



# Zip Instantaneous Hot Water



Electronically controlled instantaneous water heater CEX 9-U: 27910 - 50 °C models

Instructions for the user

For 50 °C models, the appliance delivers water not exceeding 50 °C in accordance with AS3498.

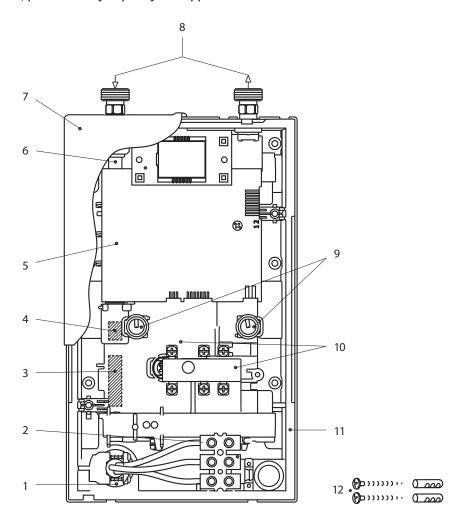






# 1. Overview

When ordering spare parts, please always specify the appliance model and serial number.



| Pos. | PartNo. | Description         | Pos.  | PartNo.  | Description                        |  |
|------|---------|---------------------|-------|--|------------------------------------|--|
| 1    |         | Grommet             | 8     |  | Cold and hot water connection 1/2" |  |
| 2    |         | Connecting terminal | 9     | 801116   | Temperature sensor set             |  |
| 3    | 801110  | Flow sensor         | 10    | 801117   | Heating element with STCO (STDB)   |  |
| 4    | 801101  | Non-return valve    | 11    |  | Bottom part                        |  |
| 5    | 801114  | Electronic CEX 9    | 12    |  | Screws and dowels                  |  |
| 6    |         | Inlet pipe          |       |  |                                    |  |
| 7    | 801115  | CEX-U cover         | Parts | Parts in <b>Bold Type</b> are available as <b>Spare Parts</b> .  Other parts are available on request. |                                    |  |
|      |         |                     | Othe  |  |                                    |  |





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#### 2. Environment and recycling

This symbol on the products and / or accompanying documents means that used electrical and electronic products should not be mixed with general household waste. For proper treatment, recovery and recycling, please take these products to designated collection points. Alternatively, in some countries you may be able to return your products to your local retailer upon the purchase of an equivalent new product. Disposing of this product correctly



will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest designated collection point. Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation. If you are a business user and you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information. This symbol is only valid in the European Union.







#### 3. Safety instructions

Installation, initial operation and maintenance of this appliance must only be conducted by an authorised professional, who will then be responsible for adherence to applicable standards and installation regulations. We assume no liability for any damages caused by failure to observe these instructions.

- Do not use the appliance until it has been correctly installed and unless it is in perfect working order.
- The appliance is suitable but not limited to domestic use and similar applications inside closed, frost-free rooms, and must only be used to heat potable water from mains supply.
- The appliance must never be exposed to frost.
- The appliance must be earthed at all times.
- The minimal specific water resistance must not fall below the value stated on the label.
- The maximum water pressure must not exceed the value on the label.
- Before commissioning for the first time and each time the appliance is emptied (e.g. due to work on the plumbing system, if there is a risk of freezing or in case of maintenance), the appliance must be vented correctly in accordance with the instructions in this manual.
- Do not remove the front cover under any circumstances before switching off the mains electrical supply to the unit.
- Never make technical modifications, either to the appliance itself or the electrical leads and water pipes.
- Pay attention to the fact that water temperatures in excess of approx. 43 °C are perceived as hot, especially by children, and may
  cause a feeling of burning. Please note that the fittings and taps may be very hot when the appliance has been in use for some time.
- Water inlet temperature must not exceed 70 °C.
- In case of malfunction, disconnect the fuses immediately. In case of leaks, cut off the cold water supply instantly. Repairs must only be carried out by the customer service department or an authorised professional.
- 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 received instructions about how to use the appliance. Children should be supervised in order to make sure that they do not play with the appliance.



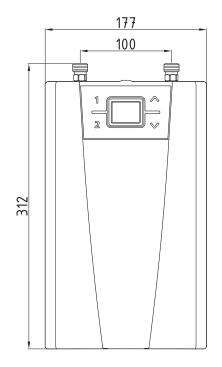


# 4. Technical specifications

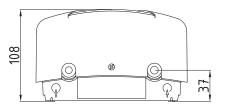
| Model   | CEX9-U ELECTRONIC MPS®                                      |
|---|---|
| Part no.  | 27910   |
| Rated capacity / rated current  | 6,0 / 9,6 kW (27,3 / 40 A)                                  |
| Chosen capacity @ 230 V   | 6,6 kW (28,7 A) 8,8 kW (38,3 A)                             |
| Electrical connection   | 1/N/PE 220240 V AC  |
| Min. required cable size 3)   | See note 3)   |
| Hot water (I/min) max. at $\Delta t = 25 \text{K}$                    | 3,8 5,0   |
| Rated volume  | 0,3 l   |
| Туре  | Pressure type 1000kPa (10 bar)                              |
| Heating system  | bare wire heating system IES®                               |
| Required spec. water resistance @ 15 °C Spec. electrical conductivity | ≥ 1100 Ωcm<br>≤ 90,9 mS/m                                   |
| Inlet temperature   | ≤ 70 °C   |
| Flow rate to switch on – max. flow rate                               | 2,0 – 5,0 l/min <sup>1)</sup>                               |
| Pressure loss   | 20kPa / at 2,5 l/min<br>130kPa / at 9,0 l/min <sup>2)</sup> |
| Temperature range   | 20 °C – 50 °C   |
| Water connection  | G ½"  |
| Weight (when filled w. water)   | 2,7 kg  |
| VDE class of protection   | I   |
| Type of protection / safety   | IP24 Welstein (E  |

- 1) Flow rate limited to achieve optimum temperature rise
- 2) Without flow regulator
- 3) The cross sectional area of the connection cable must be in accordance with the power rating of the appliance and the specific requirements of AS/NZS 3000.

# 5. Dimensions



#### Dimensions in mm

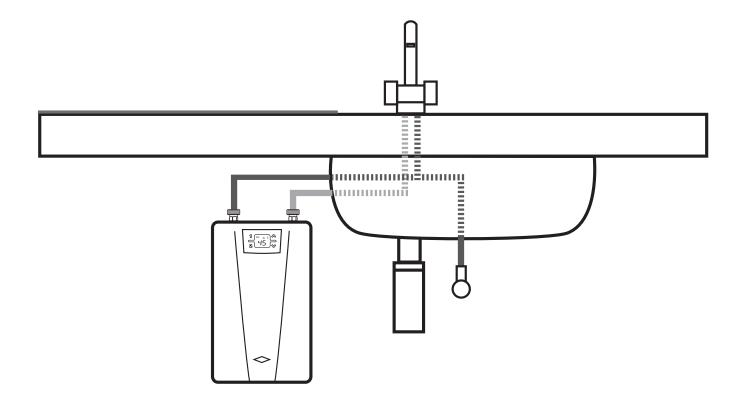






# 6. Typical installations

## Example of a closed-outlet installation:



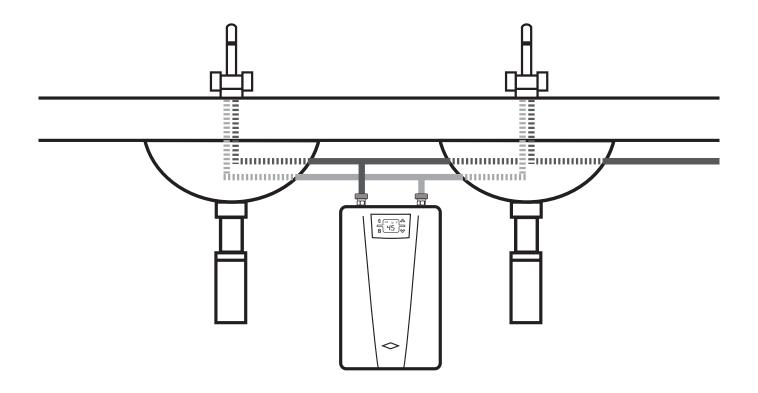






# 6. Typical installations

Example of a closed-outlet installation:









#### 7. Description of appliance

The Zip Instantaneous Hot Water heater CEX 9 is a microprocessor-controlled, pressure-resistant water heater for a decentralised water supply to one or more tap connections.

Its electronic control regulates the power consumption depending on the selected outlet temperature, the respective inlet temperature and the flow rate, thus reaching the set temperature exactly to the degree and keeping it constant in case of pressure fluctuations. The required outlet temperature can be entered between 20 °C and 50 °C and is indicated on the digital display.

This appliance delivers water not exceeding 50 °C in accordance with AS3498.

#### 8. Operation

The appliance switches on automatically when the hot water tap is opened and switches off automatically when the hot water tap is closed.

#### **Temperature setting**

The required outlet temperature can be

adjusted gradually to a higher or lower value with the up arrow and down arrow keys.

Pressing a key once briefly changes the

temperature by 0.5°C between 35°C and 42°C and by 1°C outside that range.

Pressing a key for a longer time changes the temperature continuously.

The required outlet temperature can be adjusted between 20°C and 50°C.

Note: reducing the temperature below 20°C displays "- -" and the heating function will not operate.

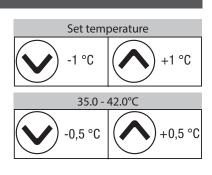
#### **Program buttons**

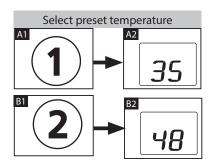
The two program keys allow a preset temperature to be selected quickly.

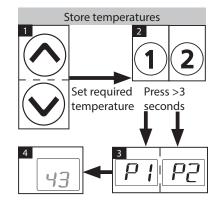
The factory setting is 35°C for program 1 and 48°C for program 2.

The preset temperature can be changed to the current temperature setting by prolonged pressing of the program key.

The display changes from "P1" or "P2" to the new temperature value which becomes available each time the corresponding program key is pressed.











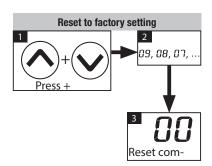
#### 9. Reset to factory setting

To reset to factory settings press the up arrow and down arrow function keys simultaneously.

The display will count backwards from "10" to "00" in one second intervals.

The appliance is reset when the counter reaches "00".

Releasing the function keys earlier will cancel the process.



#### 10. Additional features

#### **Energy saving**

Set the required hot water temperature on the appliance.

If the water is too hot reduce the temperature on the appliance instead of mixing with cold water.

Adding cold water wastes valuable energy that has been used producing excessively hot water.

Also, any cold water added is not controlled by the electronic circuitry meaning that precise temperature control can no longer be guaranteed when supplying more than one outlet.

#### **Power limit**

If the maximum power available from the appliance is insufficient to heat the volume of hot water being drawn off to the required temperature this will be indicated by "MAX" on the display.

Reducing the flow rate will enable the required temperature to be delivered.

#### Operation with solar systems

The appliance is suitable for use with solar heating systems providing appropriate controls are in place to ensure that the temperature of the water entering the unit does not exceed 70°C.

If the inlet temperature exceeds the set point, the "SUN" symbol on the display indicates that the heating power is switched off.

#### **Energy saving mode**

ECO

#### **Power limit**

MAX

#### Heating is switched off







#### 11. Cleaning and maintenance

N.B. Maintenance work must only be carried out by a qualified tradesperson familiar with instantaneous water heaters.

Plastic surfaces and sanitary fittings should only be wiped with a damp cloth.

Never use abrasive cleaning agents or solvents.

Outlet fittings (tap nozzles and shower heads) should be unscrewed and cleaned at regular intervals.

The electrical and plumbing components should be inspected regularly by a qualified tradesperson to ensure proper functioning and operational safety. Water quality should be considered when determining the frequency of inspection.

Each time the appliance is emptied (e.g. due to work on the plumbing system, if there is a risk of freezing or in case of maintenance), the appliance must be vented by opening and closing the hot water tap until all air has been eliminated from the water heater and no more air emerges before re-connecting to the electrical supply.

#### 12. Fault finding

Repairs should only be carried out by qualified tradespersons familiar with electric instantaneous water heaters.

All service work should be performed by an authorized Zip service technician – for details of the full range of services available call Zip Service on 1800 460 222.

When calling for service, please always specify the appliance model and serial number.

The following table will be helpful in determining the causes of some common problems and their solutions.

| Problem   | Cause                                    | Solution  |  |
|---|--|---|--|
|   | Circuit breaker tripped                  | Reset circuit breaker   |  |
| Water stays cold  | STC0 tripped                             | Contact Zip Service to reset STC0   |  |
| Display flashes error<br>message 'ER'                     | Control system has switched off          | Switch power supply off and on. If 'ER' still flashes contact Zip Service |  |
| Poor hot water flow rate                                  | Outlet fitting dirty or calcified        | Clean shower head or tap nozzle   |  |
|   | Fine filter dirty or calcified           | Contact Zip Service to clean fine filter                                  |  |
| Selected temperature not achieved<br>'MAX' lights up      | Excessive water flow rate                | Reduce water flow rate at the outlet                                      |  |
| Selected temperature not achieved<br>'MAX' does not light | Cold water has been added at the outlet  | Set for required temperature and tap hot water only                       |  |
| Symbol 'SUN' flashes                                      | Inlet temperature exceeding set point    | Reduce inlet temperature  |  |
| Water heats up but display fails to operate               | Display lead plug not properly connected | Contact Zip Service to connect display lead correctly                     |  |





| 13. Notes |
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#### **Head Office**

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As Zip policy is one of continuous product improvement, changes to specifications may be made without prior notice. Images in this booklet have been modified and may not be true representations of the finished goods.



...the innovative hot water solution.

### **Quick reference guide**



