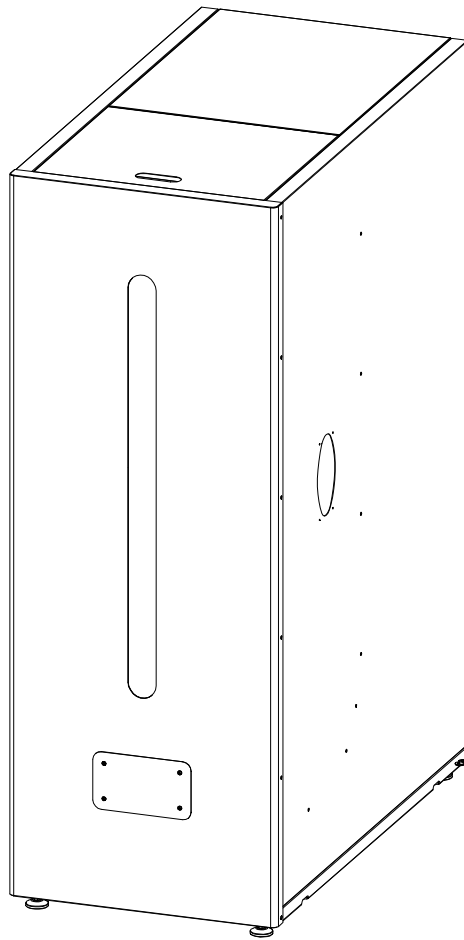


INSTALLATION AND OPERATING INSTRUCTIONS

→ HTP



DOMUSA
T E K N I K

Thank you for choosing a **DOMUSA TEKNIK** product. Within the **DOMUSA TEKNIK** range of products you have chosen the **HTP** model, a combined pellet tank with an integrated DHW tank which, together with a **BIOCCLASS NG** central heating boiler, is able to provide the appropriate level of comfort for your home and provide a balanced and economical production of hot water, provided it is accompanied by a suitable hydraulic installation.

This manual forms an essential part of the product and it must be given to the user. It is advisable to carefully read the warnings and recommendations in this manual, as they contain important information on the safety, use and maintenance of the installation.

These storage tanks must be installed by qualified personnel only, in accordance with the legislation in force and following the manufacturer's instructions.

Start-up of these storage tanks and any maintenance operations must only be carried out by **DOMUSA TEKNIK's** Authorised Technical Assistance Services.

Incorrect installation of these storage tanks could result in damage to people, animals or property, and the manufacturer will not be held liable in such cases.

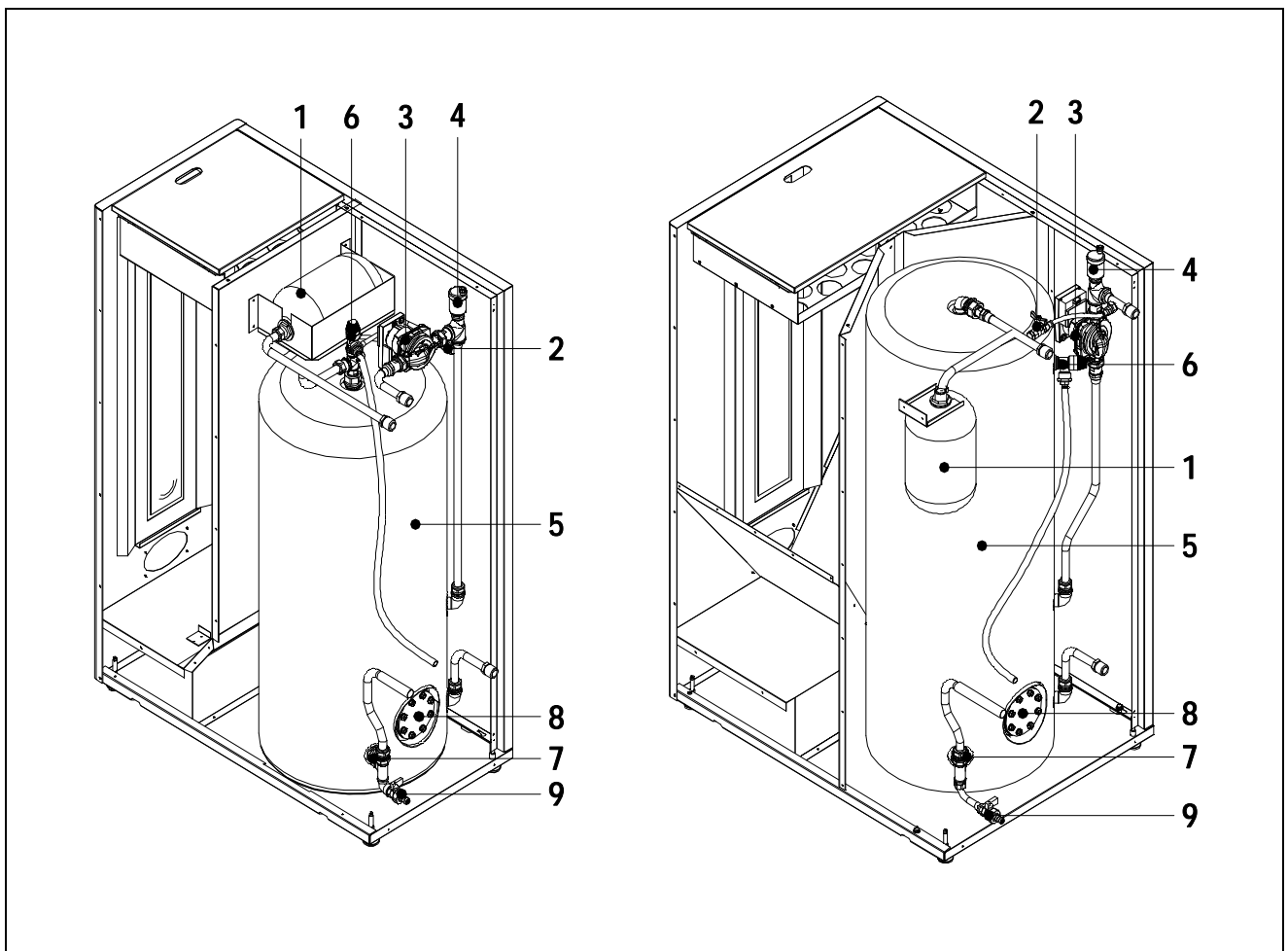
DOMUSA TEKNIK informs all parties concerned that, in compliance with section 1 of the first additional provision of Law 11/1997, the responsibility for delivering packaging waste or used packaging for its proper environmental management will be that of the final owner of the product (Article 18.1 Royal Decree 782/1998). At the end of its useful life, the product must be taken to a selected collection point for electrical and electronic equipment or must be returned to the distributor at the time of purchasing a new equivalent appliance. For more detailed information on the collection schemes available, contact either the collection facilities of the local authority or the distributor where the purchase was made.

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1 LIST OF COMPONENTS

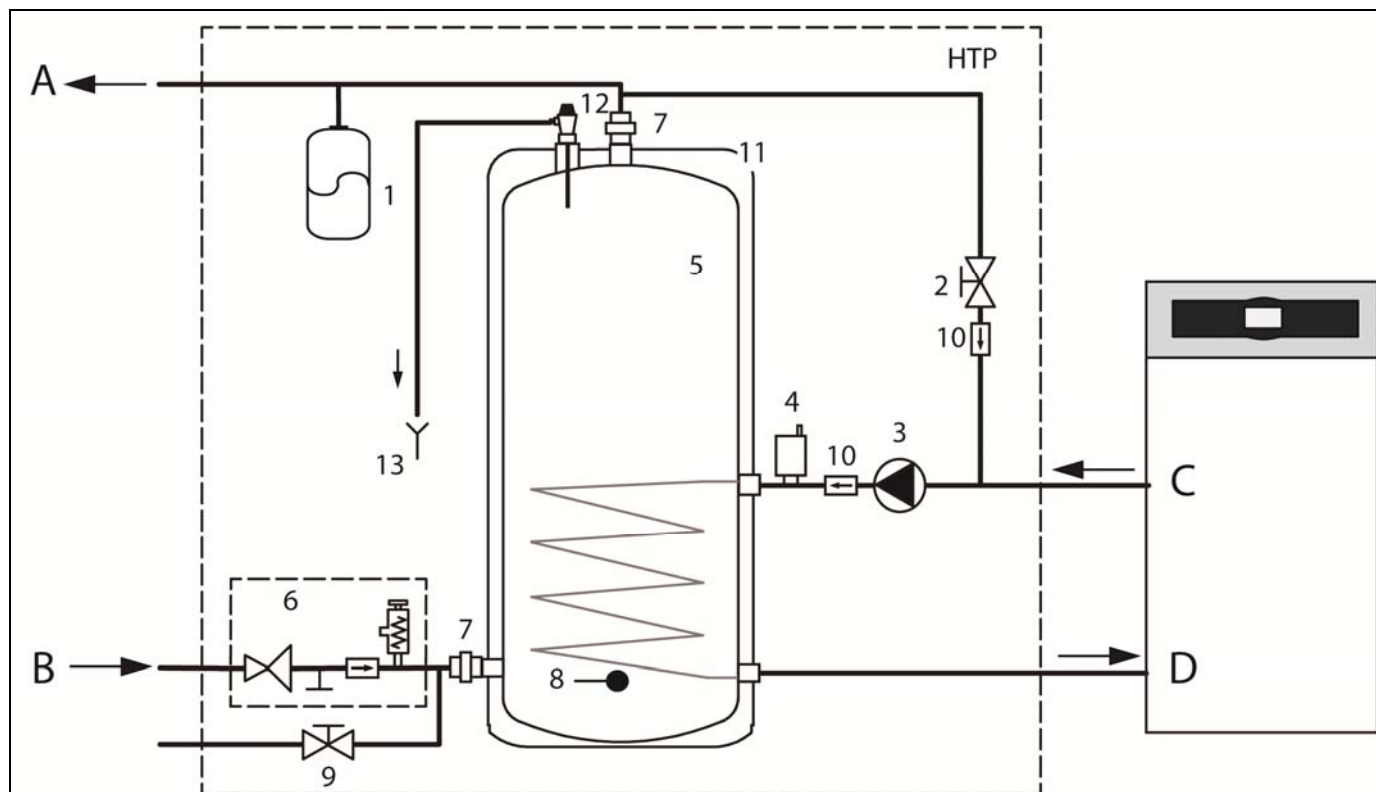


- 1: Expansion vessel.
- 2: Filling valve.
- 3: Storage tank feed pump.
- 4: Automatic air bleed valve.

- 5: DHW storage tank.
- 6: Pressure and temperature relief valve
- 7: Dielectric sleeves.
- 8: Heating element flange.
- 9: Draining valve.

2 INSTALLATION INSTRUCTIONS

The HTP range of combined deposit tanks have been specially designed to be installed and connected hydraulically with **BIOCLASS NG** pellet boilers. The hydraulic diagram for the HTP tank with the **bioCLASS NG** is as follows:



- | | |
|---|--|
| <ul style="list-style-type: none"> A. DHW outlet B. DHW inlet C. Boiler flow D. Boiler return | <ul style="list-style-type: none"> 1. 3 litre DHW expansion tank 2. Filling valve 3. High efficiency pump 4. Automatic air bleed valve 5. Stainless steel tank 6. Inlet Group (*) comprising of:
6 bar safety valve
Non-return valve
Pressure reducing valve set to 3 bar
Balanced water supply
Filter 7. Dielectric sleeve 8. DHW sensor 9. Drain valve 10. Non-return valve 11. Polyurethane insulation 12. Temperature and pressure relief valve 13. Tundish. (*). Install the inlet group according to the
Instructions (carried with the valve) |
|---|--|

(*) Follow the installation instructions which appear on the inlet group box.

HTP

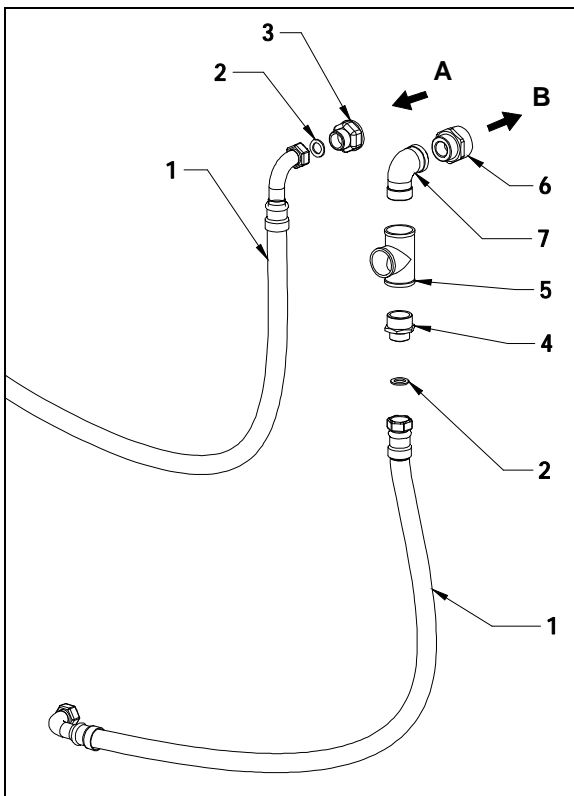
2.1 Hydraulic installation

The hydraulic installation must be made by qualified personnel. The applicable installation legislation is to be complied with, and the following recommendations should also be taken into account:

- Ensure that the Inlet Control Group is fitted adjacent to the cylinder with the arrows on the side pointing in the direction of the flow.
- The coil primary circuit (or heating circuit) shall be fitted with a safety valve calibrated to a maximum of 0.3 MPa (3 bar).
- **Once the tank is installed, first fill the secondary circuit (DHW) and pressurise it.**
- **After finishing the above, fill the primary circuit. Ensure the secondary circuit is full before filling the primary circuit.**
- To prevent heat losses through the hot water pipes in storage systems, an anti thermosyphon should be installed at the tank outlet. The hot water pipes shall be thermally insulated (at least until the start of the anti thermosyphon).
- When the concentration of chlorides in the domestic water supply exceeds 250 mg/dm³, we recommend installing anti-corrosion protection inside the tank to prevent its premature deterioration. **DOMUSA TEKNIK** supplies an optional electronic cathodic protection suitable for the **HTP** range of tanks. For its installation, carefully read the assembly instructions enclosed with the product.
- **The discharge pipes should be fitted in accordance with the current edition of the Building Regulations.**
-

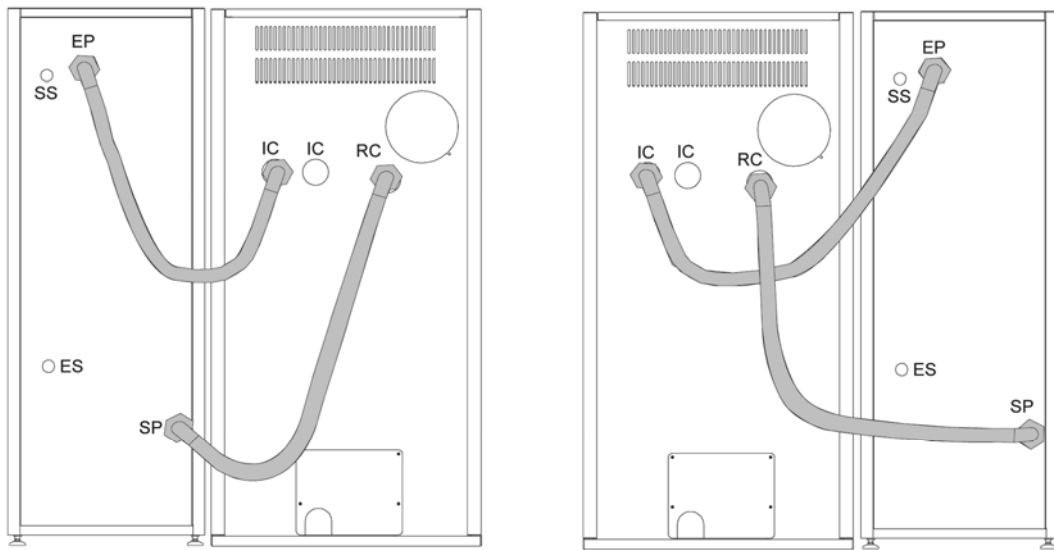
IMPORTANT: Installation must be carried out as described in this installation guide with reference to this section where appropriate. This will ensure compliance with Building Regulations, IEEE Regulations and Telford Copper Cylinders warranty provisions.

The diagram below shows the hydraulic connection using flexible hoses (supplied with the HTP UK tank) between the **BioClass NG** boiler and the HTP tank.

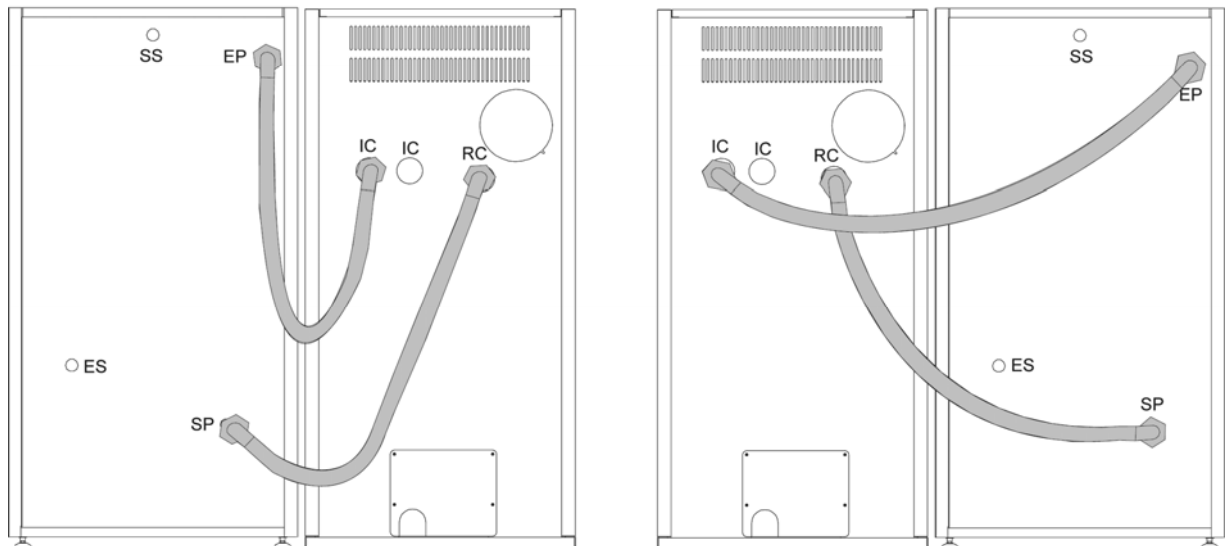


- 1.- Flexible hoses
 - 2.- 3/4" Seal
 - 3.- 1" – 3/4" Reduction
 - 4.- 1" – 3/4" Nipple
 - 5.- TE laton 1"
 - 6.- 1 1/4" – 1" Nipple
 - 7.- 1" Bend
- A.- Boiler flow
B.- Boiler return

HTP 100-150



HTP 130-200



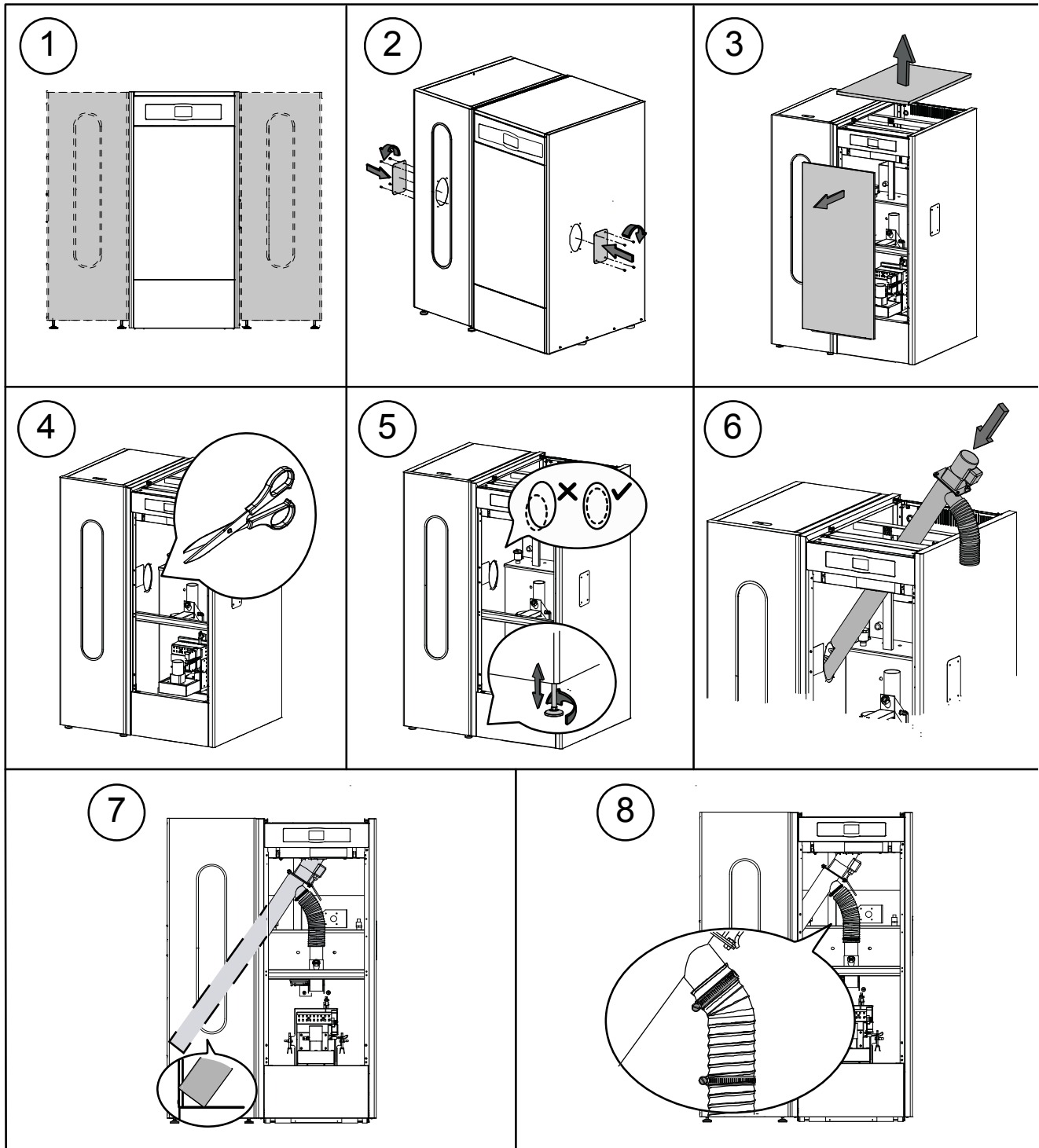
For emptying, first empty the primary circuit and then later the secondary.

IMPORTANT: The HTP must be connected to a public mains water supply through the Inlet Control supplied.

HTP

2.2 Location

The HTP combined deposit tank is reversible and can be mounted on either the left or right side of the boiler. It is also equipped with adjustable feet for height regulation.



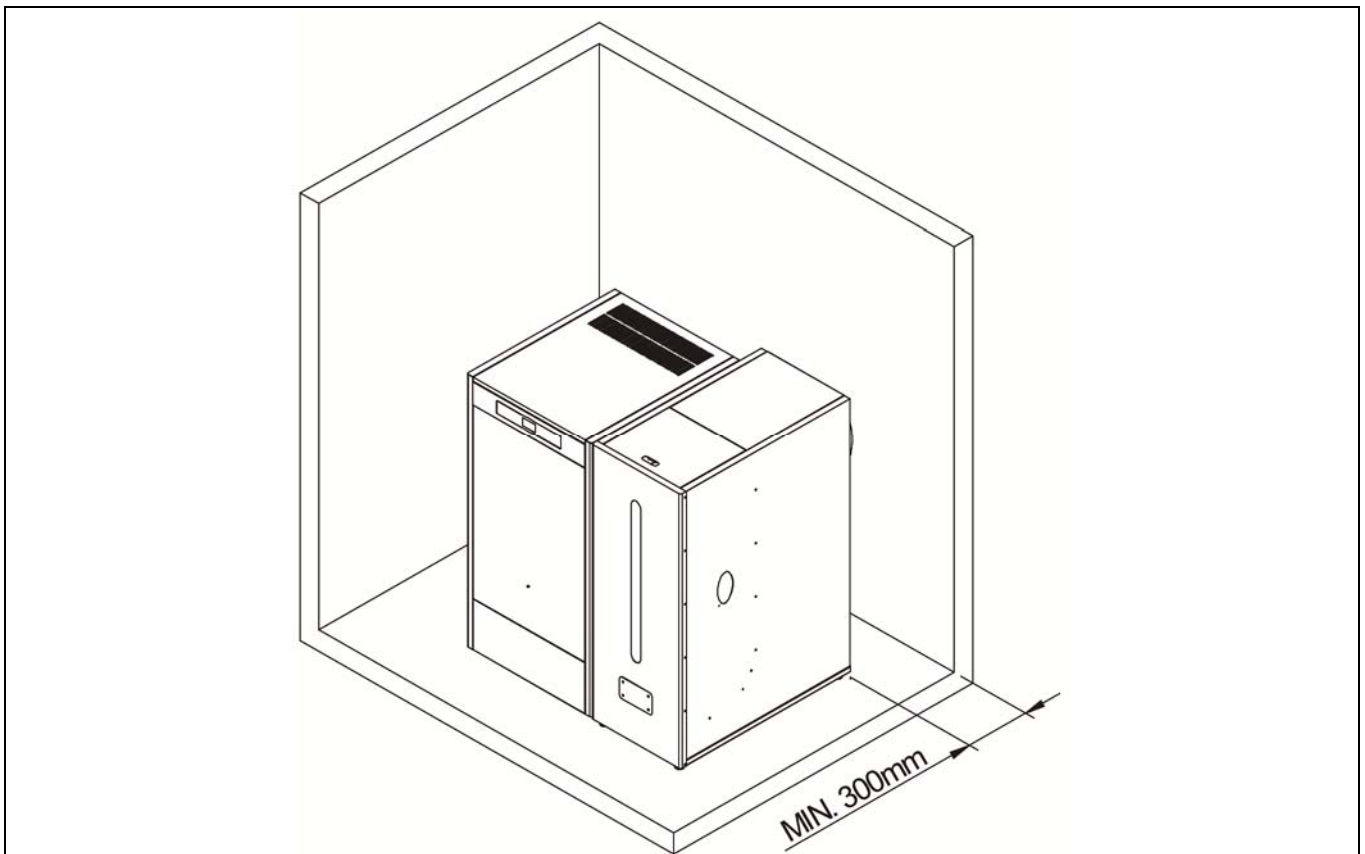
IMPORTANT: Ensure the height of the elliptical holes on the sides of the boiler and on the reserve tank coincide, for correct insertion of the feed auger. To do this, make the necessary adjustments for height (using the adjustment feet) and for depth.

The **HTP combined** tank must not be installed in a place where it may be exposed to outside elements.

For **improved** energy efficiency, the tank should be installed as close as possible to the hot water generator.

When **choosing** the location consider the weight of the filled tank and that it will be protected from extreme cold. The pipes must have insulation in accordance with the regulations concerning heating systems.

IMPORTANT: To facilitate the servicing, interior cleaning and, if necessary, replacement of the heating element flange, there must be a free space to the rear of the HTP tank of at least 300 mm.



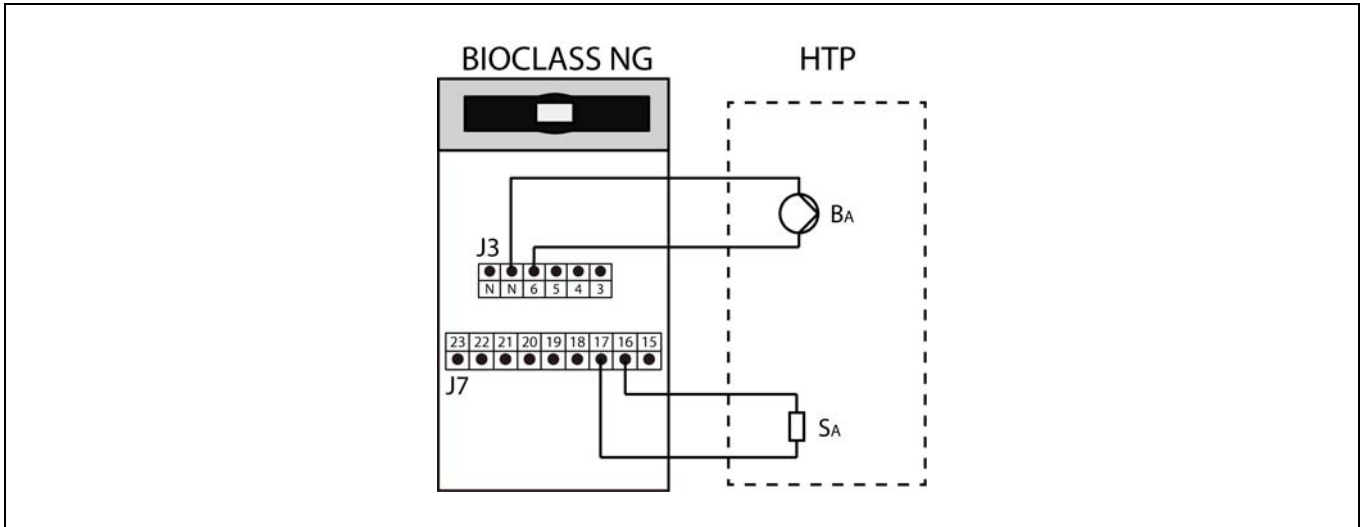
HTP

2.3 Electrical connection to the boiler

The HTP range of deposit tanks have been specially designed for their easy connection to the BIOCLASS NG boiler.

For the correct electrical connection please proceed as follows:

- **Unplug the boiler from the mains power.**
- Connect the DHW Temperature sensor (supplied with the HTP tank) to the sensor terminal strip **J7 (Sa; terminals 16 and 17)** of the **BioClass NG** boiler (see "Electrical Diagram").
- Connect the storage tank feed pump (supplied with the HTP tank) to the feed terminal strip **J3 (BA; terminals 6 and N)** of the **BioClass NG** boiler (see "Electrical Diagram")



The deposit tank will then be able to activate the boiler DHW demand function.

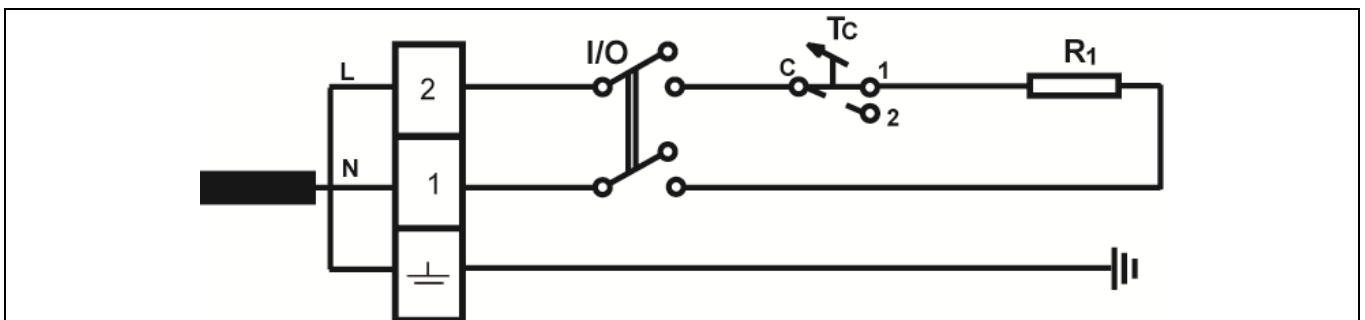
If any metal hydraulic pipes are installed (copper, iron, etc.) an earth connection must be made.

The electrical installation must comply with all national and local laws and regulations concerning electrical installations applicable at the time and place of installation.

2.4 Electrical installation of the RESISTOR KIT

The HTP range of combined deposit tanks has the option of heating the storage tank by means of an electrical resistor (optionally supplied by DOMUSA TEKNIK). The 1200W ceramic resistor (steatite) is sheathed in the flange supplied with the kit. Thus, the resistor can be directly extracted from the outside, without having to empty the storage tank, in a quick and clean operation.

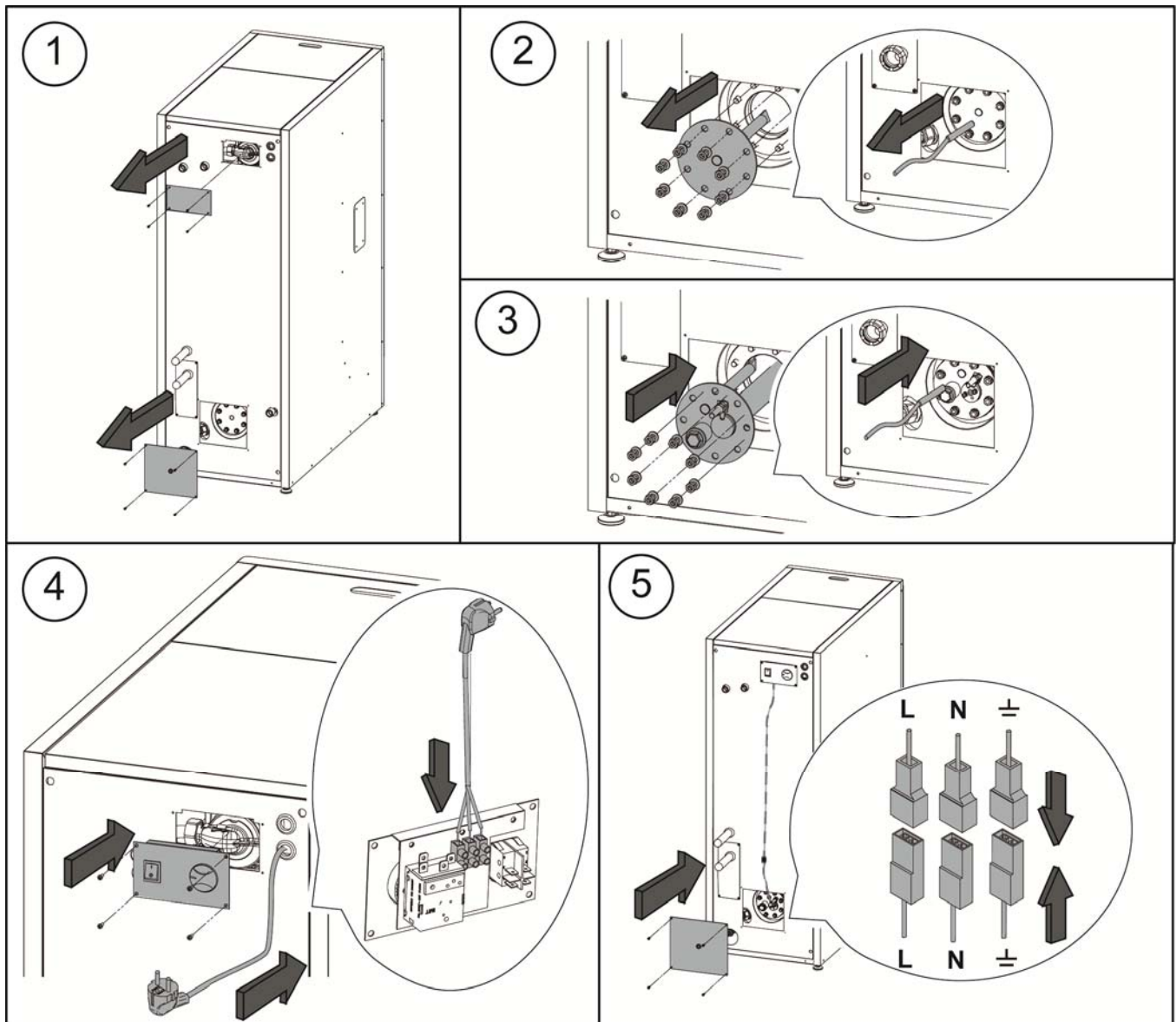
A switch, a **control** thermostat and the wires for easy interconnection are also supplied with the Kit. The electrical diagram for the installation is as follows:



An earth connection is essential.

For installing the power supply cable (not supplied with the kit) we suggest a cable section equal to or greater than 1 mm².

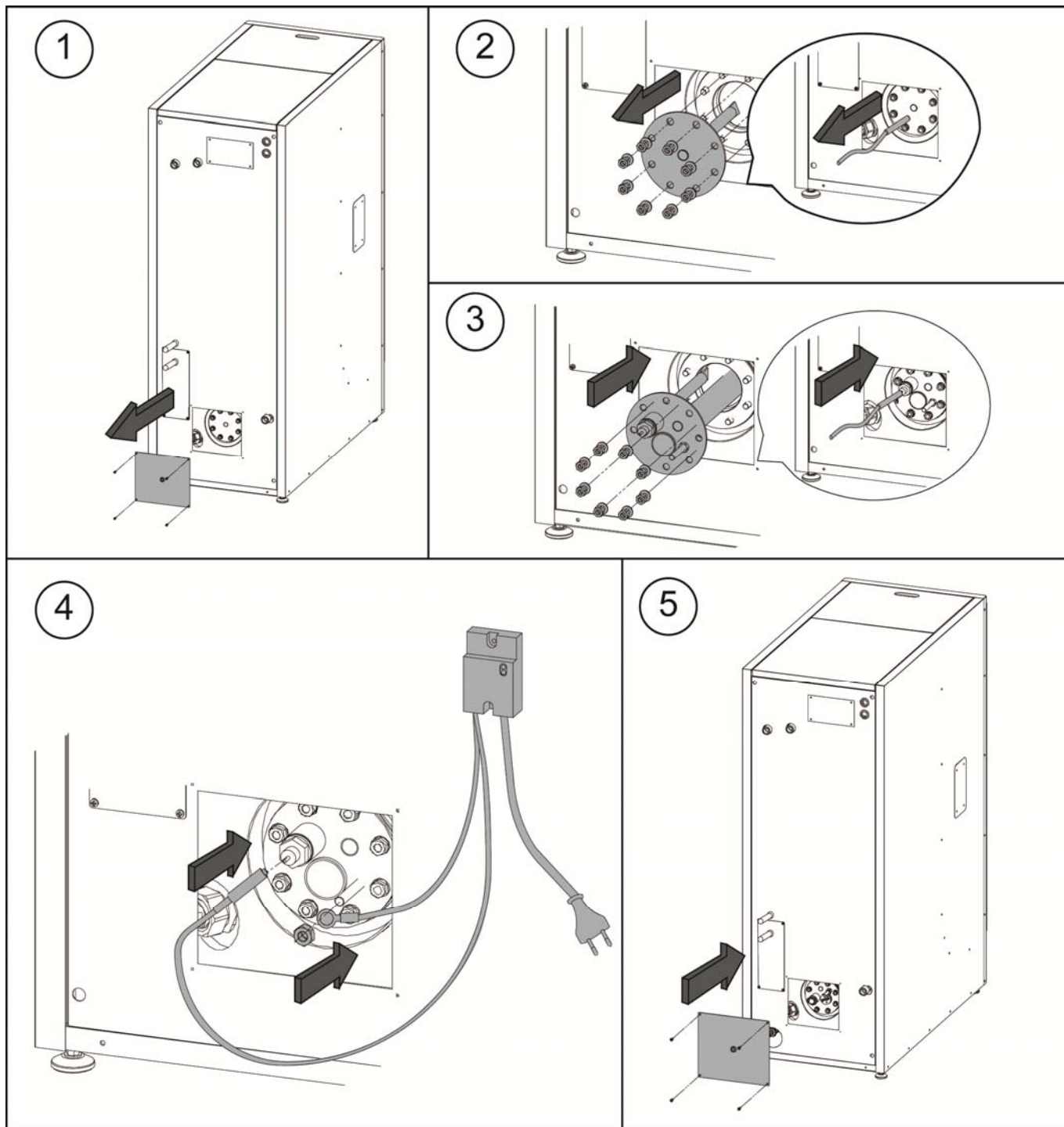
The steps to follow for installing the Resistor Kit are shown below:



HTP

2.5 Cathodic protection

When the concentration of chlorides in the domestic water supply exceeds 250 mg/dm^3 , we recommend installing cathodic protection inside the DHW tank to prevent its premature deterioration. **DOMUSA TEKNIK** supplies an optional electronic cathodic protection suitable for the **HTP** range of tanks. For its correct installation, carefully read the assembly instructions.



2.7 Characteristics of the water

The water must comply with the characteristics defined in the CTE, otherwise it must be treated.

3 OPERATION

The **HTP** range of combined DHW and pellet deposit tanks have been specially designed to be used with the **BIOCLASS NG** boilers. Its compact design reduces the installation space with maximum comfort and with all the features.

The water deposit tank consists of a top quality tank, made entirely of stainless steel, complying with the strictest hygiene requirements and ensuring a long product life.

Heat exchange is accomplished by a corrugated stainless steel coil which, due to the turbulence generated and its large exchange surface, provides maximum DHW flow.

The storage tank design respects the water stratification, thereby maintaining the highest available volume of hot water. Furthermore, thanks to the high density polyurethane thermal insulation between the inner container and the outer casing, any heat leaks are limited, thus reducing energy consumption in the home.

All models support the installation a sheathed steatite electrical resistor with cathodic protection as an option.

4 DELIVERY OF THE SYSTEM

After the initial commissioning, the installer will explain to the user how the buffer tank functions, making any observations they consider relevant.

The installer is responsible for clearly explaining to the user the functioning of any control or regulation device forming part of the installation but not supplied with the buffer tank.

5 MAINTENANCE

To maintain the Domestic Water Storage tank assembly in perfect working order, a yearly service should be performed on both devices by **DOMUSA TEKNIK's** authorised personnel. In particular, we recommended for the storage tank:

- Once a year, perform a thorough cleaning of the inside of the DHW tank. Before emptying the hot water storage tank, drain the primary circuit.
- If the storage tank features electronic cathodic protection, its correct operation must be inspected once a year.
- The installation pressure should be kept at 1 - 1.5 bar.
- Ensure the correct functioning of the safety valve and the drain valve.
- If the system has been idle for a long period of time, ensure that the storage tank loading pump works properly. To do this, remove the front cover of the pump, leaving the pump shaft exposed. If the shaft does not rotate, turn the pump off by the pump switch. With a suitable screwdriver, lightly press the shaft and rotate it in both directions. Turn the switch back on.

We recommend that users periodically check the pressure level and temperature of the buffer tank, as well as the condition of the valves, fittings and accessories. In case of flow absence or reduced flow, clean the filter in base of Pressure Reducing Valve.

5.1 Emptying the DHW tank

When the hot water tank needs emptying, it is essential that the power is first turned off and the stopcock (mains water inlet) is closed. For emptying, open the drain valve and wait until the tank is completely empty.

6 TECHNICAL CHARACTERISTICS

MODEL		HTP 100-150	HTP 130-200
DHW total volume	L	100	130
Pellet storage capacity	Kg	150	200
Max. working pressure of tank	bar	7	
Max. storage temperature	°C	80	
Max. primary temperature	°C	85	
Max. primary working pressure	bar	3	
Weight empty	Kg.	90	110
Weight full	Kg.	340	440
Continuous flow L/h $\Delta 30$ °C	Q_p 1m ³ /h	683	733
Peak flow L/10min $\Delta 30$ °C	Q_p 1m ³ /h	252	302

Domestic hot water test operating conditions:

- Boiler power: 25 kW
- Domestic water inlet temperature: 15°C,
- DHW temperature: 45°C,
- Primary hot water temperature: 80°C,
- Storage temperature: 60°C

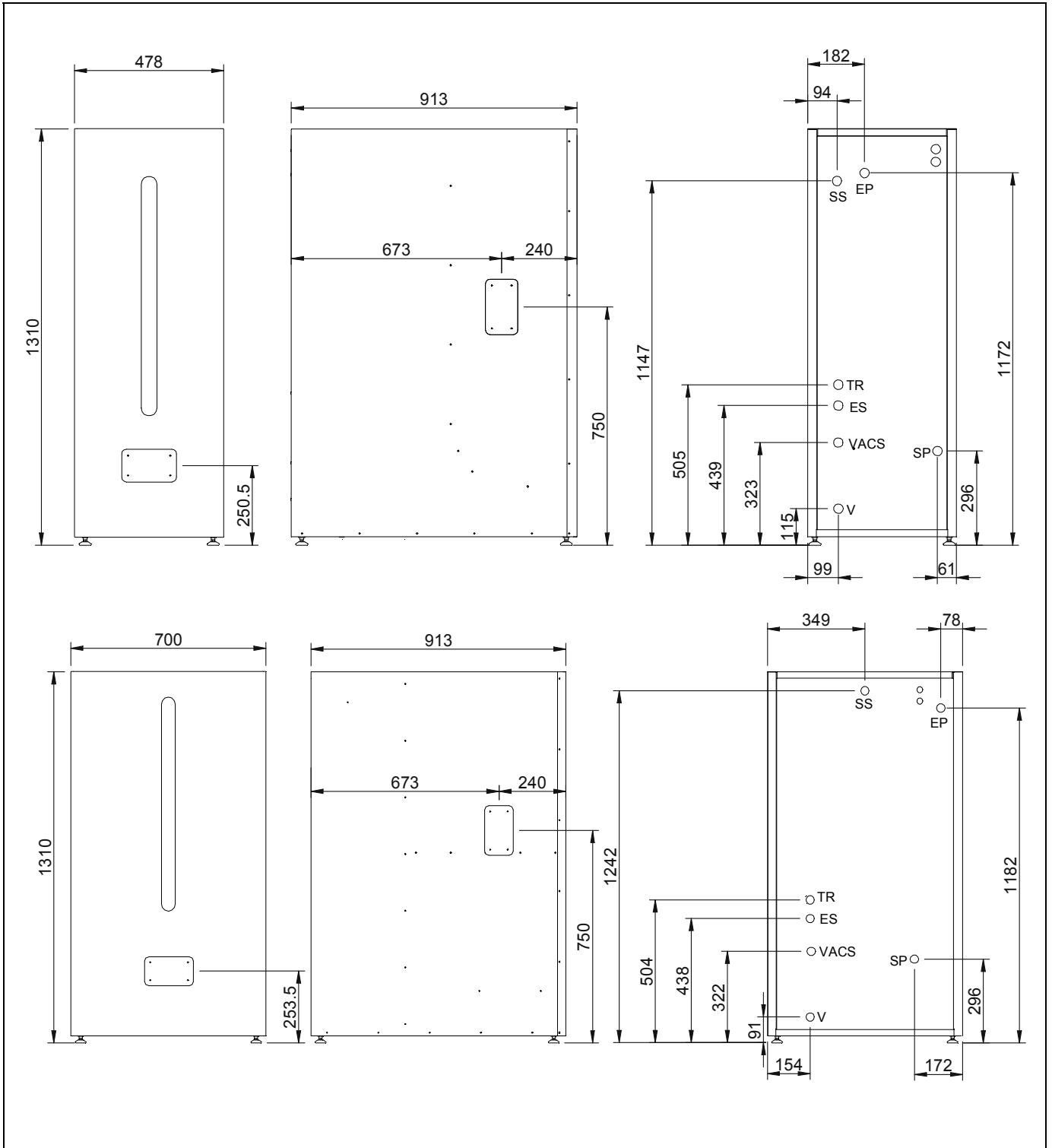
7 CIRCULATING PUMP STATUS CODES

The high efficiency pumps of the HTP deposit tanks include a Led (light) which displays their status.

PUMP LIGHT	DESCRIPTION	STATUS	CAUSE	SOLUTION
It is lit green	The pump is functioning	The pump operates according to its setting	Standard functioning	
It flashes red/green	The is ready for service but is not functioning	The pump will start up again automatically once the error has been solved	1. Low voltage $U < 160$ V or Excess voltage $U > 253$ V	1. Check the power supply $195 \text{ V} < U < 253 \text{ V}$
			2. Excess temperature of the module: the temperature of the motor is too high	2. Check the room temperature and that of the fluid
Flashes red	The pump is out of order	The pump is stopped (blocked)	The pump does not start up automatically.	Change the pump. Please contact your nearest official technical assistance service to have it replaced
Light off	There is no power supply	The electrical system is not receiving power supply	1. The pump is not connected to the power supply	1. Check the connection of the cable
			2. The LED is faulty	2. Check if the pump works
			3. The electrical system is faulty	3. Change the Pump. Change the pump. Please contact your nearest official technical assistance service to have it replaced

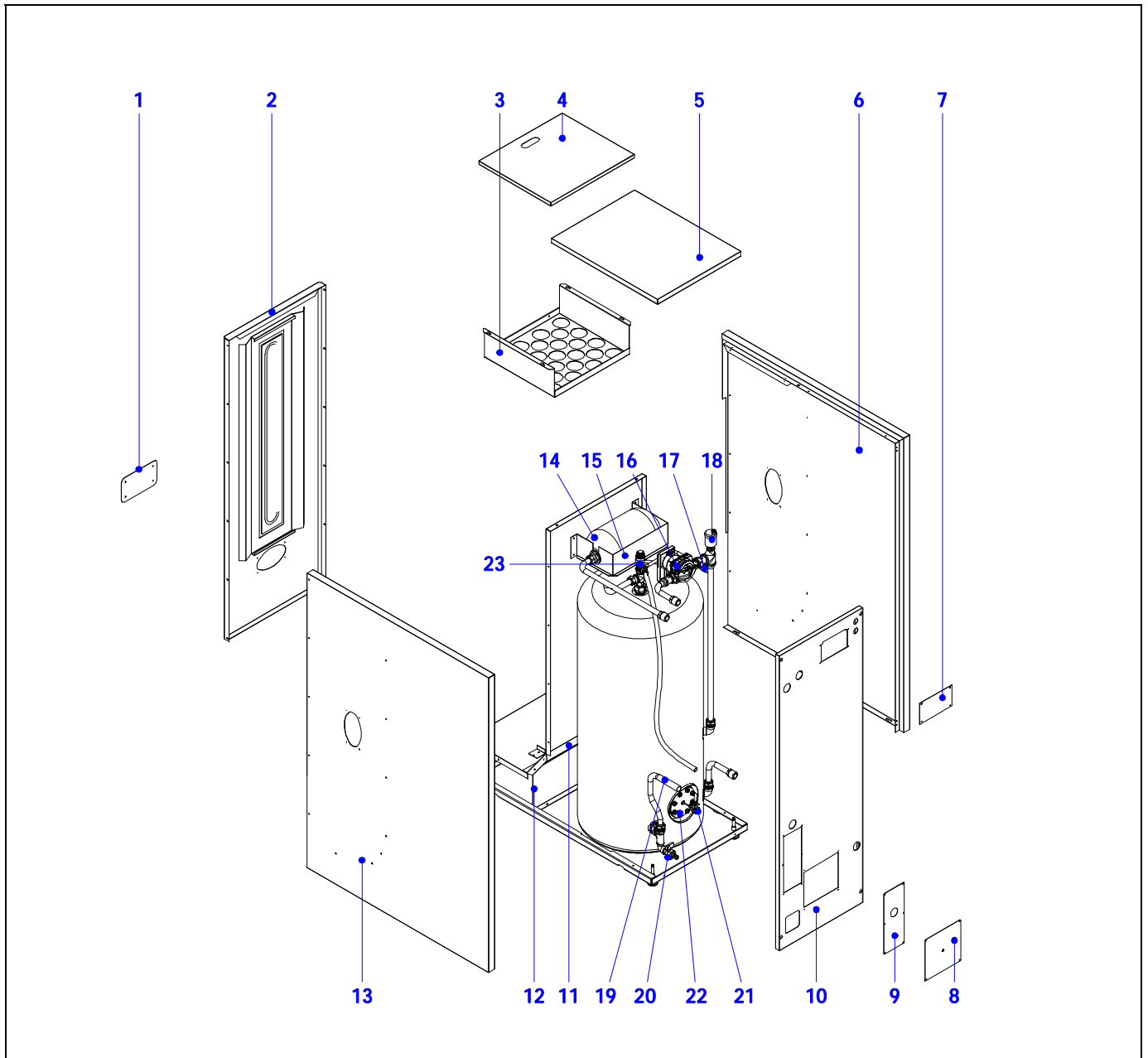
8 DIAGRAMS AND MEASUREMENTS

8.1 HTP 100-150 and HTP 130-200 tanks



9 SPARES LIST

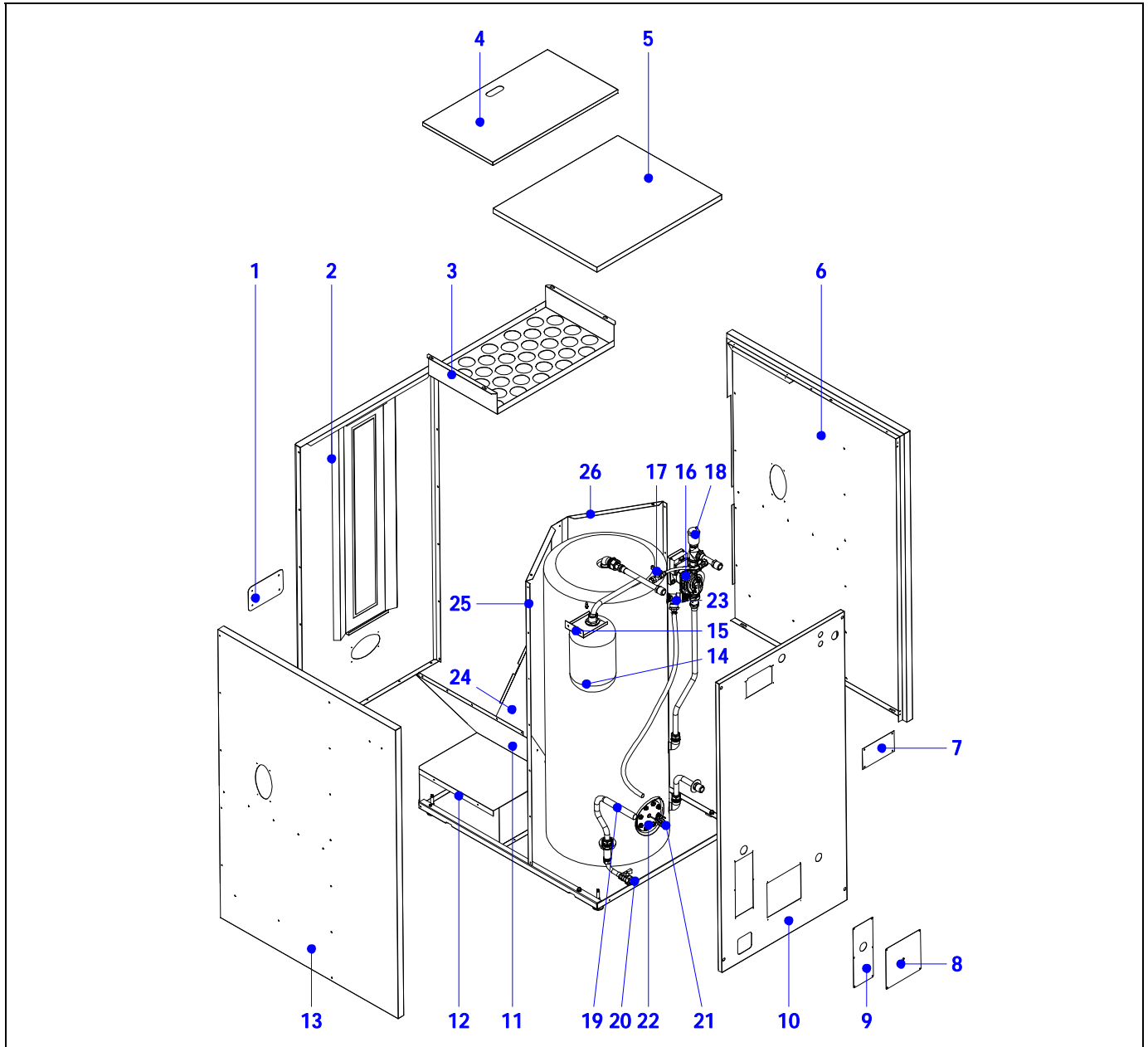
9.1 HTP 100-150 tanks



Pos.	Code	Designation	Pos.	Code	Designation
1	SEPO001430	Cover for oval hole	13	SEPO001876	HTP Right side panel 100-150
2	SEPO001875	HTP 100-150 front	14	CFOV000036	DHW expansion vessel
3	SEPO001885	Protective grille	15	SCHA010049	Vessel support
4	SEPO001880	Pellet Hopper Roof 100-150	16	CFOV000143	Yonos Pump para 6.
5	SEPO001884	Tank roof 100-150	17	CVAL000002	Fill valve
6	SEPO001877	HTP left side panel 100-150	18	CFOV000024	Automatic air bleed valve
7	SEPO001918	Resistor Kit Cover	19	SCOB012777	Cold inlet pipe
8	SEPO001882	Flange access cover	20	CVAL000034	Drain valve
9	SEPO001883	Safety unit cover	21	CELC000300	DHW sensor
10	SEPO001878	HTP 100-150 rear	22	SCON000791	Heating element flange
11	SEPO002861	Ramp	23	CVAL000051	Pressure and temperature relief valves
12	SCHA010028	Plinth			

HTP

9.2 HTP 130-200 tanks



<u>Pos.</u>	<u>Code</u>	<u>Designation</u>	<u>Pos.</u>	<u>Code</u>	<u>Designation</u>
1	SEPO001430	Cover for oval hole	15	SCHA010211	Vessel support
2	SEPO001889	HTP 130-200 front	16	CFOV000143	Yonos Pump For 6.
3	SEPO001896	Protective grille	17	CVAL000002	Fill valve
4	SEPO001892	Pellet Hopper Roof 130-200	18	CFOV000024	Automatic air bleed valve
5	SEPO001893	Tank roof 130-200	19	SCOB012778	Cold inlet pipe
6	SEPO001888	Left side panel 130-200	20	CVAL000034	Drain valve
7	SEPO001918	Resistor Kit Cover	21	CELC000300	DHW sensor
8	SEPO001882	Flange access cover	22	SCON000791	Heating element flange
9	SEPO001883	Safety unit cover	23	CVAL000051	Pressure and temperature relief valves
10	SEPO001897	HTP 130-200 rear	24	SEPO001891	Left ramp
11	SEPO001890	Right ramp	25	SEPO001895	Right back
12	SCHA010116	Plinth	26	SEPO001894	Left back
13	SEPO001887	Right side panel 130-200			
14	CFOV000036	DHW expansion vessel			

10 GUARANTEE CONDITIONS

DOMUSA TEKNIK's commercial guarantee covers the standard functioning of the products manufactured by **DOMUSA** Calefacción S.Coop., in accordance with the following conditions and time periods:

1. This **commercial guarantee** is valid for the following periods, as from the **start-up** date:

2 Years for electric and hydraulic elements: pumps, valves, etc.

5 Years for domestic hot water tanks.

During the 2-year period following the start-up date, **DOMUSA TEKNIK** will carry out any repairs of original flaws or defects totally free of charge.

After these 2 years have elapsed and until the end of the guarantee period, labour costs and call-out charges will be payable by the user.

2. The annual service is not included in the terms of this guarantee.

3. **The commissioning and annual service** are to be carried out by personnel authorised by **DOMUSA TEKNIK**.

4. The **commercial guarantee** will be null and void in the following cases:

- If the **annual service** has not been carried out by personnel authorised by **DOMUSA TEKNIK**.
- If the boiler has not been installed in accordance with the applicable laws and regulations for this type of appliance.
- If the boiler has not been commissioned immediately after its installation, by personnel authorised by **DOMUSA TEKNIK**.

Failures due to misuse or incorrect installation, use of non-suitable power or fuel, supply with water with physical or chemical properties causing incrustation or corrosion, incorrect handling of the appliance and, in general, for any reason beyond **DOMUSA TEKNIK's** control, are excluded from this guarantee.

This guarantee does not affect the consumer's rights as stipulated by law.

DOMUSA

TEKNIK

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DOMUSA TEKNIK reserves the right to make modifications of any kind to its product characteristics without prior notice.



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