

EWH 10 mini U

EWH 10 mini

EWH 15 mini

Sealed unvented (pressure-tested) water heater
Operation and installation _____ 2

Gesloten (drukbestendige) Warmwaterboiler
Bediening en installatie _____ 16

Zamknięty (ciśnieniowy) zasobnik mały ciepłej wody
Obsługa i instalacja _____ 30

Kisméretű zárt (nyomás alatti) elektromos vízmelegítő
Kezelés és telepítés _____ 44

Малогобаритный водонагреватель закрытого типа (напорный)
Эксплуатация и монтаж _____ 58

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OPERATION

1. General information

1.1 Document information

The chapter Operation is intended for the equipment user and the heating contractor.

The chapter Installation is intended for the heating contractor.



Please read

Read these instructions carefully before using the appliance and retain them for future reference. If the appliance is passed on to a third party, please hand these instructions to the new user.

1.2 Key to symbols

Symbols in this documentation

In these instructions you will come across symbols and highlights. These have the following meaning:



Risk of injury



Danger of electrocution!



Risk of scalding or burning



Possible damage

Information concerning damage to the appliance, environmental damage or material losses.



Please read

Text next to this symbol is particularly important.

» These passages and the "»" symbol indicate that you have to do something. The action you need to take is described step by step.

Symbols on the appliance



Disposal

Appliances with this marking are not suitable for general waste disposal, and should therefore be disposed of separately.

Units of measurement

All measurements are given in mm unless stated otherwise.

2. Safety

2.1 Intended use

This sealed (pressure tested) water heater is exclusively designed for heating domestic hot water. You can equip the appliance with one or more draw-off points.

Any other use beyond that described shall be deemed inappropriate. Observation of these instructions is also part of the correct use of this appliance. Any modifications or conversions to the appliance void all warranty rights.

2.2 Safety information



Risk of scalding
The fittings can reach temperatures above 43 °C.



Risk of injury
Where children or persons with limited physical, sensory or mental capabilities are allowed to control this appliance, ensure that this will only happen under supervision or after appropriate instruction by a person responsible for their safety. Children must be supervised to ensure that they never play with the appliance.



Possible water damage
Expansion water could result in water damage if the blow-off line of the safety valve is sealed off. Therefore never close the blow-off line.

2.3 CE designation

The CE designation shows that the appliance meets all essential requirements:

- Electromagnetic Compatibility Directive
- Low Voltage Directive

2.4 Test symbols

See type plate on the appliance.

3. Appliance description

The appliance constantly maintains the water content at the preselected temperature.

The DHW outlet temperature can be infinitely adjusted at the temperature selector. The heating load starts automatically as soon as the appliance temperature falls below the selected value.



The appliance is under mains water pressure. The volume of water expands as the water heats up. During this process, expansion water drains through the safety valve. This is a necessary and normal process.

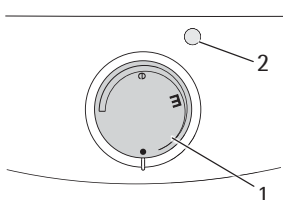
4. Operation

4.1 Temperature selector

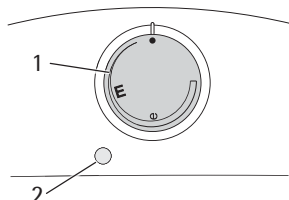
You can select whichever temperature you require at the temperature selector.

The ON/OFF indicator illuminates while the water is being heated.

EWH 10mini U



EWH 10mini / EWH 15mini



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- 1 Temperature selector
 - "E" approx. 40 °C
 - "e" approx. 60 °C
 - Fully turned to the right approx. 82 °C
- 2 Indicator

4.2 Frost protection

The water heater is equipped with a frost protection stage "●" (cold). In this position, the water heater is protected against frost. The tap and the water line are unprotected.

4.3 Economy setting

This appliance is equipped with two economy settings, i.e. "e" and "E". With these settings, minor scaling inside the appliance should be expected.

4.4 Heat-up time / Outlet volume

Subject to season, different maximum mixed water or outlet capacities can result from varying cold water temperatures. For further information regarding these, see chapter "Specification / Data table".

5. Cleaning, care and maintenance

- » Never use abrasive or corrosive cleaning agents. A damp cloth is sufficient for cleaning the appliance.
- » Check the taps regularly. You can remove limescale deposits at the tap outlets using commercially available descaling agents.
- » Have the electrical safety of the appliance and the function of the safety valve regularly checked by a heating contractor.
- » Have the protective anode checked by a heating contractor after the first 8 years. The heating contractor will then determine the intervals at which it must be checked thereafter.

6. What to do if ...

6.1 ... the appliance develops faults

Fault	Cause	» Remedy
The appliance fails to deliver hot water.	The temperature selector is set to "OFF".	Switch the appliance on by turning the temperature selector.
	There is no power.	Check the fuse/MCB in your fuse box/distribution panel.
Water can only be drawn at a reduced rate.	The perlator in the tap is scaled up.	Descale or replace the perlator.
Strong boiling noises inside the appliance.	The appliance is scaled up.	Have a contractor descale the appliance; contact customer service.
Water drips from the safety valve after heating has stopped.	The safety valve is scaled up or dirty.	Switch off the appliance and depressurise it, by isolating the appliance from the power supply and by shutting off the water supply. Have a contractor check the safety valve; contact customer service.

Where a contractor is required, they can remedy the fault more quickly and effectively if you provide the following details from the appliance type plate:

Typ: _____
 E-NO. _____
 F-NO. _____

← →

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INSTALLATION


7. Safety

Only qualified contractors should carry out installation, commissioning, maintenance and repair of the appliance.

7.1 General safety instructions

We guarantee trouble-free operation and operational reliability only if the original accessories and spare parts intended for the appliance are used.

7.2 Instructions, standards and regulations

 Observe all applicable national and regional regulations and instructions.

7.2.1 Important information regarding the safety valve

- Never exceed an operating pressure of 0.6 MPa.
- Route the blow-off line of the safety valve with a slope and leave open to atmosphere.
- The safety valve requires regular maintenance and activation.

8. Appliance description

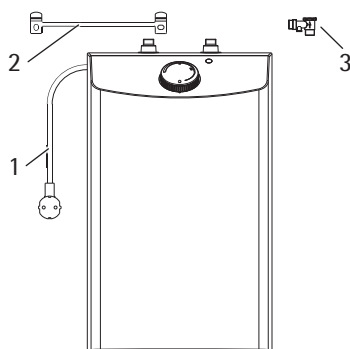
This sealed (pressure tested) water heater EWH 10mini U is designed for undersink installation and the EWH 10 mini / EWH 15 mini for oversink installation and to supply one or several draw-off points with heated domestic water.

The water heaters must only be operated with pressure tested taps. In addition, a type-tested diaphragm safety valve with non-return valve must be installed; see chapter "Standard delivery".

The internal steel cylinder is coated in special enamel and is equipped with a protective anode. The anode protects the internal cylinder against corrosion.

8.1 Standard delivery

Delivered with the appliance are:




- 1 Power cable with plug
- 2 Mounting bracket
- 3 Diaphragm safety valve with non-return valve

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9. Installation

9.1 Installation information

 **Risk of damage**
Carry out all water connection and installation work in accordance with regulations.

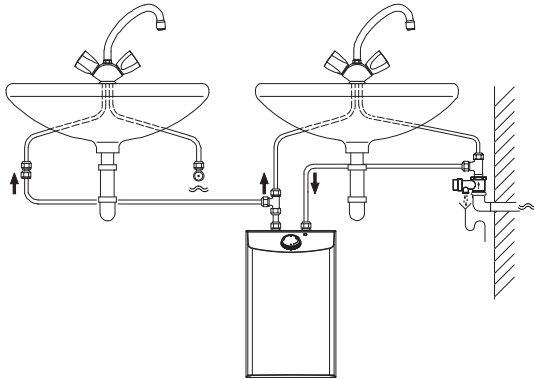
 **Risk of damage**
The water heater loses its function if the water connections at the appliance are swapped.

- » Install a pressure reducer upstream of the diaphragm safety valve in the water mains if the static pressure exceeds 0.48 MPa.


9.2 Installation location

The appliance is exclusively designed for installation on a solid wall. Ensure the wall offers adequate load bearing capacity. Always install the appliance vertically in a room free from the risk of frost and near to a hot water draw-off point. Only install pressure tested taps in conjunction with the diaphragm safety valve.

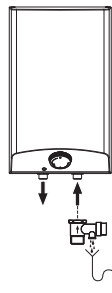
9.2.1 Undersink EWH 10mini U




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 The EWH 10mini U is only suitable for undersink installation; the water connections point upwards.

9.2.2 Oversink EWH 10mini / EWH 15 mini



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 The EWH 10mini / EWH 15 mini are only suitable for oversink installation; the water connections point downwards.

9.3 Installation

9.3.1 Installation information

 Match the colour designation of the tap connection pipes to that of the water heater.

- Route the connection to the second tap on site, for example in a 10mm copper pipe.
- Information regarding plastic pipework systems:

 **Risk of damage**
If plastic pipework systems are used, take into account the most extreme operating and fault conditions that could occur at the appliance; see chapter "Specification / Fault conditions".

9.3.2 Securing the mounting bracket

- » Mark out the holes to be drilled in accordance with the dimensioned drawings; see chapter "Specification / Dimensions and connections".
- » Drill both holes and then insert rawl plugs.
- » Secure the mounting bracket with suitable screws.

9.3.3 Installing the diaphragm safety valve

- » Install the diaphragm safety valve in the cold water supply line; see chapter "Installation / Installation location".
- » Observe the information in the installation instructions of the diaphragm safety valve.

9.3.4 Installing the appliance

- » Hang the appliance onto the mounting bracket.
- » Secure the water connections from the tap to the appliance.

9.3.5 Adjusting the flow rate

By adjusting the flow rate, the limits regarding appliance and tap noise will be maintained. In addition there will be a minor mixing effect and consequently a more favourable utilisation of the stored hot water.

- » Adjust a maximum flow rate at cold water supply to the appliance; see chapter "Specification / Data table".

9.3.6 Connecting the power supply



Danger of electrocution!

Carry out all electrical connection and installation work in accordance with relevant regulations.



Danger of electrocution!

» Installation with direct (permanent) power cables is not permitted.

» An earthed socket is required. This socket must be freely accessible after the appliance has been installed.

» Where the appliance is to be connected permanently to the AC power supply (junction box for the appliance), ensure that all poles can be separated from the power supply with a contact separation of at least 3 mm.



Risk of damage.

Observe the type plate. The specified voltage must match the mains voltage.



Earth connection.

Ensure that the appliance is earthed.

10. Commissioning



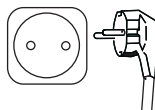
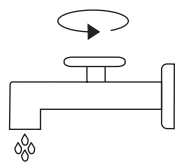
Danger of electrocution!

Commissioning must only be carried out by an authorised contractor in accordance with safety regulations.



Boil dry risk.

The high limit safety cut-out responds if the order is confused (first water, then power). In such cases, replace the controller and reset the high limit safety cut-out by pressing the reset button; see chapter "Troubleshooting / Resetting the high limit safety cut-out".



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- » Open the hot water tap or set the mono-lever mixer tap to "hot" until water is expelled free of bubbles.
- » Check the diaphragm safety valve. When cracked open, a full stream of water must flow.
- » Insert the plug into the mains supply.
- » Select a temperature.

11. Taking the appliance out of use

- » Isolate the appliance from the power supply by pulling its plug.
- » Drain the appliance, see chapter "Maintenance / Draining the appliance".

12. Recommissioning

See chapter "Commissioning".

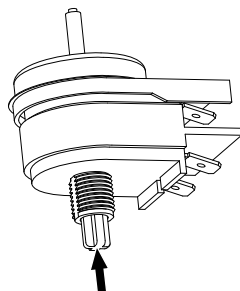
13. Appliance handover

- » Explain the appliance function to users and familiarise them with its operation.
- » Make users aware of potential dangers, especially the risk of scalding.
- » Hand over these instructions.

14. Troubleshooting

Fault	Cause	» Remedy
The appliance fails to deliver hot water.	There is no power.	Check the fuse/MCB in your fuse box/distribution panel.
	The high limit safety cut-out (STB) has responded.	Remove the cause for this fault and replace the temperature controller. Reset the high limit safety cut-out by pressing its reset button.
Water can only be drawn at a reduced rate.	The perlator in the tap is scaled up.	Descale or replace the perlator.
Strong boiling noises inside the appliance.	The appliance is scaled up.	Descale the appliance.

Reset the high limit safety cut-out



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15. Maintenance



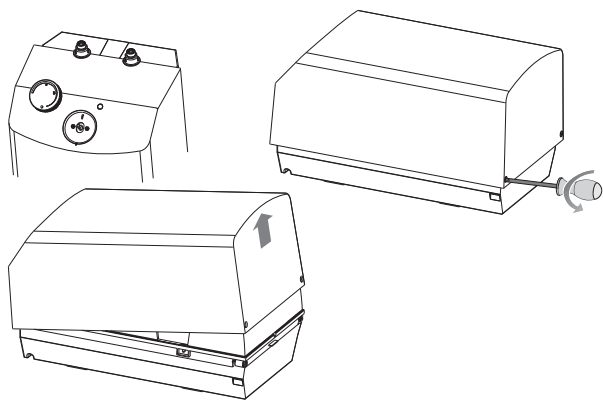
Danger of electrocution!
Before any work on the appliance, disconnect all poles from the power supply.

- » Remove the appliance for maintenance work.
- » For the torque of the flange screws, see chapter "Specification / Data table".

15.1 Draining the appliance

Drain the appliance via the connector.

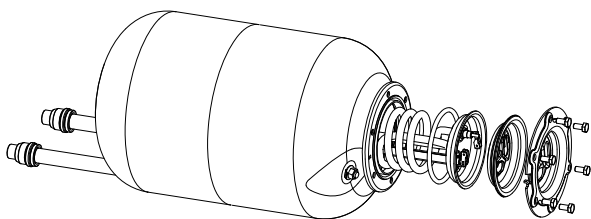
15.2 Opening the appliance



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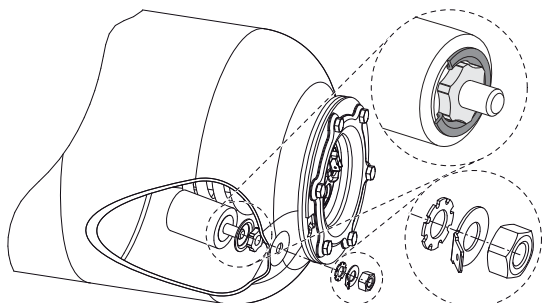
- » Pull off the rotary selector.
- » Remove the screws underneath the rotary selector.
- » Open the appliance cap by lowering the bolt screws inwards and pivot the cap upwards, then remove it.

15.3 Removing the flanged immersion heater



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15.4 Removing the protective anode



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15.5 Fitting the protective anode

- » To include the steel cylinder in the earthing mass, follow the order of installation of the fixing elements of the protective anode, see chapter "Removing the protective anode".

15.6 Descaling

- » Remove the flanged immersion heater.
- » Carefully tap the immersion heater element to remove larger limescale deposits and immerse the heating element up to the flange plate in descaling agent. Never treat the cylinder surface or the protective anode with descaling agents.

15.7 Checking the protective anode

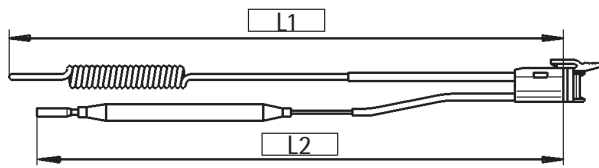
- » Check the protective anode for the first time 8 years after installation. For this, remove the flanged immersion heater; see chapter "Removing the flanged immersion heater and protective anode". Replace worn protective anodes.
- » Afterwards determine the time intervals at which further checks should be carried out.

15.8 Replace power cable

- » The power cable must be replaced by a qualified electrician with the original spare part (part no. 286211).
- » Never remove the plastic thread holding the profile plate.

15.9 Temperature controller/limiter sensor

When replacing or removing the temperature controller/limiter, reinsert the sensors into the protective pipe in accordance with the following diagrams.



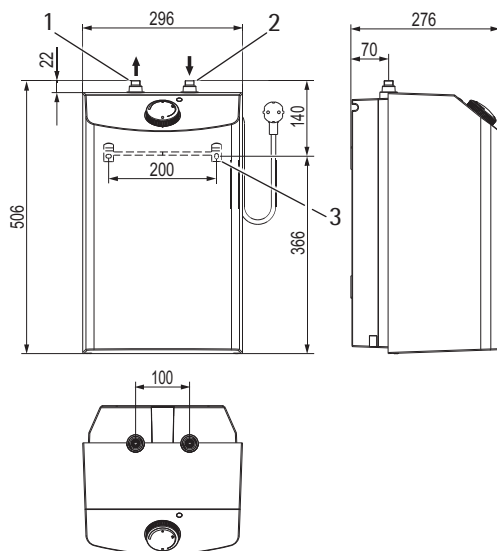
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	L1	L2
EWH 10 mini U	180	160
EWH 10 mini	160	250
EWH 15 min	200	310

16. Specification

16.1 Dimensions and connections

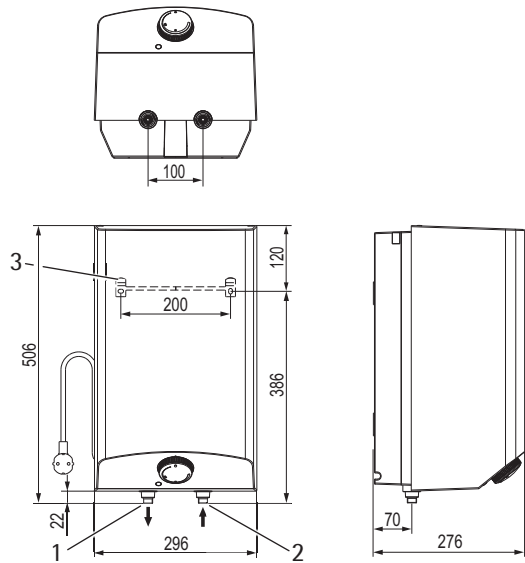
16.1.1 Undersink installation EWH 10 mini U



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- 1 Hot water connection (red)
- 2 Cold water connection (blue)
- 3 Mounting bracket

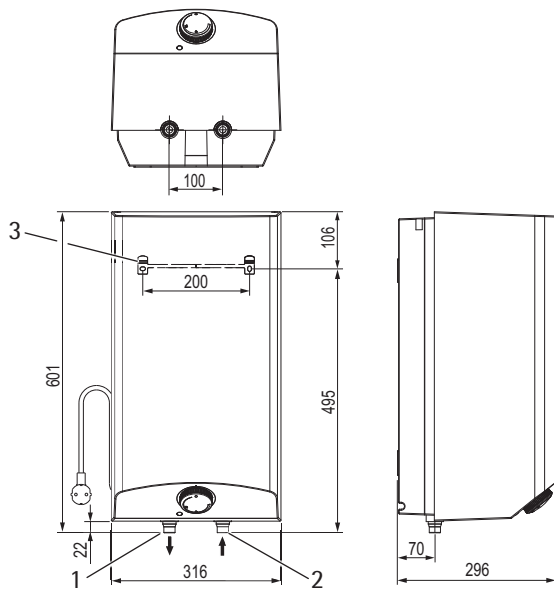
16.1.2 Oversink installation EWH 10 mini



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- 1 Hot water connection (red)
- 2 Cold water connection (blue)
- 3 Mounting bracket

16.1.3 Oversink installation EWH 15 mini

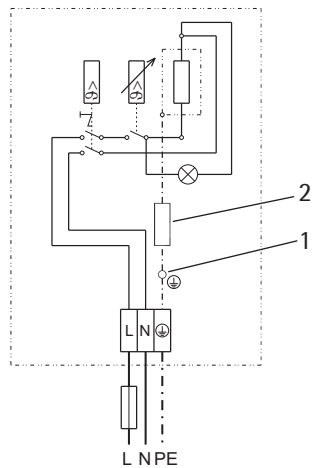


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- 1 Hot water connection (red)
- 2 Cold water connection (blue)
- 3 Mounting bracket

16.2 Wiring diagram

1/N/PE ~ 230V



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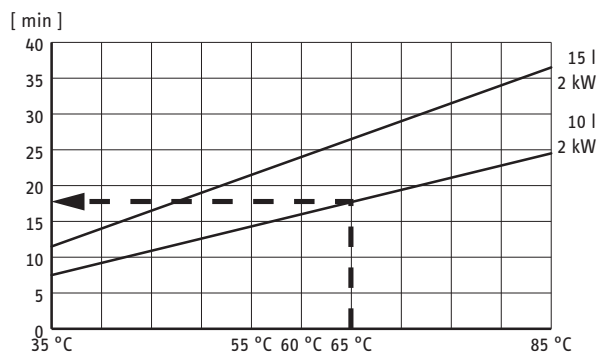
- 1 Protective anode
- 2 Resistance 560 Ω

16.3 Data table

Model		Sealed unvented water heater		
Type		EWH 10 mini U	EWH 10 mini	EWH 15 mini
Part number		229493	229496	229499
Application		Undersink	Oversink	Oversink
Operating details				
Nominal capacity	l	10	10	15
Mixed water volume 40 °C (15 °C/65 °C)	l	18	18	26
Rated output	kW	2.0	2.0	2.0
Power connection	V	1/N/PE ~ 230	1/N/PE ~ 230	1/N/PE ~ 230
Approximate temperature setting				
Minimum	°C	35	35	35
Maximum	°C	82	82	82
Permissible operating pressure	MPa	0.6	0.6	0.6
Maximum flow rate	l/min	10	10	12
Protection level to EN 60529				
		IP 24 D	IP 24 D	IP 24 D
Container (material)		Steel, enamelled on the inside	Steel, enamelled on the inside	Steel, enamelled on the inside
Connection (material)		Brass, nickel-plated	Brass, nickel-plated	Brass, nickel-plated
Resistance	Ω	560	560	560
Torque value of the flange screws	Nm	6±1	6±1	6±1
Dimensions and weights				
Height	mm	506	506	601
Width	mm	296	296	316
Depth	mm	276	276	296
Water connection (male thread)		G 3/8 A	G 1/2 A	G 1/2 A
Length of power cable	mm	800	800	800
Approx. weight	kg	8.0	8.0	10.4
Approx. wet weight	kg	18.0	18.0	25.4

16.3.1 Heat-up table

The heat-up period depends on the amount of water, degree of scaling and residual temperature. For the heat-up time for a cold water supply of 10 °C and a maximum temperature setting, see the diagram.

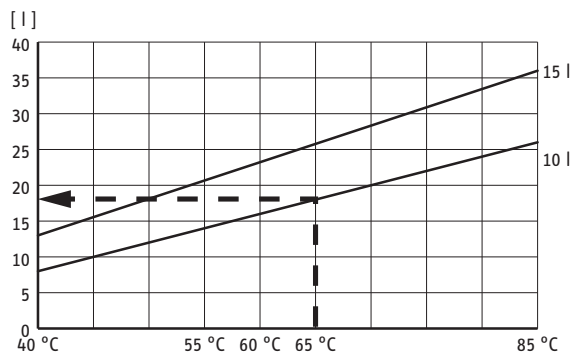


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Example EWH 10:
 Temperature setting = 65 °C
 Heat-up time = approx. 18 min

16.3.2 Mixed water volume

With the temperature adjustment, you preselect the mixed water volume at, for example, 40 °C.



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Example EWH 10:
 Temperature setting = 65 °C
 Cold water supply = 15 °C
 Mixed water volume = approx. 18 l

16.3.3 Country-specific approvals and certifications

Test symbols can be seen on the type plate.

16.4 Extreme operating and fault conditions

In case of faults, a peak temperature up to 105 °C may briefly occur in the system.

Guarantee

For guarantees please refer to the respective terms and conditions of supply for your country.



The installation, electrical connection and first operation of this appliance should be carried out by a qualified installer.



The company does not accept liability for failure of any goods supplied which have not been installed and operated in accordance with the manufacturer's instructions.

Environment and recycling



Recycling of obsolete appliances

Appliances with this label must not be disposed off with the general waste. They must be collected separately and disposed off according to local regulations.