

SIRIO S

HIGH OUTPUT WOOD AND SOLID FUEL BOILER

Versions available **S25** **S36** **S42** **S58**

The Sirio boiler is tried, tested, reliable and long lasting, having been sold in the UK for 30 years plus. As can be seen on the performance chart over there are 4 versions starting at the S25 and going up to the S58.

The output of the boiler is controlled by a fan which turns on when demand occurs and off when demand is satisfied. The blown air system of increasing and decreasing the burn rate of the appliance makes for both rapid response, (*when the fan is running*) and slow efficient combustion when it is not.

As required, secondary air can be introduced via an air slide on the fuel loading door.

The water jacket is so designed to maximize both output and efficiency by utilizing a wrap around heat exchanger which directs the flue gases through horizontal cross tubes before they depart the boiler via the rear flue outlet.

As can be seen from dimensions detailed over, both the combustion chamber and the fuel loading door are large enough to accommodate copious amounts of wood, solid fuel or both.

Protruding through the lower side panel is a substantial and conveniently located external handle which operates a mechanism driving the long lasting and extremely reliable cast iron, locomotive type riddling grates.

The boiler is clad in a powder coated steel casing with fiberglass insulation between it and the water jacket and as illustrated, the control panel is affixed to the upper side of the outer panel.

Controls

The control panel has the following controls:-

1. Appliance On – Off switch with neon illumination. (*Turned on to start the appliance*)
2. Fan On – Off switch. (*Turned on to start the appliance*)
3. Circulating pump On – Off switch. (*Turned on to start the appliance*)
4. Fuel exhausted warning light which illuminates when the fuel exhausted thermostat is triggered at 45 deg C.
5. Boiler safety stat which trips out if boiler temperature exceeds 100 deg C. (*Manually re set.*)
6. Boiler temperature thermostat used to control the boiler operating temperature.
8. Water temperature gauge used to monitor the boiler water temperature.



OPERATING THE BOILER

Turn the boiler switch on, turn the pump and fan switches to on, set the boiler stat to the required temperature.

Light the fire and open the ash pit door slightly to increase the draw.

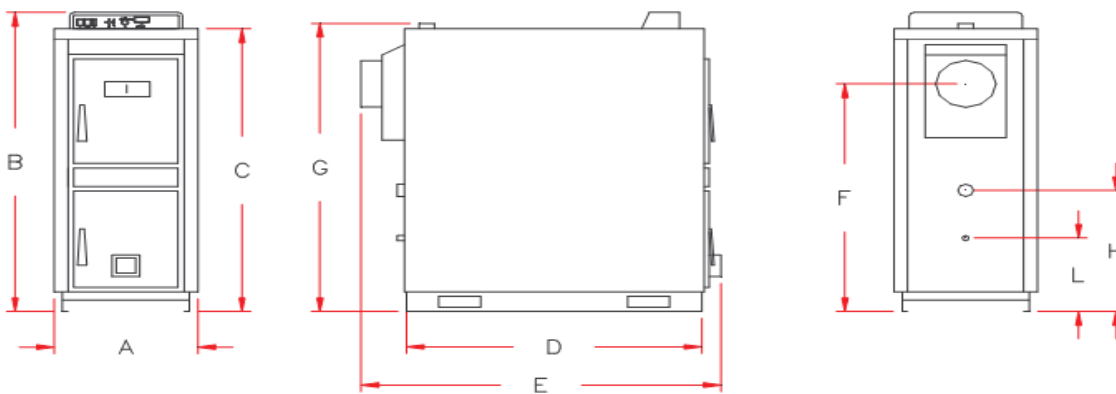
When the boiler water temperature reaches 45 deg C , the fan will start; at this stage close the ash pit door.

Set the boiler stat to the desired running temperature and the fan will run until the temperature is reached.

At target temperature the fan stops and when the boiler temperature drops back down to 60 deg C the fan starts up again and continues on a continuous cycle with the fan running up to the target temperature, stopping and starting again at 60 deg C.

If the boiler starts to overheat because the circulating pump has stopped the safety stat automatically starts the circulating pump to dissipate excess heat.

If the boiler temperature exceeds 96 deg C the safety stat operates and needs to be reset manually.



Dimensions

MODEL	Sizes in mm									Weight kg	Loading Door size mm	Combustion Chamber Length
	A	B	C	D	E	F	G	H	L			
SIRIO S 25	500	1210	1110	635	920	865	1160	495	315	215	260 x 380	540
SIRIO S 36	500	1210	1110	890	1160	865	1160	495	315	275	260 x 380	780
SIRIO S 42	500	1210	1110	910	1160	865	1160	495	315	310	260 x 380	790
SIRIO S 58	590	1310	1210	980	1250	900	1260	495	315	450	260 x 380	880

Performance

MODEL	TOTAL OUTPUT kW	COAL OUTPUT kW	WOOD OUTPUT kW	GAS / OIL OUTPUT
SIRIO S 25	32	29	28	28
SIRIO S 36	48	42	39	39
SIRIO S 42	58	49	46	46
SIRIO S 58	79	67	63	63

Technical

MODEL	BOILER WATER CONTENT lts	WORKING PRESSURE bar	FLUE VACUUM Mbar	BOILER CONNECTIONS	FLUE DIAMETER mm
SIRIO S 25	42	3	28	1 1/4"	200
SIRIO S 36	56	3	39	1 1/4"	200
SIRIO S 42	65	3	46	1 1/4"	200
SIRIO S 58	110	3	63	1 1/4"	200

BOILER WORKING PRESSURE 3 BAR

BOILER TEST PRESSURE 4.5 BAR

Data and sizes quoted in the tables above are not binding. Thermorossi reserve the right to change them without notice