

Installation, User and Service Manual

Domestic hot water tank

110 ESL-H

Dear customer,

Thank you for purchasing this appliance.

Please read this manual carefully before using the product and keep it in a safe place for future reference.

In order to ensure continued safe and efficient operation we recommend that the product is regularly maintained. Our Service and After Sales organization can assist with this.

We hope you will receive many years of satisfactory service.

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1 Safety

1.1 General safety instructions

**Danger**

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

**Danger of electric shock**

Before any work, switch off the mains supply to the domestic hot water tank.

**Caution**

Only genuine spare parts may be used.

**Warning**

Only qualified professionals are authorised to work on the domestic hot water tank and the heating installation.

**Note**

Allow the space required to install the appliance correctly, referring to the chapter Dimensions of the Appliance.

Hydraulic safety

**Caution**

The appliance is intended to be permanently connected to the domestic water mains network.

**Note**

Respect the minimum and maximum water inlet pressure to ensure correct operation of the domestic hot water tank: refer to the chapter Technical Specifications.

**Caution**

Draining the domestic hot water tank:

1. Shut off the domestic cold water inlet.
2. Open a hot water tap in the installation.
3. Open a valve on the safety unit.
4. When the water stops flowing, the domestic hot water tank has been drained.



Caution

- The pressure limiter device (safety valve or safety unit) must be regularly operated in order to remove limescale deposits and ensure that it is not blocked.
- A pressure limiter device must be fitted to a discharge pipe.
- As water may flow out of the discharge pipe on the pressure limiter device, the pipe must be kept open to the air, in a frost-free environment, and at a continuous downward gradient.

To ascertain the type, specifications and connection of the pressure limiter device, refer to the chapter Connecting the Domestic Hot Water Tank to the Drinking Water Mains in the Installation and Service Manual.



Caution

A pressure reducer (not provided) is required when the supply pressure exceeds 80% of the safety valve or safety unit calibration and must be located upstream of the appliance.



Caution

There must be no cut-off devices between the safety valve or unit and the domestic hot water tank.

Electrical safety



Caution

A disconnection method must be allowed in the fixed pipes in accordance with the rules on installation in force in the country.



Caution

If a power cord comes with the appliance and it turns out to be damaged, it must be replaced by the manufacturer, its after sales service or persons with similar qualifications in order to obviate any danger.



Caution

Install the appliance in accordance with national rules on electrical installation.



Caution

If the appliance is not wired in the factory, carry out the wiring according to the wiring schematics described in the chapter Electrical Connections in the appliance's instructions manual.

**Caution**

- The boiler must always be connected to the protective earthing.
- Earthing must comply with the prevailing installation standards.
- Earth the appliance before making any electrical connections.

For the type and calibre of the protective equipment: refer to the chapter Recommended Cable Cross-sections in the Installation and Service Manual.

**Caution**

To connect the appliance to the electricity mains, refer to the chapter Electrical Connections in the appliance's instructions manual.

**Caution**

Do not neglect to service the domestic hot water tank. Contact a qualified professional or take out a maintenance contract for the annual domestic hot water tank service.

**Note**

This manual can also be found on our internet site.

1.2 Recommendations

**Caution**

Do not neglect to service the domestic hot water tank. Contact a qualified professional or take out a maintenance contract for the annual domestic hot water tank service.

**Caution**

Do not bring the heating water and the domestic water into contact with each other in the the heating system.

**Caution**

Do not allow domestic water to circulate in the exchanger, which is reserved for the heating water.

**Note**


Insulate the pipes in the system to reduce heat losses.


**Note**

Remove the casing only to perform maintenance and repair work. Put the casing back in place after maintenance and repair work.


**Caution**


Do not make any modifications to the domestic hot water tank without the written consent of the manufacturer.


 **Note**
Never remove or cover labels and data plates affixed to the appliances. Labels and data plates must be legible throughout the entire lifetime of the appliance. Immediately replace damaged or illegible instructions and warning stickers.


 **Note**
Only qualified professionals are authorised to assemble, connect, commission and service the installation.

1.3 Specific safety instructions

 **Warning**
In order to limit the risk of being scalded, the installation of a thermostatic mixing valve on the domestic hot water flow pipes is obligatory.

 **Warning**
Take precautions with the domestic hot water. Depending on the boiler settings, the domestic hot water temperature may exceed 65°C.

 **Note**
The domestic hot water temperature setting is made from the boiler control panel.

 **See**
Boiler installation, service and user manual.

1.4 Liabilities

1.4.1 Manufacturer's liability

Our products are manufactured in compliance with the requirements of the various Directives applicable. They are therefore delivered with the **CE** marking and any documents necessary. In the interests of the quality of our products, we strive constantly to improve them. We therefore reserve the right to modify the specifications given in this document.

Our liability as manufacturer may not be invoked in the following cases:

- Failure to abide by the instructions on installing the appliance.
- Failure to abide by the instructions on using the appliance.
- Faulty or insufficient maintenance of the appliance.

1.4.2 Installer's liability

The installer is responsible for the installation and initial commissioning of the appliance. The installer must abide by the following instructions:

- Read and follow the instructions given in the manuals provided with the appliance.

- Install the appliance in compliance with prevailing legislation and standards.
- Carry out initial commissioning and any checks necessary.
- Explain the installation to the user.
- If maintenance is necessary, warn the user of the obligation to check the appliance and keep it in good working order.
- Give all the instruction manuals to the user.

1.4.3 User's liability

To guarantee optimum operation of the system, you must abide by the following instructions:

- Read and follow the instructions given in the manuals provided with the appliance.
- Call on a qualified professional to carry out installation and initial commissioning.
- Get your installer to explain your installation to you.
- Have the required inspections and maintenance carried out by a qualified installer.
- Keep the instruction manuals in good condition close to the appliance.

2 About this manual

2.1 General

These instructions are intended for the installer and the user of a 110 ESL-H domestic hot water tank.

2.2 Symbols used

2.2.1 Symbols used in the manual

This manual uses various danger levels to draw attention to special instructions. We do this to improve user safety, to prevent problems and to guarantee correct operation of the appliance.



Danger

Risk of dangerous situations that may result in serious personal injury.



Danger of electric shock

Risk of electric shock.



Warning

Risk of dangerous situations that may result in minor personal injury.



Caution

Risk of material damage.



Note

Please note: important information.



See

Reference to other manuals or pages in this manual.

2.2.2 Symbols used on the domestic hot water tank

Fig.1 Symbols used on the domestic hot water tank



MW-4000095-1

- 1 Alternating current
- 2 Protective earthing
- 3 Read the manuals provided before installing and commissioning the domestic hot water tank
- 4 Dispose of used products in an appropriate recovery and recycling structure

3 Technical specifications

3.1 Homologations

3.1.1 Directives

This product complies with the requirements of the following European Directives and Standards:

- Low Voltage Directive 2014/35/EU
Generic standard: EN 60335-1
Relevant standards: EN 60335-2-40, EN 60335-2-21
- Electromagnetic Compatibility Directive 2014/30/EU
Generic standards: EN 61000-6-3, EN 61000-6-1
Relevant Standard: EN 55014

Apart from the legal provisions and Directives, the additional Directives described in these instructions must also be observed.

For all provisions and Directives referred to in these instructions, it is agreed that all addenda or subsequent provisions will apply at the time of installation.

3.2 Technical data

3.2.1 Domestic hot water tank

Tab.1 Heating water circuit

	Unit	110 ESL-H
Maximum operating temperature	°C	95
Maximum operating pressure	bar (MPa)	3 (0.3)
Exchanger capacity	litres	4.6
Exchange surface	m ²	0.68

Tab.2 Domestic hot water circuit

	Unit	110 ESL-H
Maximum operating temperature	°C	70
Maximum operating pressure	bar (MPa)	10 (1.0)
Water capacity	litres	110

Tab.3 Weight

	Unit	110 ESL-H
Shipping weight	kg	72

3.2.2 Performances of the domestic hot water tank for use in combination with floor-standing oil-fired boilers

Tab.4 Performances in combination with condensing boilers

	Unit	19 kW	24 kW
Specific flow rate (EN 13203)	l/min	17.5	18
Draw-off capacity (EN13203)	l/10 min	190	192
Hourly flow rate ($\Delta T = 35^{\circ}\text{C}$)	l/h	440	530
Number of housing units (DIN 4703)	NL	1.2	1.3

	Unit	19 kW	24 kW
Cooling constant CC (EN 625)	Wh/d/°C/l	0.30	0.30
Standby losses $\Delta T = 45$ K (EN 625)	W	65.6	65.6
Maintenance consumption (EN 12897)	kWh/24h	1.18	1.18

Tab.5 Performances in combination with non-condensing boilers

	Unit	22 kW
Specific flow rate (EN 13203)	l/min	18.5
Draw-off capacity (EN13203)	l/10 min	190
Hourly flow rate ($\Delta T = 35^\circ\text{C}$)	l/h	550
Number of housing units (DIN 4703)	NL	1.3
Cooling constant CC (EN 625)	Wh/d/°C/l	0.30
Standby losses $\Delta T = 45$ K (EN 625)	W	65.6
Maintenance consumption (EN 12897)	kWh/24h	1.18

3.2.3 Domestic hot water sensor specifications

Tab.6 Sensor specifications

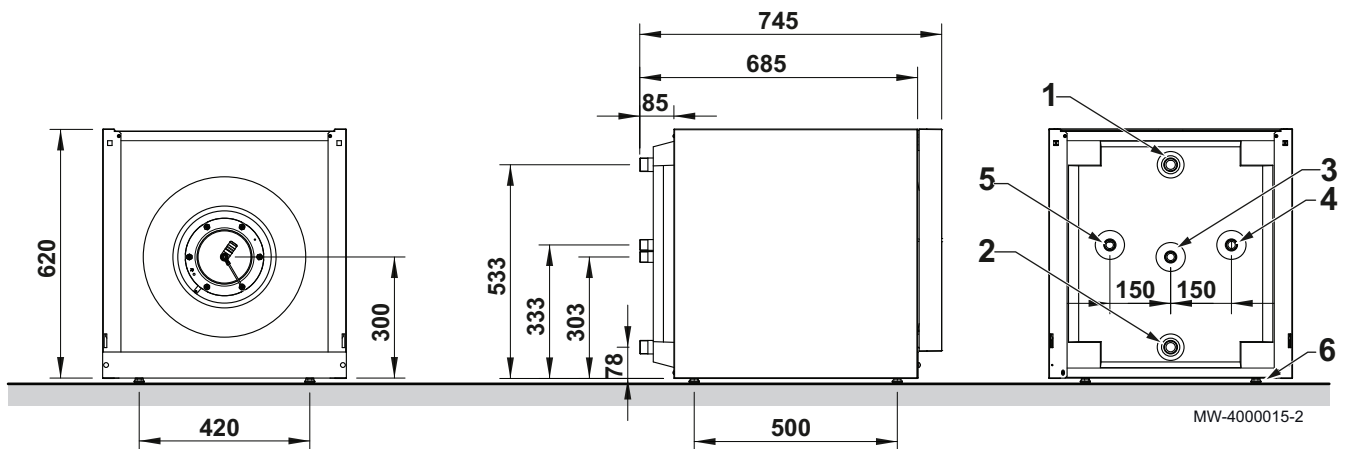
Temperature (in °C)	10	20	25	30	40	50	60	70	80
Resistance (in ohms)	19691	12474	10000	8080	5372	3661	2536	1794	1290

3.2.4 Specifications of the magnesium anode

Initial diameter of the anode	40 mm
Initial length of the anode	305 mm

3.3 Dimensions and connections

Fig.2 Dimensions and connections



- 1 Domestic hot water outlet G 1"
- 2 Domestic cold water inlet G 1"
- 3 Mounting point for recirculating loop G 3/4" (optional)
- 4 Heating water flow from the boiler G 3/4"
- 5 Heating water return to the boiler G 3/4"
- 6 Adjustable feet (10 to 20 mm from the floor)

4 Description of the product

4.1 General description

The **110 ESL-H** domestic hot water tank comes ready for connection to a condensing or non-condensing oil boiler.

110 ESL-H domestic hot water tanks can be connected to boilers used for heating domestic hot water.

Main components:

- The tank is made of high quality steel and is lined with food safe quality enamel vitrified at 850°C, which protects the tank from corrosion.
- The tank is protected against corrosion by a magnesium anode.
- The coil-shaped heat exchanger welded into the tank is made of smooth piping, its external surface, which comes into contact with drinking water, being enamelled.
- The appliance is insulated by CFC-free (chlorofluorocarbon-free) polyurethane foam, which helps to reduce heat losses to a minimum.
- The outside casing is made of painted steel sheets.

This domestic hot water tank is offered exclusively as a package with the products listed in the table below and cannot be used as an independent tank.



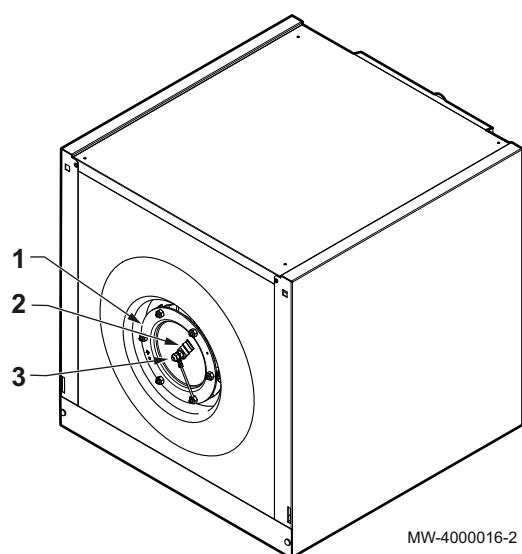
Note

The energy labels, product fiches and technical specifications pertaining to product packages are available on our internet site.

Range	Appliances
Sempre Nova	N 22 - I 22 - I 22 FF
Sempre Nova HTE	HTE 19 - HTE 24
Argenta GT, Argenta GTF	24 - 24 GT - 24 GT FF
Argenta GT Condens	20 GT Condens - 24 GT Condens

4.2 Main components

Fig.3 Main components



- 1 Hatch
- 2 Location for sensor
- 3 Magnesium anode

4.3 Standard delivery

The domestic hot water tank comes in a package comprising:

- The complete DHW tank;
- One front panel;
- One trim panel;

4 Description of the product

- One insulated cover;
- One data plate;
- Boiler retaining screws;
- An instructions bag containing:
 - Adjustable feet;
 - One drain valve;
 - One domestic hot water sensor;
 - One screws bag;
 - Clips;
 - One installation, user and service manual.

5 Before installation

5.1 Regulations governing installation

**Note**

The installation must comply on all points with prevailing regulations and directives, which govern work and interventions in individual homes, blocks of flats and other buildings.

**Note**

Only qualified professionals are permitted to install the domestic hot water tank, in accordance with prevailing local and national regulations.

**Caution**

In compliance with the safety rules, fit a sealed safety valve to the domestic cold water tank inlet on the domestic hot water tank.

**Caution**

The components used for the connection to the cold water supply must comply with the prevailing standards and regulations in the country concerned.

5.2 Installation requirements

5.2.1 Water operating pressure

The tanks on our domestic hot water heaters can run at a maximum operating pressure of 1.0 MPa (10 bar). The recommended operating pressure is under 0.7 MPa (7 bar).

5.2.2 Domestic water quality

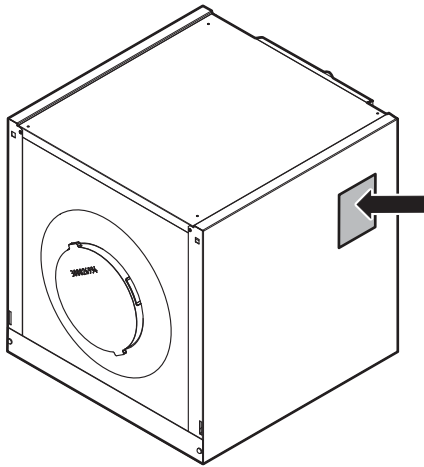
In regions where the water is very hard ($T_h > 20^\circ\text{f}$), we recommend fitting a softener.

The water hardness must always be between 12°f and 20°f to be capable of providing effective protection against corrosion.

The softener does not bring about a derogation from our warranty provided that it is approved and set pursuant to the codes of practice and the recommendations given in the instructions for the softener and is regularly inspected and maintained.

5.3 Choice of the location

Fig.4 Data plate



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5.3.1 Data plate

The data plate must be accessible at all times.

The data plate identifies the domestic hot water tank and provides the following information:

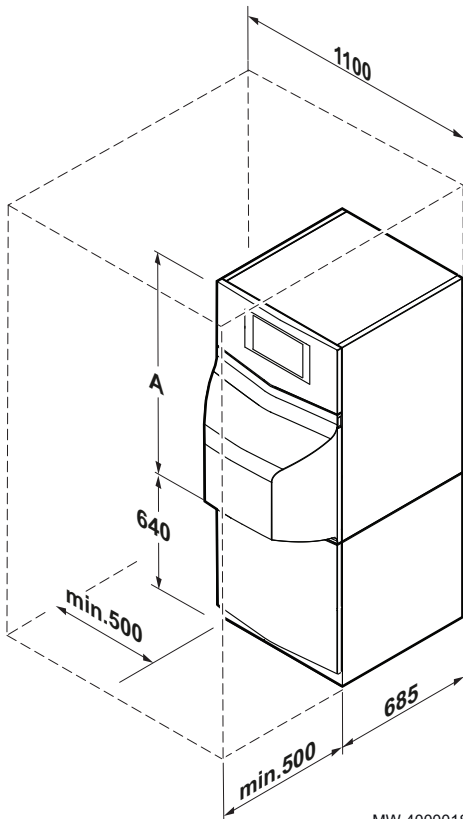
- Type of product
- Date of manufacture (Year — Week)
- Serial number
- CE identification number



Note

Never remove or cover labels and data plates affixed to the appliances. Labels and data plates must be legible throughout the entire lifetime of the appliance. Immediately replace damaged or illegible instructions and warning stickers.

Fig.5 Overall space needed for the domestic hot water tank



MW-4000018-3

5.3.2 Overall space needed for the domestic hot water tank

A Height of the boiler (varies depending on the boiler model).

Install the domestic hot water tank beneath the boiler. To ascertain the space to be allowed around the domestic hot water tank in order to facilitate access and maintenance, refer to the boiler's installation and service manual.

- Set the domestic hot water tank on a raised base frame to facilitate cleaning of the premises.
- Install the domestic hot water tank as close as possible to the draw-off points in order to minimise energy losses through the pipes.



Caution

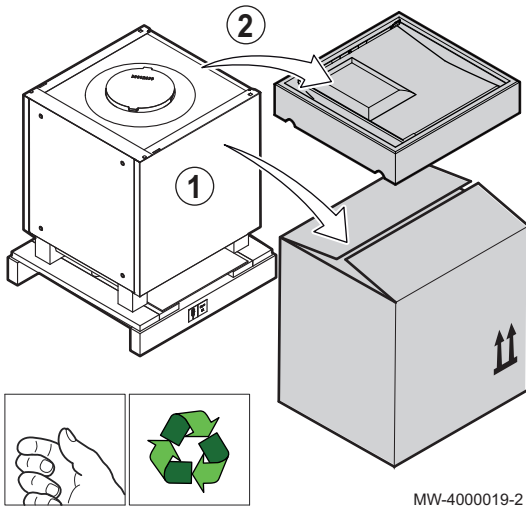
Install the domestic hot water tank in a frost-free environment.

5.3.3 Discharge

Install a water discharge device in the boiler room, as well as a funnel-siphon, for the safety unit.

5.4 Unpacking & initial preparation

Fig.6 Unpacking



5.4.1 Unpacking the domestic hot water tank

1. Remove the packaging from the domestic hot water tank but leave the tank on the shipping pallet.

i Note
The domestic hot water tank is shipped in the vertical position.

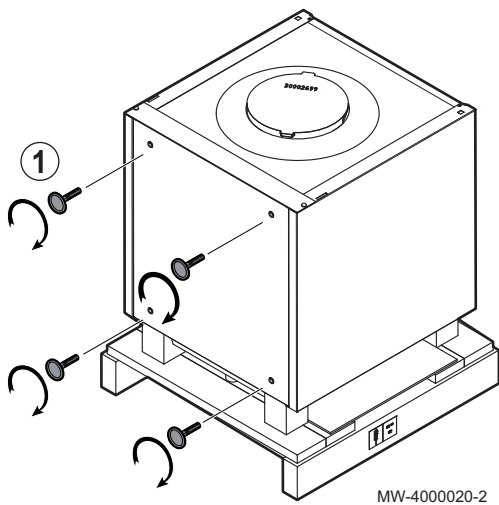
2. Remove the protective packaging.

5.4.2 Positioning the domestic hot water tank

- Have two people available.
 - Handle and manoeuvre the domestic hot water tank with gloves.
1. Screw the 4 adjustable feet to the bottom of the domestic hot water tank.

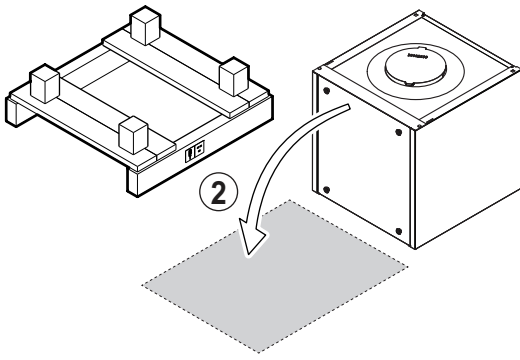
i Note
The 4 adjustable feet are delivered in the instructions bag.

Fig.7 Fitting the 4 adjustable feet



5 Before installation

Fig.8 Positioning the domestic hot water tank



2. Put the domestic hot water tank in position and tilt on the ground.



Note

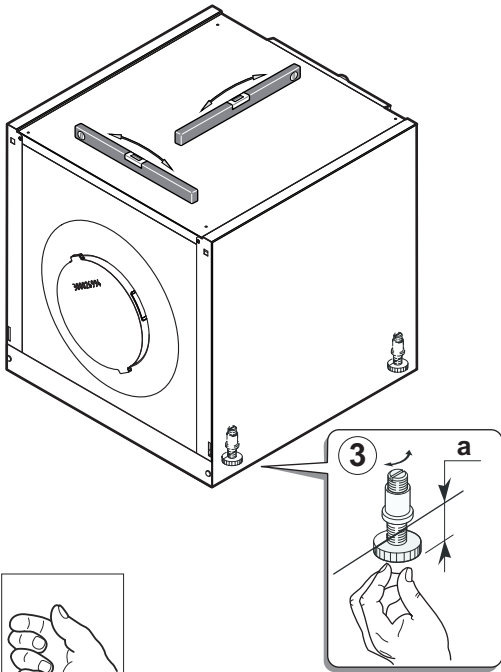
Be careful to lift the domestic hot water tank slightly in order not to damage the bottom of the panels.



MW-400021-1

Fig.9 Levelling the domestic hot water tank

3. Level the domestic hot water tank with the adjustable feet.



a	Adjustment range: 10 to 20 mm from the floor
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6 Installation

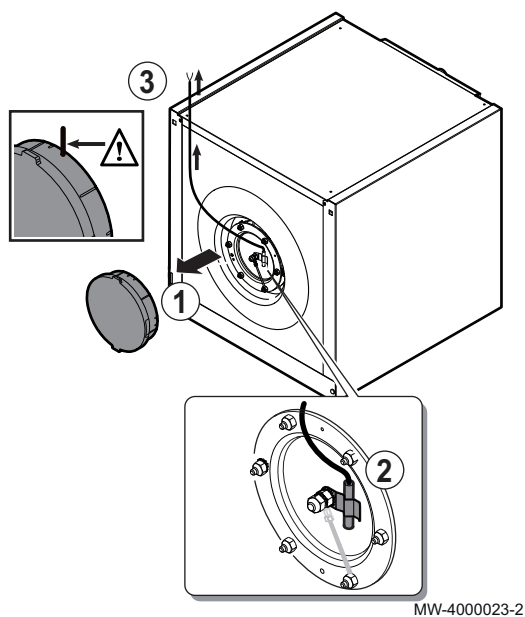
6.1 General

Installation must be carried out in accordance with the prevailing regulations, codes of practice and the recommendations in this manual.

6.2 Mounting

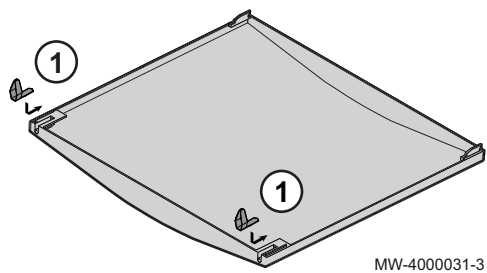
6.2.1 Mounting the domestic hot water sensor

Fig.10 Mounting the domestic hot water sensor



1. Remove the insulated cover
2. Put the domestic hot water sensor in place.
3. Put the insulated cover back in place, feeding the sensor cable through the notches in the cover.

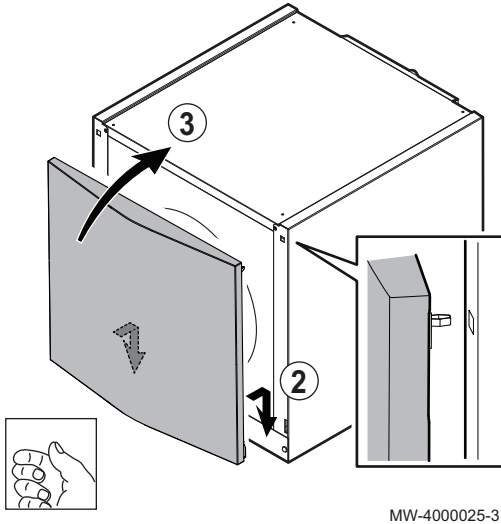
Fig.11 Putting the clips in place



6.2.2 Mounting the front panel

1. Slide the clips (provided in the instructions bag) into the grooves on the inside of the front panel.

Fig.12 Fitting the hooks



2. Insert the bottom of the panel into the notches on the domestic hot water tank.
3. Press firmly on the top of the panel to secure it to domestic hot water tank.

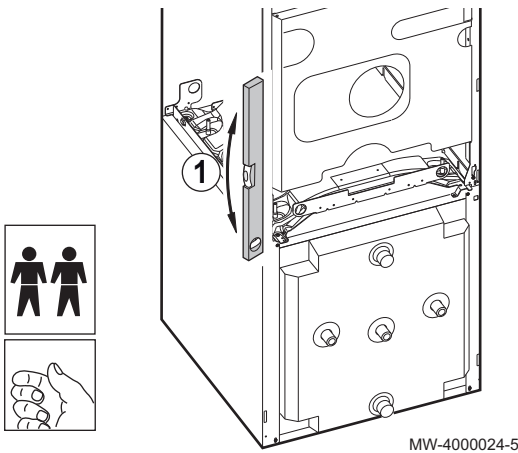
6.2.3 Mounting the boiler on the domestic hot water tank



Note

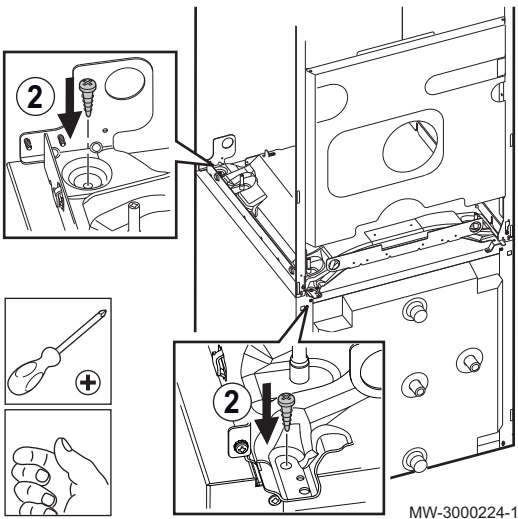
- Have 2 people available.
- Handle and manoeuvre the domestic hot water tank with gloves.

Fig.13 Aligning the boiler and the domestic hot water tank.



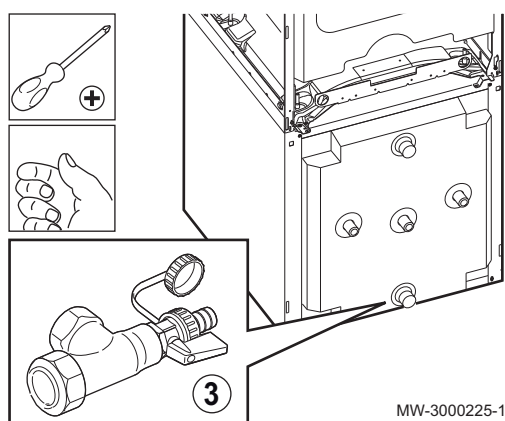
1. Install the boiler on the front of the domestic hot water tank, taking care to correctly align the side panels of the boiler and the domestic hot water tank.

Fig.14 Securing the boiler to the domestic hot water tank.



2. Secure the boiler to the domestic hot water tank using the screws provided in the instructions bag.

Fig.15 Adding a T-fitting and a valve.



6.3 Water connections

3. Add a T-fitting and a valve (not provided) to the domestic hot water tank drain outlet.

6.3.1 Connecting the domestic hot water tank to the drinking water mains

1. Flush the drinking water inlet pipes in order to prevent metal or other particles from entering the appliance's tank.
2. Hydraulically isolate the domestic water circuit with a stop valve to facilitate maintenance operations on the domestic hot water tank.
3. Install a pressure reducer if the mains pressure exceeds 80% of the calibration of the safety valve or unit (e.g. 5.5 bar (0.55 MPa) for a safety unit calibrated to 7 bar (0.7 MPa)).



Caution

The pressure reducer must be installed upstream of the appliance and downstream of the water meter in such a way as to ensure the same pressure in all of the system's pipes.

4. Install a non-return valve between the safety unit and the pressure reducer to prevent the backflow of domestic hot water into the domestic cold water circuit.
5. Incorporate a sealed safety valve calibrated to 7 bar (0.7 MPa) (not provided) on the domestic cold water inlet, close to the tank, in a position which is easy to reach.



Caution

There must be no cut-off devices between the safety valve or unit and the domestic hot water tank.



Note

Mount the safety valve above the domestic hot water tank to avoid having to drain the domestic hot water tank when working on it.



Note

Install a water drain in the boiler room and a funnel-siphon for the safety unit.



Note

6. Install the drain valve at the bottom of the domestic hot water tank.
7. Make the connection to the domestic cold water.



See

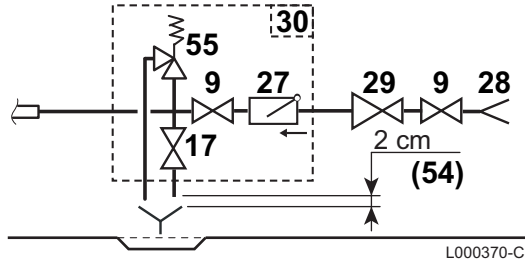
Hydraulic installation diagram shown in the boiler's installation and maintenance manual.

■ Safety unit discharge pipe

To avoid restricting the flow of water in the event of overpressure:

- The safety unit discharge pipe must be kept in the open, in a frost-free environment, and have a continuous, downward gradient.

Fig.16 Safety unit



- The cross section of the safety unit discharge pipe must be at least equal to the cross section of the opening of the safety unit outlet.

■ **Description of the safety unit**

- 9 Isolation valve
- 17 Drain valve
- 27 Non-return valve
- 28 Domestic cold water inlet
- 29 Pressure reducer
- 30 Safety unit
- 54 End of the discharge pipe free and visible 2 to 4 cm above the flow funnel
- 55 Domestic hot water diaphragm safety valve, sealed and calibrated to 7 bar

■ **Sizing the safety unit**

The diameter of the safety unit and its connection to the tank must be at least equal to the diameter of the domestic cold water inlet on the tank.

6.3.2 Connecting the domestic hot water tank to the boiler



See

To connect the domestic hot water tank to the boiler, refer to the instructions that come with the connection kit.

6.3.3 Connecting the domestic hot water circuit



Warning

When making the connection, it is imperative that the standards and corresponding local directives be respected.



Caution

If the mains pipes are made of copper, fit a sleeve made of steel, cast iron or any other insulating material between the domestic hot water tank's DHW outlet and the pipes to prevent corrosion to the connection.



Caution

Limit temperature at the draw-off point: the maximum domestic hot water temperature at the draw-off point is subject to special regulations in the various countries in which the appliance is sold in order to protect the user. These special regulations be observed when installing the appliance.

1. Mount a domestic water thermostatic mixer valve (not provided) on the domestic hot water tank outlet.
2. Install a recirculation loop if necessary.

■ **Domestic hot water recirculation loop**

To guarantee the availability of domestic hot water as soon as the taps are turned on, a recirculation loop between the draw-off points and the domestic hot water tank's recirculation pipes can be installed.



Note

Fit a non-return valve into this loop.



Note

Run the domestic hot water recirculation loop via the boiler control system or an additional timer programmer to optimise energy consumption.

6.4 Electrical connections

6.4.1 Recommendations



Warning

- Any electrical connections must always be made by a qualified professional and with the power off.
- Earth the appliance before making any electrical connections.

Make the electrical connections of the appliance according to:

- The requirements of the prevailing standards;
- The instructions on the wiring diagrams provided with the appliance;
- The recommendations in these instructions.



Note

Earthing must comply with the prevailing installation standards.



Note

- Separate the sensor cables from the 230/400 V circuit cables.
- The installation must be fitted with a main switch.

6.4.2 Connecting the domestic hot water sensor

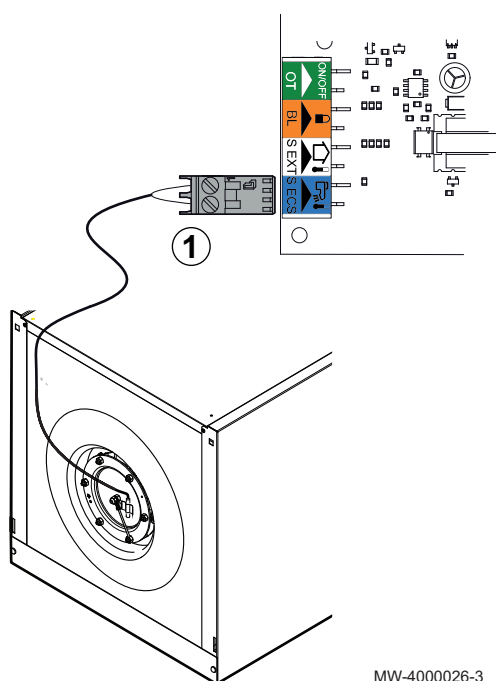
1. Connect the domestic hot water sensor to the **S.ECS** output on terminal block on the boiler.



See

Boiler installation and service manual.

Fig.17 Connecting the domestic hot water sensor



MW-4000026-3

6.5 Filling the system

6.5.1 Filling the domestic hot water circuit

1. Flush the domestic circuit and fill the tank through the cold water inlet pipe.
2. Open a hot water tap.
3. Completely fill the domestic hot water tank via the cold water inlet pipe, leaving a hot water tap open.
4. Close the hot water tap when the water flow is regular, without any noises in the pipes.
5. Degas all of the domestic hot water pipes by repeating steps 2 to 4 for each hot water tap in the system.



Note

Carefully degas the domestic hot water tank and the distribution network in order to eliminate noises and hammering caused by trapped air moving in the pipes during draw-off.

6. Check the safety devices (particularly the safety valve or safety unit), referring to the instructions provided with those components.

6.5.2 Filling the heating water circuit (coil)

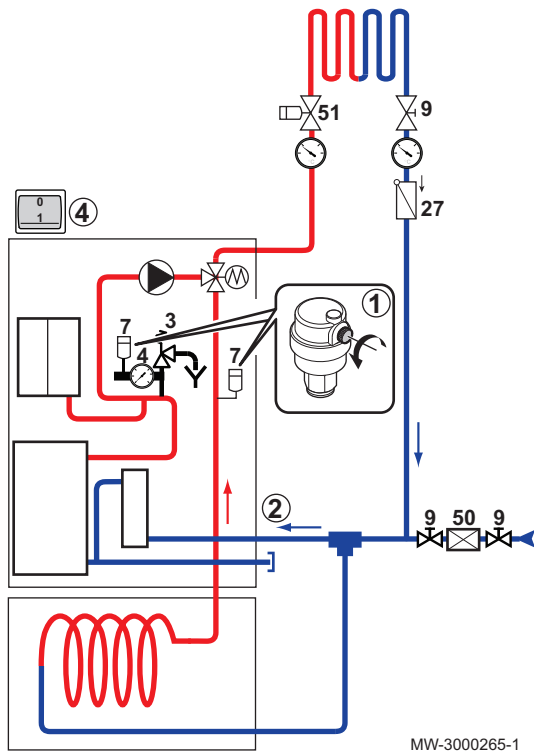
■ **Fully equipped boiler: 3-way valve, safety valve and expansion vessel**

Filling is done when the boiler is switched off and the 3-way valve is set to heating.

- 3 3-bar safety valve
- 4 Pressure gauge
- 7 Automatic air vent
- 9 Isolation valve
- 27 Non-return valve
- 50 Disconnecter
- 51 Thermostatic valve

1. Open the caps on the 2 air vents.
2. Fill through the system's return.
3. Pressurise: approximately 0.2 MPa (2 bar).
4. Switch on the boiler.
A venting cycle is performed automatically and lasts approximately 3 minutes.
During the venting cycle and after several **ON/OFFs** on the pump in heating mode, followed by several **ON/OFFs** on the pump in domestic hot water mode, the reversal valve switches alternately from heating mode to domestic hot water mode.
5. Repeat steps 3 and 4 until the coil is thoroughly vented.
6. Add water to the coil circuit if necessary.

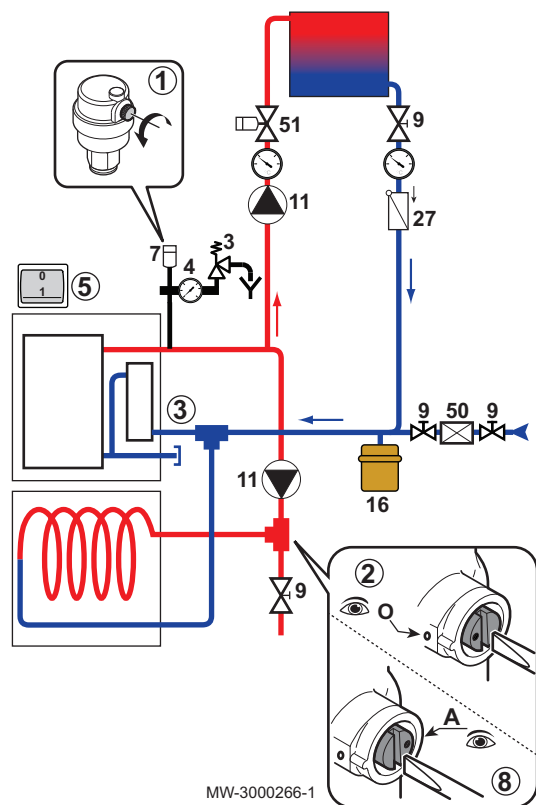
Fig.18 Fully equipped boiler



■ **Non-equipped boiler**

Filling is done when the boiler is switched off.

Fig.19 Non-equipped boiler



- 3 3-bar safety valve
- 4 Pressure gauge
- 7 Automatic air vent
- 9 Isolation valve
- 11 Heating pump
- 16 Expansion vessel
- 27 Non-return valve
- 50 Disconnecter
- 51 Thermostatic valve

1. Open the cap on the air vent.
2. Set the screw on the anti-thermosiphon valve to **O** (open).
3. Fill through the system's return.
4. Pressurise: approximately 0.2 MPa (2 bar).
5. Switch on the boiler.
 - A venting cycle is performed automatically and lasts approximately 3 minutes.
6. Repeat steps 4 and 5 until the coil is thoroughly vented.
7. Add water to the coil circuit if necessary.
8. Set the screw on the anti-thermosiphon valve back to **A** (automatic).

6.6 Completing the installation

1. Re-mount the front panels.
2. Tidy away or scrap the various packaging items.
3. Affix the data plate found in the instructions bag to a visible part of the domestic hot water tank.

7 Commissioning

7.1 Checklist before commissioning

7.1.1 Hydraulic circuits

1. Check visually the tightness of all connections in the domestic water circuit of the system.
2. Check visually the tightness of all connections in the heating water circuit of the system.

7.1.2 Electrical connections

1. Check that the sensors are correctly fitted and connected.
2. Check the electrical connections, particularly the earthing.
3. Be careful to put the front panel correctly back in place.

7.2 Commissioning procedure


Note

Initial commissioning must be done by a qualified professional.


Note

During the heating process, a certain amount of water may escape via the safety valve or unit because of the expansion of the water. This phenomenon is perfectly normal and must in no circumstances be hindered.


Note

Have the domestic hot water tank commissioned at the same time as the boiler.


See

Boiler installation and maintenance manual.

7.2.1 Commissioning the domestic hot water tank


Note

Once the domestic hot water tank has been connected to the boiler, the system is managed from the boiler control panel and no action need be taken directly on the domestic hot water tank itself.

1. Set the domestic hot water temperature on the boiler.
2. Set the thermostatic mixer valve to the maximum of 65°C.


Note

The thermostatic mixer valve is not supplied.


See

Thermostatic mixer valve instruction manual.

3. Check the safety devices (safety valve or unit), referring to the instruction manuals provided with those components.


Warning

The outlet pipe in the safety valve or unit must not be blocked.


See

Boiler installation and service manual.

8 Maintenance

8.1 General



Caution

Maintenance work must be carried out by a qualified professional.



Caution

Do not neglect the maintenance of the domestic hot water tank. Contact a qualified professional or take out a maintenance contract for the annual servicing of the domestic hot water tank.



Caution

Only genuine spare parts may be used.

8.2 Standard inspection and maintenance operations

8.2.1 List of standard maintenance operations to be performed

An annual inspection with tightness check is obligatory.

Schedule servicing of the domestic hot water tank at the same time as the boiler.

1. Check the safety valve or unit.
2. Check the magnesium anode.
3. Descale the domestic hot water tank.



For more information, see

Checking the safety valve or unit, page 28

Checking the magnesium anode, page 28

Descaling the domestic hot water tank, page 28

8.2.2 Removing and remounting the inspection hatch

■ Removing the inspection hatch

1. Shut off the domestic cold water inlet.
2. Open a hot water tap.
3. Drain the domestic hot water tank by opening the drain valve.
4. Remove the insulated cover.
5. Remove the inspection hatches.

Fig.20 Draining the DHW tank

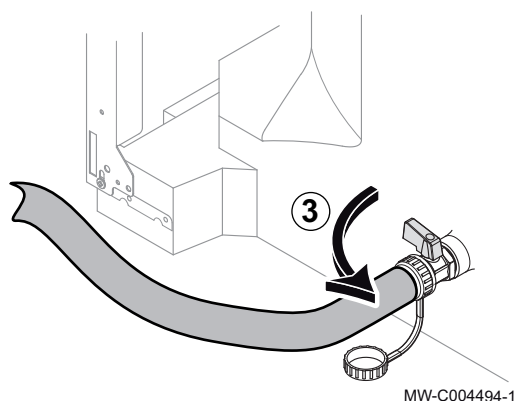
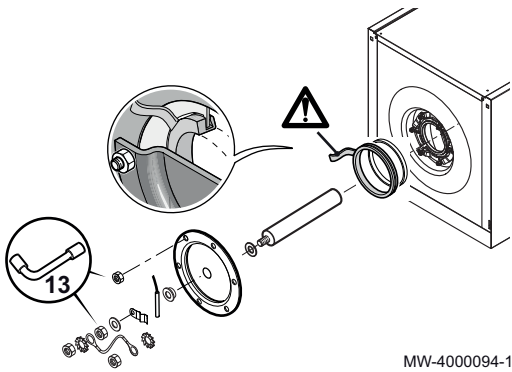


Fig.21 Replacing the lip gasket



MW-4000094-1

■ Replacing the inspection hatch

1. Replace the lip gasket + retainer ring and place it in the inspection opening, taking care to position the tab on the lip gasket outside the domestic hot water tank.



Caution

Each time it is opened, the lip gasket + retainer ring unit must be replaced to guarantee tightness.

2. Remount the unit.



Caution

- Use a torque wrench no. 13.
- The retaining screws on the inspection hatch must not be over tightened. **Torque:** 6 N·m +1/-0



Note

Approximately 6 N·m is obtained by holding the box spanner by the small lever.

3. Close the valves.
4. After reassembly, check the tightness of the side flange.
5. Proceed with commissioning.



For more information, see

Commissioning the domestic hot water tank, page 26

8.2.3 Checking the safety valve or unit

The safety valve or unit on the domestic cold water inlet must be operated at least **once a month** in order to ensure that it works properly and take precautions against possible pressure surges which would damage the domestic hot water tank.



Caution

Failure to follow this maintenance requirement may lead to the deterioration of the domestic hot water tank and void its warranty.



Caution

The outlet pipe in the safety valve or unit must not be blocked.



For more information, see

Removing and remounting the inspection hatch, page 27

8.2.4 Checking the magnesium anode

Check the condition of the anodes at the end of the first year. Determine the periodicity of subsequent checks after the first check, according to the wear and tear on the anodes. Magnesium anodes must be checked at least every 2 years.

1. Remove the inspection hatches.
2. Descale the domestic hot water tank if necessary.
3. Measure the diameter of the anode. Replace the anode if its diameter is less than 15 mm.
4. Reassemble the anode/inspection hatch unit.

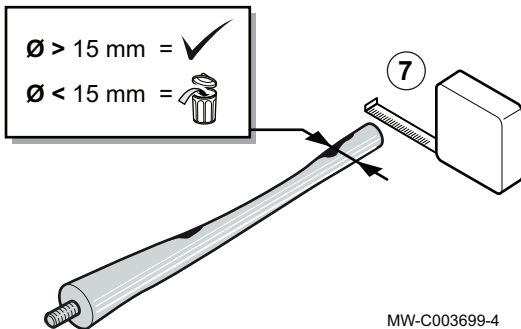


For more information, see

Removing and remounting the inspection hatch, page 27

Descaling the domestic hot water tank, page 28

Fig.22 Checking the magnesium anode



MW-C003699-4

8.2.5 Descaling the domestic hot water tank

In hard water regions, annual descaling of the appliance is recommended in order to maintain its performance.

**Note**

Schedule descaling at the same time as the domestic hot water is due to be drained.

1. Remove the inspection hatch.
2. Remove limescale deposits in the form of sludge or strips from the bottom of the tank. On the other hand, do not touch limescale adhering to the walls of the tank as it provides effective protection against corrosion and improves the insulation of the domestic hot water tank.
3. Remove limescale deposits from the exchanger to guarantee its performance.
4. Reassemble the anode/inspection hatch unit.

**For more information, see**

Removing and remounting the inspection hatch, page 27

8.2.6 Cleaning the casing

1. Clean the outside of the appliance using a damp cloth and a mild detergent.

9 Disposal

9.1 Scrapping and recycling



Note

Dismantling and scrapping of the domestic hot water tank must be done by a qualified professional in compliance with prevailing local and national regulations.

1. Disconnect the anode where one is connected.
2. Cut the electrical power to the boiler.
3. Close the water inlet valves.
4. Drain the installation.

10 Spare parts

10.1 General

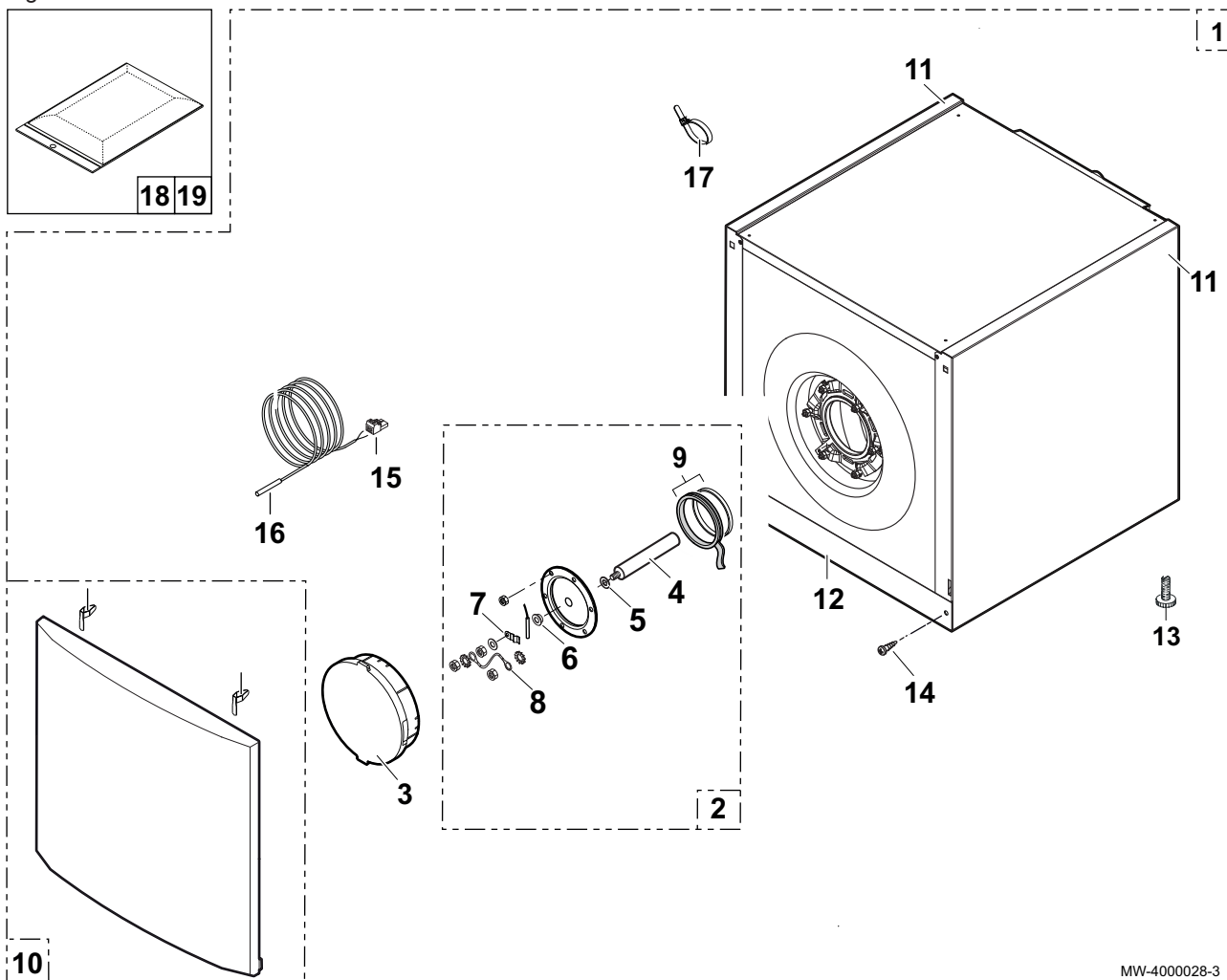
If inspection and maintenance work bring to light the need to replace a component in the domestic hot water tank, use only genuine spare parts or recommended spare parts and equipment.


Note

To order a spare part, give the reference number shown on the list.

10.2 Exploded views

Fig.23 Domestic hot water tank



MW-4000028-3

Markers	Reference	Description
1	7619490	Domestic hot water tank 110 ESL-H
2	200022433	Inspection hatch + magnesium anode + gasket
3	300026994	Insulated cover
4	89708901	Magnesium anode
5	95014035	Gasket Ø 35 x 8.5 x 2
6	94974527	Nylon spacer
7	95365009	Sensor attachment lug
8	89604901	Earthing wire (anode)
9	89705511	Gasket 7 mm + retainer ring 5 mm

Markers	Reference	Description
10	200022624	Front panel
11	7613531	Right or left side panel
12	200023263	Trim panel
13	97581059	Adjustable foot 8x25
14	95770692	Screw EC CB 7x12.7
15	300008957	2-pin connector
16	95362447	KVT60 sensor, length 2 m
17	95320780	Clamp
18	200021501	Inspection hatch fittings
19	200019786	Spring kit for front panel (10x)

11 Warranty

11.1 General

We would like to thank you for buying one of our appliances and for your trust in our product.

In order to ensure continued safe and efficient operation we recommend that the product is regularly inspected and maintained.

Your installer and our service department can assist with this.

11.2 Terms of warranty

The following provisions do not affect the application, in favour of the buyer, of the legal provisions with regard to hidden defects that are applicable in the buyer's country.

This appliance comes with a warranty that covers all manufacturing faults; the warranty period will commence on the date of purchase stated on the installer's invoice.

The warranty period is stated in our price list.

As a manufacturer, we can by no means be held liable if the appliance is used incorrectly, is poorly maintained or not maintained at all, or is not installed correctly (it is your responsibility to ensure that installation is carried out by a qualified installer).

In particular, we cannot be held liable for material damage, intangible losses or physical injury resulting from an installation that does not comply with:

- Legal or regulatory requirements or provisions laid down by the local authorities,
- National or local regulations and special provisions relating to the installation,
- Our manuals and installation instructions, in particular in terms of regular maintenance of the appliances,

Our warranty is limited to the replacement or repair of the parts found to be defective by our technical services team, excluding labour, transfer and transport costs.

Our warranty does not cover replacement or repair costs for parts that may become defective due to normal wear, incorrect usage, the intervention of unqualified third parties, inadequate or insufficient supervision or maintenance, a mains supply that is not appropriate or the use of unsuitable or poor quality fuel.

Smaller parts, such as motors, pumps, electrical valves etc., are guaranteed only if these parts have never been dismantled.

The rights established in European Directive 99/44/EEC, implemented by legal decree No. 24 of 2 February 2002 and published in Official Journal No. 57 of 8 March 2002, remain in force.

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