Installation guide COMBI E
Before installing read this guide first
Introduction

The operation of the Quooker COMBI E
The Quooker COMBI E supplies boiling water and hot water. The tank is vacuum-insulated and is connected to the cold water supply via an inlet combination valve. Inside the tank the water is heated electrically to approx. 110°C and is kept at this temperature. When boiling water is drawn off, cold water flows into the tank at the same time and is heated automatically. If the entire content of boiling water is used in one go, the heating time is ca. 20 min. Before the water leaves the tank it is purified by the HiTAC® water filter (High Temperature Activated Carbon). To extend the life of the filter, the water used for mixing the hot water is not filtered.

In addition to boiling water, the COMBI E also supplies instant hot water. The Quooker COMBI E supplies hot water by mixing boiling water from the Quooker tank with cold water from the water mains inside the mixing valve. A thermostatic control element inside the valve keeps the outgoing water temperature constant. This temperature can be set between 40°C and 60°C with the grey knob on the mixing valve. The mixing valve is suitably protected against a loss in water pressure, preventing any boiling water from flowing out of the mixer tap.

The grooved handle on the tap lights up when the water is running to warn the user that the water is boiling. As an additional safety feature, the Nordic single tap is height-adjustable and the Nordic single tap, the Fusion tap and the Flex tap are fully insulated.

Despite all the safety features incorporated in the product, anyone using the Quooker system must keep in mind the risks of using boiling water in general. Incorrect use can lead to injury. Therefore always read the manual carefully before use.

Installation, maintenance and warranty
The Quooker can be installed in almost any location provided there is sufficient space for the tank as well as a 13 amp socket, water supply and waste pipe. The Quooker tank must be fitted in an upright position. If the tank is to be fitted in a cabinet with drawers, an optional bracket can be purchased to suspend the tank from the cabinet wall.

The HiTAC® filter inside the tank should be changed once every 3-5 years depending on your water hardness. If you live in a hard water area, lime scale will collect at the bottom of the tank and will need to be cleaned out by one of our engineers approximately once a year depending on usage and the quality of the water in your area. Alternatively, you can install a suitable descaling system. This system must not reduce the pH level of the water below 7 or remove all the minerals from the water (reverse osmosis) as this can be harmful to the tank and would void the warranty. Suitable descaling systems are also available directly from Quooker as an optional extra.

The warranty period is two years and covers supply of parts only. It does not cover labour costs or issues resulting from insufficient lime scale maintenance.
Users
The Quooker tap can be used by children above the age of eight and people with diminished physical, sensory or intellectual abilities provided they are supervised or have been instructed on the safe use of the device. Inform people who are unfamiliar with the Quooker system about safe use and the possible dangers associated with the use of the boiling-water tap. Please note: incorrect use may result in injury. Prevent children from using the tap as a toy and do not allow children to clean or maintain the product unsupervised. Keep the plug out of reach of small children.

The Quooker system is suitable for household use and commercial use such as in staff kitchens at shops, offices, farms and other business premises and for use by visitors at hotels, motels, bed & breakfasts and other residential accommodation.

Always follow the installation method described in the manual. Avoid spilling water on the plug. If defective, the power plug may only be replaced by a qualified technician. Water may drip from the pressure relief valve. This is normal. Always leave the grey funnel of the pressure relief valve open.

The inlet combination valve must be serviced regularly to prevent lime scale build-up and to check that the valve has not blocked up.

Make sure you let the tank cool off adequately before disconnecting it. The fastest way to do this is as follows: turn off the Quooker, but leave the plug in the socket. Then open the boiling-water tap and turn it off once the water is cold.

You can find a more detailed explanation for disconnecting the tank in chapter F. Tips for use and the installation manual can also be found on our website: www.quooker.co.uk
Declaration of conformity
Quooker Nederland B.V., Staalstraat 13, 2984 AJ Ridderkerk (The Netherlands) herewith declares, on our own responsibility, that the product Quooker COMBI E is in accordance with the conditions of the following directives:
- 2006/95/EC Low voltage Directive,
- 2004/108/EC Electromagnetic Compatibility Directive,
- 2014/68/EU Pressure Equipment Directive
And are in conformity with the following standards:
EN62233:2008

The Netherlands, Ridderkerk, 12-02-2016

[Signature]
Niels Peteri, Director
### Technical specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>COMBI E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tank</strong></td>
<td></td>
</tr>
<tr>
<td>Voltage</td>
<td>230 V</td>
</tr>
<tr>
<td>Wattage*</td>
<td>2200 W</td>
</tr>
<tr>
<td>Capacity</td>
<td>7 litres</td>
</tr>
<tr>
<td>Heating-up time*</td>
<td>20 minutes</td>
</tr>
<tr>
<td>Standby power consumption*</td>
<td>10 W</td>
</tr>
<tr>
<td>Tank height</td>
<td>47 cm</td>
</tr>
<tr>
<td>Total tank height requirement</td>
<td>55 cm</td>
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<tr>
<td>Tank diameter</td>
<td>20 cm</td>
</tr>
<tr>
<td>Min. mains pressure</td>
<td>200 kPa (2 bar)</td>
</tr>
<tr>
<td>Max. mains pressure</td>
<td>600 kPa (6 bar)</td>
</tr>
<tr>
<td>Max. working pressure</td>
<td>800 kPa (8 bar)</td>
</tr>
<tr>
<td>Volume at 40°C*</td>
<td>27 litres</td>
</tr>
<tr>
<td>Volume at 60°C*</td>
<td>15 litres</td>
</tr>
<tr>
<td>Temperature regulation</td>
<td>thermostatic</td>
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<tr>
<td>Mounting bracket optional</td>
<td>yes</td>
</tr>
<tr>
<td>Safety features</td>
<td>- maximum temperature fuse</td>
</tr>
<tr>
<td></td>
<td>- pressure relief valve 800 kPa (8 bar)</td>
</tr>
<tr>
<td>HiTAC® water filter</td>
<td>High Temperature Activated Carbon</td>
</tr>
</tbody>
</table>

*These are average values.

### Energy label

- **Declared load profile**: XXS
- **Water heating energy efficiency class**: A
- **Water heating energy efficiency**: 36%
- **Annual electricity consumption**: 511 kWh/A
- **Warm water temperature**: 40°C - 60°C
- **Sound power level**: - dB

### Tap

<table>
<thead>
<tr>
<th>Tap</th>
<th>Nordic</th>
<th>Fusion, Flex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tap hole size</td>
<td>32 mm</td>
<td>35 mm</td>
</tr>
<tr>
<td>Recommended temperature</td>
<td>-</td>
<td>60°C</td>
</tr>
<tr>
<td>Mixing water</td>
<td>-</td>
<td>60°C</td>
</tr>
<tr>
<td>Tap base plate optional</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>
Contents of the pack

1. Nordic single tap, small fibre washer, centring ring, metal washer, threaded ring and two screws
or Fusion tap, hoses, small fibre washer, brass fixing plate, fixing nut, white tap support (for thin work tops) and two inlet hose screens
or Flex tap, hoses, small fibre washer, metal washer, threaded ring with two screws, coupling with boiling water hose, white tap support (for thin work tops), two inlet hose screens and quick-release tool
2. COMBI E tank
3. Quooker inlet combination valve, waste hose, Quooker drill bit, PVC connector, two large fibre washers (one spare) and one small fibre washer
4. Mixing valve
5. T-joint and pressure reducing valve
   - Installation guide and ‘Tips for use’
It is recommended that you install the Quooker in the following order:
A. Drilling hole
B1. Fitting Nordic single tap
C. Connecting water
D. Connecting waste
E. Connecting tank to Nordic tap

Note: Bear in mind that the tank, inlet combination valve, mixing valve and socket must remain accessible for servicing.
For an overview of the Fusion tap installation, please refer to the next page and for the Flex tap to the page after that.
It is recommended that you install the Quooker in the following order:
A. Drilling hole
B. Fitting boiling-water tap
C. Connecting water
D. Connecting waste
E. Connecting tank to Fusion tap

Note: Bear in mind that the tank, inlet combination valve, mixing valve and socket must remain accessible for servicing.
For an overview of the Flex tap installation, please refer to the next page.
It is recommended that you install the Quooker in the following order:
A. Drilling hole
B3. Fitting Flex tap
C. Connecting water
D. Connecting waste
E. Connecting tank to Flex tap

NOTE: Bear in mind that the tank, inlet combination valve, mixing valve and socket must remain accessible for servicing.
Drilling hole

- Note: The tap hole for the Nordic single tap should be 32 mm in diameter. The Fusion, Nordic mixer tap or Flex tap hole should be 35 mm in diameter.
- The Nordic single tap should ideally be positioned at the corner of the sink to enable use above the sink or the work top.
- Note: It must be possible to move the spout of the Nordic single tap freely up and down. When the spout is in its lowest position it projects ca. 25 cm below the work top. Bear this in mind when fitting the inlet combination valve, sockets and the like.
- Note: The Flex tap coupling must be able to move freely. When the hose is not withdrawn it hangs approximately 40 cm below the work surface. Make allowances for this when fitting the inlet combination valve, power sockets and so forth.

1 Select position single tap
Select a suitable position for the Nordic single tap based on the type of sink and position of the mixer tap.

2 Drilling hole for single tap
Using the correct drill bit, drill a hole of 32 mm through the work top for the Nordic single tap.
In the case of a hole of 35 mm or larger, use the black plastic centring ring provided to secure the tap in the larger hole.
Note: For the Nordic mixer tap please refer to the separate guide.

3 Drilling hole for Fusion or Flex tap
Select a suitable position for the Fusion or Flex tap. Using the correct drill bit, drill a hole of 35 mm through the work top.
Fitting Nordic tap

- Note: The total length of the hose between the single tap and tank is only 70 cm. The tank must therefore be fitted close to the tap. Extension hoses are available in different lengths but are not normally required.
- Note: The small fibre washers supplied with the tap rings are not required yet at this point. One will be used for connecting the tap and tank hose (see section E), the second one is a spare.

1 Tap through work top
When fitting the tap in a 35 mm hole or larger, first attach the black plastic centring ring to the base of the tap to centre the tap in the hole.

2 Securing the tap
Set the tap to the desired position and secure it with the metal washer and threaded ring supplied.

3 Securing tap screws
Tighten the threaded ring and secure it with the two screws provided.
Fitting Fusion tap

1 Tap through work top
Push the tap through the hole in the work top.

2 Securing tap
Position the brass fixing plate around the hoses. Screw the fixing nut onto the tap thread. Adjust the position of the tap to ensure that the Quooker logo is facing the user. When the handle is in the cold position, it will be parallel to the edge of the work top. Tighten the fixing nut with a pipe wrench, socket wrench or spanner.

3 Fitting to thin work top
When fitting to a thin work top, use the white tap support before fitting the brass fixing plate around the hoses.

- Note: The total length of the hose between the single tap and tank is only 70 cm. The tank must therefore be fitted close to the tap. Extension hoses for the boiling water hose are available in different lengths but are not normally required.
- Note: The small fibre washers supplied with the tap rings are not required yet at this point. One will be used for connecting the tap and tank hose (see section E), the second one is a spare.
Fitting Flex tap

1 Fit hoses
Fit the hot, cold and mixer water hoses to the tap.

2 Tap through worktop
Push the tap through the hole in the worktop.

3 Tighten the brass plate
Place the metal washer and threaded ring around the hoses. Adjust the position of the tap to ensure that the Quooker logo is facing the user and fully tighten the metal washer.

4 Securing tap screws
Tighten the threaded ring and secure it with the two screws provided.

- When installing the tank it is necessary to take into account that the Flex tap coupling must be able to move up and down freely. When the hose is not withdrawn it hangs approximately 40 cm below the work surface.
- Note: When fitting the tap to a thin work top use the white tap support before placing the metal washer and threaded ring around the hoses.
5 Attach the coupling
Click the pull-out hose into the coupling’s quick-release fitting while ensuring that the hose stem is fully inserted.

6 Fit the mixer water hose
Click the mixer water hose into the coupling’s quick-release fitting while ensuring that the hose stem is fully inserted.

If necessary
Detach coupling. Use the quick-release tool to detach the mixer water hoses from the coupling. Press the quick-release tool flat against the coupling to hold it still. This enables the hose to be extracted.
Connecting water

- Note: The COMBI E operates under mains water pressure and must always be fitted with the supplied inlet combination and pressure reducing valves.
- The Nordic single tap, the Fusion or the Flex tap must be installed according to the locally applicable regulations.
- The inlet combination valve will release drips of expansion water while the water in the tank is heating up in order to regulate the pressure inside the tank.
- Position the inlet combination valve as high as possible to create a sufficient height distance between the valve and the point where the waste hose connects to the waste pipe. This is necessary to allow the expansion water to flow away and to prevent water from backing up from the waste pipe (see figure at step D4).

1 Fitting pressure reducing valve

Close the main shut-off valve. Fit the pressure reducing valve to the T-joint and subsequently to the cold water pipe (Ø 15 mm). Note: The pressure reducing valve must be fitted in the correct direction. Fit the cold water inlet hose of the mixer tap the Fusion or the Flex tap to the T-joint with the inlet hose screen.

2 Fitting inlet combination valve

Connect the inlet combination valve to the pressure reducing valve with a piece of copper piping (Ø 15mm).

3 Fitting mixing valve

Connect the mixing valve to the inlet combination valve with the large fibre washer supplied. Allow for the temperature setting knob. Connect the hot water inlet hose of the mixer tap, the Fusion or the Flex tap to the mixing valve with the inlet hose screen.

4 Temperature setting

Turn the temperature setting knob of the mixing valve to the temperature you require (between 40°C and 60°C).
Connecting waste

The Quooker tank releases expansion water via the inlet combination valve which is fed into the grey funnel. The funnel is connected to the waste pipe via the supplied waste hose. The drilling kit, also supplied, can be used to make a connection to the waste pipe.

It is important to keep the height distance between the inlet combination valve and the connection to the waste pipe as large as possible to prevent waste water from flowing back.

1 Drilling hole
Using the drill bit supplied, drill and tap in one operation a threaded hole in the waste pipe. Drill slowly so that the PVC does not melt. Turn back anti-clockwise to preserve the thread.

2 Fit connector
First try to screw the PVC connector in the hole before fitting permanently with PVC glue.

3 Connect hose to waste pipe
Slide the waste hose over the PVC connector.

4 Connect hose to inlet combination valve
Create a u-bend (or loop) in the hose and connect it to the funnel of the inlet combination valve. The u-bend will create a water lock to block smells from the waste pipe. As the water is being heated, the inlet combination valve will release drips of water into the grey funnel. The open funnel is required to prevent pressure build-up.
• The Quooker tank is supplied with a UK 3 pin plug and requires a standard 13 amp earthed socket.
• If the mains lead is damaged it should be replaced by the manufacturer, their agent or a qualified technician to prevent hazard.
• The light ring on the Nordic single tap, the Fusion or Flex tap will light up to indicate when the water is being heated inside the tank.
• The Q-shaped button on top of the tank is the on/off switch. Once the water is up to temperature the light on the tank will fade in and out.
• Ensure that the tank has sufficient height clearance to avoid pinching the hose.
• Do not use any washers or sealants other than the ones supplied.

1 Connecting tank
Place the tank in position and connect the tank hoses to the mixing valve.
Note: The hoses have flare fittings and should not be fitted with any seals or washers. Connect the tap hose to the fitting at the top of the tank using the small fibre washer supplied and size 10 and 14 spanners.

2 Electrical connection
Connect the tap by plugging the LED cable into the hole provided at the back of the tank cover. Plug the tank into the socket. Switch the socket on but not the tank yet.

3 Filling tank
Open the boiling-water handle of the tap and the stop valve on the inlet combination valve. Check for leaks. Flush the tank through until the water is clear. Black water will flow out initially. This is Norit carbon from the filter and completely harmless.

4 Switching on tank
Switch on the Quooker. After the water has heated up, the entire content of the Quooker must be flushed out once before use.
Disconnecting tank

- In case of service.
- The Q-shaped button on top of the tank is the on/off switch.

1 Switching off
Press the on/off switch at the top of the tank to switch it off. Leave the socket switched on and do not unplug the tank from the socket yet.

2 Draining
Open the boiling-water handle of the tap and leave the water running until it is cold. Then close the handle again.

3 Isolating
Close the main shut-off valve or the stop valve on the inlet combination valve (small grey knob). Check that the Quooker is depressurized by opening the boiling-water handle of the tap again. If it is depressurized, no water should flow out of it.

4 Disconnecting
Unplug the tank from the socket and the LED cable from the back of the tank cover. Disconnect the tap and inlet hoses and remove the tank. Drain the tank into the sink via the hoses.