

SOLIDA 5 PL SOLIDA 8 PL+



IT

ENG

RUS

SOLIDA 5 PL
Kit pellet Sime 5 PL

cod. 8058541
cod. 8075980 (optional)

SOLIDA 8 PL +
Kit pellet Sime 8 PL +

cod. 8075743
cod. 8075981 (optional)

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WARNINGS

- In case of failure or malfunction of the equipment, contact authorised technical staff
- Make sure that no external electrical cables can come into contact with hot parts of the water heater
- Duly install a device in the electrical power supply grid that ensures complete omni-polar disconnection (surge category III)
- During operation of the water heater, the fumes exhaust pipe and the cast iron doors reach high temperatures (do not touch without appropriate protection)
- If the electrical power supply cable is damaged, it must be replaced by the manufacturer or by qualified technical staff
- To avoid system water backflow, install check valves or valves that are only opened to reintegrate water into the system.

GENERAL NOTES

- The appliance must be installed by qualified staff who operate in compliance with the national standards in force and with the instructions in the accompanying manual.
- The appliance is not intended for use by persons, including children, with reduced physical, sensory or mental abilities. Children must be monitored to ensure they do not play with the appliance.
- A puffer (inertial accumulation) is recommended but not obligatory. Its presence has the advantage of releasing the water heater from the system's "sudden" requests and allowing integration with other sources of heat. Reduces consumption and increases system efficiency.
- Do not use or leave materials that are explosive or easily flammable (e.g. petrol, paint, paper) in the room where the appliance is installed.
- The user must be instructed on use and operation of the equipment.

1 OPERATION WITH PELLETS AND SPECIAL KIT

1.1 DESCRIPTION

The **SOLIDA PL** boilers may be transformed to operate with pellets. 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)	thermostat and connectors	n° 1	n° 1

To maximize use of the product, we recommend the use of pellets with a quality

that is certified by an authorized body (the quality of the pellets used with the **SOLIDA PL** are defined in accordance with the DIN plus standard).

The boiler complies with Class 3 in accordance with EN 303-5/2012.

1.1.1 OVERALL DIMENSIONS (with pellets kit code 8079580 for SOLIDA 5 PL /code 8075981 for SOLIDA 8 PL+)

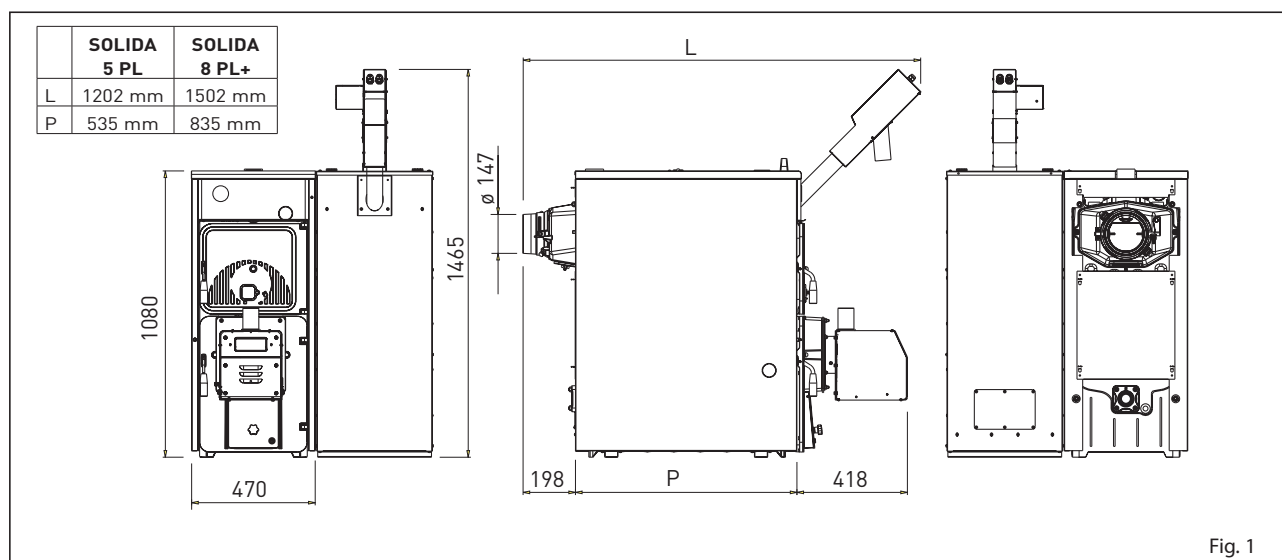


Fig. 1

1.1.2 TECHNICAL FEATURES (Kit with pellet)

Model		SOLIDA 5 PL	SOLIDA 8 PL +
Nominal thermal output	kW	26.2	40.0
Minimum thermal output	kW	7.4	12.0
Nominal heat input	kW	34.7	50.0
Minimum heat input	kW	10.4	15.0
Maximum useful efficiency	%	75.96	80.00
Minimum useful efficiency	%	72.81	80.00
CO mg/Nm³ at 10% of O₂ at the nominal thermal input		837.8	28.0
CO mg/Nm³ at 10% of O₂ at the minimum thermal input		467.3	1451.0
OGC mg/Nm³ at 10% of O₂ at the nominal thermal input		10.0	7.2
OGC mg/Nm³ at 10% of O₂ at the minimum thermal input		90.7	25.5
DUST mg/Nm³ at 10% of O₂ at the nominal thermal input		42.0	13.4
DUST mg/Nm³ at 10% of O₂ at the minimum thermal input		-	22.2
C.H. flow/return fittings	ø	2"	2"
Fumes flow-rate at nominal/minimum power	Kg/s	0,0171/0,0104	0,0188/0,0111
Max/min operating pressure	Mpa	0,15/0,05	0,15/0,05
Water content	l	31	43
Weight	Kg	270	375
Size of a pellet container with a capacity of 200 dm³	H	1081	1081
	L	440	440
Size of a pellet container with a capacity of 300 dm³	H	1381	1381
	L	440	440
Size of a container with a capacity of 500 dm³	H	1481	1481
	L	640	640

2 INSTALLATION

2.1 MOUNTING ACCESSORIES SUPPLIED SEPARATELY

A) Place the cast iron 1st deflector with the rear side supports

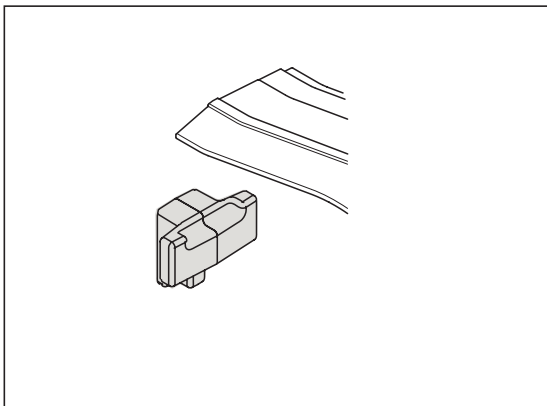


Fig. 2 Rear side supports



Fig. 3 1st deflector with the rear side supports

B) Place the cast iron 2nd deflector with the front side supports

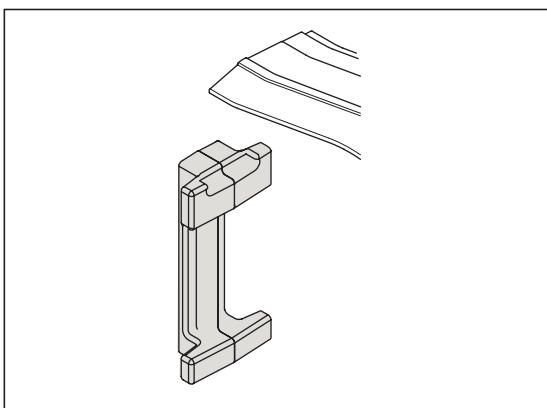


Fig. 4 Front side supports



Fig. 5 2nd deflector with the front side supports

C) Place the remaining front lateral supports and insert the cement bricks

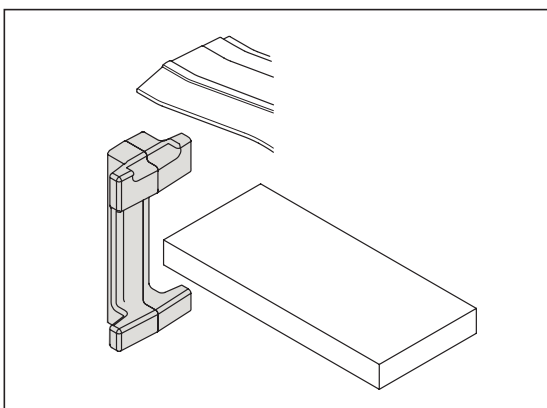


Fig. 6 Lateral supports



Fig. 7 Cement bricks

WARNING!

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

D) Place the last cast iron deflector



Fig. 8 Last deflector

E) Screw the brass reduction by interposing the sealant for the hydraulic seal

F) Screw the safety thermostat to the reduction



Fig. 9 Safety thermostat

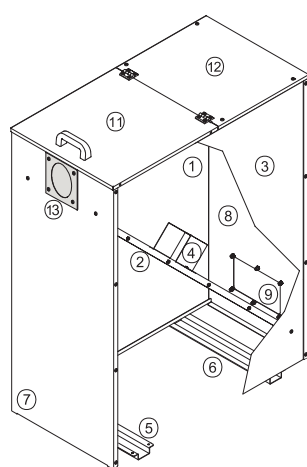
CAUTION:
Screw the thermostat by hand or with a fork spanner: tightening torque of 1.5 Nm

G) Assembly pellets tank (200 to 500 dm³) positioned to the right of the boiler, resting on the flank and aligned at the same.

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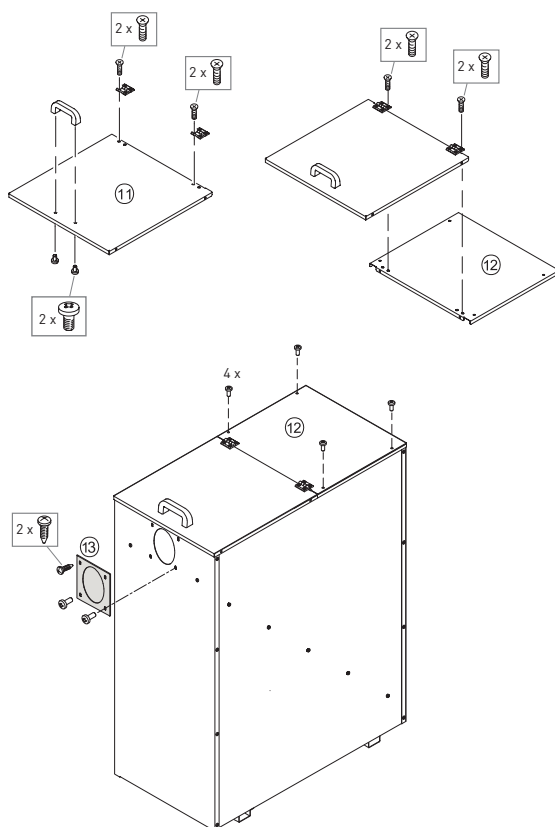
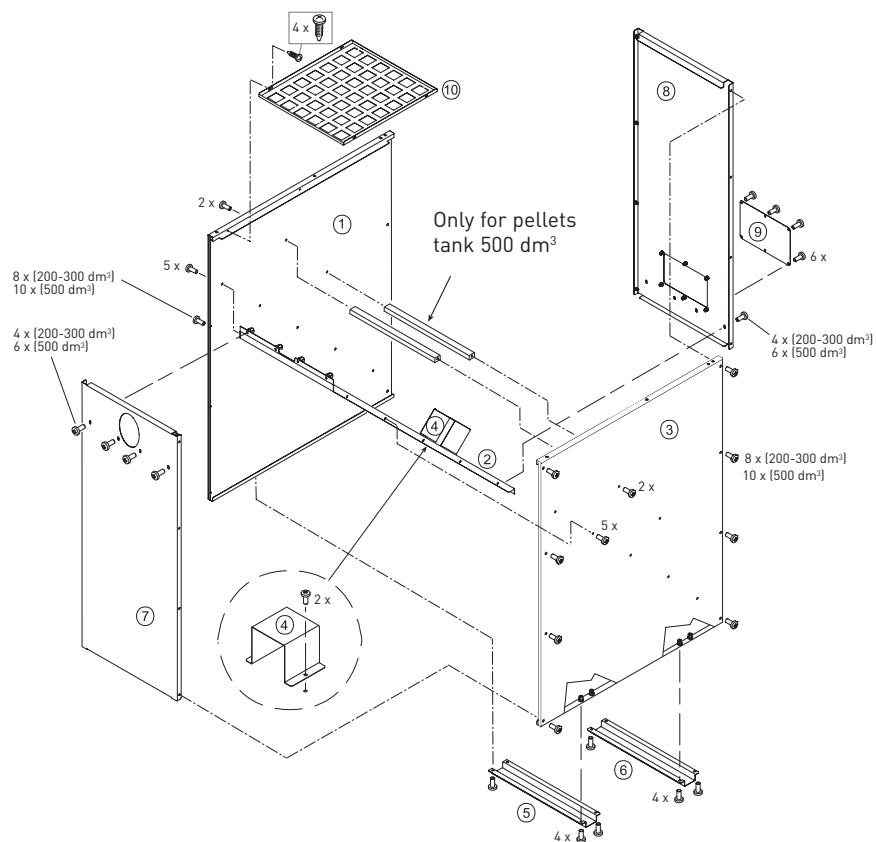


Mod. 200-300 dm³

- TCB M5x12 (5/4 x)
- TCB M6x8 (2 x)
- TCB 7SPx3/8" (6 x)
- TSP M5x20 (8 x)

Mod. 500 dm³

- TCB M5x12 (6/6 x)
- TCB M6x8 (2 x)
- TCB 7SPx3/8" (6 x)
- TSP M5x20 (8 x)



H) Push the cochlea feeder motor in its housing container pellets.

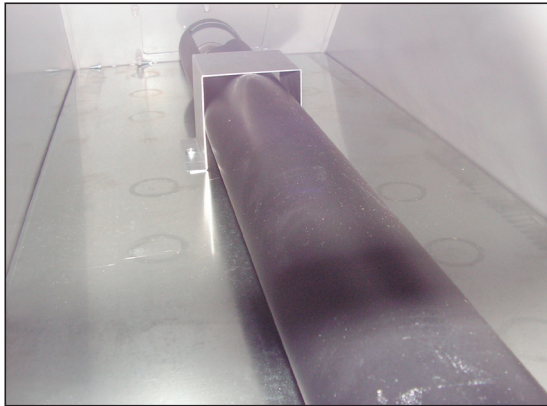


Fig. 10 - Insertion cochlea

I) Mounting the burner (**B-Home Round 25 for SOLIDA 5 PL and B-Essential Round 50 for SOLIDA 8 PL+).**

Position the seal (4), supplied with the burner, between the flange (5) and the door (2) of the boiler

Push in the 4 screws (6) (M8) but **ONLY** tighten the two screws which hold the lower split-flange. The two screws of the upper split-flange must **ONLY BE PLACED** but not tightened.

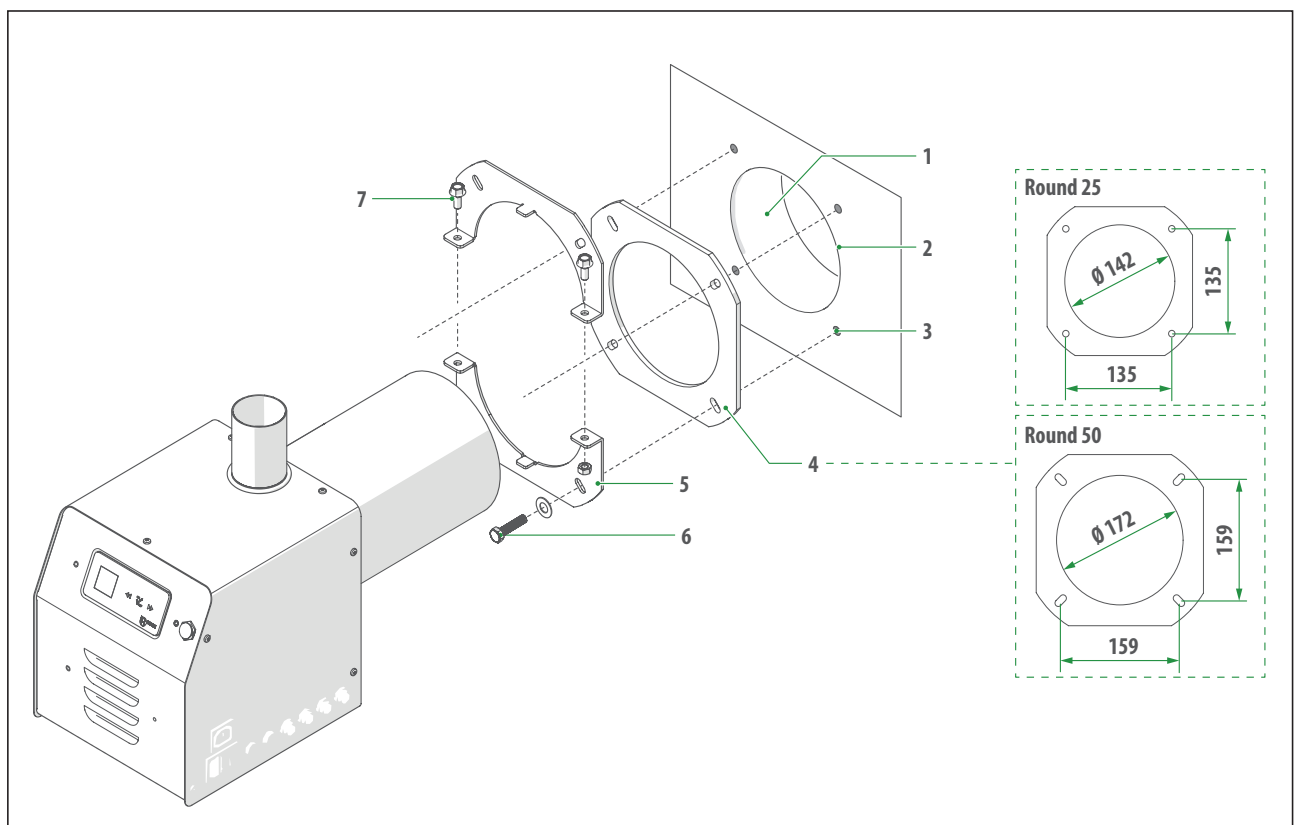
Insert the combustion chamber of the burner into the boiler as far as is necessary

Tighten the two semi-flanges with the screws (7) and the screws (6), which were previously just placed in position.

WARNING DANGER

The burner **MUST** be mounted **ONLY** in the position shown in the diagram. Any other position is **FORBIDDEN**.

The flame will propagate in a straight line, through the hole of the burner combustion chamber.



2.2 ELECTRICAL CONNECTIONS

- A) Connect the cable connector coming from the screw feeder motor to the burner (3 fig. 11)
 B) Connect the safety thermostat connector (7 fig. 12) the seven-pin plug (see WIRING DIAGRAM)

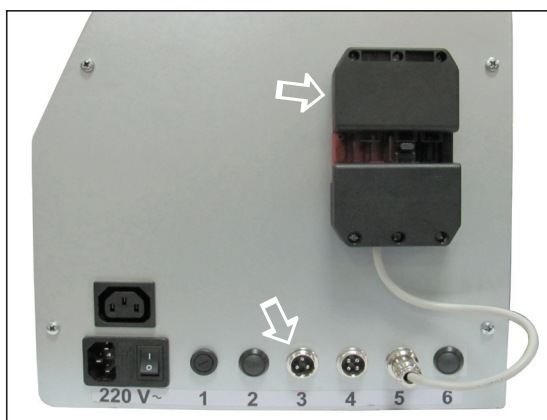


Fig. 11 Screw feeder motor cable

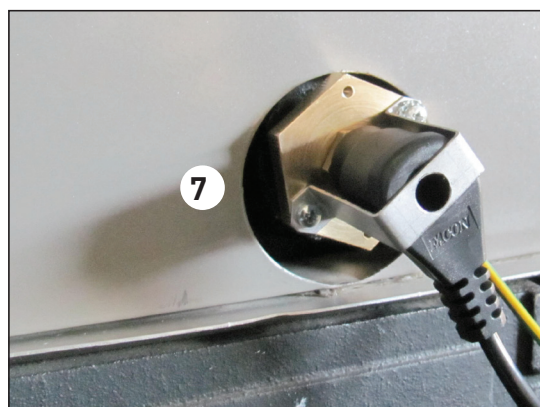


Fig. 12 Safety thermostat connector

- C) Place the inlet joint (8 fig. 13) in the sheath (9 fig. 14) found on the boiler body

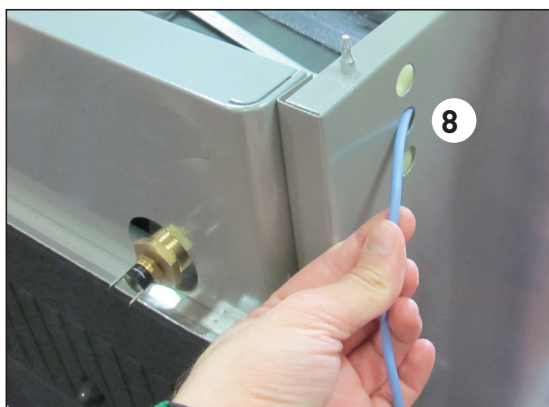


Fig. 13 Inlet joint

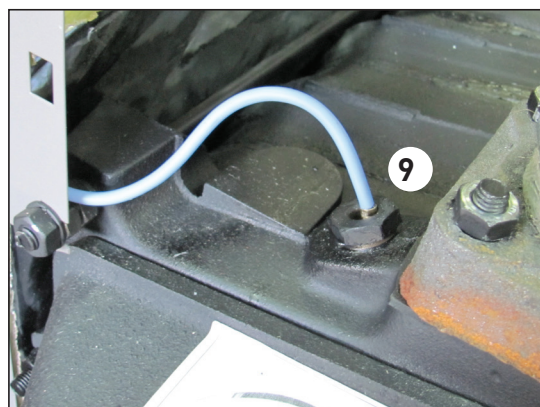


Fig. 14 Inlet joint

- D) Connect the burner power cable to the mains (1 fig. 15).

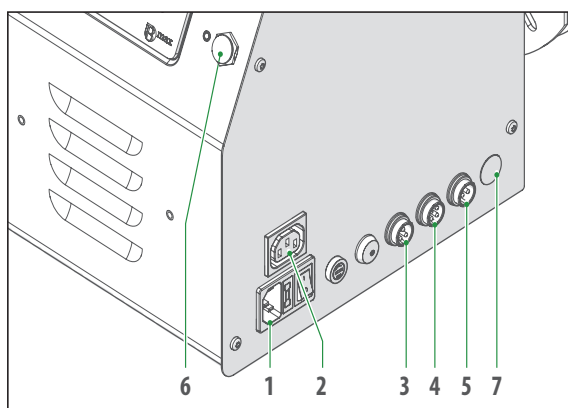


Fig. 15 Connection to the mains

BLUE = NEUTRAL
 BROWN = PHASE
 YELLOW-GREEN = EARTH

- 1 Power supply socket (230V-50Hz)
- 2 External cochlea fan power socket
- 3 External cochlea motor
- 4 Boiler water temperature probe
- 5 Connection seven-pin plug
(Safety thermostat / Air pressure switch / Door micro switch)
- 6 Connection for use with a PC
- 7 Arrangement for additional applications

2.3 WIRING DIAGRAM

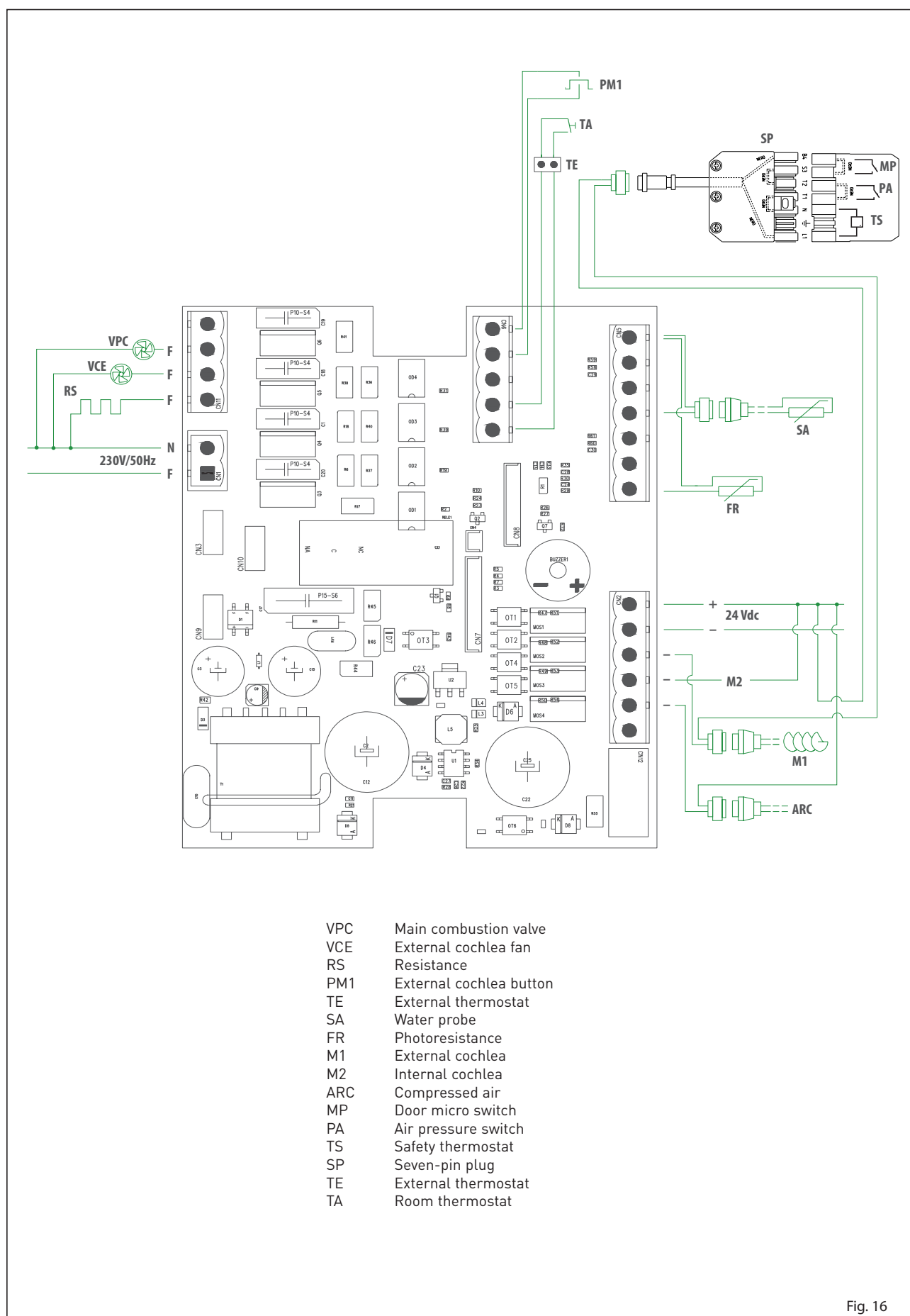


Fig. 16

2.4 HYDRAULIC DIAGRAM

The hydraulic circuit must be set up by an authorised installer or qualified personnel in compliance with the design specifications and the technical standards and legislation in force. The temperature of the return water of the water heater should always be above 55°C. An anti-condensation unit **MUST**, therefore, be installed, otherwise the warranty is rendered null and void.

WARNING

- The components of the system are the responsibility of the installer, who must observe the legislation in force and release a declaration of conformity upon completion of his work.
- SIME cannot be held liable for harm to people or animals or damage to property attributable to an incorrect choice of components or improper set-up of the system.

The hydraulic circuit diagram that can be used as a valid reference.

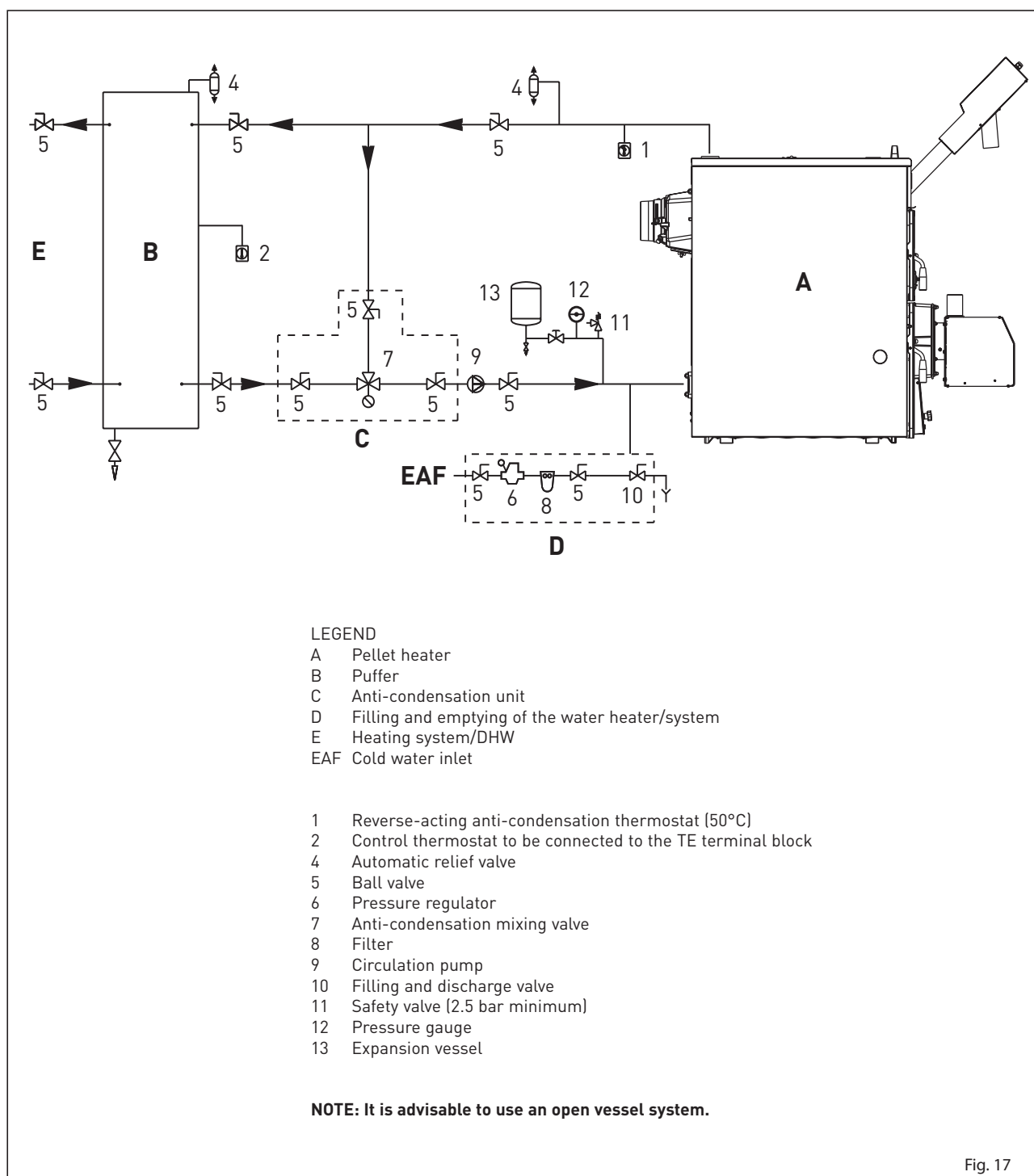


Fig. 17

2.5 CLEANING (fig. 18)

Cleaning operations must be carried out at regular intervals and only when the boiler is cold.

Combustion residuals collect in the removable drawer that must be emptied before starting the boiler.

ATTENTION: To release and open the bottom door, lift the locking bracket (A).

To remove all combustion residuals, use an ordinary aspirator and verify that all the ashes inside the combustion chamber have been completely removed.

The aspirator can also be used to clean the fuel grille.

To clean the fume ducts inside the boiler body, use a wiper.

ATTENTION: if the generator is switched off for long periods of time (above 15 days), it is necessary to empty the pellet container in order to prevent the pellets from absorbing excessive humidity, which could affect the operation of the boiler. A high amount of humidity in the pellets could cause them to pulverize, increase the amount of residuals in the brazier and obstruct the pellet feeding system.

2.6 SAFETY THERMOSTAT (fig. 19)

The safety thermostat with manual reset intervenes automatically, switching off the burner, when the water heater temperature exceeds 95°C.

To start the water heater back up again, press the button as shown in the figure. During the resetting procedure one must not remove the bracket that protects the thermostat.

If this event occurs frequently, have qualified staff inspect the equipment.

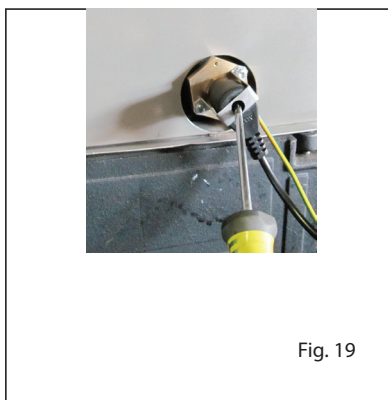


Fig. 19

2.7 ANNUAL MAINTENANCE

For optimum performance, it is advisable to have the boiler inspected accurately and thoroughly by qualified personnel at least once every season.

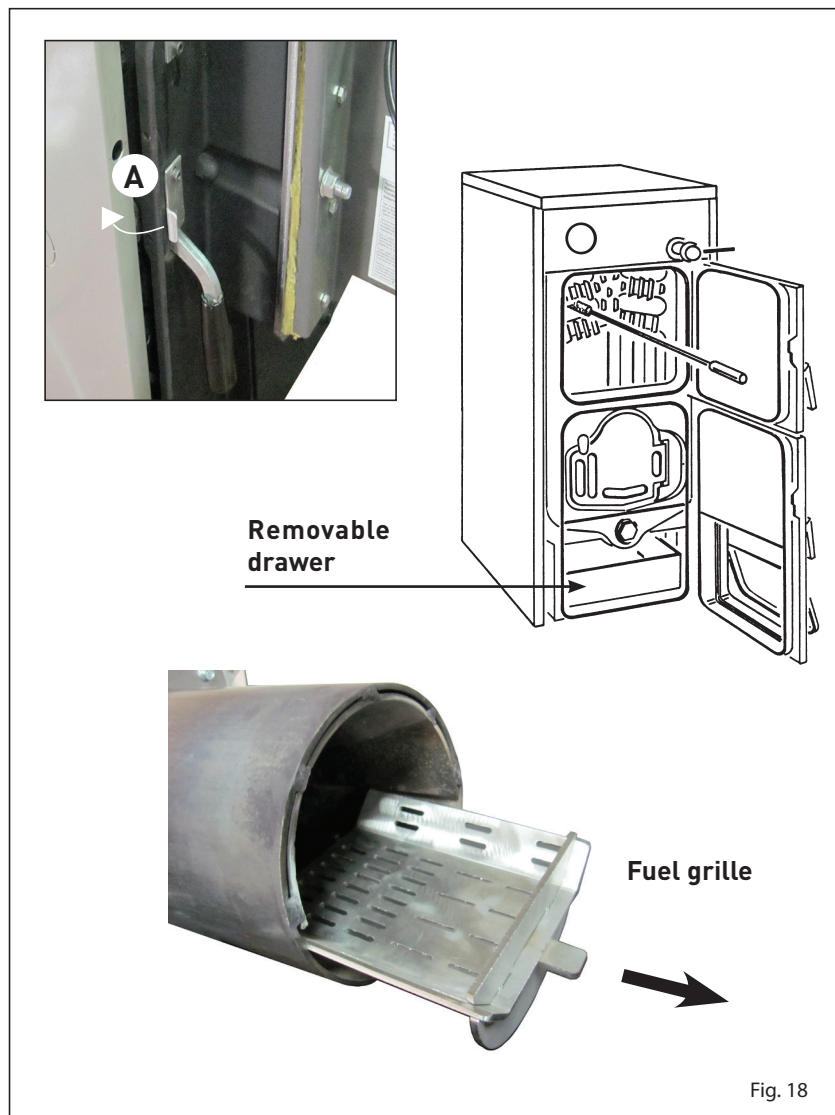


Fig. 18

Before performing maintenance operations, verify that the boiler is cold and has been disconnected from the mains.

to health. It also allows you to recover many recyclable materials with significant economic and energy savings.

2.7.1 Warnings

In the event of product failure and/or malfunction, switch it off and do not attempt to repair or intervene on it. Any repairs must be carried out by authorised staff using original spare parts.

2.8 DEMOLITION AND DISPOSAL OF THE APPLIANCE

At the end of its life cycle the appliance **MUST BE DISPOSED AND RECYCLED**, as required by current law. It **MUST NOT** be disposed of with domestic waste. It can be taken to waste recycling centres, where they exist, or to a dealer providing this service. Recycling waste prevents potential damage to the environment and harm

2.9 ACCESSORIES

The available accessories to be ordered separately:

- code **5197500** 200-litre PELLET TANK (1081 x 440)
- code **5197510** 300-litre PELLET TANK (1381 x 440)
- code **5197520** 500-litre PELLET TANK (1481 x 640)



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