The Zip RCH II series is a range of cistern fed rectangular flatback storage tanks. They can be connected directly to the cold water main and can supply more than one outlet without the need for special taps.

These instructions should be read carefully and understood before commencing the installation. Do not proceed if any part is unclear or if requirements cannot be fully met.

Please leave these instructions with the users after installation.

Immersion element / thermostat BEAB / NEMKO approved and CE endorsed.
Technical Data

**Specification**

<table>
<thead>
<tr>
<th></th>
<th>RCH25</th>
<th>RCH50</th>
<th>RCH75</th>
<th>RCH100</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Energy efficiency class</strong>&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>D</td>
<td>D</td>
<td>D</td>
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<tr>
<td><strong>Standing heat loss [W]</strong></td>
<td>54</td>
<td>58</td>
<td>62</td>
<td>69</td>
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<tr>
<td><strong>Storage Capacity hot [l]</strong></td>
<td>25</td>
<td>50</td>
<td>75</td>
<td>100</td>
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<tr>
<td><strong>Storage Capacity cold [l]</strong></td>
<td>8</td>
<td>24</td>
<td>24</td>
<td>24</td>
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<tr>
<td><strong>Weight empty [kg]</strong></td>
<td>20</td>
<td>32</td>
<td>37</td>
<td>40</td>
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<tr>
<td><strong>Weight full [kg]</strong></td>
<td>53</td>
<td>106</td>
<td>136</td>
<td>164</td>
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<tr>
<td><strong>Power rating [W]</strong></td>
<td>3,000</td>
<td></td>
<td></td>
<td>(6,000 optional on RCH100)</td>
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<tr>
<td><strong>Nominal supply voltage [V~]</strong></td>
<td>240</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Water connections supply</strong></td>
<td>1/2&quot; BSP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Water connections overflow</strong></td>
<td>3/4&quot; BSP</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

<sup>(1)</sup> EU Regulation 812/2013, 814/2013

**Dimensions**

![Dimensions diagram]

<table>
<thead>
<tr>
<th>Product</th>
<th>Dimensions (mm)</th>
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<tbody>
<tr>
<td>Ref</td>
<td>W</td>
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<tr>
<td>RCH25</td>
<td>470</td>
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<tr>
<td>RCH50</td>
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<td>RCH75</td>
<td>600</td>
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<tr>
<td>RCH100</td>
<td>600</td>
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</tbody>
</table>
WARNINGS

• Installation, commissioning and maintenance of this appliance must only be carried out by a competent installer who will then be responsible for adhering to all relevant standards and regulations.
• The appliance must be disconnected from mains power supply before carrying out any work involving live circuits.
• The appliance must be permanently connected to the supply through an isolating switch with a contact separation of at least 3mm in all poles and be protected by a suitably rated RCD.
• To protect the appliance, an MCB (miniature circuit breaker) or cartridge fuse must be fitted with a rating suitable for the nominal current of the appliance.
• The cross sectional area of the connection cable must be appropriate for the power rating and location of the appliance. See Technical Data.
• The connecting cable must be adequately secured.
• This appliance must be earthed at all times.
• Check that the power supply is switched off prior to electrical connection.
• The appliance, its wiring and piping must not be modified in any way.
• In case of malfunction isolate the power supply immediately. In case of leaks also isolate the water supply. Repairs must only be carried out by Zip Heaters (UK) Ltd or an authorised Zip service engineer.
• Temperatures in excess of approximately 43°C are perceived as hot, especially by children, and may cause a feeling of burning.
• This appliance must not be used by any person (including children) with limited physical, sensorial or mental abilities or failing experience and/or knowledge unless they are supervised by a person responsible for their safety or have received instructions about how to use the appliance.

CAUTIONS

• Children should be supervised in order to make sure that they do not play with the appliance.
• The appliance must only be used when correctly installed and in perfect working order.
• The appliance must be installed in a frost-free room and must never be exposed to frost.
• The appliance must be completely filled with water before being switched on.
• Zip Heaters (UK) Ltd cannot be held liable for any damages caused by failure to observe these instructions.
• It is recommended that an HE45004 Water Block is fitted in the water supply line to minimise the potential damage in the event of any leakage.
Installation

Element Installation

- Place RCH unit upside down on a non-abrasive surface.
- Remove the electrical cover by removing the the retaining screws (x 2), lift and place to the side.
- Ensuring the ‘o’ring seal is coated with lubricant e.g vaseline or a WRAS approved/listed lubricant and in place around the base of the element, insert the element into the aperture provided carefully ensuring that the threads engage correctly and then screw hand tight.
- Using a large socket box spanner tighten into position by approx. one quarter turn.
- **NOTE**: Do not replace the electrical cover before filling with water and ensuring there are no leaks.

Wall Mounting

The installation should be carried out by a suitably qualified person in accordance with current (IEE) wiring regulations.

The Zip RCH II series of water heaters are supplied with all the components that are required to comply with the WRAS byelaw 30.

When wall mounted, the unit base must be a minimum of one metre above the highest draw off point. This will ensure a flow of hot water.

Sufficient clearance must be allowed to ensure access to the ball valve assembly (150mm above unit).

The wall fixing points are designed to accept 8mm bolts, which should not be less than 50mm in length.

Always ensure that the wall is strong enough to carry the weight of the unit when full of water.

(see Technical Data/ Specification chart page 3. for weight when full).

Pipework Connections

The installation must conform to any local authority byelaws. The cold water supply and overflow pipe assembly can be connected to either side of the unit.

The respective apertures are pre-formed in the outer case and should be used as guides for cutting through the cold water tank.

A Ø22mm hole saw is required for the inlet and a Ø27mm hole saw for the overflow.

An isolating valve must be fitted to the cold water mains supply to allow for servicing.
• The Ball Valve and overflow assembly comprises four components.
• The 90° overflow (tank connector) is inserted through the Ø27mm hole, and secured in place by tightening the nut and sealing washer on the inside of the tank.
• The shorter end of the Dip Tube is pushed firmly into the overflow connector, with the longer section facing downwards as shown in fig.4.
• The overflow may now be connected to a suitable drainage system.
• Fit the Ball Float to the ball valve assembly as in fig.4.
• The Ball Valve assembly is fitted by inserting the threaded section through the Ø22mm hole and securing this in place using the sealing nuts (x 2) either side of the tank side as shown in fig.4 and then attaching a 90° 3/4" to 15mm elbow reducer (not supplied) on the external side of the outer casing.
• Adjust the Ball float to ensure that the water level in the tank does not exceed the water level line.
• When fitting the ball valve assembly, ensure that the small plastic inlet elbow located above the ball valve is directed away from the internal tank vent pipe.
• NOTE: After installation, replace the lid and secure with the retaining screw supplied.

**Comissioning**

Before making the electrical connection it is recommended that the unit is filled with water, then ALL the plumbing connections and element installation can be thoroughly checked for leaks.
Installation

Electrical Connection

The installation should be carried out by a suitably qualified person in accordance with current (IEE) wiring regulations.

A double pole isolation switch, having a contact separation of greater than 3mm, should be fitted to allow for servicing.

NOTE: The unit MUST have water flowing from the taps, before switching on the electricity supply.

The RCH II series of water heaters are all fitted with a 3 kW heating element. (2kW available also 6kW available for the 100ltr. See Spare Parts below.) The heating element assembly incorporates a thermostatic control, factory set to 60°C with an over-temperature safety cut-out set to 75°C.

The supply cable should be securely clamped before replacing the heating unit's own cover AND as it passes through the gland in the element housing cover.

Schematic Wiring Diagram

fig.5

EARTH (Green/yellow)
NEUTRAL (Blue)
LIVE (Brown)

RESET Button
TEMPERATURE Control armØ

In the event of having to manually set or reset the cut-out, isolate the heater from the mains supply before removing the terminal cover.

Investigate the cause for the operation of the cut-out, rectify it if possible before manually resetting the thermostat by depressing the small white button located next to the temperature control arm as indicated in fig.5.

To prevent a re-occurrence of the fault it is advisable to reduce the temperature to 55°C on the thermostat.

Spare Parts

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCO400/2</td>
<td>2kW element (+ gasket and combined thermostat/cut-out)</td>
</tr>
<tr>
<td>RCO400/3</td>
<td>3kW element (+ gasket and combined thermostat/cut-out)</td>
</tr>
<tr>
<td>RCO400/6</td>
<td>6kW element (+ gasket and combined thermostat/cut-out)</td>
</tr>
<tr>
<td>RCO405</td>
<td>Element gasket</td>
</tr>
<tr>
<td>RCO410</td>
<td>Ball valve</td>
</tr>
<tr>
<td>RCO411</td>
<td>Ball float</td>
</tr>
<tr>
<td>RCO412</td>
<td>Dip tube</td>
</tr>
<tr>
<td></td>
<td>Overflow connector</td>
</tr>
<tr>
<td></td>
<td>Breather filter</td>
</tr>
</tbody>
</table>

Operation

The cold water supply to the integral cistern is controlled by the Ball Valve.

When one or more hot taps are opened the hot water drawn off from the unit is replaced from the contents of the cold water cistern which is refilled automatically.

NOTE: This unit MUST NOT be used if it is suspected of being frozen. If water ceases to flow, switch off the electricity supply immediately at the isolating switch.

If the unit is to be serviced or drained, ensure that the electricity supply is disconnected before commencing the operation.

RCH Water storage heater - November 2015 - V2.00
Warranty

The Zip appliance you have chosen is precision-built from the finest materials available and should give many years of trouble free service.

Certain warranties may be implied by law into your contract with Zip. The warranty provided below is additional to these implied warranties and nothing set out below shall limit your statutory rights or rights at law.

Zip Heaters (UK) Ltd warrants that, should any part fail within 12 calendar months of installation, that part will be repaired or replaced free of charge by Zip or its Distributor or Service Provider, except as set out below, provided the appliance is installed and used strictly in accordance with the instructions supplied, and that failure is not due to accident, misuse, abuse, unsuitable water conditions, or to any alteration, modification or repair by any party not expressly nominated by Zip.

No costs are payable by the customer other than any mileage or travelling-time charges incurred by a Zip Service Provider or the cost of removal, cartage and re-installation of any component of the appliance if it needs to be returned for repair to Zip or its Distributor.

This warranty does not cover damage resulting from misuse of the appliance or consequential damage to any other goods, furnishings or property.

Zip does not exclude, restrict or modify any liability that cannot be excluded, restricted or modified or which cannot, except to a limited extent, be excluded, restricted or modified as between the owner or user and Zip under the laws applicable.

Furthermore, this warranty does not displace any statutory warranty, but, to the extent to which Zip is entitled to do so, the liability of Zip under any statutory warranty will be limited at Zip’s option to the replacement of the appliance or supply of equivalent appliance, the payment of the cost of replacing the appliance or acquiring an equivalent appliance, or the payment of the cost of having the appliance repaired or the repair of the appliance.

End of life disposal

The use of this crossed out wheeled bin logo indicates that this product needs to be disposed of separately to any other household waste.

Within each of the European Union member countries, provisions have been made for collection and recycling of unwanted electrical and electronic equipment. In order to help preserve our environment we ask that you dispose of this product correctly. Please contact Zip Customer Service on 0845 6 005 005 or 0345 6 005 005 for advice.

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Mobile: 0345 6 005 005