

STIEBEL ELTRON

DHC 6 EL / 6 EC / 8 EL / 8 EC / 10 EL

English

Instantaneous water heater - Operation and installation instructions

This water heater must be installed (water and electrical installation), commissioned and serviced by approved service technicians in accordance with these instructions.

General information

The chapter **Operation** is intended for users and qualified installers.

The chapter **Installation** is intended for qualified installers.



Read these instructions carefully before using the appliance and retain them for future reference. If the appliance is passed on to the third party please hand these instructions to the new user.



- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.



- Children should be supervised to ensure that they do not play with the appliance.

Operation Instruction for the user and the qualified installer

1. Operation and installation instruction

1.1 Description of the unit.

The DHC_EC / EL fully electronic instantaneous water heater heats the water while it is flowing through the unit. The indicator light will show when the heater is in operation, and the temperature can be adjusted by turning the knob at the front of the unit, which controls the operation of the heater electronically.

1.2 Using the unit

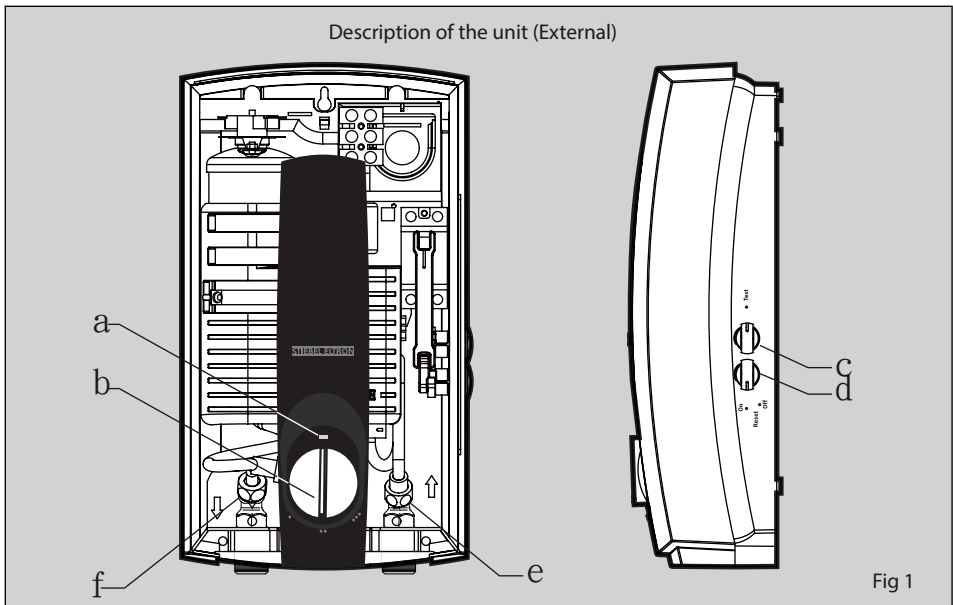
1. Adjust the temperature using at the selector.

Level ● → heats the water to a

- temperature of ~ 40°C
- Level ●● → heats the water to a medium temperature of ~ 50°C
- Level ●●● → heats the water to a maximum temperature of ~ 60°C

Note: In case incoming water flow is too high or cold water temperatures are low temperatures may not be reached.

2. Turn the hot water on. The indicator valve will show at the front of the unit (a)



1.3 Description of the unit (External)

- a. Indicator Light
- b. Temperature Control knob
- c. ELCB Test knob
- d. ELCB Reset knob
- e. Cold Water Inlet Pipe
- f. Hot Water Outlet Pipe

Operation Instruction for the user and the qualified installer



The DHC EC water heater unit is to be installed in a closed, frost-free room (disconnected units are to be stored in a frost-free location, since there will always be some water left in the unit) The water heater is to be installed vertically on a wall (water connection downwards).



Warning :

For electrical heating appliances equipped with a heat cutoff device that does not reset automatically, if you would like to reset the unit, the mains power supply must be disconnected first.



Warning !

If the unit does not operate, even pressing the Reset knob, contact Stiebel service for a check and repair.

1.4.1 This model features an automatic cutoff device that functions when the water temperature is unusually high.



In the event that the thermostat cut off from operating, please refrain from taking any action. Please contact the Stiebel Eltron Service Center for further inspections and repairs to be made.

1.4 This model features an Earth Leakage Circuit Breaker (ELCB) (Type EC only), which should be test a monthly.

How to use the ELCB:

Before operating the water heater. Turn the ELCB Reset knob (d) at the side of the heater to start operation.

How to test the ELCB:

Turn the ELCB Test knob (c) at the side of the unit. ELCB Reset (d) will cease to function. Please note that the indicator light at the front of the unit will turn off. Then, turn the ELCB Reset knob (d) to start operate again.

ELCB Knob Positioning

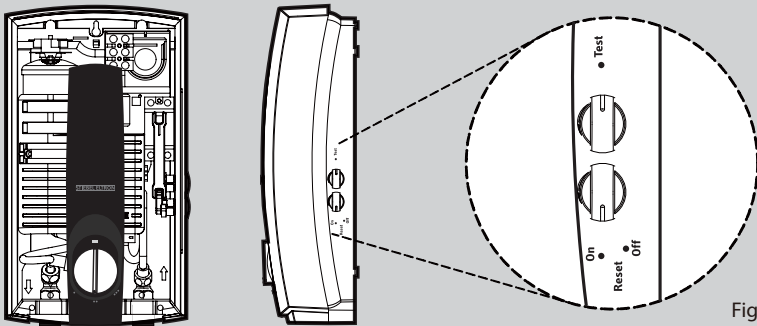


Fig 2

Operation Instruction for the user and the qualified installer

2. First Operation

The water heater should first be operated by an expert technician only.



Before turning on the water heater to start operation, turn the ELCB Reset knob to the "off" position, and open all of water valves fully at every point, so that water is able to flow through the heater and expel air from the pipe and the tank, until the water flow is constant. Please ensure that the water heater is functioning correctly, and close the valve again.

- Turn the ELCB Reset knob to the "on" position to start operating the water heater.



WARNING:

When selecting an appropriate water temperature, the temperature may be dangerously high, especially for children. Keep away from the hot water outlet, as it may cause a potential scalding hazard.

- The indicator light will show.

- The DHC_EC Water Heater features a temperature control knob at the front of the unit, whereby 3 temperature levels may be selected.

2.1 Adjusting Water Flow

If the required temperature is not reached, you may adjust the flow rate by turning the combination valve or water flow control device (Fig 3, No.15).



The hot water temperature depends on the power of the unit, the cold water temperature and the flow volume.

Operation Instruction for the user and the qualified installer

3. Technical Data

Type		6 EL	6 EC	8 EL	8 EC	10 EL
Norminal capacity	l.	0.45				0.50
Design		Close outlet				
Max. water pressure		10 bar / 1.0 MPa				
Min. water pressure to activate unit		0.2 bar / 0.02 MPa				
Water connection		G ½" (External Thread)				
Dimension (W x H x D)	mm.	360 x 200 x 110				
Weight	kg.	2.0				
Electrical connection		1/N/PE/AC 220..240 V.				
Recomended circuit breaker	A.	32		40		50
Recomended cable size	Squmm)	4-6		6-8		8-10
Rated power (kW) Rated current (A.)		Kw - A		kW - A		kW - A
	220 V	6.0 - 27.3		8.0 - 36.4		9.9
	230 V	6.6 - 28.7		8.7 - 37.8		
	240 V	7.1 - 29.6		9.5 - 39.6		
Safety device		-	ELCB	-	ELCB	-

4. Regulations and Provisions

- Regulations of the local power supply company should be observed.
- Regulations of the water supply company should be observed
- Read & study the technical data.
- Install the unit vertically on the wall.
- Electrical connection to be secured.



The device must be capable of being isolated from the mains, for example by fuses, with an isolating distance of at least 3.5 mm. in all poles.

5. Important notes

- Make sure the data on the unit rating plate is current
- Install the unit so that it is flush with the wall
- Material for the water installation: Steel, copper, or plastic piping systems. If plastic piping systems are being used, the following instructions are to be respected.
- Temperature : max 60 °C
- Pressure : max 10 bar



The unit must be connected to the protective earth conductor (see electric circuit diagram).

Operation Instruction for the user and the qualified installer

6. Installation location



The instantaneous water heater should be installed in an enclosed frost-free area, if possible close to the drawing-off point (when dismantled, the unit is to be stored in a place not subject to frost, because there will always be some residual water left inside). The unit is to be installed vertically, as in Example (Fig 1)

7. Care and maintenance



All the information in these instructions for operation and installation must be followed carefully. They provide important information regarding safety, operation, and maintenance of the unit.

A damp cloth is sufficient to clean the unit. Do not use any foaming or abrasive cleaning agents!



Maintenance work may only be carried out by a qualified installer.



When carrying out any work, disconnect the unit from the mains.

Guarantee

8. Guarantee

For guarantees please refer to the respective terms and conditions of supply for your country.



The installation, electrical connection and first operation of this appliance should be carried out by a qualified installer.



The company does not accept liability for any failure caused by improper installation and / or unauthorized installers.

Fault elimination for the user

9. Fault elimination for the user

Fault	Cause	Rectification
No hot water despite water flow through the unit.	- The water flow volume required for the unit to turn it on has not been reached.	- Increase flow volume
	- Water flow too high	- Reduce water flow
	- Heating setting too low	- Turn knob to the right (max. position)
	- ELCB activated.	- Turn ELCB Reset button.

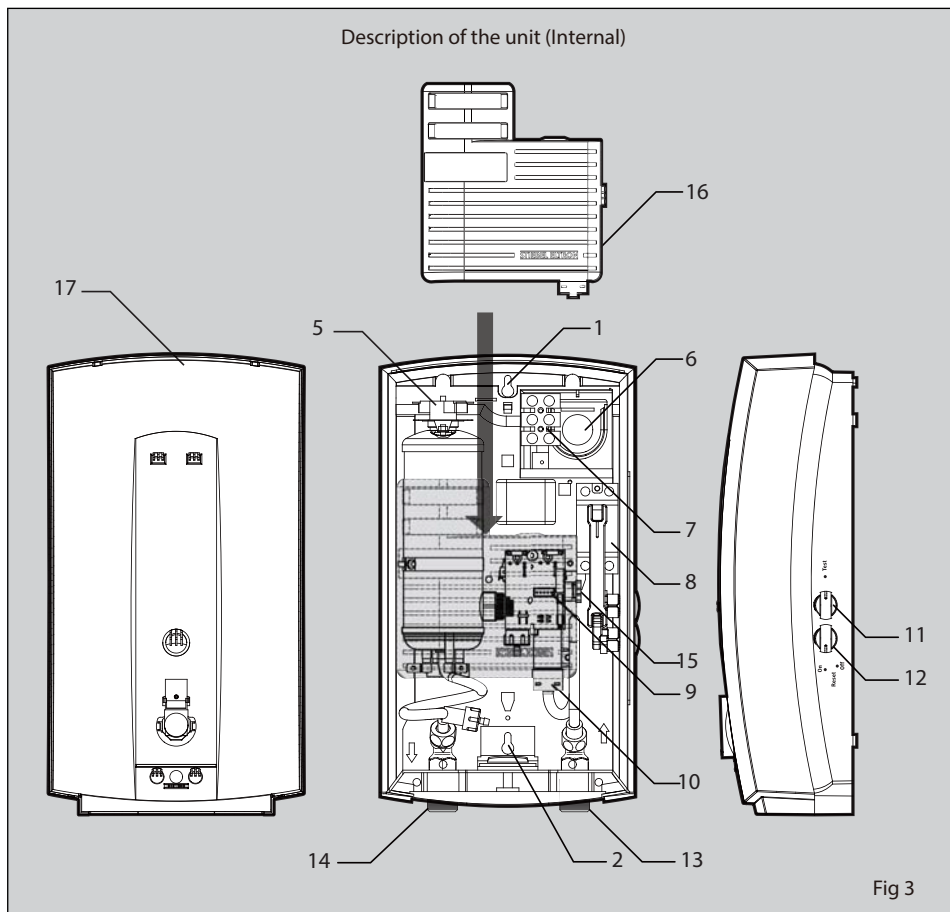
Installation Instruction for the qualified installer

Description of the unit (internal)

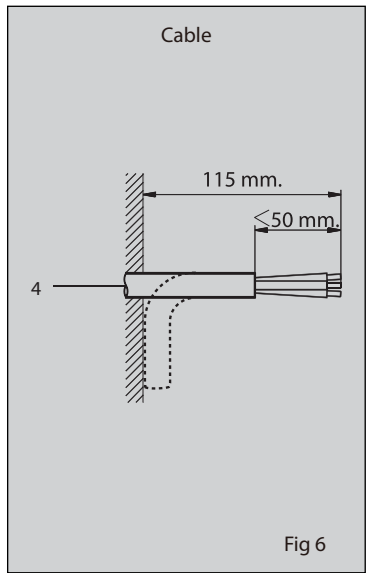
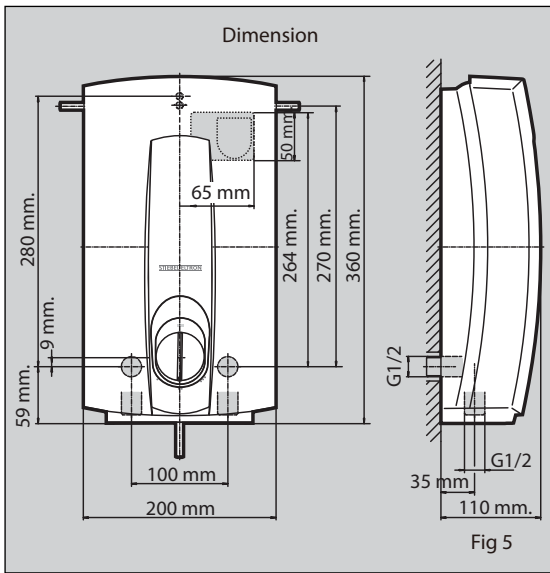
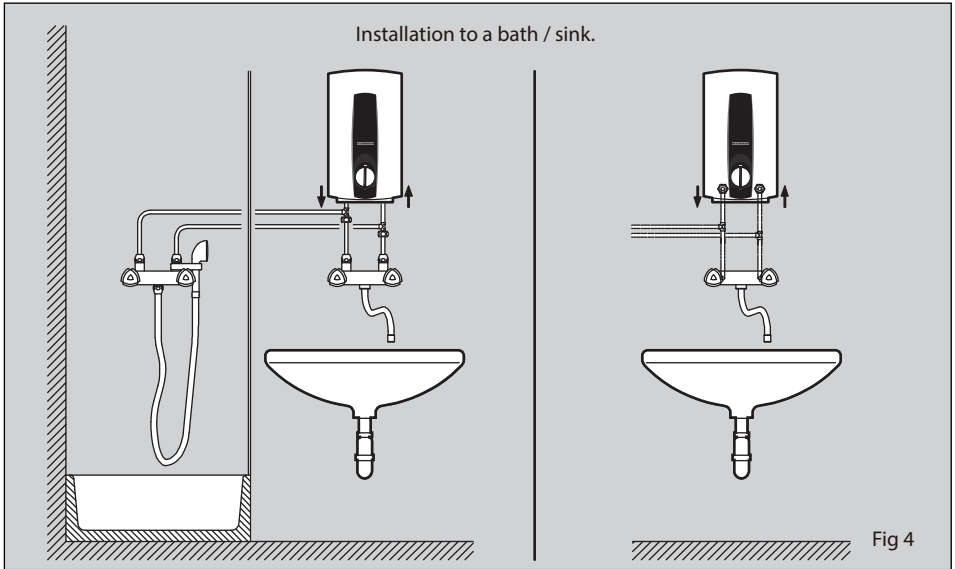
1. Upper mounting hole
2. Lower mounting hole
3. Depth for mounting screw (Fig 7#3)
4. Distance of the connection cable (Fig 6#4)
5. Thermostat
6. Cable entry with seal

7. Electrical connection
8. ELCB (option)
9. Plug connecting the circuit board to the cover
10. Reed switch
11. ELCB Test (option)
12. ELCB Reset (option)

13. Cold water connection
14. Hot water connection
15. Flow Limiter
16. Circuit board cover
17. Cover

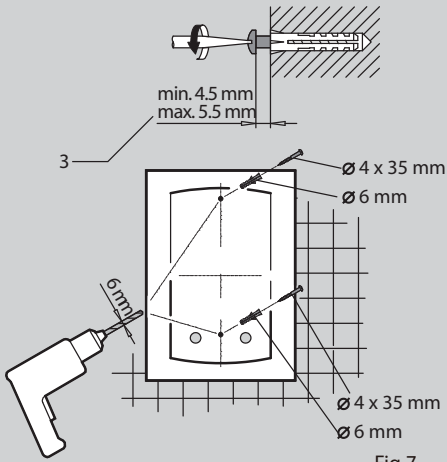


Installation Instruction for the qualified installer

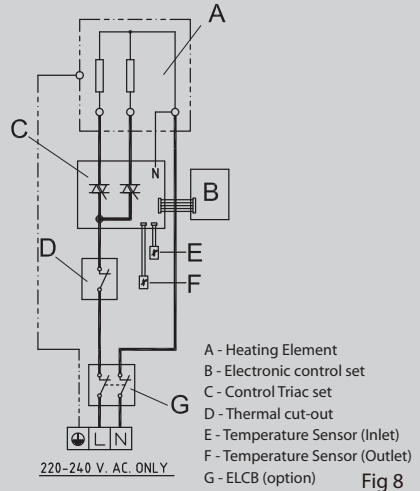


Installation Instruction for the qualified installer

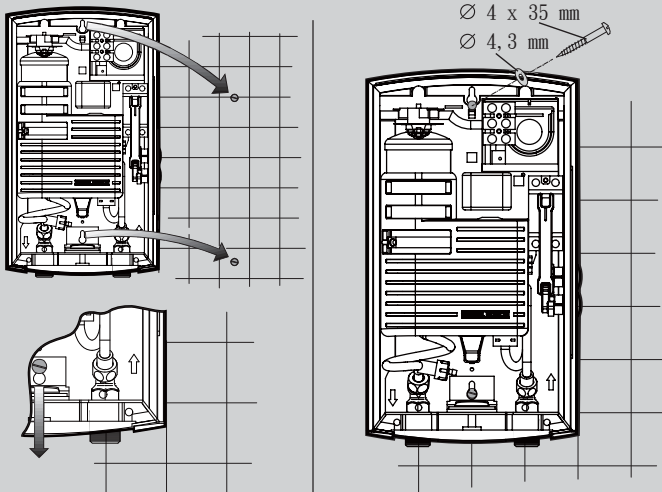
Using the installation template to drill the holes



Wiring diagram



Wall Mounting



Installation Instruction for the qualified installer

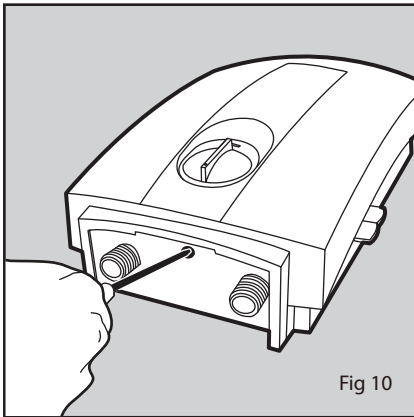
Installation

Preparation before installation of the unit:

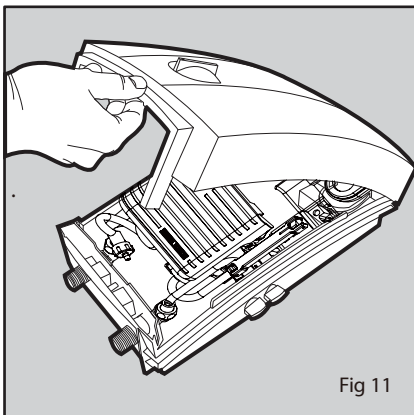
- Before taking any action, always switch off the water heater's main circuit breaker first.

- Place a drilling guide at the drilling position in order to drill a hole in the wall (Fig 7).

- Insert a wall plug and screw in (the depth of the protruding screw head must be correct) (Fig 7#3).

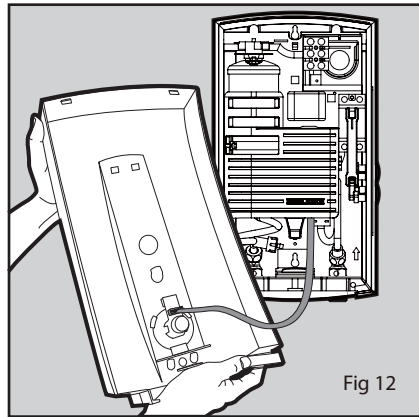


- Remove the screw from underneath the water heater to open the cover of the unit.

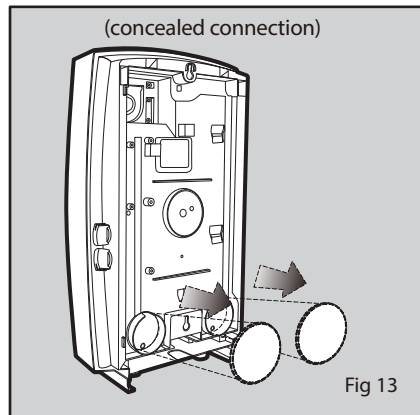


- Open the cover of the unit.
- **Remove the plug connecting the cover of the unit.**

- Inspect the internal components. The cable must be in good condition, and the ELCB must be turned to the "off" position.

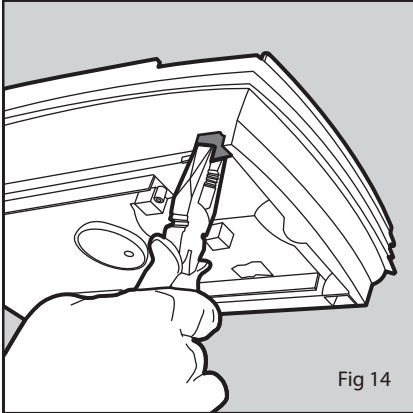


- Create an opening for the water inlet in the case of wall-embedded and wall-mounted pipes.

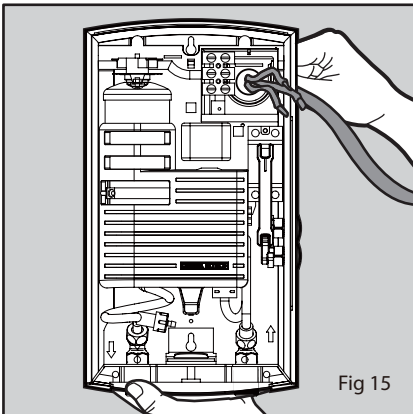
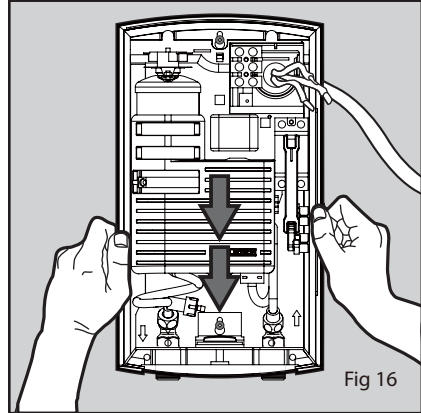


Installation Instruction for the qualified installer

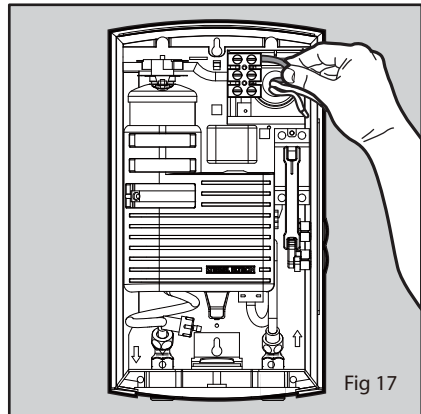
- In the case of laying the cable from above and from the side, create an opening for the electric cable using a pair of pliers to pinch or break the plastic chip on the side or on the top of the heater as appropriate, so that the cable is tightly secured to the unit.



- A circuit breaker or power control switch should be installed before the unit. The size of the circuit breaker must correspond to the voltage of the heater (check the size of the circuit breaker in the Technical Information section).

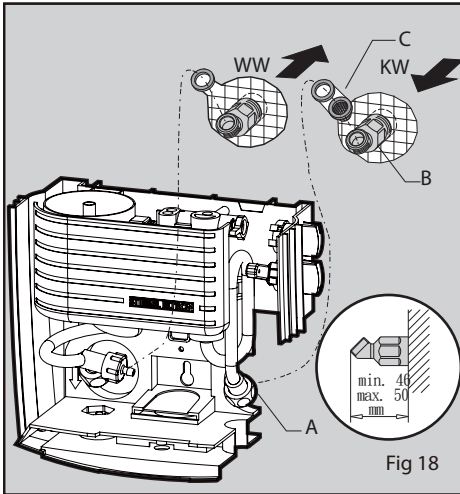


- Insert the cable through the rubber seal at the rear of the unit. Please ensure that the power is turned off at the mains.



- Measure and cut the insulation at the end of the wire in preparation.
 - Insert the wires into the respective openings according to the diagram, and fasten the screws to secure the wires tightly. Please ensure that the correct size of wire is used.

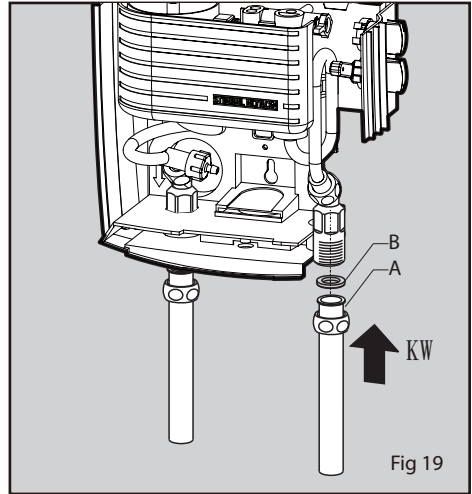
Installation Instruction for the qualified installer



Connecting Water Pipes (concealed connection)

Connecting the water heater to a wall-embedded water pipe:

- Connect the nipple joints (Fig 18/B) to the cold water inlet pipe and the hot water outlet pipe embedded in the wall at an appropriate position and depth (please pay attention to the distances shown in the diagram).
- Screw the joints on the unit (Fig 18/A) to the joints (both hot and cold water), using a rubber leakage gasket (Fig 16/B) between the joints.



Installing Water Heater wall-mounted

Connecting the water heater to a wall-mounted water pipe:

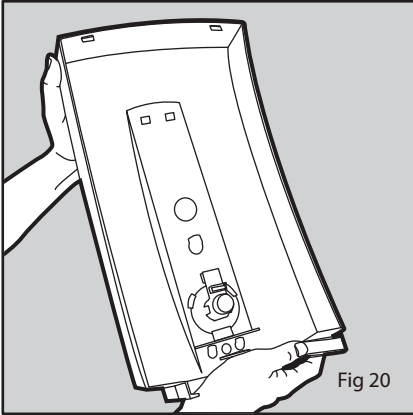
- Connect the prepared water pipe to the pre-assembled nipple joint.
- Screw the joints on the unit (Fig 19/A) to the pipe (both hot and cold water), using a rubber leakage gasket (Fig 16/B) between the joints.



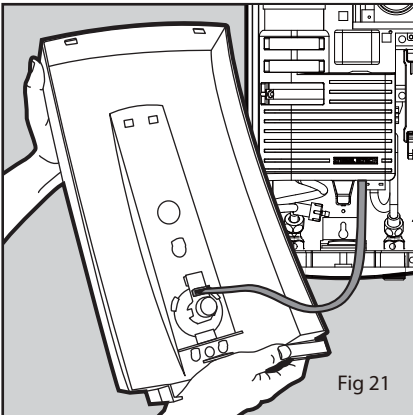
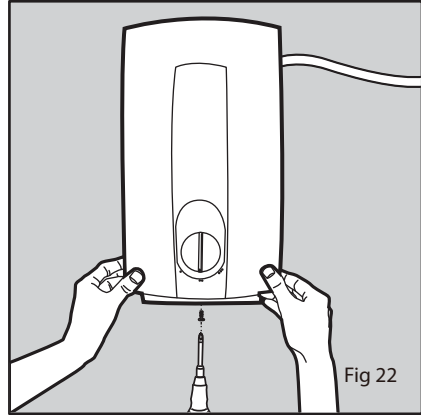
The cold water pipe must be turned on in order to rinse it before installation. Pressure-resistant equipment must be used in compliance with accepted standards.

Installation Instruction for the qualified installer

- Install the cover. Connect the power cord between the circuit board and the cover.



- After installation is complete, close the casing and screw in tightly.



Size:A5

Material: Green read paper 75 g.

Plastic bag : 7 x 11 INCH

Part no. 7901-293468

Part name : OPERATING INSTRUCTION DHC(EC) Th-En

Rev.02

Product code : DHC 6 EL : 232209 / DHC 6 EC : 231279 / DHC 8 EL 232210 / DHC 8 EC : 231280 /
DHC 10 EL : 232211