Installation Guide

WT-T 300 WT-T 500



Thermia AB is not liable or bound by warranty if these instructions are not adhered to during installation or service. The English language is used for the original instructions. Other languages are a translation of the original instructions. (Directive 2006/42/EC) © Copyright Thermia AB

Installation

The hot water heater should stand on a solid surface and be levelled with assistance from the setscrews underneath the tank. The tank models that come without setscrews can be levelled with assistance of a shim. This must be done before the tank is connected to the pipes and filled with water. Connections not in use must be plugged appropriately. During water filling, condensed water may emerge on the outside of the tank. This will result in water underneath the tank, on the floor. This will cease when the tank is heated. There must be a floor drain in the same room.

All connections (including those not used) must be insulated to minimize idle losses.

Commissioning

Start by filling the tank, then pressurize it. Continue to fill the radiator system (the enclosed water). The working pressure may not exceed 10 bar (gauge), a safety valve with a releasing pressure of 10 bar must always be installed.

Maintenance

Check the safety valve annually by manually opening and closing the valve handle and making sure that water is released. Check annually all connections for eventual leakage (also peripheral installations, i.e. a heat pump, etc.).

Electrical Installation

- The electrical installation must be performed by an authorized installer and follow applicable norms and regulations.
- When selecting electrical equipment, it must be selected with approved materials and enclosure class.

Pipe installation

The water heater must be supplied with:

- A safety valve
- A shut-off valve
- A drain valve
- A non-return valve
- A mixing valve
- A pressure gauge
- A vacuum valve as per applicable standards.

The water heater must be supplied with the prescribed safety equipment according to applicable local and national regulations. The overflow pipe from the safety valve must not be able to be shut-off and must run visibly above the floor drain.

Filling

Fill the water heater as follows:

- 1. Open a hot water tap in the system.
- 2. Open the shut-off valve on the incoming cold water. This valve should then be fully open during operation.
- 3. The hot water tap can only be shut off when the water heater is filled, which is when only water comes out of the tap (initially an air-water mixture comes out of the tap).

Water temperature

Outgoing water temperature must not exceed applicable local and national regulations. At higher heater temperatures a mixer valve can be installed to restrict the outgoing hot water temperatures according to country specific regulations. The lower the temperature in the system, the less heat loss from lines and valves.

Safety valve

The safety valve must be inspected regularly.

Ease the safety valve lever slightly to release some water through the overflow pipe. This must be carried out at least 4 times a year. It is quite normal for the safety valve to let out small amounts of water when the water tank is being charged.

- If the valve does not work satisfactory, it must be replaced.
- If there is a risk of freezing, the water heater must be drained.
- In the event of malfunctions contact the installer.

Disassembling the product

When disassembling the product, applicable laws and regulations must be observed. Contact your installer for more information.

Technical data

| WT-T | | 300 | 500 |
|---------------------------------|---------|-------------|-------------|
| Corrosion protection | | stainless | stainless |
| Storage volume V/Total volume | litre | 281,8/303,3 | 460,9/488,5 |
| Volume, coil | litre | 18 | 24 |
| Length, coil | m | 30 | 39 |
| Heating surface, coil | m² | 2,9 | 3,7 |
| Max. pressure, hot water heater | bar/MPa | 10 | 10 |
| Max. pressure, coil | bar/MPa | 10 | 10 |
| Max. immersion heater length | mm | 460 | 570 |
| Height (incl. feet) | mm | 1804 | 2200 |
| Net weight | kg | 69 | 93 |
| Immersion heater, max. output | kW | 6 | 9 |
| Standing loss S | w | 65,5 | 79,1 |
| Energy efficiency class | | В | В |

Pressure drop diagram



Connection WT-T 300

- 1 Connections (2x), DN50 int.
- 2 Circulation, DN25 int.
- 3 Temperature sensor conn. DN15 int.
- 4 Temperature sensor conn. DN15 int. (located on the "backside")
- 5 Coil supply, DN25 ext.
- 6 Coil return, DN25 ext.
- 7 Immersion heater conn. DN50 int.



Technical data

| WT-T 300 | |
|-------------------|--------------|
| Storage volume V | 281,8 litres |
| Test pressure | 14,3 bar |
| Working pressure | 10 bar |
| Rated temperature | 95 °C |
| Weight | 69 kg |

Dimensions

| WT-T 300 | |
|----------------|------|
| Height (mm) | 1804 |
| Diameter (ømm) | 675 |

Required ceiling height for tilting: min. 1950 mm



| Connection WT-T 500 | | | |
|---------------------|--|--|--|
| 1 | Connections (2x), DN50 int. | | |
| 2 | Circulation, DN25 int. | | |
| 3 | Temperature sensor conn. DN15 int. | | |
| 4 | Temperature sensor conn. DN15 int. (located on the "backside") | | |
| 5 | Coil supply, DN25 ext. | | |
| 6 | Coil return, DN25 ext. | | |
| 7 | Immersion heater conn. DN50 int. | | |
| | | | |

Technical data

| WT-T 500 | |
|-------------------|--------------|
| Storage volume V | 460,9 litres |
| Test pressure | 14,3 bar |
| Working pressure | 10 bar |
| Rated temperature | 95 °C |
| Weight | 93 kg |

Dimensions

| WT-T 500 | |
|----------------|------|
| Height (mm) | 2020 |
| Diameter (ømm) | 795 |

Required ceiling height for tilting: min. 2200 mm





Thermia AB Box 950 SE-671 29 ARVIKA Phone +46 570 81300

Thermia assumes no responsibility whatsoever for any errors occurring in catalogues, brochures or other printed material. Thermia reserves the right to make changes to (the design of) its products with no prior warning. The same applies to products already on order provided that the previously agreed specifications remain unchanged. All trademarks in this material are the property of the respective company. Thermia and the Thermia logotype are trademarks which belong to Thermia AB. All rights reserved.