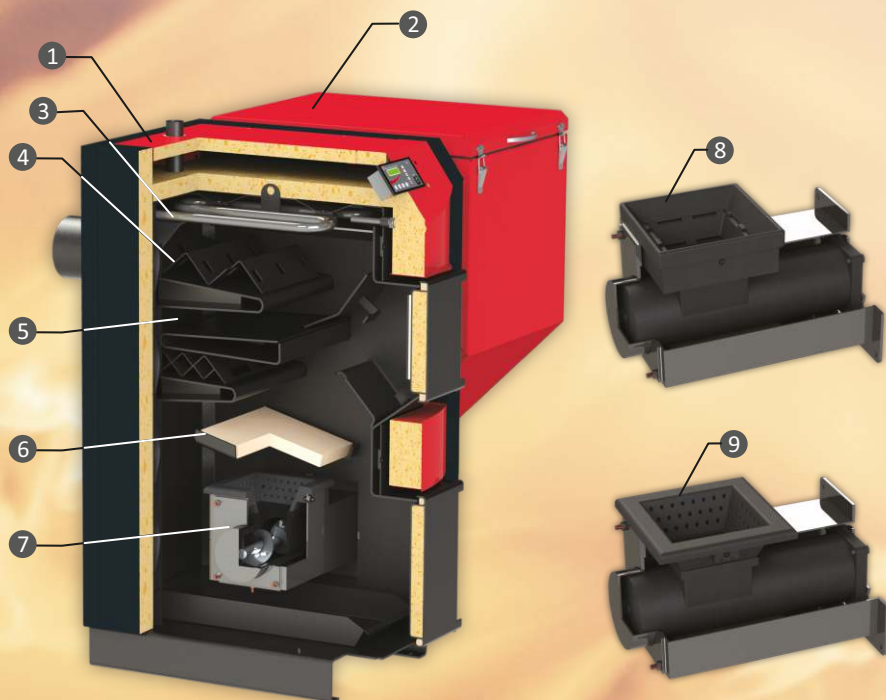


agri-pellets ( sunflower pellets)  
 $\varnothing$  6÷8 mm

Alternatively:

### Product Features:

- **Built-in control unit. Functions:**  
Automatic combustion control;  
Controls the operation of central heating pump;  
Controls the operation of DHW (domestic hot water) pump.
- **Universal burner UB. Characteristics:**  
Equipped for burning of different fuel types as coal, wood-pellets and agri-pellets (straw pellets and sunflower pellets).  
Two Cast Iron grates for coal and pellets;  
Robust Cast Iron burner body;  
Long service life and ease of maintenance;
- **Boiler combustion chamber** with large heat exchanging surface and low chamber resistance.
- **Ribbed chamber surface is equipped with turbolators** for longer retention of the gases into combustion chamber.  
**Three-pass flue gas flow.**
- **The water mantle** embraces the combustion chamber in full to utilize the emitted heat most efficiently.
- **Fuel hopper UB under pressure.**  
Air delivery hose is connected to the fuel hopper.  
Lateral connection to the boiler.  
Leveling foot.  
Convenient hatch for fuel loading.
- **Safety devices:**
  - 1) Controller for boiler temperature monitoring and control.
  - 2) Pressure relief valve 3 bar;
  - 3) Safety heat evacuator a tap-water-filled line passes through the upmost part of the boiler body. In case of overheating it is triggered open by a thermostatic valve.
  - 4) STB thermostat monitors boiler temperature - not to exceed 95°C;
  - 5) *Optional:* Safety valve for temperature (c) connected to water tank (a) by water delivery hose (b). This prevents backfiring into the fuel hopper.



- ① Combined boiler WBS AC-UB; ② Fuel hopper UB; ③ Safety heat evacuator; ④ Turbulators;  
 ⑤ Three-pass flue gas flow; ⑥ Ceramic plate to improve the combustion;  
 ⑦ Universal burner UB; ⑧ Cast Iron grate for coal;  
 ⑨ Cast Iron grate for wood-pellets / agri-pellets;

		WBS AC-UB 25kW	WBS AC-UB 40kW
Heat output	kW	20	35
Overall dimensions	Height H	1290	1290
	Width L / Depth D	1347/976,6	1347/976,6
Water mantle volume	L	96	114
Combustion chamber volume	L	66	88
Combustion chamber resistance	Pa/mbar	12/0,12	12/0,12
Power supply	V/Hz	230 AC / 50Hz	
Power consumption	Ignition Mode	1600	1600
	Operating Mode	60-70	60-70
Recommended fuel:	Cast Iron grate for coal Cast Iron grate for pellets (Alternatively) coal, ø 5-25mm wood-pellets, ø 6÷8mm EN 14961-2:2011 agri-pellets: straw / sunflowerts ø 6÷8mm		
Exhaust gas temperature (operation mode)	°C	<250 ÷ 280	
Operating temperature range	°C	65-85	
Operating pressure	bar	3	3
Weight	kg	388	475
Capacity of Fuel hopper UB	kg	380	420
Cold water inlet	A, mm	R¼" /212	R¼" /212
Hot water outlet	B, mm	R¼" /1245	R¼" /1245
Safety heat evacuator inlet/outlet	E, mm	R½" /1052	R½" /1052
Sensor or Safety valve sleeve	K, mm	G½" /1055	G½" /1055
Flue	F,mm	ø150/945	ø180/930
	J,mm	270	350
Flue cleaning opening	O, mm	150/70	150/70
Drain	Y, mm	G½" /212	G½" /212
Air delivery hose, connected to the fuel hopper	P	✓	✓
Controller	U	✓	✓
Water tank	( a )	option	
Water delivery hose	( b )	option	
Safety valve for temperature	( c )	option	

