Installation guide Scale Control Plus

Read this guide before installation
Introduction

How does the Quooker Scale Control Plus work?
The Scale Control Plus reduces the hardness of the water in order to prevent limescale build-up in the tank. This extends its lifespan and improves the taste of the water. The Scale Control Plus consists of a filter head and a cartridge, which is inserted into the head. This cartridge softens the water that flows through it by means of an ion exchanger. The cartridge must be replaced after a certain period of time, which depends on the mains water hardness and how much Quooker water is used. Replace the cartridge before it becomes completely saturated.

Installing the Quooker system for the first time
Using the installation manual, first install the Quooker tank and connect it to the tap. Then use the manual to install the Scale Control Plus.

When the Scale Control is to be replaced by a Scale Control Plus
Please note: the Scale Control Plus should be installed before the inlet combination valve. It is therefore important to follow the instructions as shown in this installation manual.

Lifespan of the cartridge
The Scale Control Plus cartridge needs to be replaced regularly. The replacement frequency depends on how hard the water is and how much water is used. Timely replacement of the cartridge prevents the deposition of limescale in the Quooker system. For Quooker systems installed after October 2017, the included Scale Control Plus Meter can be installed. The Scale Control Plus Meter provided sounds an alarm signal when the cartridge needs to be replaced. Before mounting the meter, use the test kit provided to determine the total water hardness, as described in Part A. After doing so, mount the Scale Control Plus Meter and connect it to the Quooker tank, as described in Part E.

For Quooker systems installed before October 2017, it is not possible to use the Scale Control Plus Meter supplied. The cartridge lifespan can be determined in a different way. Before installing the Scale Control Plus, test the water hardness with the test kit provided. Part A of this guide features detailed instructions on how to do this. With the help of this value, the service life of the cartridge can then be determined on the basis of the hardness table supplied. See Part B.

Technical specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Measurement</th>
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</thead>
<tbody>
<tr>
<td>Height</td>
<td>470 mm</td>
</tr>
<tr>
<td>Diameter</td>
<td>100 mm</td>
</tr>
<tr>
<td>Maximum operating pressure</td>
<td>8.7 bar</td>
</tr>
</tbody>
</table>
Package contents

1. Mounting bracket, head, cartridge, two plastic tubes
2. Two inserts, two push–fits
3. Mounting bracket inlet combination, Allen key, four short screws, four long screws
4. Total Hardness Test Kit
5. Scale Control Plus Meter, metal washer, screw and sticker
Hardness testing

- Test your water hardness with the Total Hardness Test Kit, as described below, to determine the expected cartridge lifespan.
- Ensure the Scale Control Plus is working optimally by comparing the water hardness of the cold mains water to the hardness of the Quooker tank water. The second value should be lower.

1. Filling test tube
   Take the test tube out of its box. Take a sample of water from the mains cold water feed. Rinse out the test bottle with this sample water then fill to the 5 ml mark.

2. Adding reagent
   Slowly add the reagent drop by drop, all the while swirling gently to mix the water. Count the number of drops it takes to turn the red colour of the solution to green.

3. Determining water hardness
   One drop of the reagent is the equivalent to 1.0°dH (degree of hardness) – For example, if it takes 9 drops for the sample to turn to green, this means your water has a water hardness of 9°dH.
**Hardness table (for systems before October 2017)**

- The left side of the table shows the reduced water hardness, derived from the mains water hardness. The right side of the table shows the expected lifespan of the cartridge, derived from the mains water hardness and the type of Quooker tank used. For continuous optimum performance replace the cartridge at the end of the lifespan.
- Enter the replacement date for the cartridge in the table below. Keeping this table in a handy place will remind you to order a new cartridge on time.
- For Quooker systems installed after October 2017, the life of the cartridge is determined by the Scale Control Plus Meter. This sounds an alarm signal when the cartridge needs to be replaced. Part E describes how to install this meter.

<table>
<thead>
<tr>
<th>Total hardness (°dH)</th>
<th>Type of tank</th>
<th><em>Cartridge lifespan (in weeks)</em></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>PRO3</td>
<td>PRO7</td>
</tr>
<tr>
<td>Mains water</td>
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<td>10</td>
<td>34</td>
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<td>20</td>
<td>17</td>
<td>7</td>
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</tbody>
</table>

* The cartridge lifespan is based on the average consumption of Quooker water for each type of Quooker tank: PRO3, 3 litres/day; PRO7, 7 litres/day; COMBI, 8 litres/day.

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</tbody>
</table>
Mounting the Scale Control Plus

- When mounting the bracket, make sure to leave enough space for the cartridge to be replaced.
- For PRO3, PRO7 or COMBI.

1. Mounting the bracket
Screw the bracket into the head of the cartridge using the four short screws provided.

2. Mounting the bracket
Screw the bracket onto the kitchen cabinet wall using the two long screws provided.

3. Removing the cap
Remove the blue cap from the top of the cartridge.

4. Aligning the cartridge
In order to insert the cartridge into the head of the Scale Control Plus, the protruding parts on the side of the cartridge need to be aligned with the notches in the head. When doing so, keep in mind that there are two grooves on one side of the cartridge and only one on the other side.
5. Inserting the cartridge
Firmly push the cartridge into the head of the Scale Control Plus until the groove between the cartridge and the head is no longer visible.

6. Securing the cartridge
Now rotate the cartridge a quarter turn to the right to ensure that it is securely in place.

(For installation with PRO3 or PRO7, continue to section E1. For installation with a COMBI, continue to section E2.)
**Installation with a PRO3 or PRO7**

- Follow the steps below to install the Scale Control Plus with a Quooker PRO3 or PRO7.
- The ‘Q’ on the top of the tank is the on / off switch.

1. **Turning off the tank**
   
   Turn off the tank. Leave the plug in the socket. Open the boiling water tap and let the water run cold. Also open the cold water tap. Close the inlet combination first, and then the tap. Then turn off the mains cold water supply.

2. **Removing the copper pipe**
   
   Remove the copper pipe, including the nuts and clamping rings, between the T-piece and inlet combination.

3. **Mounting the inlet combination**
   
   Mount the push-fit using the insert on the pressure reducing valve. Then connect one of the two plastic tubes (B) to the push-fit.

4. **Mounting the bracket**
   
   Screw the bracket onto the kitchen cabinet wall using the two long screws provided.
5. Mounting the inlet combination
Insert the inlet combination into the bracket. Turn the screw on the top of the bracket clockwise using the supplied Allen key until the inlet combination is securely attached.

6. Connecting the tube
Mount the provided push fit connection using the insert on the T-piece. Then connect plastic tube A to the push-fit.

7. Connecting the Scale Control Plus
Now connect plastic tube (A) to the head of the Scale Control Plus. Make sure that this is done in the right direction (see the arrow on the head). Now connect the second plastic tube (B) to the other side of the head.

8. Flushing out the cartridge
Open the inlet combination and turn on the mains cold water supply. Ventilate the system by opening the boiling water tap. Flush the system with 20 litres of water until the water runs clear. Turn on the tank. Once the water has heated up again, the Quooker system is ready to use (continue to section F).
Installation with a COMBI

- Follow the steps below to install the Scale Control Plus with a Quooker COMBI.
- The ‘Q’ on the top of the tank is the on/off switch.

1. Turning off the tank
   Turn off the tank. Leave the plug in the socket. Open the boiling water tap and let the water become cold. Also open the cold water tap. Close the inlet combination first, and then the tap. Then turn off the mains cold water supply.

2. Removing the copper pipe
   Remove the copper pipe, including the nuts and clamping rings, between the T-piece and inlet combination.

3. Mounting the inlet combination
   Mount the push-fit using the insert on the inlet combination. Then connect one of the two plastic tubes (B) to the push-fit.

4. Mounting the bracket
   Screw the bracket onto the kitchen cabinet wall using the two long screws provided.
5. Mounting the inlet combination
Insert the inlet combination into the bracket. Turn the screw on the top of the bracket clockwise using the supplied Allen key until the inlet combination is securely attached.

6. Connecting the tube
Mount the provided push-fit connection using the insert on the T-piece. Then connect plastic tube A to the push-fit.

7. Connecting the Scale Control Plus
Now connect plastic tube (A) to the head of the Scale Control Plus. Make sure that this is done in the right direction (see the arrow on the head). Now connect the second plastic tube (B) to the other side of the head.

8. Flushing out the cartridge
Open the inlet combination and turn on the mains cold water supply. Ventilate the system by opening the boiling water tap. Flush the system with 20 litres of water until the water runs clear. Turn on the tank. Once the water has heated up again, the Quooker system is ready to use.
1. Connecting the tap
Detach the tap’s jack plug from the tank and insert it into the jack plug socket of the Scale Control Plus Meter.

2. Connecting the Scale Control Plus Meter
Insert the jack plug of the Meter into the socket closest to the centre on the top of the Quooker tank.

3. Mounting the metal washer
Screw the washer provided into the kitchen cabinet using the screw provided.

4. Securing the Scale Control Plus Meter
Mount the Meter on the metal washer using the magnet on the back of the Meter. Affix the sticker provided next to the Meter on the inside of the cabinet.
5. Activating Scale Control Plus Meter
Initially activate the Scale Control Plus Meter by pressing the wheel until the screen lights up.

6. Setting water hardness
Turn and press the wheel to input the water hardness (found using the steps in part D). Press the wheel again to confirm.

7. Setting tank type
Turn the wheel again to set the power (in kW) in correspondence with the type of tank you have (see table below). Press the wheel when the correct value is highlighted. Press again to confirm.

8. Using the Scale Control Plus Meter
After setting the meter, ‘100%’ will appear on the screen. This percentage represents the lifespan of the cartridge and will slowly count down to ‘0%’. When this happens, the meter sounds an alarm signal that the cartridge needs replacing.

<table>
<thead>
<tr>
<th>Model</th>
<th>Power (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRO3</td>
<td>1.6 kW</td>
</tr>
<tr>
<td>PRO7</td>
<td>2.9 kW</td>
</tr>
<tr>
<td>COMBI</td>
<td>2.2 kW</td>
</tr>
</tbody>
</table>
Replacing the cartridge

- The cartridge must be replaced before it becomes completely saturated.
- The ‘Q’ on the top of the tank is the on/off switch.
- When installed with a Meter: If it is not possible to replace the cartridge when the alarm sounds, you can temporarily snooze it (for 72 hours) by pressing the wheel on the Scale Control Plus Meter.

1. Releasing the pressure
Press the on/off switch at the top of the tank to switch it off. Dispense boiling and cold water together in order to release the pressure from the system and then close it once again when the water runs cold. Close the inlet combination then turn off the mains water supply.

2. Replacing the cartridge
Detach the saturated cartridge by twisting it out of the head and replace it with a new one.

3. Flushing out the system
Open the inlet combination, then turn on the mains water supply. Ventilate the system by opening the boiling water tap. Flush the system with 20 litres of water until the water runs clear. Turn on the tank. Once the water has heated up again, the Quooker system is ready to use.

4. When installed with a Meter: resetting the Meter
Turn on the Meter by pressing the wheel once. Turn the wheel to ‘reset’ and press the wheel to confirm.