Installation, Operation and Maintenance Manual

1. Foreword

Thank you for choosing our product. This manual should be read carefully prior to installation. This manual has been carefully prepared to provide instructions on installation, operation, and maintenance of the Dot-X-Eautechnik products.

This manual is intended to be used in conjunction with other literature provided with the Dot-X-Eautechnik products. Installation should be made in accordance with the regulations of the authority having jurisdiction, local code authorities, and utility companies which pertain to this type of equipment. Authority having jurisdiction (AHJ) may be federal, state, local government, or individuals such as fire department, labor department, health department, building official, electrical inspector, or others having statutory authority. In some circumstances, the property owner of his/her agent assumes the role, and at government installations, the commanding officer or departmental official may be the AHJ.

Installation and maintenance of Dot-X-Eautechnik products must be performed by qualified professionals where civil, mechanical, and electrical work is required.

This document is intended to provide information only and does not form a contract with third parties.

Note: EauTechnik reserves the right to modify and update product technical specifications, components, and documentation without notice and without obligation to update existing equipment. It is the user's responsibility to ensure that the latest version of this manual is being used that is available by contacting EauTechnik GmbH or any of its authorized distributors.

Note: The texts and drawings in this manual are correct to the best of our knowledge. Your own calculations and plans, under consideration of the current standards and directions should be the only basis for your projects. We do not offer a guarantee for the completeness of the drawings and texts of this manual - they only represent some examples. They can only be used at your own risk. No liability is assumed for incorrect, incomplete, or false information and / or the resulting damages. The design and the specifications can be changed without notice. The illustrations may differ from the original product.

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2. General Instructions

1. Read these instructions and warnings carefully. Instructions contain vital information regarding the safe installation, operation, and maintenance of this product. Failure to comply with the instructions in this manual can cause product/property damage, severe personal injury, and/or loss of life for which the manufacturer shall not be liable.
2. This manual must be kept in a suitable place with easy access for users and operators, protected from dust and damp. The manual must accompany the unit during the entire life cycle.
3. Examine the product when it is received to be sure that there is no damage in shipping. If any damage is evident, report it to the transportation company and have it inspected by them. Check the nameplate to verify the correct unit has been received.
4. The responsibility of installation lies with the installer and must be performed by an authorized and qualified professional.
5. Using the product for reasons other than those specified in this manual are strictly prohibited. The manufacturer shall not be held liable for any damage caused by improper or unjustifiable use or by failure to comply with the instructions in the manual.
6. Incorrect handling, installation, operation, and maintenance of the product may cause personal injury or damage to property. The manufacturer shall not be held liable for such damage.
7. Installation, maintenance, and other special work on the product must be performed by an authorized professional, always in compliance with instructions provided in this manual and any other further instructions provided by the manufacturer.
8. Keep all packaging materials out of reach of children.
9. All repairs must be performed exclusively by an authorized specialist, using only the appropriate parts. Failure to comply with the instructions above may endanger your safety and relieves the manufacturer of all responsibility.
10. The product is for its intended use only.
11. Install the product close to a floor drain.
12. Before using the product, and after periodic maintenance, it is recommended to fill the product tank with water, and completely drain it to remove any residual impurities.
13. It is normal water drips from the overpressure safety device when

the appliance is heating. For this reason, the drain must be connected, always left open to the atmosphere, with a drainage pipe installed in a continuous downward slope and in a place free of ice.

Symbols

Symbol	Meaning
	These instructions must be strictly followed and indicates a hazardous situation which, if not avoided, will result in death or serious personal injury.
	Indicates an electrical hazard that can result in fatal injury. These instructions must be followed and carried by a qualified electrician or electrical engineer.
	These instructions are highly recommended and indicates the product's general and specific cautions, instructions and standards.

Note: Failure to follow the procedures and instructions in this manual will void the warranty and EauTechnik may not be held liable for any damages to property nor injury or death.

3. Safety Standards

General Safety Standards

- Observe the national regulations for working at heights.
- Wear a safety belt.
- Cordon off the areas in the fall zone below the working position so that persons cannot be injured by falling objects.
- Identify the working position, e.g. by signs conforming to the applicable national regulations.
- Avoid danger of burning and scalding. We recommend installing a thermostatic mixer valve on the water delivery line, marked with a red collar.
- The product is not be used by persons under 8 years of age/persons with reduced physical, sensory or mental capacity, or lacking the requisite experience and familiarity, unless under supervision or following instruction in the safe use of the appliance and the hazards attendant on such use. DO NOT permit children to play with the appliance. User cleaning and maintenance may not be done by unsupervised children.
- DO NOT leave the packaging materials (staples, plastic bags, expanded polystyrene, etc.) within the reach of children.
- Do not leave flammable materials in contact with or in the vicinity of the product.
- Do not place anything under the product which may be damaged by a leak.

Product Specific Safety Standards

- This appliance must be grounded. In the event of malfunction or breakdown, grounding will reduce the risk of electric shock by providing a path of least resistance for electric current. This appliance is equipped with a cord having an equipment grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.
- Product must be permanently connected to fixed wiring.
- Spray head must be descaled regularly.
- The outlet must not be connected to any tap or fitting other than those specified.
- This appliance is not to be installed in a location where freezing can occur.
- Do not install this appliance near to tinder or strong magnetic field place.
- Do not switch on if there is a possibility that the water inside the water heater is frozen, as this could result in serious damage to the appliance. Wait until you are sure that is completely thawed out before turning it on. If in doubt, consult your qualified plumber.
- Disconnect the product before cleaning and maintenance.
- Product must not be supplied through an external switching device (e.g. timer), or connected to a circuit that is regularly switched on/off by utility services.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid hazard. Please do not replace the power cord by yourself. Using non-authorized power cords may result in fire or electric shock.
- The product is not intended to be used as a potable water supply.
- The product is intended to be permanently connected to the water mains. It is not intended to be connected by a hose set.
- The water inlet of this product shall not be connected to inlet water obtained from any other water heating system.
- The pressure relief valve must be attached with the product and be installed at the cold water inlet during installation.
- Do not touch the appliance when barefoot or if any part of body is wet.
- Do not tamper with pressure relief/safety valve. If supplied with the product, trip the valve periodically to ensure that it is not jammed and to remove any scale deposits.

4. Transportation, Storage, & Disposal

4.1. Transportation

Dot-X-Eautechnik products are supplied from the factory and should be stored in its original packaging until installation. Care must be taken when handling the product during unpacking and prior to installation to ensure that no misalignment occurs due to bending.

Only used approved hoisting gear that is sized to handle the total weight to be transported.

The product should not be subjected to unnecessary shocks and impacts.

4.2. Storage

The product should be stored in a clean, dry, and well-ventilated area away from direct sunlight, rain, excessive humidity, and corrosive environments. It is recommended to keep the product in its original packaging until it is ready for installation to protect it from dust, moisture, and accidental damage. The storage area should maintain a stable ambient temperature, ideally between 5°C and 40°C, unless otherwise specified. The product must be placed on a stable, level surface, and care should be taken to avoid stacking heavy objects on it. During handling and storage, appropriate precautions must be taken to prevent mechanical shock or impact. Periodic inspection is advised to ensure the product remains in good condition, with any protective coatings or seals remaining intact. Proper storage helps maintain product integrity and ensures reliable performance during installation and operation.

4.3. Disposal

For safe disposal that does not impact the environment:

1. Avoid contamination by lubricants, detergents, etc.
2. Dispose the product and packaging in a proper and environmentally sound manner using local public or private waste collection services.
3. Observe local regulations for decommissioning and disposal.

The crossed-out wheelie bin symbol on a product means that it must be disposed of separately from household waste. When a product marked with this symbol reaches its end of life, take it to a collection point designated by the local waste disposal authorities. The separate collection and recycling of such products will help protect the environment and human health.

5. General Product Information

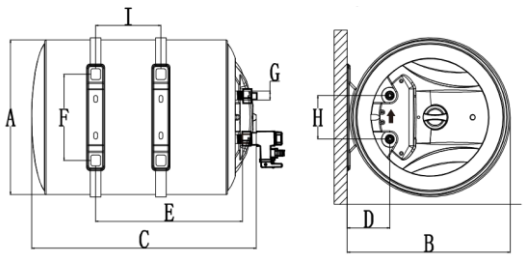
5.1. Technical Data

General

Model	DT-50H-S01S	DT-80H-S01S
Rated Capacity	50L	80L
Rated Frequency	50 Hz	50 Hz
Rated Power	1200 W	1200 W
Rated Voltage	AC 220V	AC 220V
Rated Current	5.45 A	5.45 A
Rated Pressure	0.74 MPa	0.75 MPa
Temperature Range	30 C – 75 C	30 C – 75 C
Ingress Protection	IPX4	IPX4
Classification	Class 1	Class 1
Net Size (mm)	405*400*905	405*400*1255
Mounting Type	Ceiling Mounted	Ceiling Mounted

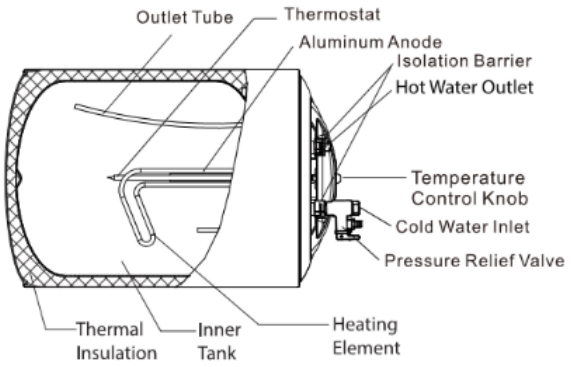
5.2. Dimensions

All dimensions are in mm.



Model	DT-50H-S01S	DT-80H-S01S
A	355	355
B	380	380
C	755	1100
E	507	795
F	198	198
G	G ½”	G ½”
H	100	100
I	300	450

5.3. Components



ID	Component	Material of Construction
A	Outlet Tube	*Stainless Steel (SS316)*
B	Thermostat	*Thermoplastic*
C	Anode	Magnesium
D	Isolation Barrier	*Unknown*
E	Hot Water Outlet	*Stainless Steel (SS316)*
F	Temperature Control Knob	*Thermoplastic*
G	Cold Water Inlet	*Stainless Steel (SS316)*
H	Pressure Relief Valve	*Brass*
I	Heating element	Stainless Steel (SS316)
J	Inner Tank	Carbon Steel
11	Thermal Insulation	High Density Polyurethane

6. Preparation (for qualified installer)

Before starting work on the product, make sure that the power supply is switched off and does not turn on accidentally.

6.1. Inspection the product

Upon unpacking, carefully inspect the product for any visible signs of damage that may have occurred during transportation or handling. Check for dents, cracks, loose fittings, missing components, or corrosion. Ensure all fasteners are intact and securely in place. Verify the product's nameplate or label to confirm the model number, serial number, and specifications match your intended application. Any damage or discrepancy should be reported to the supplier or manufacturer immediately before proceeding with installation.

6.2. Cleaning before Installation

Before installation, remove all packaging materials, dust, moisture, or protective coatings that may have been applied for transportation or storage purposes. Use a clean, dry cloth or an appropriate non-abrasive cleaning agent recommended for the product's surface material. Ensure that any inlets, ports, or electrical terminals are free of debris or obstruction. Do not use solvents or high-pressure cleaning unless specifically approved by the manufacturer.

6.3. Position Requirements

Ensure the product is installed in the correct orientation and position as specified in the product’s technical documentation. The installation position must allow for easy access to maintenance points, ventilation (if required), and connection interfaces (mechanical or electrical). Follow any manufacturer guidelines regarding mounting angles, clearances, or alignment to avoid operational issues or warranty violations.

6.4. Installation Site & Support Equipment

The installation site must meet the environmental and structural requirements suitable for the product, including proper ventilation, ambient temperature, humidity levels, and protection from corrosive or explosive atmospheres. The foundation or mounting surface must be level, stable, and capable of supporting the product's weight and operational loads. Ensure all necessary utilities—such as power supply, piping, ducting, or control lines—are available and positioned correctly. Support equipment such as lifting tools, brackets, fasteners, and alignment instruments should be prepared in advance as per installation needs.

- The product must be installed on a solid wall. The selected location must support a weight x2 of the total weight of fully filled (with water) water heater.
- The product must be installed at a location free of water flash.

6.5. Product Specific Preparation

1. Confirm earth electrode on socket is reliably grounded.
2. Check that the wire, circuit breaker, fuse and watt-hour meter are suitable for product.
3. Keep the product away from violet vibration.
4. Install the product close to a floor drain.

Outdoor installation is not recommended.

7. Connections (for qualified installer)

This section provides guidance on all key connections required before operating the product, including electrical, water, and physical interfaces. Ensure all connection work is carried out by qualified personnel in accordance with local codes, regulations, and manufacturer guidelines. Before making any connections, confirm that the installation area is secure, power is disconnected, and all components are clean and free of damage.

Before starting any work on the product, ensure that the power is disabled and cannot be accidentally switched on while working. Prior to making any electrical motor connection, make sure there is no voltage on the entire plant.

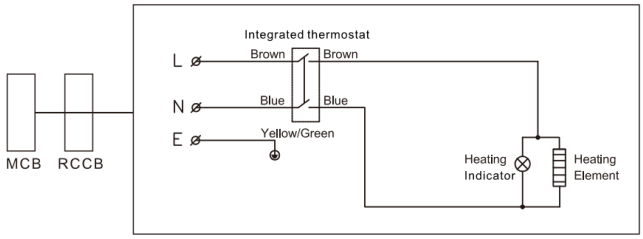
The product must be connected to an external main switch and shall be provided with a means permitting it to be locked in the OFF (isolated) position. Type and requirements of switch as specified in EN 60204-1, 5.3.2

7.1. Electrical Connections

Electrical connections must be carried out by an authorized electrician or electrical engineer in accordance with local regulations.

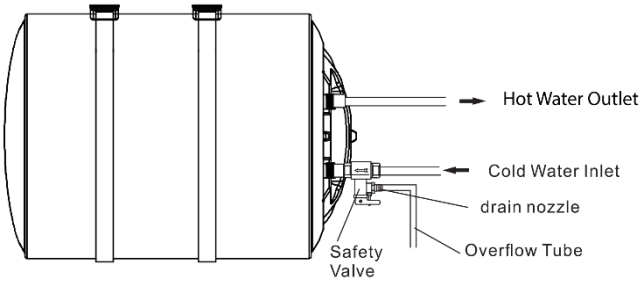
The supply voltage rated maximum current, and cos φ are identified on the name plate and must be kept within the electrical panel.

For new installations or after maintenance of the unit, it is required to carry out a resistance measurement on the earth wire in accordance with the applicable regulations and with an appropriate measurement device.



Also, check that there is voltage symmetry in the power supply lines (same voltage difference between the individual phases).

7.2. Water Connections

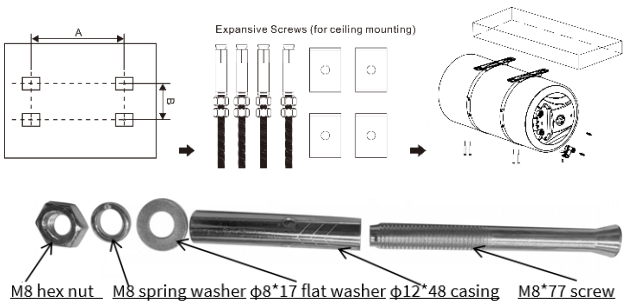


The diameter of inlet (blue) and outlet (red) is G ½". Before connecting external fittings to the heater, ensure that they are resistant to the working pressure and able to withstand the maximum temperature of the heater.

The safety valve prevents excessive pressure build up in the heater tank and must not be removed or replaced. In the event the tank pressure exceeds 0.75 MPa, the safety valve will operate and vent the water through the overflow tube. The overflow tube must not be closed or blocked. Closing, blocking the drain nozzle may cause serious damage to the heater tank and void the product warranty.

7.3. Physical Connections

Pipe Connection on the right side



8. Mechanical Installation (for qualified installer)

This section provides guidelines for carrying out the mechanical installation of the product. All procedures should be performed by qualified personnel in accordance with relevant safety standards, product specifications, and site requirements. Proper mechanical installation is critical to ensuring operational reliability, safety, and

longevity of the equipment.

When mounting the piping onto the product, wear personal protective gear to avoid getting cut on the sharp edges of the product.

Flush the product throughly with clean water before the product is used for supplying drinking water. Do not use the product for drinking water if the interal components have come into contact with particles or substances unsuitable for water suitable for human consumption.

Be careful to avoid bending or damaging the product when moving them from the horizontal to vertical position.

8.1. Tools

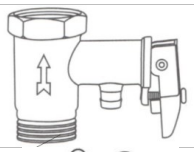
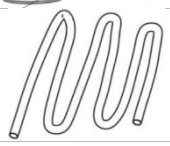
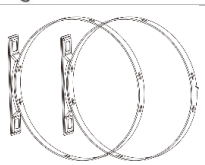
Before starting installation, ensure all necessary tools are available and in good working condition. Always use tools appropriate for the product's material and fastener sizes. Power tools should be used with caution and only where permitted. Tools must be calibrated.

1. Hammer Drill
2. 8mm Concert Drill Bit
3. Screwdriver – Phillips
4. Screwdriver – Flathead
5. Spanner/Wrench Set
6. Spirit Level
7. Teflon Tape (PTFE)
8. PVC Pipe Cutter or Hacksaw
9. Pencil/Marker
10. Measuring Tape
11. Adjustable pipe wrench
12. *Basic Plumbing Tools*

8.2. Parts

Before starting installation, ensure all necessary parts are available and in good working condition.

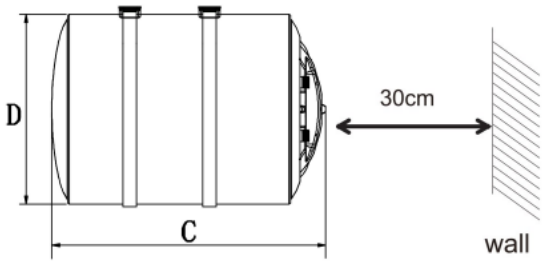
Ensure to use parts supplied with the product.

Quantity	Accessory	Specification	Picture
1	Pressure Relief Valve		
1	Overflow tube	Flexible, 3 meters	
1	(Ceiling) Flexible mounting brackets	355 mm	
8	Expansion Screws	80 mm	
4	Load bearing sheets	33x50 mm	

8.3. Site Prerequisites

The installation site must meet all structural and environmental requirements. This includes

1. The product must be installed on a solid wall. The selected location must support a weight x2 of the total weight of fully filled (with water) water heater.
2. The product must be installed near to the point of use for convenience of water and electrical supply.
3. The product must be installed at a location free of water flash.
4. There must be at least 30 cm of free space from the wall.



According to site requirement, you may regulate the position of the flexible mounting bracket to ceiling mounting configuration. Once the position is confirmed, ensure to secure the expansion bolts onto the wall and always tighten the supporting screws at the bottom part of the product.

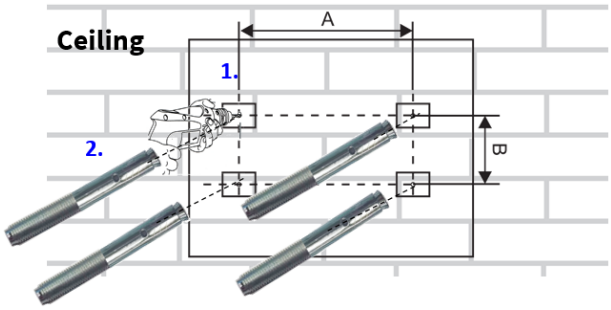
8.4. General Prerequisites

Before beginning mechanical installation, confirm that all materials, components, and mounting accessories are available and match the approved design or layout.

8.5. Installation

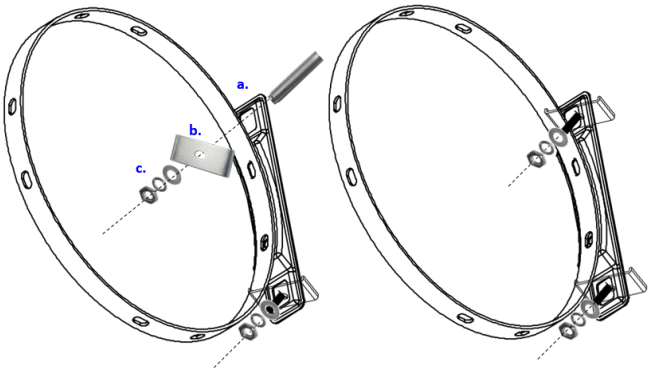
1. Mark the drill location for 4 expansion bolts on ceiling.

Pay attention to distance between flexible brackets (marked as A in below figure). For 50 L: 300 mm, For 80 L: 450 mm.

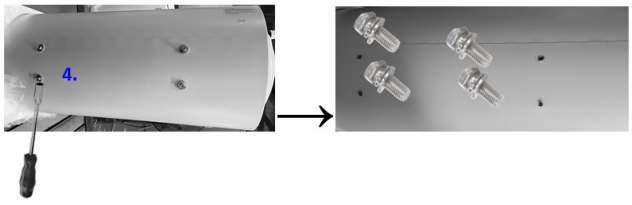


Model	Capacity	A	B
DT-50H-S01S	50 L	**300 m**	198 mm
DT-80H-S01S	80 L	**450 mm**	198 mm

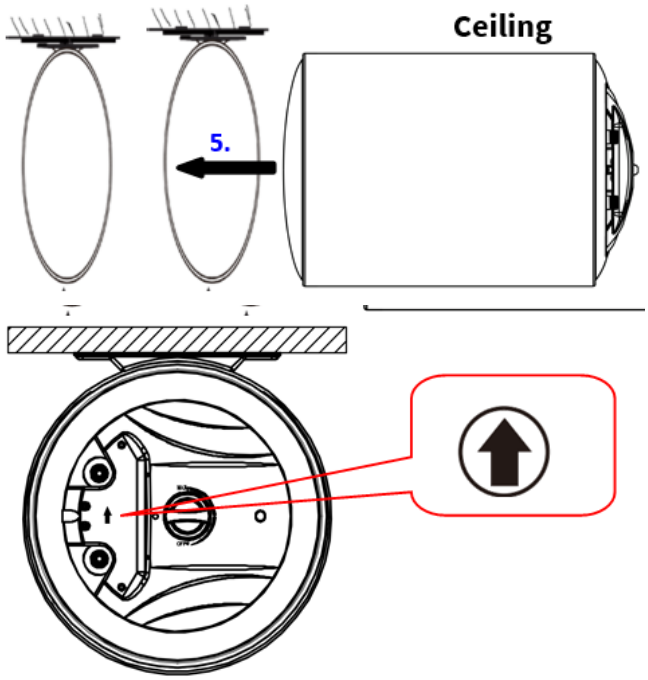
2. Drill bolt holes in ceiling wall.
3. Hang up the flexible mounting brackets
   a. Insert the expansion screws.
   b. Put load bearing sheets to press the brackets.
   c. Inset the M8 hex nut and M8 spring washer andϕ8*17 flat washer to fix well the flexible mounting brackets.



4. Unscrew the 4 screws (8x18mm) from the bottom of the product body.

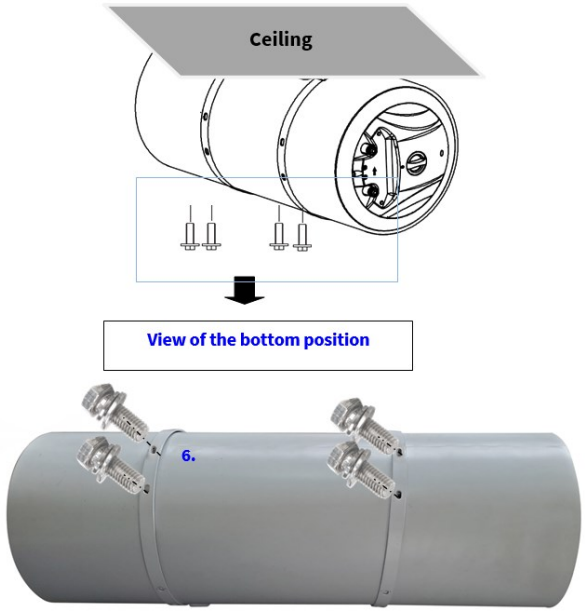


5. Align the product such that it is oriented with the direction of the up arrow. Carefully position the water heater through the installed ceiling brackets.



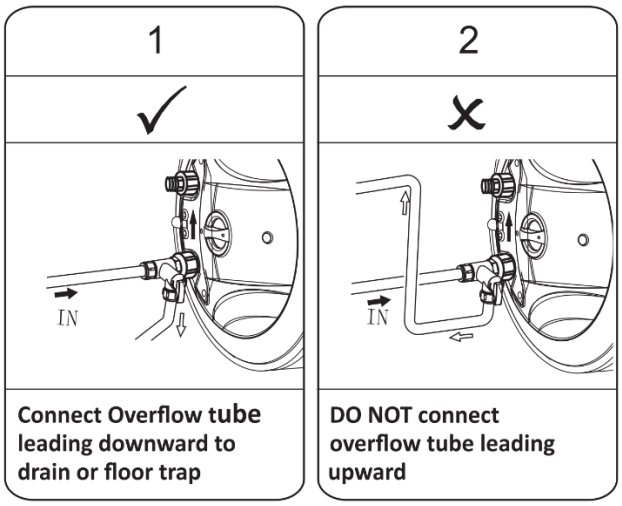
Product must be installed according to the direction of the arrow.

6. Insert and screw the 4 bottom screws into the product bottom holes to firmly secure the mounting brackets to the heater body. **Tighten securely.**



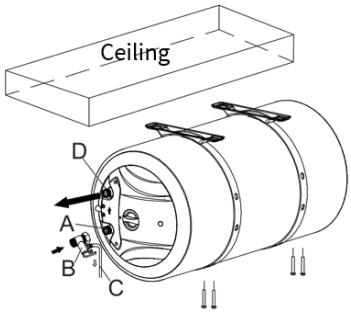
7. Connect the drain hose from the safety valve to drain outlet. Ensure the hose is sloping downward, free of obstructions,

and has no pinches.



Ensure the hose is sloping downward, free of obstructions, and has no pinches.

During the heating process, it is normal to have slight dripping of water from the pressure relief valve. For this reason, it is instructed to connect overflow tube to drain nozzle of the safety valve (pressure relief valve), leaving the other end always open, **and sloping downwards towards floor drain.**



A. Cold Water Inlet
B. Safety Valve
C. Overflow Tube to Drain
D. Hot Water Outlet

9. Operation

This section outlines the proper methods for starting, operating, and shutting down the product. Following these instructions ensures safe, efficient, and reliable performance throughout the product's lifecycle.

9.1. Initial Start-Up Procedure

1. Fully fill the water heater
   a. Open a hot water tap
   b. Turn on the main water inlet to your house.

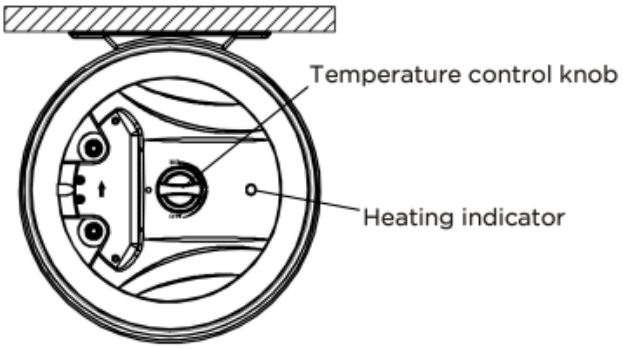
Once the water flowing out from the hot water tap is normal and free of any choking noise, the tank is fully filled with water (and all air is cleared from tank).

2. Check for any water leaks on all pipe fittings
3. Check for any water leaks on heater body.
4. Turn on the power supply to the heater. The heating indicator at the heater control panel will light to indicate the heater is in process of heating water to the pre-set temperature.

9.2. Operating Conditions

- Adjustable temperature range: 30 C- 75 C

9.3. Control Interface and Functions



- Temperature control knob: Turn clockwise to increase the pre-set heating temperature. Turn anti-clockwise to decrease the pre-set heating temperature.

9.4. Monitoring and Indicators

The heater has a heating indicator on the control panel of the heater to indicate heating is in process.

10. Testing

After installation and initial start-up, a performance check must be carried out to verify that the product is operating according to its specified parameters. This step is critical to ensure that the product has been installed correctly, is functioning as intended, and is ready for continuous operation.

10.1. Performance Check

Water temperature typically drops by 5 C by the distance it reaches the end outlet (e.g. faucet). This varies based on distance from tank outlet to faucet.

Model	Tank Capacity (Full)	Heating time	Notes
DT-50H-S01S	50L	116 min	Heating time is based on 40 Celsius delta temperature (Starting temperature: 20 degrees centigrade, Ending temperature: 60 degrees centigrade)
DT-80H-S01S	80L	186.5 min	Heating time is based on 40 Celsius delta temperature (Starting temperature: 20 degrees centigrade, Ending temperature: 60 degrees centigrade)

Power Rating	Voltage	Frequency	Phase
1200 W	220V AC	50 Hz	Single

10.2. Operation Check

Once the product has been successfully installed and powered on, an operation check must be carried out to confirm that all systems are functioning correctly under normal operating conditions. Begin by verifying that the product starts and stops smoothly using the designated controls, and that all control interfaces, indicators, and safety features respond as expected. Observe the unit for unusual noise, vibration, or odors, and monitor key operational parameters such as pressure, flow, temperature, speed, or electrical load to ensure they are within the specified range. Confirm that the product is operating in the intended mode (manual, automatic, or standby) and that all external connections—such as electrical inputs, water lines, or communication signals—are stable and correctly integrated. The operation check should be performed by qualified personnel and documented as part of the commissioning process. Any anomalies detected during this phase must be resolved before the product is placed into regular service.

11. Maintenance and Service (for qualified personnel)

All products are easy to service and can be serviced by your local authorized distributor, technician, or the manufacturer. Only use genuine spares supplied by the manufacturer for replacement of parts.

Perform operation checks as advised in section 10.2 for periodic inspection of equipment.

In order to drain water out, it is important to check that the water heater has been switched off long enough for the water inside to cool down.

Disconnection of the water heater must be incorporated in the fixed wiring in accordance with the wiring rules.

11.1. Annually

- Inspect the safety valve and check that it is operating correctly.
- Flush the safety valve with water to remove any salt deposits. The valve can be removed and reattached with a wrench.
- Inspect the anode.

11.2. >1 years

- Clean the inner tank and deposits on heating element once every 2 years.
- Replace the anode every 2 years. To do this, dismantle the heating element from the heater and unscrew the anode from the supporting bracket.

12. Troubleshooting

When troubleshooting or servicing the product:

1. Disconnect power unless required for testing.
2. Have electrical testing done by a qualified electrician.
3. Most problems occur above ground. Remove pump only as a last resort.
4. Use all precautions for the voltages involved.

Problem	Possible Cause	Remedy
No water coming out of the heater	Closed valves.	Check whether all stop valves are opened
	Missing water supply.	Check whether water supply is there
	Overtightened safety valve.	Check whether safety valve is overtightened.
	Loose water supply connection to safety valve.	Check whether inlet water supply is connected to safety valve.
Water Heater is not working	Missing power supply.	Check whether power supply is ON.
	Insecure connection from main supply to product.	Is the heater lamp on?
	Temperature control known not set.	Is the adjustable temperature control knob on?
	Insecure/incorrect connection to external systems.	Is the mixer tap connected correctly, securely?
Water is not hot enough	Temperature control knob improperly set.	Is the adjustable temperature control knob in the right dial position? Turn to maximum setting.
	Incorrect mixer (External system) setting.	Is the mixer tap adjusted correctly?
	Inadequate time to heat.	Give adequate time for heating process (when the temperature reaches the pre-set temperature, the heating indicator lamp will automatically switch off)
	In adequate product capacity.	Replace the product with adequate capacity product.

13. Warranty (to be retained)

This section provides key warranty terms for the product. For full details, exclusions, and the warranty claim process, please refer to the official warranty policy document available at:

www.eautek.com

Model: _____

Serial Number: _____

Primary Product warranty: _____5_____ **years.**

Date of Purchase: _____

Components:

	Component	Warranty Period

A	Inner Tank	5 years

- In case of a claim, the unit MUST remain installed. Proof of purchase & installed must be supplied.
- DotX-EauTechnik will not be held responsible for any damage, direct or direct, to people, animals, properties in the area due to non-observance of instructions contained in the installation manual of the relevant unit.
- The warranty begins from the date of purchase.
- In order to exercise the right to eventual claim, keep the receipt/invoice (proving the date of purchase) along with this document, duly signed warranty section.
- The warranty does not cover damage resulting from surface defects (such as chipping, peeling, plating, or denting), normal wear and tear, or any damage caused by accidents, mishandling, negligence, or improper installation by the customer or installer.

For full details, exclusions, and the warranty claim process, please refer to the official warranty policy document available at: **www.eautek.com**.