

INSTALLATION

7. Safety

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

7.1 General safety instructions

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

7.2 Instructions, standards and regulations



Note
Observe all applicable national and regional regulations and instructions.



Note
The installation of this appliance shall conform to the Plumbing Code of Australia (PCA), and the New Zealand Building Code.

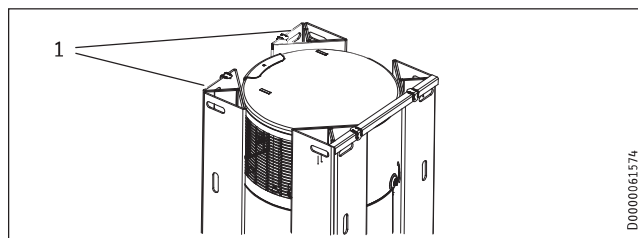
Take note of the appliance type plate and chapter "Specification".

8. Appliance description

8.1 Standard delivery



Note
The accessories are located in the corners of the packaging. Remove the accessories before disposing of the packaging.



1 Corners of the packaging

The following are delivered with the appliance:

- Condensate drain bend
- 2 straight pipe adaptors from G 1 to G 3/4
- T&P valve G 1/2
- Reducer from R 3/4 male thread to G 1/2 female thread

8.2 Required accessories

Various safety assemblies are available that need to be selected subject to the static pressure. These type-tested safety assemblies protect the appliance against unacceptable excess pressure.

For Australia: Various safety assemblies are available to protect the appliance against unacceptable excess pressure and limit the DHW outlet temperature.

8.3 Additional accessories

- Condensate pump (if the condensate cannot be drained off with a naturally occurring fall)

8.4 Incorrect use

The following are not permitted:

- Operating the appliance when the casing is open
- Filling the appliance with a refrigerant other than the one detailed in chapter "Specification / Data table"
- Heating liquids other than potable water

Observe the list of requirements regarding the installation room and non-permissible installation sites (see chapter "Installation site").

9. Preparation

9.1 Transport



CAUTION Injury

- ▶ Observe the weight of the appliance.
- ▶ Use suitable transport aids (e.g. sack truck) and enough personnel for transportation.



Material losses

- The appliance has a high centre of gravity and low overturning moment.
- ▶ Safeguard the appliance against falling over.
- ▶ Only set the appliance down on an even base.



Material losses

- The appliance casing is not designed to withstand strong forces. Incorrect handling can lead to material losses of considerable extent.
- ▶ Observe the information on the packaging.
- Only remove the packaging shortly before installation.

Where possible, do not unpack the appliance until it has arrived in the installation room.

For transport and handling leave the appliance in its packaging and on the pallet. This enables brief horizontal transport and provides places to hold on to during transport.

If the appliance has to be unpacked before transportation, we recommend using a sack truck. Pad the contact surfaces to avoid damaging the appliance. Secure the appliance using a strap. Pad the areas between the strap and the appliance, and avoid over-tightening the strap. Where stairwells are narrow, you can carry the appliance by the handles on the sack truck or trolley and the foot of the appliance.

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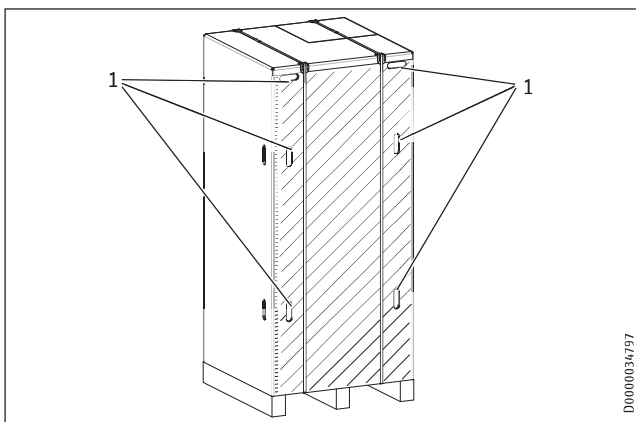
Vehicular transport

! Material losses
The appliance must generally be stored and transported vertically.

On tarmac, asphalt, bitumen or otherwise paved roads you may transport the appliance horizontally over a maximum distance of 160 km. Strong shocks are not permissible.

! Material losses
If transported horizontally, the appliance must always be laid on the shaded side of the box.
The appliance must not remain in a horizontal position for more than 24 hours.
If the appliance was transported horizontally, leave it to rest in a vertical position for at least one hour before commissioning.

► Observe the information on the packaging.



1 Recessed grips

Transport from vehicle to installation room

The cardboard box has reinforced handholds (recessed grips). You can use these recessed grips, as well as the pallet at the lower end, to carry the appliance into the installation room. Take note of the weight of the appliance and ensure sufficient personnel are available.

9.2 Storage

If it is necessary to store the appliance for a prolonged period before installation, observe the following information:

- Only store the appliance in a vertical position. Never store the appliance horizontally.
- Store the appliance in a location that is dry and largely dust-free.
- Protect the appliance from coming into contact with aggressive substances.
- Ensure the appliance is not subjected to shocks or vibrations.

9.3 Installation site

! Material losses
Observe the following list of requirements regarding the installation site.

- Install the appliance where it will be exposed as little as possible to strong direct wind, extreme rain, sun or snow, but will still be well ventilated. Unhindered air intake and air discharge must be possible. If necessary, protect the appliance against the elements with a canopy, base and deflectors.
- The installation site must be free from flammable, highly combustible gases and substances, as well as high levels of dust.
- The application limits for the heat pump and DHW cylinder must be maintained (see chapter "Specification / Data table").
- The substrate of the installation site must be level and have sufficient load bearing capacity. Take note of the weight of the appliance with a full DHW cylinder (see chapter "Specification / Data table"). A floor with insufficient load bearing capacity is in danger of collapse. If the appliance is not level, there may be a risk of appliance damage.
- In the case of indoor installation, the size of the installation room must correspond to the application limits of the appliance (see chapter "Specification / Data table").
- Observe the safety clearances and protection zones.
- Always leave sufficient space to provide access for installation, maintenance and cleaning. Observe the minimum clearances (see "Preparations / Siting the appliance"). Otherwise, the energy efficiency may decrease and the service life may be reduced.
- Never install the appliance in locations with aggressive atmospheres. Never draw off supply air from locations with aggressive atmospheres. This may damage the appliance.
- Check for anything which may have adverse effects on the installation site or the air supply. This can decrease the energy efficiency and reduce the service life, for example.
- Never install the appliance in close proximity to outdoor air conditioning units. This can damage the fan, the compressor or the evaporator, for example.
- Ensure the operation of other equipment in the installation room is not impaired.
- To keep the water pipe lengths as short as possible, we recommend installing the appliance close to the kitchen or bathrooms.
- To prevent adverse effects from operating noise, do not install the appliance close to bedrooms.

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Preparation

Examples of unacceptable installations	
Atmospheres containing ammonia	Sewage works, pigsties
Substances which block the evaporator	Air containing oil or fat, dust (cement, flour, etc.). Note: If the air contains hairspray (e.g. in hairdressing salons), the appliance should be operated with shorter maintenance intervals.
Saline environments	Coastal installations (< 200 m from the coast) can reduce component service life.
Atmospheres containing chlorine or chloride	Swimming pools, salt works
Atmospheres containing thermal water	
Formaldehyde in the atmosphere	Certain wood-based materials (e.g. OSB boards) Certain insulating materials (e.g. foams based on urea-formaldehyde (UF in-situ foams))
Carboxylic acid in the atmosphere	Extract air from kitchens Components of floor cleaners (e.g. vinegar cleaner)

Air polluted with these substances can cause corrosion of copper materials in the refrigerant circuit, especially the evaporator. This corrosion can lead to failure of the appliance. Any damage to the appliance caused in this way is not covered by the guarantee conditions.



Note

The appliance output data is calculated according to the relevant standards, using the intake temperature specified in the data table. Below this temperature the appliance efficiency and output decrease. The heat-up time is extended.



Note

You can improve the efficiency of the appliance by utilising the waste heat from other appliances to heat the DHW cylinder, e.g. boilers, tumble dryers or freezers. If, for example, a tumble dryer releases dust at the installation site, the evaporator must be cleaned more frequently.

Sound emissions

The sound emissions are louder on the air intake and air discharge sides of the appliance than on the closed sides.

- ▶ Do not direct the air intake or air discharge towards noise-sensitive rooms of the house, e.g. bedrooms.

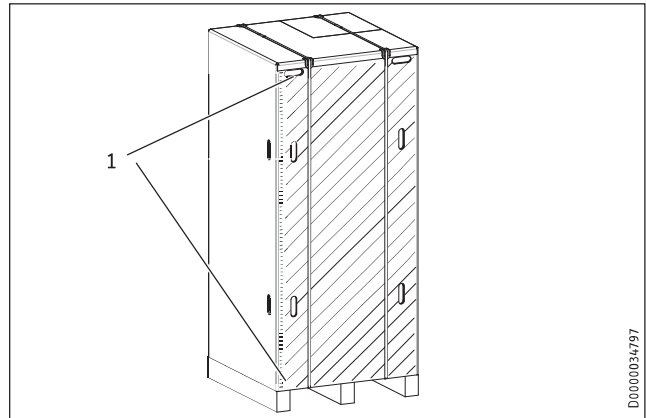


Note

For details on sounds emissions, see chapter "Specification / Data table".

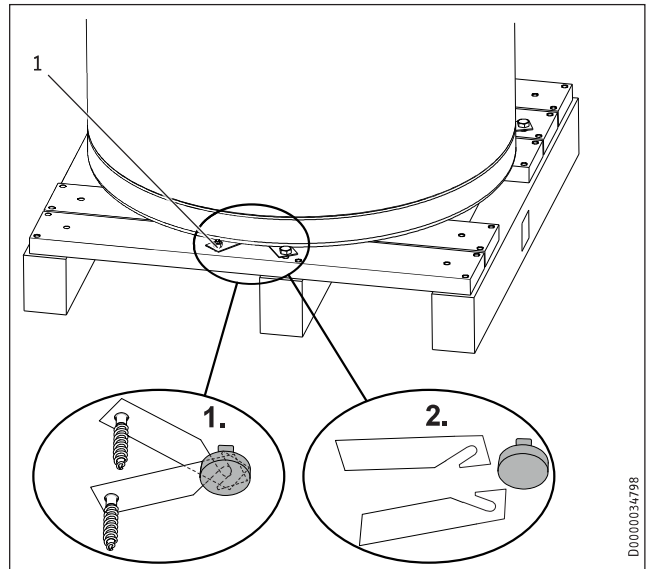
9.4 Siting the appliance

- ▶ Carefully undo the cardboard packaging at the clips.



1 Cardboard packaging clips

The appliance is secured to the pallet with metal brackets and screws. The metal brackets are hooked onto the feet underneath the floor plate of the appliance.



1 Metal bracket fixing screw

- ▶ Remove the fixing screws of the metal brackets from the pallet.
- ▶ Push the metal brackets a little towards the cylinder centre to unhook them from the appliance feet.
- ▶ Pull the metal brackets out from underneath the appliance.



Material losses

Take note of the appliance's weight and centre of gravity.

- ▶ Slightly tip the appliance and carefully roll the appliance off the pallet.
- ▶ Position the appliance in the final installation site.

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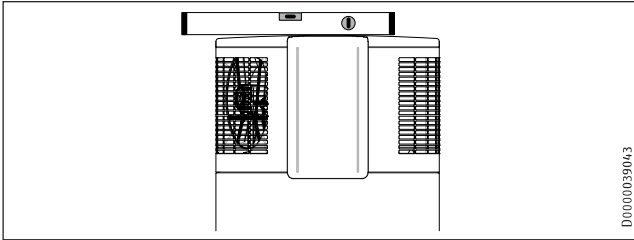


Material losses

The appliance must be positioned vertically to avoid damage.

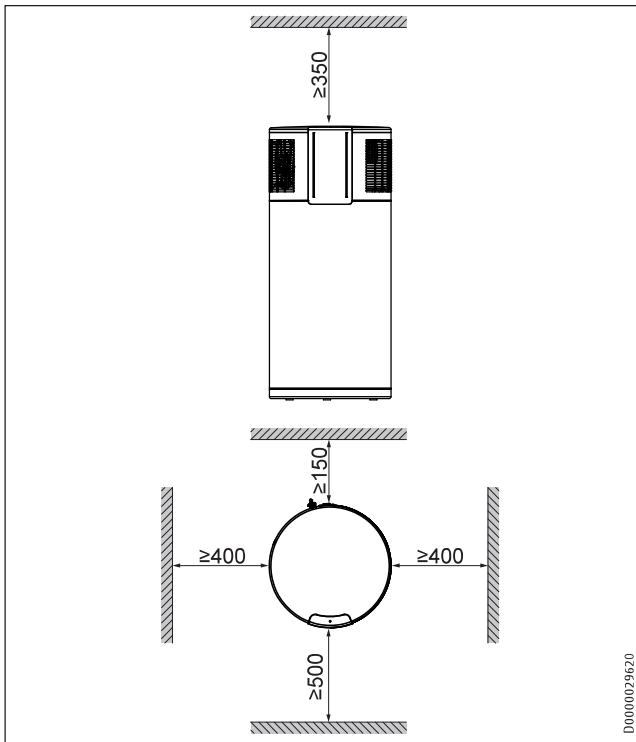
The appliance has height-adjustable feet below its base.

- ▶ Level the appliance horizontally using the height-adjustable feet.



9.4.1 Minimum clearances

- ▶ Maintain the minimum clearances.



10. Installation



WARNING Injury

Incorrect installation can lead to serious injury or material losses.

Before any work, ensure sufficient clearances for installation.

Handle sharp-edged components carefully.

10.1 Water connection



Material losses

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



Material losses

The corrosion protection provided by the anode can only be guaranteed when the electrical conductivity of the potable water is within the limits stated in chapter "Specification / Data table".

Cold water line

Galvanised steel, stainless steel, copper and plastic are approved materials.

A safety valve is required.

DHW line

Stainless steel, copper and plastic pipework are approved.



Material losses

When using plastic pipework, observe the manufacturer's data and chapter "Specification / Fault conditions".

- ▶ Thoroughly flush the pipework before connecting the appliance. Foreign bodies, such as abraded plastic or metal, rust, sand or sealant can impair the operational reliability of the appliance.



Material losses

To protect the connections against corrosion, the water connection must be made with flat gaskets. The use of hemp on connections is not permissible.

DHW circulation

DHW circulation is not permissible.

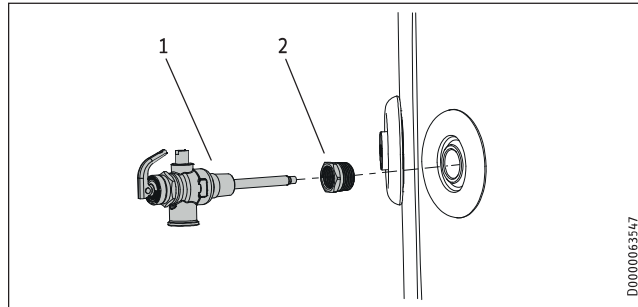
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10.1.1 Safety equipment

A T&P valve or a cold water expansion control valve, or both, must be installed. Observe local and regional regulations.

T&P valve (850 kPa)



- 1 T&P valve
- 2 Reducer from R 3/4 male thread to Rp 1/2 female thread

- ▶ If specified, install a type-tested T&P valve with reducer at the "T&P valve" connection provided on the appliance.

The response pressure of the valve must be below or equal to the permissible operating pressure of the DHW cylinder. The valve protects the appliance against unacceptable excess pressure or temperature. The diameter of the cold water supply line must not be greater than the diameter of the valve.

- ▶ Ensure that the expansion water escaping from the valve can drip into a drain, e.g. a funnel or tundish.

Ensure the drain cannot be shut off.

- ▶ Size the drain pipe so that water can drain off unimpeded when the safety valve is fully opened.
- ▶ Ensure that the drain pipe of the safety valve is open to the outside.
- ▶ Fit the drain pipe of the safety valve with a constant downward slope and in a location free from the risk of frost.

Safety valve (cold water expansion control valve)

- ▶ If specified, install a type-tested 700 kPa safety valve (expansion control valve) in the cold water supply line.

The safety valve protects the appliance against unacceptable excess pressure. The diameter of the cold water supply line must not be greater than the diameter of the safety valve.

- ▶ Ensure that the expansion water escaping from the safety valve can drip into a drain, e.g. a tank or funnel.

Ensure the drain cannot be shut off.

- ▶ Size the drain pipe so that water can drain off unimpeded when the safety valve is fully opened.
- ▶ Ensure that the drain pipe of the safety valve is open to the outside.
- ▶ Fit the drain pipe of the safety valve with a constant fall in a room free from the risk of frost.

10.1.2 Pressure reducing valve

The maximum pressure in the cold water supply line must be at least 20 % below the lowest response pressure of all installed T&P valves. Otherwise a pressure reducing valve is required. If this is the case, install a pressure reducing valve in the cold water supply line. The pressure reducing valve must be set to 540 kPa if a safety valve is installed; otherwise to 700 kPa.

10.1.3 Drain valve

- ▶ Install a suitable drain valve at the lowest point in the cold water supply line.

10.1.4 Thermal insulation

- ▶ Insulate the DHW line and valves against heat loss and to improve energy efficiency in accordance with locally applicable regulations.
- ▶ Insulate the cold water supply line to prevent condensate forming.

10.1.5 DHW outlet



WARNING Burns

The water in the DHW cylinder can be heated to temperatures in excess of 60 °C. There is a risk of scalding at outlet temperatures in excess of 43 °C.

- ▶ Install a temperature limiter in all systems intended for personal hygiene, e.g. balancing valve, thermostatic mixing valve.

10.2 Condensate drain

Install a condensate drain hose in order to remove the condensate which forms.

- ▶ Connect the condensate drain bend included in the standard delivery to the "Condensate drain" connection.
- ▶ Connect a condensate drain hose to the condensate drain bend.

A siphon must be installed to prevent aggressive gases from the sewer entering the appliance. The condensate drain must be installed with an outlet that opens freely above the siphon.



Material losses

Ensure condensate cannot back up.

- ▶ Use a condensate drain hose with a diameter greater than the diameter of the condensate drain bend.
- ▶ Ensure the condensate drain hose is not kinked.
- ▶ Route the condensate drain hose with a continuous fall.

The condensate drain must be open to atmosphere.

- ▶ Use a suitable condensate pump if there is insufficient fall. Take the building characteristics into account.

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Condensate pan heater

! Material losses
If the temperature at the installation site could continuously fall below freezing (1 - 2 days) you should install a condensate pan heater. The condensate pan heater is not part of the standard delivery.

When the compressor is running, install a load-dependent relay to switch on the condensate pan heater after a delay.

The condensate pan heater must have an external power supply.

10.3 Electrical connection

⚡ WARNING Electrocutation
The appliance is supplied with a flexible power cable without plug. In the case of a permanent connection, the appliance must be able to be separated from the power supply by an isolator that disconnects all poles with at least 3 mm contact separation. Contactors, circuit breakers or fuses can be used for this. This type of isolator must be installed in the fixed electrical installation according to the regulations.
For Australia: Ensure that the appliance can be separated from the power supply by a suitable isolator. Contactors, circuit breakers, fuses or general purpose power plugs can be used for this. This type of isolator must be installed according to the electrical installation regulations.

⚡ WARNING Electrocutation
Carry out all electrical connection and installation work in accordance with national and regional regulations.

⚡ WARNING Electrocutation
Ensure that the appliance is connected to the earth conductor.

⚡ WARNING Electrocutation
Observe the safety measures to prevent contact with dangerously high contact voltage.

⚡ WARNING Electrocutation
Coming into contact with live components presents a threat to life. Disconnect the appliance from the power supply before carrying out work on its interior. Prevent the power supply from being switched on while you are working on the system.

⚡ WARNING Electrocutation
Insufficient earthing can lead to electrocution. Ensure the appliance is earthed according to locally applicable requirements.

⚡ WARNING Electrocutation
If the power cable is faulty, replace it with a new one. The power cable should only be replaced by a qualified contractor.

! Material losses
Install a residual current device (RCD).

! Material losses
The specified voltage must match the mains voltage. Observe the type plate.

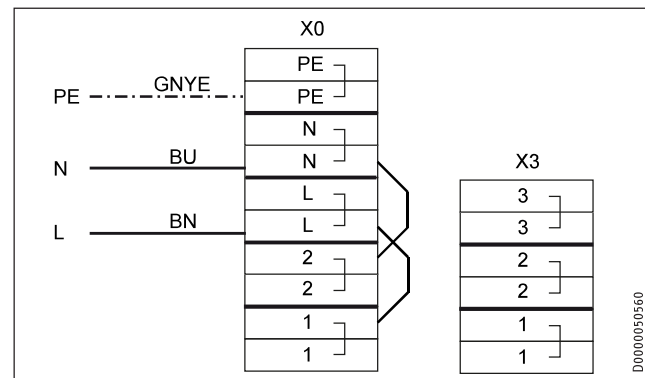
! Material losses
Observe the fuse protection required for the appliance (see chapter "Specification / Data table").

! Material losses
Never connect the appliance to the power supply before the DHW cylinder is filled.

The appliance is supplied with a flexible power cable without plug.

- ▶ If the power cable is not long enough, you may disconnect it from the appliance and replace it with a longer, more suitable cable. Alternatively, you may extend the cable as permitted by regional and national regulations (e.g. with the use of a junction box).
- ▶ When routing the new power cable, ensure waterproofing where it passes through the existing cable grommet. Connect the cable properly inside the appliance.

10.3.1 Standard connection (without external signal transmitter)



BN Brown
BU Blue
GNYE Green/yellow

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10.3.2 Separate power supply to the impressed current anode

At the factory, the appliance is fitted with rechargeable batteries that ensure the power supply to the impressed current anode in the case of a power failure. If regular interruptions to the power supply are not anticipated, the batteries will not require any maintenance.

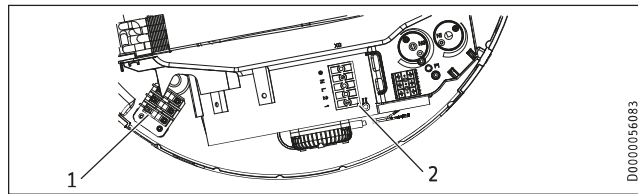
The rechargeable batteries for the impressed current anode must be replaced every three years in the following cases:

- The impressed current anode is not separately connected to a continuous power supply and a switching contact regularly interrupts the power supply to the appliance.
- The security of supply is inadequate.

Failure to observe this point puts the appliance at risk of damage.

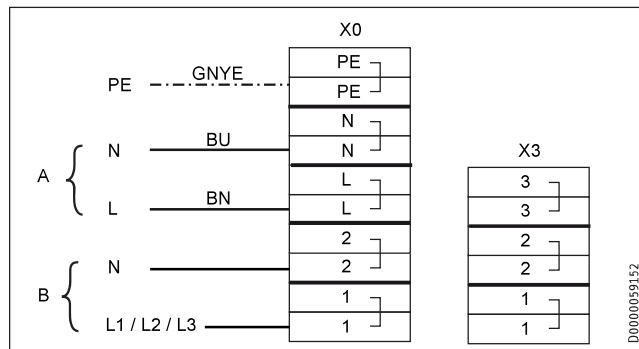
Replacing the batteries can be avoided by connecting the impressed current anode separately to a continuous power supply. This means the DHW cylinder continues to be protected against corrosion if the rest of the appliance is switched off, e.g. by a controlled power supply.

- ▶ Remove the appliance cover (see chapter "Cleaning and maintenance / Removing the appliance cover").



- 1 Strain relief
- 2 Terminal X0

- ▶ Prepare the cables in such a way that each cable terminates with a wire ferrule.
- ▶ Push the cables through one of the cable entries in the appliance casing.
- ▶ Route the cables through the strain relief.
- ▶ Remove the jumper which leads from X0/N to X0/2 in the delivered condition.
- ▶ Remove the jumper which leads from X0/L to X0/1 in the delivered condition.



- A Power supply provided by power supply utility or energy management system for switching the load (compressor)
- B Power supply to impressed current anode and PCB
- BN Brown
- BU Blue
- GNYE Green/yellow

- ▶ Connect the cables for the separate power supply to the impressed current anode to X0/1 and X0/2.



Material losses

The power supply to the impressed current anode must be ensured at all times.

10.3.3 Connection with external signal transmitter



Note

The appliance has a second, higher set temperature which is preset at the factory. This is activated when there is an external switching signal. Set temperature 2 takes priority over the standard set temperature while there is an external switching signal.

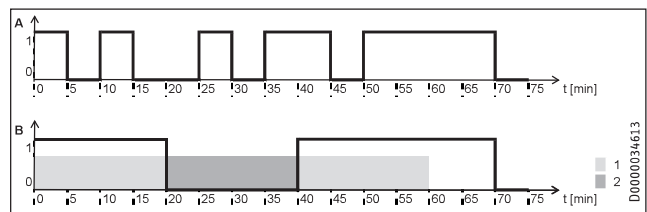
An external signal transmitter for switching a separate set DHW temperature (set temperature 2) can be connected to terminal X3/1-2. In the delivered condition, terminal X3/1-2 is not assigned. If this terminal is connected at the voltage stated in the specification (see "Permissible voltage range, external signal transmitter") (L to X3/1, N to X3/2), the appliance activates set temperature 2.

Following a one-off activation (signal is present for at least 1 minute), set temperature 2 applies for at least 20 minutes. Set temperature 2 takes priority over set temperature 1. When the relevant set DHW temperature has been reached, the compressor switches off and remains off for a minimum idle time of 20 minutes.

The following diagram illustrates the connections by means of a sample signal sequence from an external signal transmitter.

Example:

- Water temperature = 62 °C
- Set temperature 1 = 61 °C
- Set temperature 2 = 65 °C



A External signal

B Compressor

- 1 20 min. minimum runtime, set temperature 2
- 2 20 min. minimum compressor idle time



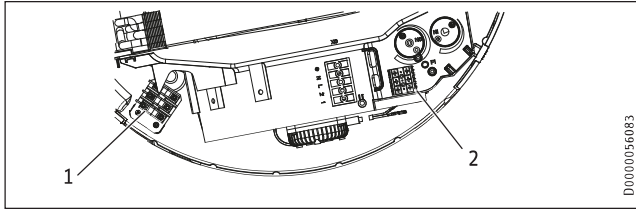
Note

An external signal must be present for at least 60 seconds before the control unit responds to it. For example, this will prevent a brief burst of sunshine from triggering a heat-up process which, in the absence of further sunlight, can no longer be covered using locally generated PV power.

- ▶ Remove the appliance cover (see chapter "Cleaning and maintenance / Removing the appliance cover").

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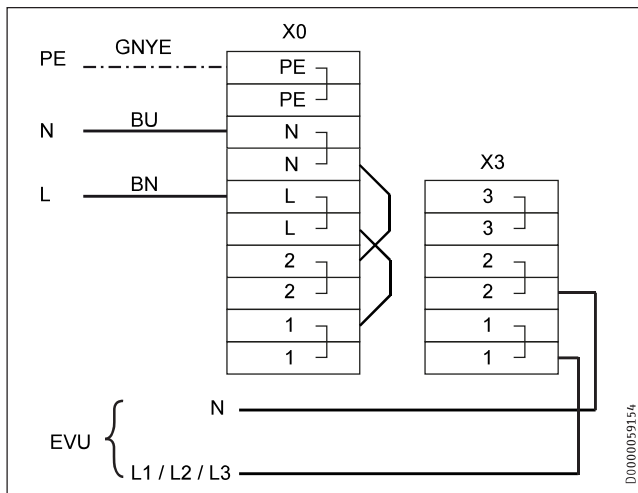
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- 1 Strain relief
- 2 Terminal X3

- ▶ Prepare the cables in such a way that each cable terminates with a wire ferrule.
- ▶ Push the cables through one of the cable entries in the appliance casing.
- ▶ Route the cables through the strain relief.
- ▶ Connect the cables to X3.

Example 1: Power supply utility signal with its own phase



- EVU Power supply utility
- BN Brown
- BU Blue
- GNYE Green/yellow

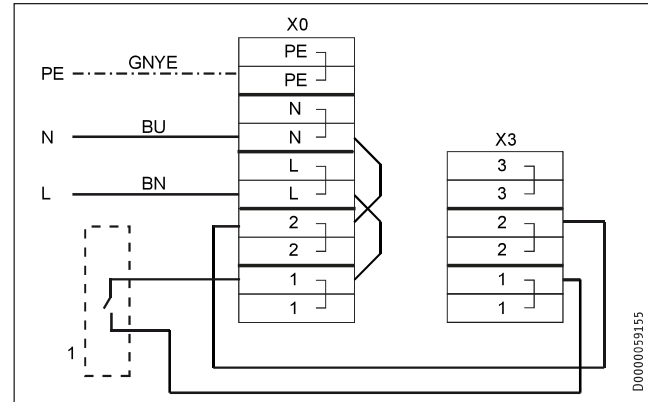
Example 2: Photovoltaic signal via on-site relay and phase routed outside the appliance

Note

The relay in the inverter must meet the following requirements:

- Potential-free relay (240 V AC / 24 V DC, 1 A) with N/O contact
- Adherence to safety regulations and standards for safety extra low voltage
- The switching output must be able to be programmed such that the relay contact closes or opens if certain limits are exceeded or undershot (inverter output level).

If necessary, check with the inverter manufacturer whether the product meets the stated criteria.



- 1 Inverter (floating contact)
- BN Brown
- BU Blue
- GNYE Green/yellow

The inverter power feed is usually located at a central distribution point (e.g. in the main fuse box).

10.4 Assembling the appliance



Note

Refit the appliance cover after completing your work. See chapter "Maintenance and cleaning / Fitting the appliance cover".

11. Commissioning



WARNING Electrocutation
Never operate the appliance when the casing is open or without a cover.

11.1 Initial start-up



Note
Fill the DHW cylinder before switching on the power supply to the appliance.
The appliance is equipped with boil-dry protection to prevent operation if the DHW cylinder is not completely full of water.



Note
Following an interruption to the power supply, compressor operation remains blocked for at least one minute. The PCB delays the electrical start-up by one minute, during which the appliance initialises. If the compressor subsequently fails to start, it may be locked out by additional safety devices (motor overload relay and high pressure switch). This lockout should be cleared after 1 to 10 minutes.

11.1.1 Filling the DHW cylinder

Fill the DHW cylinder and vent the pipework by following the procedure below:

- ▶ Close the drain valve.
- ▶ Open all DHW draw-off points and the shut-off valve in the cold water supply.
- ▶ Close the DHW draw-off points as soon as water comes out of them.
- ▶ Check the safety valve by leaving it open until water runs out.

11.1.2 Settings / function check

- ▶ Switch the power supply ON.
- ▶ Check the appliance function.
- ▶ Check the function of the safety assembly.

After completing the function check, reducing the set DHW temperature helps to save energy.

- ▶ Establish the customer's comfort requirements and adjust the set DHW temperature accordingly. For hygiene reasons, do not set a DHW temperature of less than 61 °C (see section "Set temperature 1" on page 10 and "Set temperature 2" on page 10). Also ensure compliance with the legislation in force at the installation location.

11.1.3 Appliance handover

- ▶ Explain the appliance function to users and familiarise them with how it works.
- ▶ Make users aware of potential dangers, especially the risk of scalding.
- ▶ Make users aware of critical environmental factors and requirements concerning the installation site.
- ▶ Inform users that water may drip from the safety valve during the heat-up process.
- ▶ Please note that the appliance is not protected against frost and corrosion when it is disconnected from the power supply. At the factory, the appliance is fitted with rechargeable batteries that ensure the power supply to the impressed current anode in the case of a power failure. The batteries must be replaced every three years if the power supply is regularly interrupted by a switching contact or if there is inadequate security of supply. We recommend a maintenance contract for replacing the batteries.
- ▶ Hand over these operating and installation instructions to users for safekeeping.

11.2 Recommissioning



Note
Following an interruption to the power supply, compressor operation remains blocked for at least one minute. The PCB delays the electrical start-up by one minute, during which the appliance initialises.
If the compressor subsequently fails to start, it may be locked out by additional safety devices (motor overload relay and high pressure switch). This lockout should be cleared after 1 to 10 minutes.

If the appliance is switched off due to an interruption to the power supply, no specific measures for restarting are required once the power supply has been restored.

If the "Rapid/comfort heat-up" function was active before the power supply interruption, it is re-enabled with a set temperature of 65 °C once the power supply has been restored.

Emergency mode is not reactivated after an interruption to the power supply.

12. Settings

■ Service menu

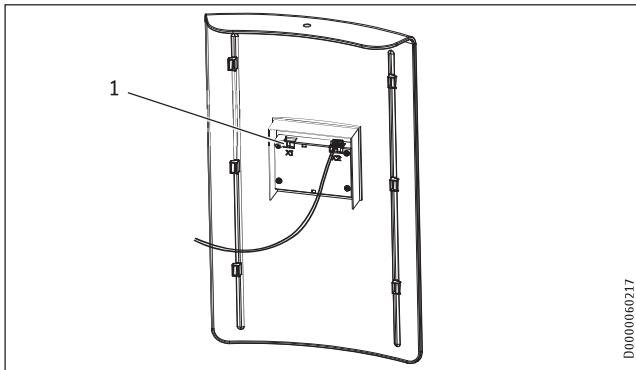


Material losses

Service menu settings shall only be accessed with prior approval from Stiebel Eltron.

To unlock the service menu, you need to connect a service plug or enter a code.

Accessing the service menu with a service plug



1 Slot X1

► Plug the service plug into slot X1 on the back of the programming unit.

Accessing the service menu by entering a code



Press the "Menu" button for longer than 3 s. The software version number of the controller PCB appears.

Display	Version number
301	3.1.00



To display the software version number of the programming unit PCB, press the "Plus" button.

Display	Version number
-103	1.3.00



To go to code entry, press the "Minus" button.

To go from the software version number of the controller PCB directly to code entry, press the "Minus" button.



To go to the code digit check, press the "Rapid heat-up" button. The currently active digit flashes.



Set the first digit using the "Plus" and "Minus" buttons.



To set the next digit, press the "Rapid heat-up" button.

To confirm the code after entering all digits, press the "Rapid heat-up" button.

■ Service menu	
<input type="checkbox"/>	Integral sensor offset
<input type="checkbox"/>	Set the cylinder volume
<input type="checkbox"/>	Compressor lockout due to evaporator fault
<input type="checkbox"/>	Clear high pressure lockout
<input type="checkbox"/>	Clear low pressure lockout
<input type="checkbox"/>	Temperature of evaporator fins
<input type="checkbox"/>	Number of times hot gas temperature sensor was triggered
<input type="checkbox"/>	Number of defrost faults
<input type="checkbox"/>	Number of low pressure triggers
<input type="checkbox"/>	Number of high pressure triggers
<input type="checkbox"/>	Hot gas temperature switching value
<input type="checkbox"/>	Fan lead time
<input type="checkbox"/>	Integral sensor replacement
<input type="checkbox"/>	Set value limit

The parameters in this menu are reserved for qualified contractors.

■ Integral sensor offset

You can manually calibrate the integral sensor with the value set. This should only be done after the DHW cylinder has been fully heated up, without any DHW being drawn-off.

Example: The configured, active set temperature is 55 °C. The integral sensor of the appliance checks when the set temperature is reached. If the compressor switches off after heat-up, check the actual temperature (detected by the cylinder top sensor) using the programming unit. If the actual temperature is 60 °C, for example, set the integral sensor offset to 5 K.

Cylinder top sensor temperature = integral sensor temperature + offset



Press the "Menu" button until "lo" appears on the display.



You can change the value using the "Plus" and "Minus" buttons. Setting range: -5 - 5



■ Set the cylinder volume

The cylinder size is required for accurate calculation of the mixed water volume. You can switch the cylinder size between 200 and 300 l using the "Plus" and "Minus" buttons.

If the PCB has been replaced, you will need to set the cylinder size.

If you see the value 9999 in the cylinder size parameter, you must select a suitable cylinder size for the appliance.

Compressor lockout due to evaporator fault

This menu item is only displayed if there is a compressor lockout due to fault code E 64. You can clear the lockout by pressing the "Rapid heat-up" button or performing a power ON reset.

Clear high pressure lockout

The appliance will be locked out if the high pressure sensor responds 5 times within 5 hours.



To clear the high pressure lockout, press the "Rapid heat-up" button.

Clear low pressure lockout

The appliance will be locked out if the low pressure sensor responds 5 times within 5 hours. This menu item allows you to clear the lockout.



Note

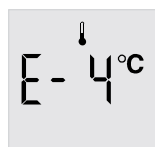
Currently appliances are built without low pressure sensors.

- ▶ If this lockout arises, check the jumper on the PCB (X0/L - X1/6 - A1/X2/ND).



To clear the low pressure lockout, press the "Rapid heat-up" button.

Temperature of evaporator fins



The temperature measured by a sensor on the evaporator fins is displayed here.

Number of times hot gas temperature sensor was triggered

The counter indicates how often the hot gas temperature has exceeded the set hot gas temperature switching value during heat-up.



To reset the counter to 0, press the "Rapid heat-up" button.

Number of defrost faults

The number of defrost faults is displayed here. A defrost fault occurs if the temperature for terminating defrosting, as measured at the temperature sensor between the evaporator fins, has not been reached within the specified time frame.



To reset the counter to 0, press the "Rapid heat-up" button.

Number of low pressure triggers



To reset the counter to 0, press the "Rapid heat-up" button.

Number of high pressure triggers



To reset the counter to 0, press the "Rapid heat-up" button.

Hot gas temperature switching value

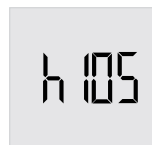


Material losses

Factory default setting: 105 °C

Only a service technician is permitted to change his parameter in line with factory instructions.

If the set hot gas temperature switching value is exceeded, the hot gas temperature counter increments and the set temperature is temporarily reduced to the temperature captured by the integral sensor.



Press the "Menu" button until "h" appears on the display.

You can change this value using the "Plus" and "Minus" buttons. Setting range: 100 - 120 °C



Appliance shutdown

Example: The set temperature is 65 °C. At an actual temperature of 61 °C, for example due to a critical intake temperature, the appliance detects an unacceptably high hot gas temperature. The appliance temporarily reduces the set temperature to 61 °C. The appliance shuts down. Once the charge level has been under-shot (this refers to the currently applicable set value, i.e. 61 °C and not 65 °C), and when the hot gas temperature has dropped again, the compressor restarts and operates with the original set temperature (65 °C). The set temperature is reduced again if the appliance cannot reach this set temperature because the hot gas temperature was previously too high.

■ Fan lead time



Material losses

Factory default setting: 30 s

Only a service technician is permitted to change his parameter in line with factory instructions.

The set value specifies the number of seconds the fan runs before the compressor is enabled.



Press the "Menu" button until "u" appears on the display.



You can change this value using the "Plus" and "Minus" buttons.



■ Replacement sensor

If the integral sensor is faulty, switch this parameter to replacement sensor operation using the "Plus" button.

When replacement sensor operation is active, fault 4 is permanently hidden. The default display shows the cylinder top temperature instead of the mixed water volume.

IE 0 Standard mode

IE 1 Replacement sensor active

■ Set value limit

If set value limiting is active, the lower end of the setting range for the set value is limited to 61 °C. If set value limiting is inactive, the set value can be adjusted to any value within the applicable range (see Set value1/Set value2).

Lt 0 Standard mode

Lt 1 Set value limiting active

13. Appliance shutdown



Material losses

If you disconnect the appliance from the power supply, it is no longer protected against frost or corrosion.

- ▶ Only disconnect the appliance from the power supply for longer periods if you are also draining the DHW cylinder. See chapter "Maintenance / Draining the appliance".

The appliance can only be switched off by interrupting the power supply.

- ▶ Disconnect the appliance from the power supply at the fuse in the distribution board or by unplugging the power plug if the appliance is connected to a socket.

14. Troubleshooting



WARNING Electrocutation

Troubleshooting must only be carried out by a qualified contractor. Prior to all work on the appliance, isolate it from the power supply.



Material losses

If you disconnect the appliance from the power supply, it is no longer protected against frost or corrosion.

- ▶ Only disconnect the appliance from the power supply for longer periods if you are also draining the DHW cylinder.

- ▶ For work inside the appliance, remove the appliance cover (see chapter "Cleaning and maintenance / Removing the appliance cover").

- ▶ If necessary, remove the upper section of the casing jacket (see chapter "Maintenance and cleaning / Removing the casing ring").



Note

Refit the casing ring after completing the work. See chapter "Maintenance and cleaning / Fitting the casing ring".



Note

Refit the appliance cover after completing your work. See chapter "Maintenance and cleaning / Fitting the appliance cover".



Note

Following an interruption to the power supply, compressor operation remains blocked for at least one minute while the appliance initialises.


If the compressor subsequently fails to start, it may be blocked by additional safety devices (motor overload relay, high pressure switch). This lockout can last between 1 and 10 minutes.


INSTALLATION

Troubleshooting

Fault	Cause	► Remedy
No hot water is available.	The impressed current anode is faulty.	Replace the impressed current anode.
The compressor is switched off unexpectedly.	The application limits have been exceeded or undershot.	No action required.
	Excessive pressure in the refrigerant circuit. The safety pressure limiter has responded 5 times in 5 hours. The compressor has been switched off.	Eliminate the cause of the increased pressure in the refrigerant circuit. Wait approx. 5-15 minutes for the appliance to equalise the pressure. The appliance lockout can only be cleared using a service programming unit.
The heating output of the appliance has reduced.	An inadequate air flow across the evaporator is a possible cause.	Check whether the fan is dirty. Check whether the evaporator is dirty. Ensure that the supply and extract air flow are unimpeded.


14.1 Fault codes

		Fault description	Remedy
2	Continuously on	The cylinder top sensor is faulty. The actual temperature display switches from the cylinder top sensor to the integral sensor. The appliance continues to heat without any loss of comfort. The mixed water volume cannot be calculated and is displayed as "- -".	Check that the plug is seated correctly. Measure the resistance of the sensor and compare it with the resistance table. Install the replacement sensor.
4	Continuously on	The integral sensor is faulty. In the event of a faulty integral sensor, the integral sensor is set to the value of the cylinder top sensor, and the mixed water volume is calculated using this value. The appliance continues to heat with a reduced start hysteresis. A mixed water volume is still calculated, based on the assumption that the cylinder top temperature is reached throughout the DHW cylinder.	Check that the plug is seated correctly. Measure the resistance of the sensor and compare it with the resistance table. Install the replacement sensor. In the service menu, use parameter "IE" to switch to standby mode.
6	Flashing	The cylinder top sensor and the integral sensor are faulty. The appliance no longer delivers heat.	Check that the plug is seated correctly. Measure the resistances of the sensor and compare them with the resistance table. Install the replacement sensor. In the service menu, use parameter "IE" to switch to standby mode.

		Fault description	Remedy
8	Flashing	The appliance has ascertained that the DHW cylinder has not been heated within the maximum temperature increase time, despite there being a demand.	Check if a DHW circulation line is installed and whether it is insulated. The total output loss is greater than the heating output of the appliance. Check if a DHW circulation pump is installed and whether it is controlled according to temperature or time. If necessary, install a corresponding control unit. Check the refrigerant circuit for leaks.
16	Continuously on	A short circuit of the impressed current anode has occurred or the protective anode is faulty.	Check the cables and relevant plug-in connections of the impressed current anode according to the connection diagram and replace faulty cables. Check the impressed current anode in the heating element/anode assembly and replace if necessary.
32	Flashing	The appliance is not being operated with a completely filled DHW cylinder. The appliance is not heating. The anode current is interrupted. The appliance is not heating.	Fill the DHW cylinder of the appliance. The fault code disappears and the appliance starts. Check the contacts of the impressed current anode.
64	Continuously on	The defrost temperature has not yet been reached after the maximum defrost time has elapsed. The compressor is not working. The temperature of the intake air is below the lower application limit.	Check the position of the evaporator sensor in the evaporator. Wait for higher ambient temperatures. Ensure that the application limit is not undershot.
128	Continuously on	There is no communication between the controller and the programming unit. The most recently selected set values are active. The appliance continues to heat.	Check that the plug is seated correctly and replace the connecting cable if necessary. Replace the programming unit PCB.
256	Flashing	Manually activated emergency mode (only electric emergency/booster heater active)	See chapter "Appliance description / Emergency mode".
E 1	Flashing	The temperature sensor on the air inlet is faulty.	Check that the plug is seated correctly. Measure the resistance of the sensor and compare it with the resistance table. Replace the sensor.
E 2	Flashing	The temperature sensor on the evaporator is faulty.	Check that the plug is seated correctly. Measure the resistance of the sensor and compare it with the resistance table. Replace the sensor.
E 4	Continuously on	The hot gas temperature sensor is faulty. The appliance continues to heat. To protect the appliance, the (possibly higher) set temperature is reduced to the set value for setback.	Check that the plug is seated correctly. Measure the resistance of the sensor and compare it with the resistance table. Replace the sensor.

INSTALLATION

Maintenance

		Fault description	Remedy
E 16	Continuously on	The high pressure switch has responded. Compressor heating mode is temporarily blocked. Compressor heating mode will continue as soon as the pressure has normalised.	No action required. After consultation with the customer, reduce the set temperature if required. Increase the charge level with the programming unit. Check the offset of the integral sensor to the cylinder top sensor and adjust if necessary. Check the high pressure switching point and replace the high pressure switch if necessary.
E 32	Continuously on	An electrical fault has occurred.	A1/X2: Check whether the power supply has been interrupted. Then reset the fault with the corresponding menu option.
E 64	Flashing	Evaporator temperature < Minimum evaporator temperature	Check whether the evaporator is clogged with deposits. If required, clean the evaporator with clear water without cleaning agents or other additives. Check whether air can flow freely through the appliance. Check whether the fan is blocked or faulty. Replace the fan if necessary. Check the function and setting of the expansion valve. Check whether the appliance has defrosted.
E 128	Flashing	A permanent pressure switch fault has occurred. A pressure fault occurred multiple times within a defined pressure fault evaluation time.	Check the relevant fault counter and look up the corresponding fault code remedy: E 16 (high pressure), E 32 (electrical wiring fault). Once the cause of the fault has been eliminated, clear the fault code in menu item "Hd 1" by pressing the "Rapid heat-up" button.

14.2 Resetting the safety pressure limiter

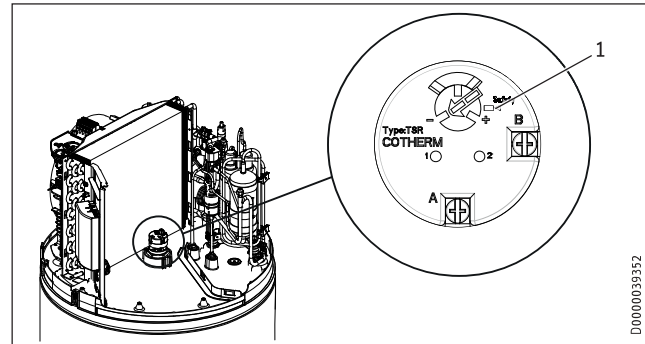
The safety pressure limiter responds in the event of unacceptably high pressure in the refrigerant circuit. If the safety pressure limiter responds 5 times in 5 hours, compressor operation is blocked.

- ▶ Eliminate the cause of the increased pressure in the refrigerant circuit.
- ▶ Wait approx. 5-15 minutes for the appliance to equalise the pressure.

The appliance lockout can only be cleared using a service programming unit.

14.3 WWK 222 H / WWK 302 H: Resetting the high limit safety cut-out

If the DHW cylinder is overheated, the high limit safety cut-out switches off the electric emergency/booster heater to protect the appliance.



1 Reset button for high limit safety cut-out

- ▶ Once the cause of the fault has been removed, press the reset button of the high limit safety cut-out on the rod thermostat. To do so, remove the appliance cover.

14.4 Motor overload relay

The motor overload relay will shut down the compressor if it is overloaded because of excessive thermal load.

- ▶ Remove the cause.

After a short cooling period, the motor overload relay will restart the compressor automatically.

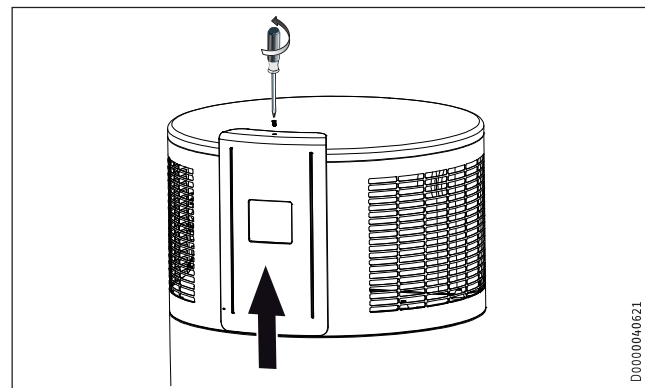
15. Maintenance



WARNING Electrocutation

Prior to all work on the appliance, isolate it from the power supply.

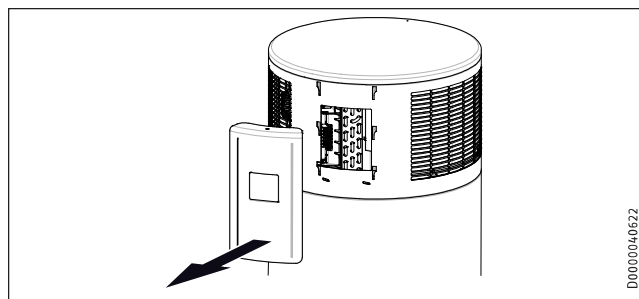
15.1 Removing the appliance cover



- ▶ Undo the screw (Torx) that secures the programming/control cover to the appliance.
- ▶ Push the programming/control cover upwards.

INSTALLATION

Maintenance

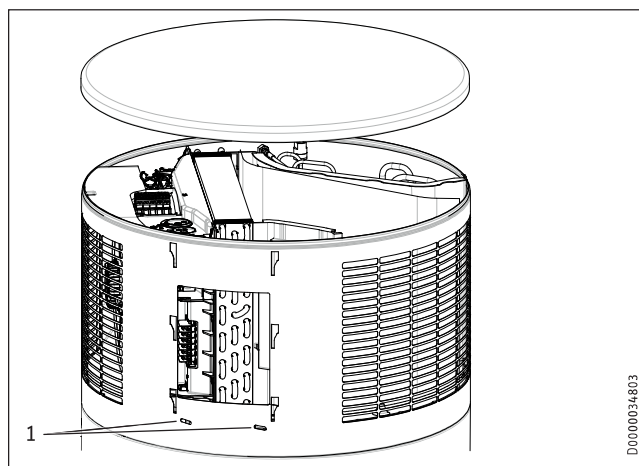


- ▶ Carefully remove the cover.
- ▶ A cable connects the operating controls to the appliance PCB. If necessary, disconnect the plug at the back of the programming/control cover to fully remove it.
- ▶ Undo the plug-in connection in the cable that runs to the battery pack at the back of the cover.
- ▶ Carefully lift away the appliance cover and release the earth cable that runs from the appliance control panel to the cover.

Note
Refit the appliance cover after completing your work. See chapter "Maintenance and cleaning / Fitting the appliance cover").

15.2 Removing the casing ring

Note
If you require more space to work inside the appliance, you can remove the casing ring on the upper section of the appliance.

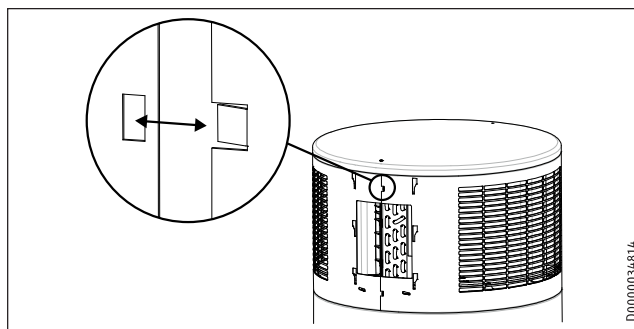


- 1 Fixing screws on casing ring

The casing ring is fastened with screws.

- ▶ Undo the fixing screws on the casing ring.
- ▶ Remove the condensate drain bend and pipe collar of the drain. Turn anti-clockwise to release.

Material losses
Inside the appliance, an earth cable is connected to the casing ring. Release the earth cable in order to be able to remove the casing ring.



The casing ring overlaps along the joint. A tab on one end clips into the recess at the other end of the casing ring.

- ▶ Ease the casing ring apart, until it can be removed or slid downwards.

Note
Refit the casing ring after completing the work. See chapter "Maintenance and cleaning / Fitting the casing ring").

15.3 Cleaning the evaporator

WARNING Injury
The evaporator consists of numerous sharp-edged fins.
▶ Be careful when cleaning the evaporator and wear protective clothing, especially safety gloves.

To keep the appliance performance levels as high as possible, check and clean the appliance evaporator as often as necessary.

- ▶ Undo the screw that fastens the appliance cover to the top of the programming/control cover.
- ▶ Remove the programming/control cover and the appliance cover.
- ▶ Carefully clean the evaporator fins. Only use water and a soft brush for this. Never use acidic or alkaline cleaning agents.

15.4 Draining the cylinder

WARNING Burns
Hot water may escape when draining the DHW cylinder.

To drain the DHW cylinder, e.g. when shutting the appliance down, proceed as follows.

- ▶ Isolate the appliance from the power supply.
- ▶ Close the shut-off valve in the cold water supply line.

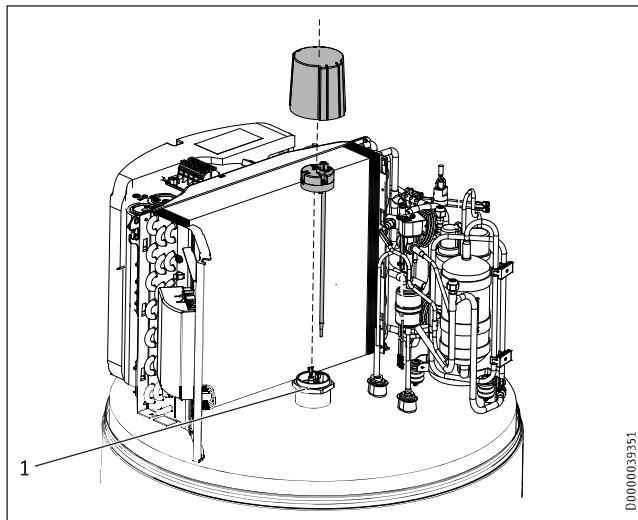
The DHW cylinder is drained via the cold water supply line.

- ▶ Open the drain valve installed in the cold water supply line (see chapter "Water connection"). If no drain valve has been installed, undo the cold water supply line at the "Cold water inlet" connection.
- ▶ To vent the system, undo the DHW line connected to the "DHW outlet" connection.

Some residual water will remain in the bottom of the DHW cylinder.

15.5 Descaling the electric emergency/booster heater

Only descale the flange of the emergency/booster heater after disassembly. Never treat the inside of the DHW cylinder or the impressed current anode with descaling agents. The electric emergency/booster heater is screwed into the DHW cylinder of the appliance at a central point at the top.



1 Electric emergency/booster heater with protective anode

15.6 Valves

Regularly check the valves in the system (safety valve, pressure reducing valve, drain valve) to ensure the operational reliability of the appliance. The amount of limescale deposits depends on the local water quality.

- ▶ Check all valves in the system and remove limescale deposits.
- ▶ Replace the valves if necessary.
- ▶ Check the function of the valves.

15.7 Condensate drain

- ▶ Check whether the condensate drain is clear of obstructions. Remove any dirt.

15.8 Replacing the power cable

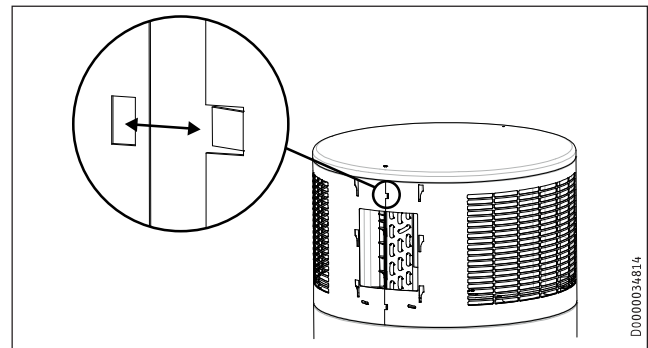


WARNING Electrocutation
The power cable must only be replaced (for example if damaged) by a qualified contractor.

15.9 Fitting the casing ring



WARNING Electrocutation
▶ Reconnect the earth cable to the casing ring.



- ▶ Fit the upper casing ring. The casing ring overlaps along the joint. A tab on one end clips into the recess at the other end of the casing ring.
- ▶ Secure the casing ring with screws.
- ▶ Fit the pipe collar of the condensate drain and the condensate drain bend.

15.10 Protective anode and battery change

The appliance is equipped with a maintenance-free impressed current anode that protects the cylinder from corrosion when it is connected to the power supply. At the factory, the appliance is fitted with rechargeable batteries that ensure the power supply to the impressed current anode in the case of a power failure. The appliance power supply must not be interrupted for more than 16 hours.

If the power supply is regularly interrupted by a switching contact or the security of supply is inadequate, the batteries of the impressed current anode must be replaced every three years. Failure to comply may result in damage to the appliance. If regular interruptions to the power supply are not anticipated and there is security of supply, no maintenance of the batteries is required and the appliance is maintenance-free in this regard.



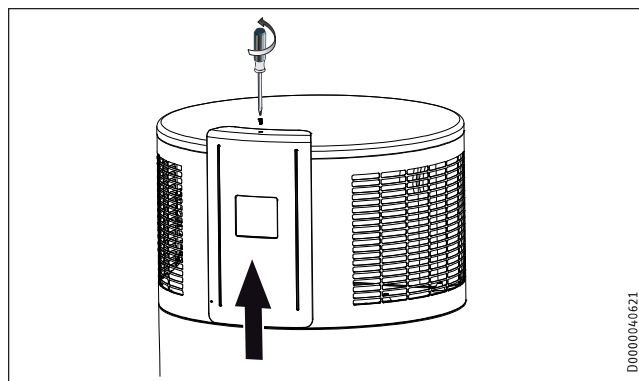
Material losses

Never use batteries that cannot be charged. Only rechargeable NiMH batteries are permissible. Batteries may be damaged in the appliance. Without a power supply, the impressed current anode and the cylinder would not be protected against corrosion.

The batteries are secured at the back of the programming/control cover.

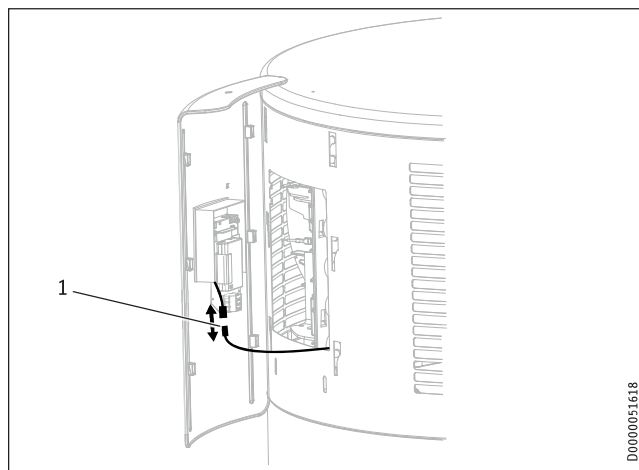
INSTALLATION

Maintenance



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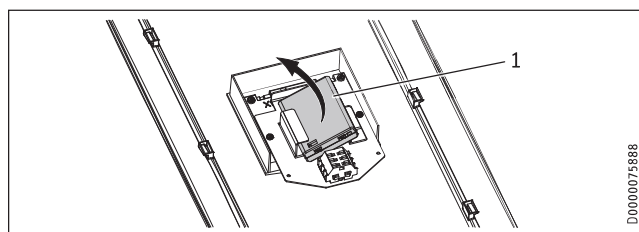
- ▶ Undo the screw securing the cover.
- ▶ Carefully remove the cover so that the cables running from the batteries to the impressed current anode in the appliance are not pulled out.



D0000051618

1 Plug-in connection

- ▶ Undo the plug-in connection by pressing the catches on both sides.



D0000075888

1 Battery compartment

- ▶ Carefully pull the battery compartment on the right-hand side forward.
- ▶ Remove the battery compartment from the retainer.
- ▶ Open the battery compartment using a screwdriver.
- ▶ Replace the batteries (NiMH, type AAA ≥ 800 mAh).



Material losses

Make sure that the batteries are inserted properly and the right way round, because otherwise there will be no corrosion protection in the event of interruptions to the power supply.

- ▶ Close the battery compartment using a screwdriver.
- ▶ Push the battery compartment into the retainer.
- ▶ Reconnect it to the appliance with the plug-in connection.

15.11 Fitting the appliance cover



WARNING Electrocutation

▶ Reconnect the earth cable to the appliance cover.

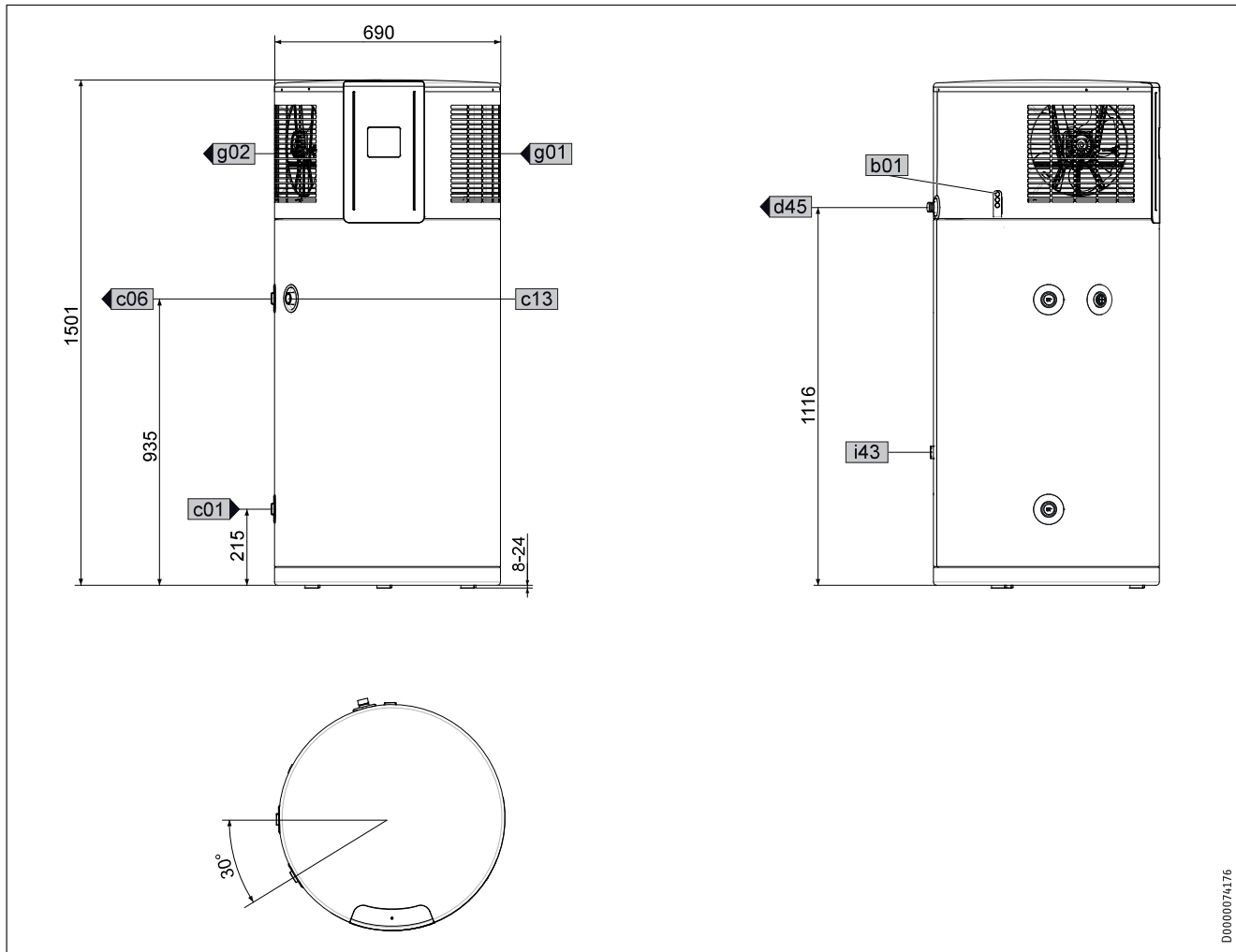
- ▶ Place the cover back on the appliance.
- ▶ Press the cover into the bead around the casing ring.
- ▶ Connect the cable linking the batteries with the internal control unit at the back of the programming/control cover.
- ▶ Connect the cable linking the programming unit to the PCB inside the appliance at the back of the programming/control cover.
- ▶ Insert the programming/control cover.
- ▶ Use the screw to secure the programming/control cover at the top of the appliance.

INSTALLATION Specification

16. Specification

16.1 Dimensions and connections

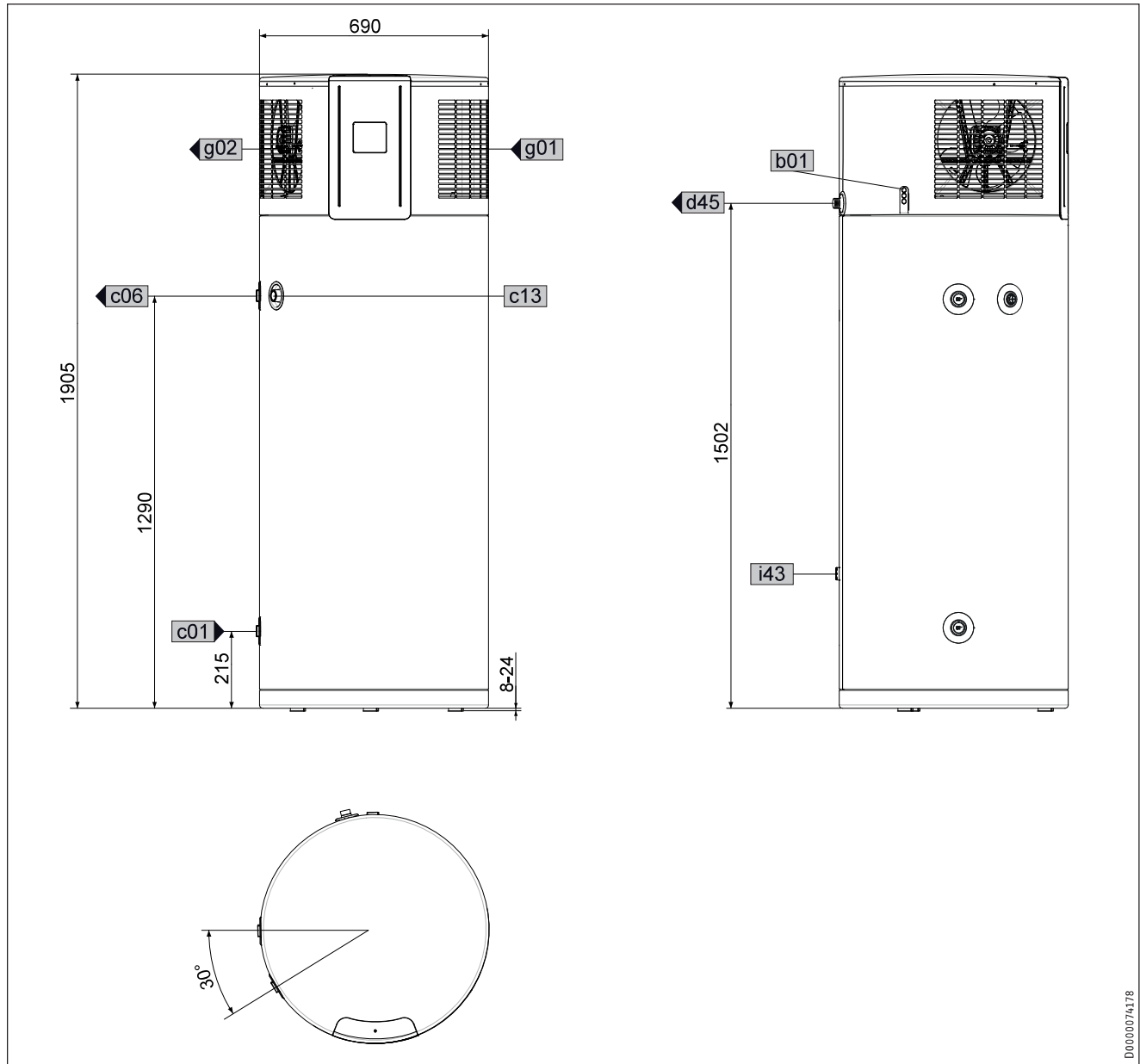
16.1.1 WWK 222 / WWK 222 H



		WWK 222	WWK 222 H
b01	Entry electrical cables		
c01	Cold water inlet	Male thread	G 1
c06	DHW outlet	Male thread	G 1
c13	T&P valve	Female thread	Rp 3/4
d45	Condensate drain	Male thread	G 3/4
g01	Air intake		
g02	Air discharge		
i43	Cover for manufacturing aperture		

INSTALLATION Specification

16.1.2 WWK 302 / WWK 302 H

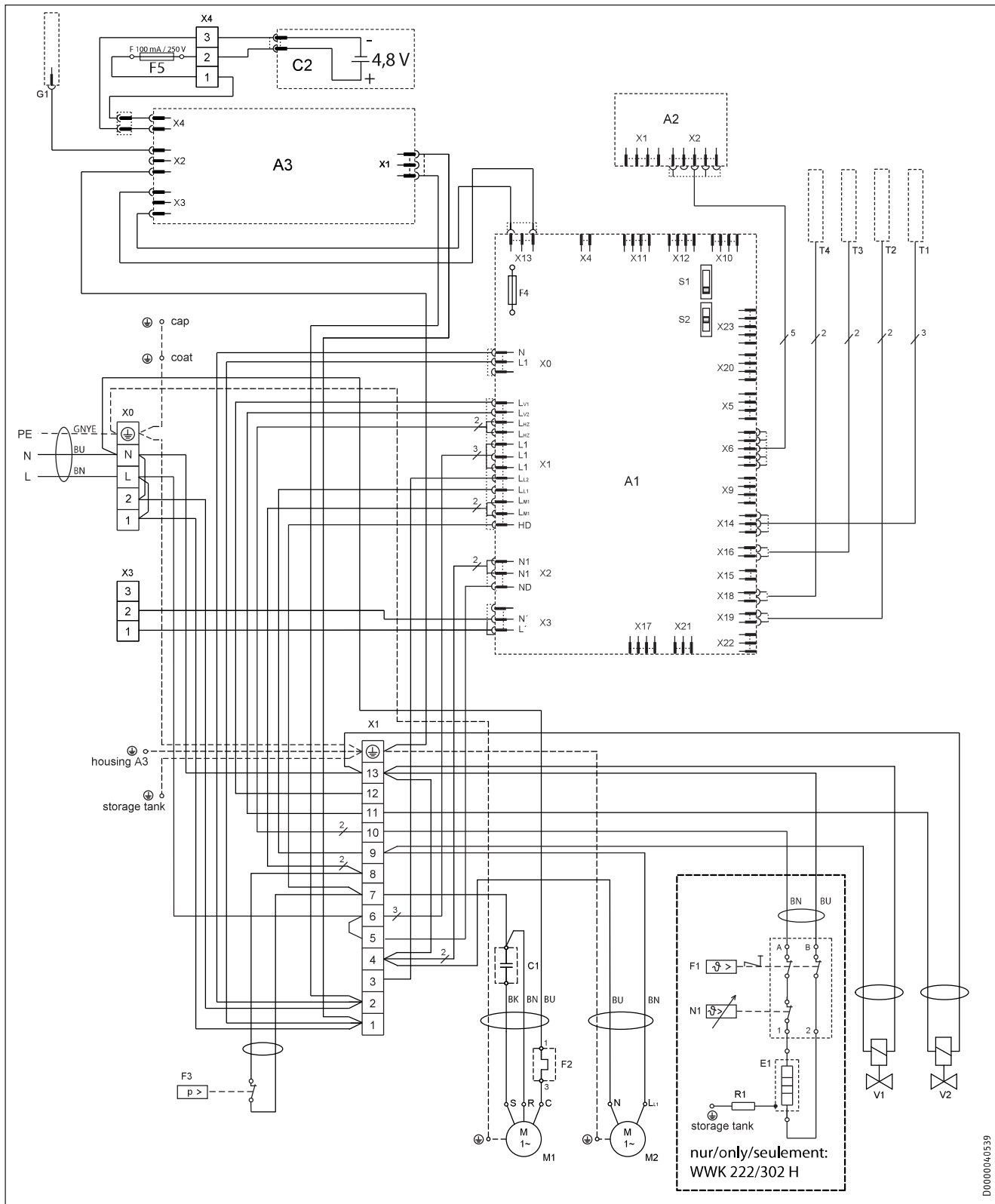


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		WWK 302	WWK 302 H
b01	Entry electrical cables		
c01	Cold water inlet	Male thread	G 1
c06	DHW outlet	Male thread	G 1
c13	T&P valve	Female thread	Rp 3/4
d45	Condensate drain	Male thread	G 3/4
g01	Air intake		
g02	Air discharge		
i43	Cover for manufacturing aperture		

INSTALLATION Specification

16.2 Wiring diagram



INSTALLATION

Specification

A1 Electronic assembly (control unit)
A2 Electronic assembly (programming unit)
A3 Electronic assembly (electrical corrosion protection)
C1 Capacitor
C2 Battery pack
E1 Heating element
F1 High limit safety cut-out TSR
F2 Motor overload relay M1
F3 High pressure switch
F4 Fuse
F5 Fuse
G1 Impressed current anode
M1 Compressor
M2 Fan

N1 Thermostat TSR
R1 Resistor
S1 DIP switch (operating mode)
S2 DIP switch
T1 Temperature sensor cylinder top/int.
T2 Temperature sensor, hot gas
T3 Temperature sensor, air intake
T4 Temperature sensor, evaporator
V1 Solenoid valve (live in heating mode)
V2 Solenoid valve (live in defrost mode)
X0 Mains terminal
X1 Terminal
X3 Terminal
X4 Terminal, battery pack

16.3 Fault conditions



WARNING Burns

In the case of a fault, temperatures up to the high limit safety cut-out limit can occur (see chapter "Specification / Data table").

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16.4 Data table

		WWK 222 231209	WWK 222 H 233209	WWK 302 231211	WWK 302 H 232905
Hydraulic data					
Nominal capacity	l	220	220	302	302
Application limits					
DHW temperature with heat pump	°C	61	61	61	61
Max. DHW temperature with heat pump	°C	65	65	65	65
Max. DHW temperature with emergency/booster heater	°C	65	65	65	65
High limit safety cut-out	°C	92	92	92	92
Min./max. application limits of heat source for heat pump operation	°C	-5/+42	-5/+42	-5/+42	-5/+42
Min./max. application limits for cylinder ambient temperature	°C	-5/+55	-5/+55	-5/+55	-5/+55
Min. installation room volume (recirculation air mode, general domestic use)	m ³	13	13	13	13
Max. permissible operating pressure, cold water/DHW	MPa	0.85	0.85	0.85	0.85
Min./max. conductivity, potable water	µS/cm	100-1500	100-1500	100-1500	100-1500
Annual Average Coefficient of Performance (Australia)					
ACOP (AS/NZS 4234 climate zone 2 medium load)		3.94	3.94	3.58	3.58
Values					
Temperature setting range, DHW	°C	61-65	61-65	61-65	61-65
Type of anode		Maintenance-free impressed current anode	Maintenance-free impressed current anode	Maintenance-free impressed current anode	Maintenance-free impressed current anode
Air flow rate	m ³ /h	550	550	550	550
Recommended number of users		≤ 4	≤ 4	≤ 6	≤ 6
Energy data					
DHW heating energy efficiency class (load profile), indoor air		A+ (L)	A+ (L)	A (XL)	A (XL)
Output data to EN 16147					
Nominal DHW temperature (EN 16147)	°C	61	61	61	61
Nominal load profile (EN 16147)		L	L	XL	XL
Heating output					
Average heating output (A15 / W10-55)	kW	1.6	1.6	1.6	1.6
Power consumption					
Average power consumption of heat pump (A15 / W10-55)	kW	0.5	0.5	0.5	0.5
Max. heat pump power consumption (excl. start-up)	kW	0.65	0.65	0.65	0.65
Power consumption, emergency/booster heater	kW		1.5		1.5
Max. power consumption, heat pump + emergency/booster heater	kW		2.2		2.2
Electrical data					
Rated voltage	V	230	230	230	230
Power supply		1/N/PE 220-240 V 50/60 Hz	1/N/PE 220-240 V 50/60 Hz	1/N/PE 220-240 V 50/60 Hz	1/N/PE 220-240 V 50/60 Hz
Permissible voltage range, external signal transmitter		~ 220-240 V 50/60 Hz	~ 220-240 V 50/60 Hz	~ 220-240 V 50/60 Hz	~ 220-240 V 50/60 Hz
Max. operating current	A	3.18	9.7	3.18	9.7
Max. starting current	A	15.4	23.44	15.4	23.44
Fuse protection	A	C10	C16	C10	C16
Sound emissions					
Sound power level (EN 12102)	dB(A)	60	60	60	60
Average sound pressure level at 1 m distance, free field	dB(A)	45	45	45	45
Versions					
IP rating		IP 24	IP 24	IP 24	IP 24
Refrigerant		R134a	R134a	R134a	R134a
Refrigerant charge	kg	0.85	0.85	0.85	0.85
Global warming potential of the refrigerant (GWP100)		1430	1430	1430	1430
CO ₂ equivalent (CO ₂ e)	t	1,216	1,216	1,216	1,216
Power cable length approx.	mm	2000	2000	2000	2000
Dimensions					
Height	mm	1501	1501	1905	1905
Diameter	mm	690	690	690	690
Height when tilted	mm	1652	1652	2026	2026
Height when tilted incl. packaging	mm	1895	1895	2230	2230
Packing unit dimensions height/width/depth	mm	1740/740/740	1740/740/740	2100/740/740	2100/740/740
Weights					
Weight, empty	kg	120	120	135	135

INSTALLATION

Specification

	WWK 222	WWK 222 H	WWK 302	WWK 302 H
Connections				
Condensate connection	G 3/4	G 3/4	G 3/4	G 3/4
Safety valve connection	Rp 3/4	Rp 3/4	Rp 3/4	Rp 3/4
Water connection	G 1 (with adaptor Rp 3/4 fem.)	G 1 (with adaptor Rp 3/4 fem.)	G 1 (with adaptor Rp 3/4 fem.)	G 1 (with adaptor Rp 3/4 fem.)

The output data refers to new appliances with clean heat exchangers.

Nominal data to EN 16147 – heat pump for recirculation air

16.5 Standardised output data

Information on determining and interpreting the specified standardised output data

Standard: EN 16147

The output data specifically mentioned in text, diagrams and technical datasheets has been determined in line with the test conditions described in the standard shown in the heading of this chapter.

Generally, these standardised test conditions will not fully meet the conditions found at the installation site of the system user. Depending on the chosen test method and the extent to which the selected method deviates from the conditions described in the standard shown in the heading of this chapter, any deviations can have a considerable impact. Additional factors that have an influence on the test values are the measuring equipment, the system configuration, the age of the system and the flow rates.

A confirmation of the specified output data can only be obtained if the conditions applicable to the relevant test match those of the standard shown in the heading of this chapter.

Guarantee

The guarantee conditions of our German companies do not apply to appliances acquired outside of Germany. In countries where our subsidiaries sell our products a guarantee can only be issued by those subsidiaries. Such guarantee is only granted if the subsidiary has issued its own terms of guarantee. No other guarantee will be granted.

We shall not provide any guarantee for appliances acquired in countries where we have no subsidiary to sell our products. This will not affect warranties issued by any importers.

Environment and recycling

We would ask you to help protect the environment. After use, dispose of the various materials in accordance with national regulations.

Warranty Stiebel Eltron Australia Only - According to national regulations in Australia

Warranty for Heat Pumps – Models WWK 222, WWK 222 H, WWK 302 and WWK 302 H

Who gives the warranty

1. The warranty is given by Stiebel Eltron (Aust) Pty Ltd (A.B.N. 82 066 271 083) of 294 Salmon Street, Port Melbourne, Victoria, 3207 (“we”, “us” or “our”).

The warranty

2. This warranty applies to Stiebel Eltron Heat Pumps – Models WWK 222, WWK 222 H, WWK 302 and WWK 302 H (the “unit”) manufactured after 1 July 2015.
3. Subject to the warranty exclusions we will repair or replace, at our absolute discretion, a faulty component in your unit free of charge if it fails to operate in accordance with its specifications during the warranty period.
4. If we repair or replace a faulty component to your unit under this warranty, the warranty period is not extended from the time of the repair or replacement.
5. The warranty period commences on the date of completion of the installation of the unit. Where the date of completion of installation is not known, then the warranty period will commence 2 months after the date of manufacture.
6. The warranty period for a unit used for domestic purposes is shown in the table below. Domestic purposes means that the unit is used in a domestic dwelling.

Component	Warranty period
Cylinder and condenser	5 years
Sealed refrigeration system, including compressor, evaporator, valves and associated pipe work. All other electrical components.	2 years
T&P relief valve	1 year

7. The warranty period for a unit used for commercial purposes is shown in the table below. Commercial purposes means that the unit is used for a non-domestic purpose and includes but not limited to being used in a motel, hotel, mining camp or nursing home.

Component	Warranty period
Cylinder and condenser	2 years
Sealed refrigeration system, including compressor, evaporator, valves and associated pipe work. All other electrical components.	2 years
T&P relief valve	1 year

Your entitlement to make a warranty claim

8. You are entitled to make a warranty claim if:
 - 8.1. you own the unit or if you have the owner’s consent to represent the owner of the unit;
 - 8.2. you contact us within a reasonable time of discovering the problem with the unit;

How you make a warranty claim

9. To make a warranty claim you must provide us with the following information:
 - 9.1. The model number of the unit;
 - 9.2. A description of the problem with the unit;
 - 9.3. The name, address and contact details (such as phone number and e-mail address) of the owner;
 - 9.4. The address where the unit is installed and the location (e.g. at side of house);
 - 9.5. The serial number of the unit;
 - 9.6. The date of purchase of the unit and the name of the seller of the unit;
 - 9.7. The date of installation of the unit;
 - 9.8. A copy of the certificate of compliance when the unit was installed.
10. The contact details for you to make your warranty claim are:

Name: Stiebel Eltron (Aust) Pty Ltd

Address: 294 Salmon Street, Port Melbourne, Victoria, 3207

Telephone: 1800 153 351 (8.00 am to 5.00 pm AEST Monday to Friday)

Contact person: Customer Service Representative

E-mail: service@stiebel.com.au
11. We will arrange a suitable time with you to inspect and test the unit.

Warranty exclusions

12. We may reject your warranty claim if:
 - 12.1. The unit was not installed by a registered and qualified plumber.
 - 12.2. The unit was not installed and commissioned:
 - a) in Australia;
 - b) in accordance with the Operating and Installation Guide; and
 - c) in accordance with the relevant statutory and local requirements of the State or Territory in which the unit is installed.
 - 12.3. The unit has not been operated or maintained in accordance with the Operating and Installation Guide.
 - 12.4. The unit does not bear its original Serial Number or Rating Label.
 - 12.5. The unit was damaged by any or any combination of the following:
 - a) normal fair wear and tear;
 - b) connection to an incorrect water supply, for example, (but not limited to) connection to water from a bore, dam or swimming pool;
 - c) connection to an incorrect power supply;
 - d) connection to faulty equipment, such as damaged valves;
 - e) insufficient air flow;
 - f) foreign matter in the water supply, such as sludge or sediment;
 - g) corrosive or acidic elements in the water supply, where the Langelier Saturation Index (LSI) is outside the range $-1.0 < \text{LSI} < 0.8$;
 - h) inappropriate current impressed anode;
 - i) inappropriate current impressed anode battery maintenance;
 - j) accidental damage;
 - k) uncontrollable natural phenomena, including damage by flood, storm, fire, lightning strike and the like;
 - l) excessive water pressure, negative water pressure (partial vacuum) or water pressure pulsation;
 - m) ingress of vermin.
 - 12.6. The unit was damaged before it was installed e.g. it was damaged in transit.
 - 12.7. An unauthorised person has modified, serviced, repaired or attempted to repair the unit without our consent.
 - 12.8. Non genuine parts other than those manufactured or approved by us have been used on the unit.
13. We may charge you:
 - 13.1. for any additional transport costs if the unit is installed more than 30 kilometres from our closest authorised service technician.
 - 13.2. for the extra time it takes our authorised service technician to access the unit for inspection and testing if it is not sited in accordance with the Operating and Installation Guide and not readily accessible for inspection.
 - 13.3. for any extra costs of our authorised service technician to make the unit safe for inspection.

NOTES

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STIEBEL ELTRON



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