

2 OPERATION WITH PELLETS AND SPECIAL KIT

2.1 DESCRIPTION

The **SOLIDA** boilers may be adapted to operate with pellets.

This is achieved with use of the **SOLIDA PL pellet kit**, consisting of:

1. Burner with incorporated electronic control.
2. Pellet feed with motor and screw feeder.
3. A 80 litre pellet store (formed from the accessory packaging). NOTE available separately are a 200, 300 or 500 litre

- pellet store.
4. Accessory kit containing:

SOLIDA

5 PL 8 PL +

a) front spacers	n° 6	n° 10
b) back spacers	n° 2	n° 4
c) deflectors	n° 3	n° 5
d) cement bricks	n° 2	n° 3
e) 242x272x4 gasket	n° 1	n° 1

Only pellets that comply with EN 149961-2, ENplus- A1. should be used with this appliance.

The boiler complies with Class 3 in accordance with EN 303-5.

2.1.1 OVERALL DIMENSIONS

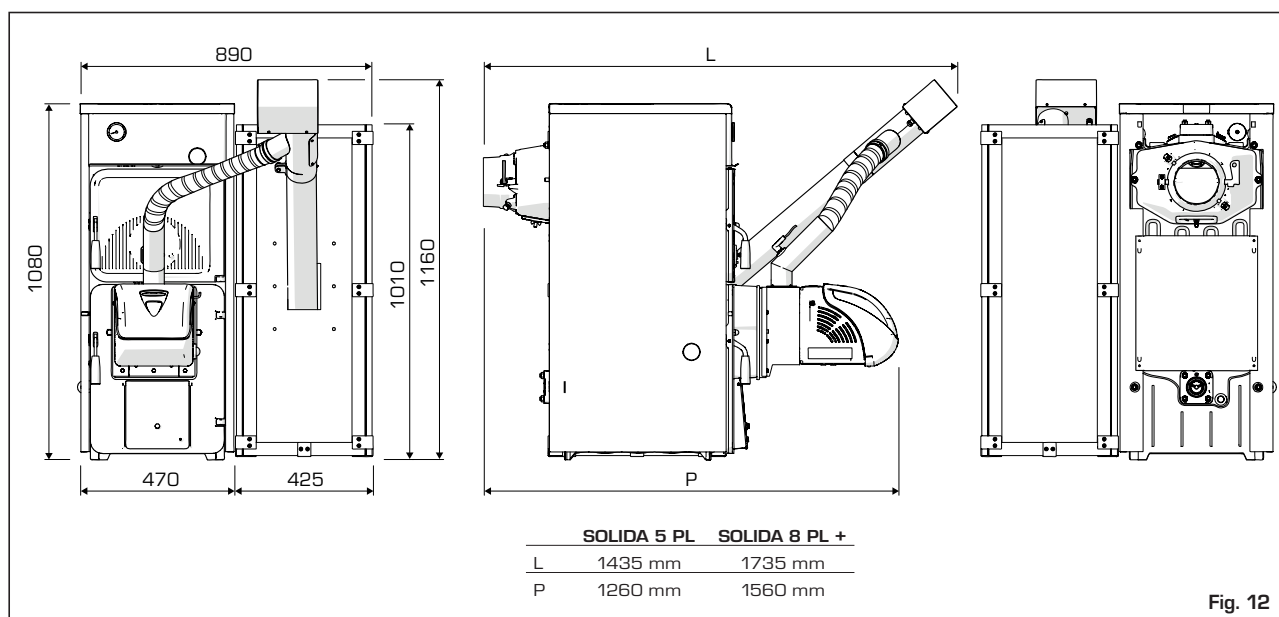


Fig. 12

2.1.2 TECHNICAL FEATURES

Model		SOLIDA 5 PL	SOLIDA 8 PL +
Nominal thermal output	kW	26,20	32,20
Minimum thermal output	kW	7,84	8,98
Nominal heat input	kW	34,07	40,36
Minimum heat input	kW	10,62	11,26
Maximum useful efficiency	%	76,90	79,78
Minimum useful efficiency	%	73,82	79,75
Boiler classification		Class 3	Class 3
CO mg/Nm ³ at 10% of O ₂ at the nominal thermal input		516,01	103,21
CO mg/Nm ³ at 10% of O ₂ at the minimum thermal input		776,17	467,24
OGC mg/Nm ³ at 10% of O ₂ at the nominal thermal input		3,02	3,60
OGC mg/Nm ³ at 10% of O ₂ at the minimum thermal input		8,14	12,09
G mg/Nm ³ at 10% of O ₂ at the nominal thermal input		25,8	22,13
G mg/Nm ³ at 10% of O ₂ at the minimum thermal input		-	-
Size of a pellet container with a capacity of 200 dm ³	H	1081	1081
	L	440	440
Size of a pellet container with a capacity of 300 dm ³	H	1381	1381
	L	440	440
Size of a container with a capacity of 500 dm ³	H	1481	1481
	L	640	640

2.2 INSTALLATION

2.2.1 BOILER ADAPTATION FOR OPERATION WITH PELLETS AND SPECIAL KIT

A) Remove the cast iron cover plate from the lower door. Open the door and remove the latch and screws securing the grill. remove the grill.



Fig. 13 Remove the blind plate



Fig. 14 Remove the grille

B) Place the cast iron deflector with the rear side supports.



Fig. 15 1st deflector



Fig. 16 1st deflector

C) Place the cast iron deflector with the front side supports.



Fig. 17 2nd deflector



Fig. 18 2nd deflector

- D) Place the remaining front lateral supports and insert the cement bricks



Fig. 19 Lateral supports



Fig. 20 Cement bricks

WARNING!

THE CEMENT BRICKS MUST BE POSITIONED TO THE FRONT PART OF THE BOILER

- E) Place the last cast iron deflector.



Fig. 21 3rd deflector

- F) Screw the M10 screws to the blind plate.
G) Fix the plate to the combustion chamber door with the 4 M8 screws using the gasket.

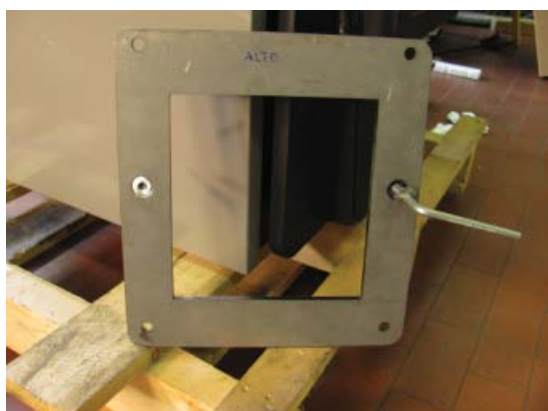


Fig. 22 Plate



Fig. 23 Plate fixed to the combustion chamber door

H) Place the rock wool insulation on the burner sleeve (See Fig. 24).



Fig. 24 Insulation

I) Assemble the burner and fix it with the 2 M10 flange nut.



Fig. 25 Burner assembly



Fig. 26 Fixing of the burner

WARNING!
TIGHTEN THE NUTS UNTIL THE BURNER PLATE RESTS ON THE BOILER PLATE.
DO NOT OVERTIGHTEN.

J) Unscrew the thermostatic regulator (if provided) and screw the brass reducer. use a suitable sealant.

K) Screw the safety thermostat to the reducer.



Fig. 27 Brass reducer



Fig. 28 Safety thermostat

L) Remove the thermometer and plug the panel hole.



Fig. 29 Remove the thermometer



Fig. 30 Plug the hole

M) Block the suction door if the boiler was previously used for operation with wood or carbon.



Fig. 31 Suction door

WARNING!
OPEN THE LOADING DOOR ONLY WHEN THE BURNER IS TURNED OFF.

N) Assembly of an 80-kg tank (this is formed from the packaging).

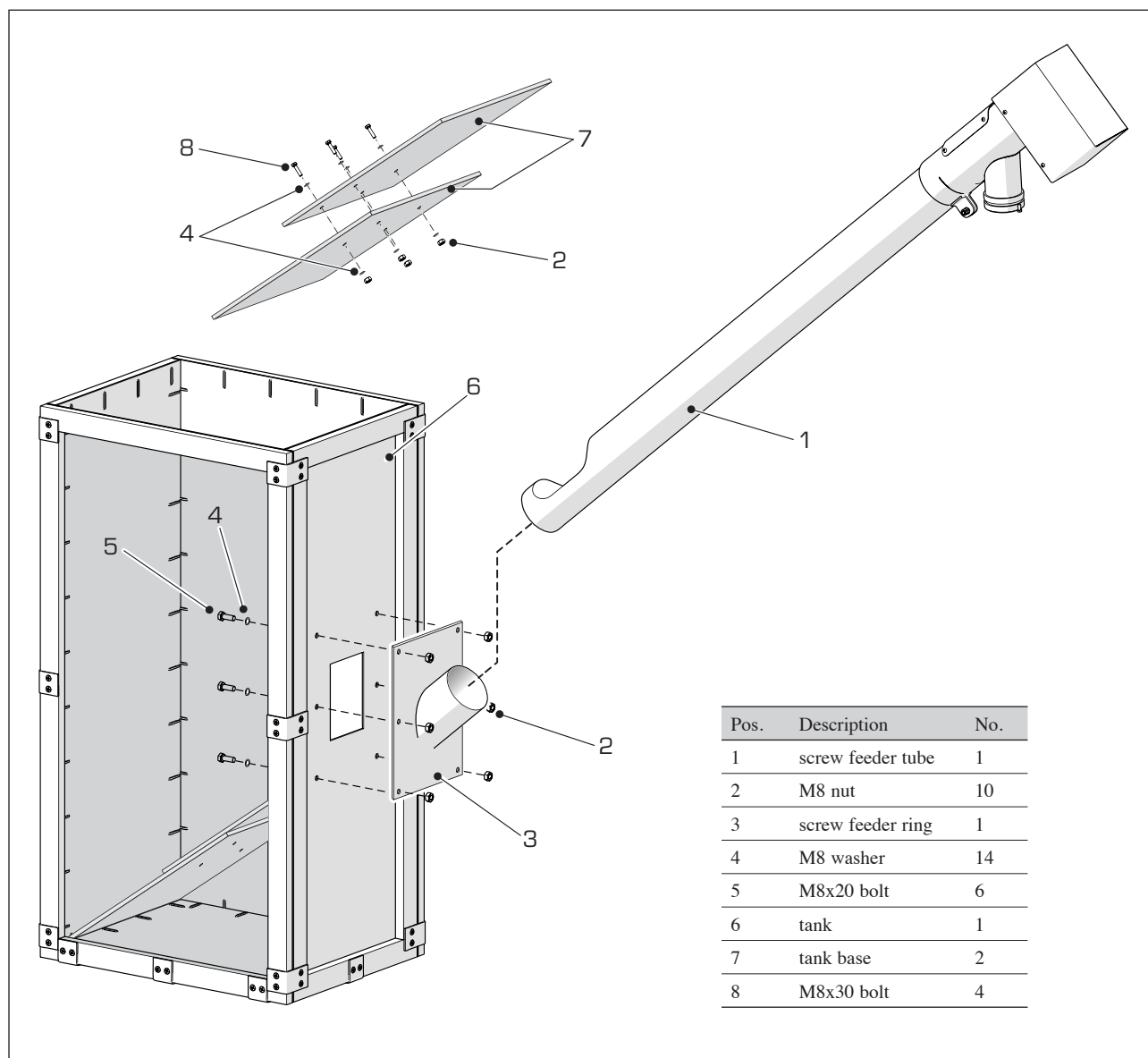


Fig. 32 Tank and screw feeder assembly

2.2.2 ELECTRICAL CONNECTIONS

- A) Connect the cable connector (1) coming from the screw feeder motor to the burner.
- B) Connect the cable connector (2) coming from the burner to the safety thermostat.



Fig. 33 Screw feeder motor cable



Fig. 34 Safety thermostat connector

- C) Pass the NTC sensor through the grommet on the boiler body

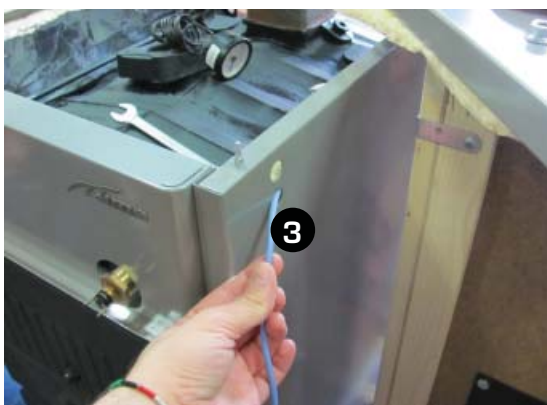


Fig. 35 NTC sensor cable route



Fig. 36 Position and secure the NTC sensor.

- D) Connect the burner power cable (5) to the mains.

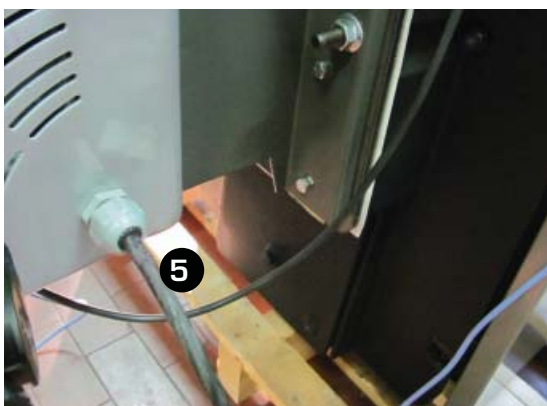


Fig. 37 Connection to the mains

BLUE = NEUTRAL
BROWN = PHASE
YELLOW-GREEN = EARTH