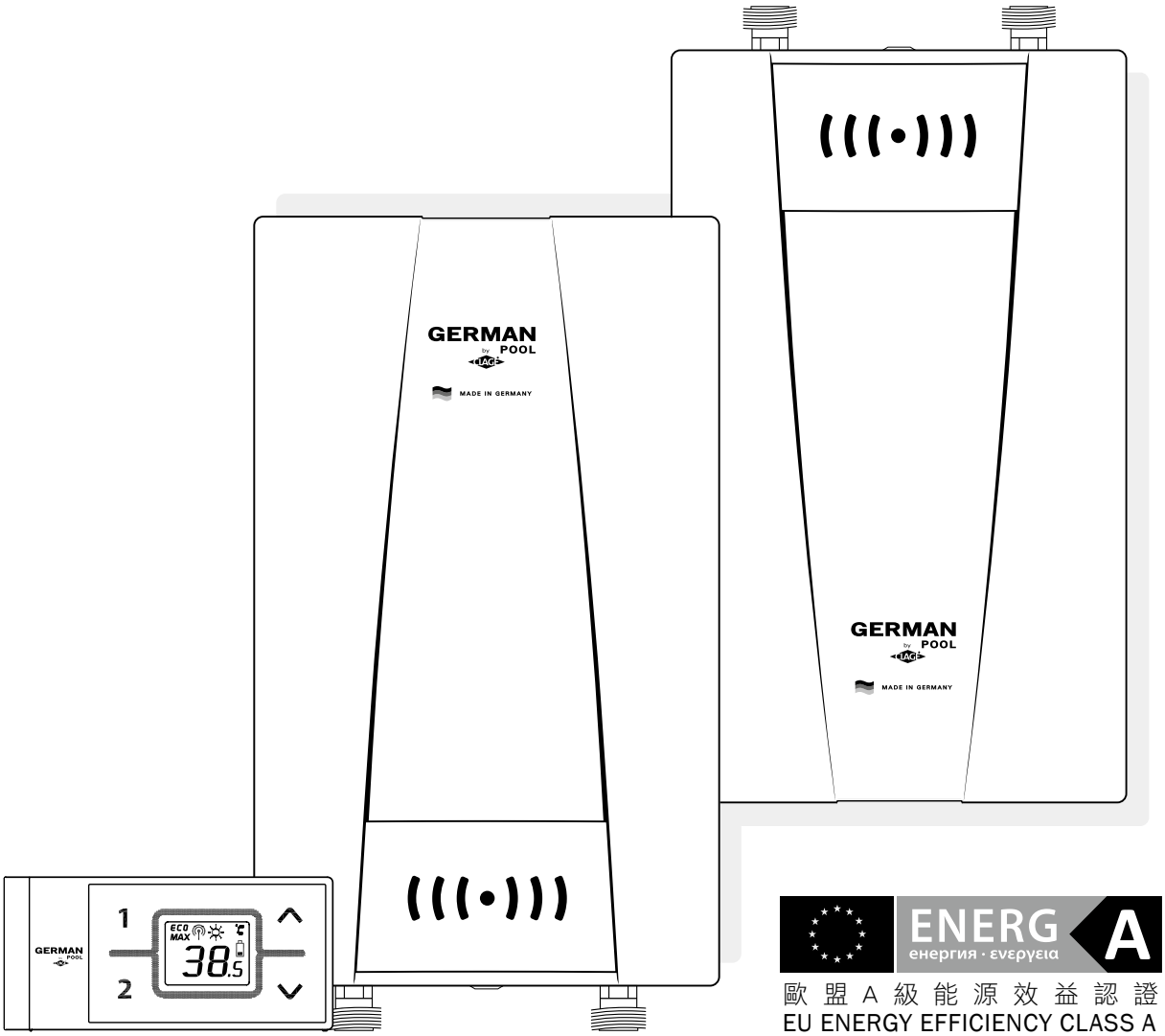
GERMAN
by POOL
CLAGE

即熱式電熱水器
Instantaneous Water Heater | CFX21/CFX21-U



ENERG A
енергия · ενεργεια
歐盟A級能源效益認證
EU ENERGY EFFICIENCY CLASS A

ENVIRONMENT-FRIENDLY
環保 節水節能
环保 节水节能
energy and water saving

在使用之前請詳細閱讀「使用說明書」及「保用條例」，並妥為保存。
Please read these instructions and warranty information carefully before use and keep them handy for future reference.

DVE GS geprüfte Sicherheit

CE

使 用 說 明 書 | OPERATING INSTRUCTIONS

Printed in Germany

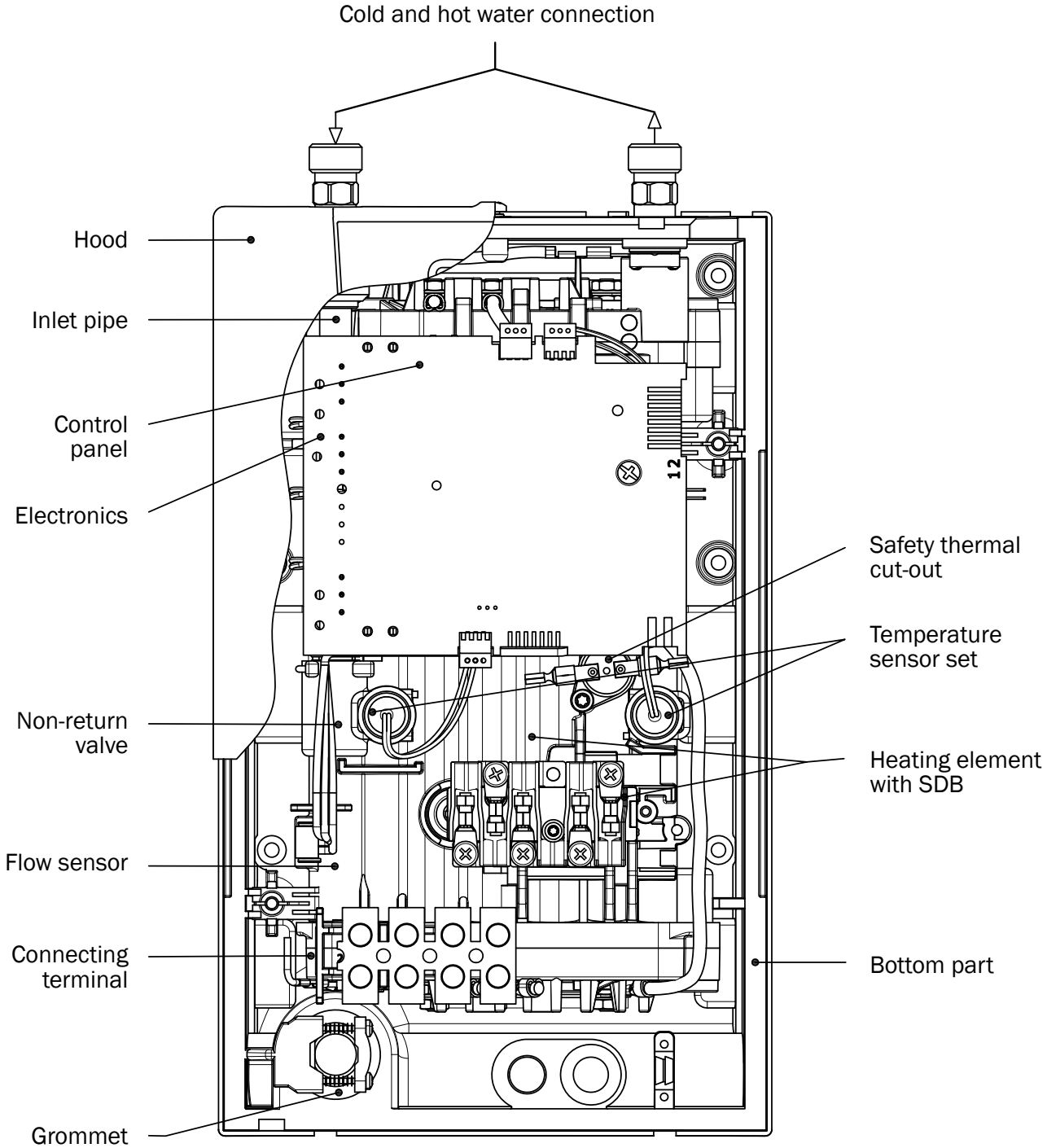
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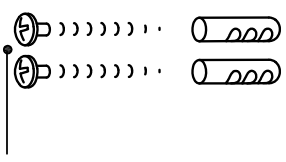
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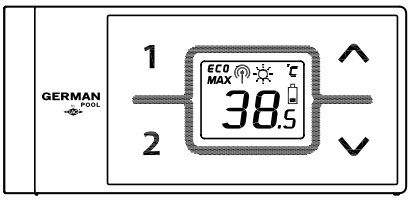
1. Overview

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





Screws and dowels



Wireless remote control with batteries

2. Safety Instructions



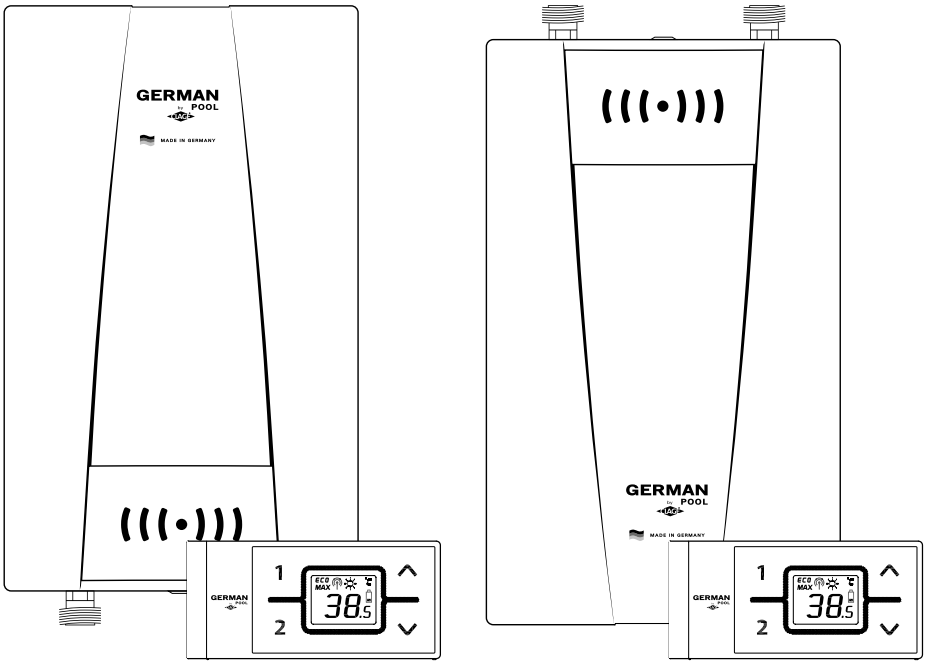
Please read these instructions carefully before installing or using the appliance! Keep the instructions handy with the appliance for future use!

Instruction manuals are intended for the specialist who is responsible for the installation of the appliance. Operation manuals are for the end user.

The latest version of the instructions can be found online at www.germanpool.com.

- Do not use the appliance until it has been correctly installed and unless it is in perfect working order.
- The appliance is only suitable for domestic use and similar applications inside closed rooms, and must only be used to heat incoming water from mains supply.
- The appliance must never be exposed to frost.
- The appliance must be earthed at all times.
- 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.
- This appliance can be used by children aged 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance.
- Cleaning and user maintenance shall not be performed by children without supervision.
- The values stated on the rating plate must be observed.
- In case of malfunction, disconnect the fuses immediately. In case of leaks, cut off the mains water supply instantly. Repairs must only be carried out by the customer service department or an authorised professional.
- The remote control and the wall bracket should not get close to items with magnetic strips, like credit cards etc. The built in magnets can damage the card’s magnetic strip.
- Before commissioning for the first time and each time the appliance or the plumbing system 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 the manual.
- Water inlet temperature must never exceed 70 °C.

3. Description of Appliance



The instantaneous water heater CFX21/CFX21-U is a microprocessor-controlled, pressure-resistant water heater for a decentralised water supply to one or more outlets.

Its electronic control regulates the heating 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 operation is done via the wireless remote control. The required outlet temperature can be entered on a keypad within a range between 20 °C and 60 °C and can be read off the digital display.

The maximum inlet temperature can be up to 70 °C so that operation in connection with solar heating systems is possible.

4. Technical Specifications

Model	**CFX21-U FUNKTRONIC MPS® / CFX21 FUNKTRONIC MPS®**	
Energy efficiency class	A *)	
Rated capacity / rated current	18 / 21 kW (26 / 30.3 A)	
Chosen capacity (Chosen current)	18 kW (26 A)	21 kW (30.3 A)
Electrical connection	3 / PE 380..415V AC	
Min. required cable size	4 mm^2	4 mm^2
Hot water (l/min) max. at Δt = 33 K	7.8	9.1 [1)]
Rated volume	0.3 l	
Type	Pressure type 1.0 MPa (10 bar)	
Heating system	Bare wire heating system IES®	
Required spec. water resistance @ 15 °C Spec. electrical conductivity	≥ 1000 Ωcm ≤ 100mS/m	
Inlet temperature	≤ 70 °C	
Flow rate to switch on – max. flow rate	2.0 – 8.0 l/min [2)]	
Pressure loss	0.2 bar at 2.5 l/min 1.3 bar at 9.0 l/min [3)]	
Temperature choice	20 – 60 °C	
Water connection	G ½ inch	
Weight (when filled w. water)	2.7 kg	
VDE class of protection	I	
Type of protection / safety	IP24 [4)]	

*) The declaration complies with the EU regulation No 812/2013

1) Mixed water

2) Flow rate limited to achieve optimum temperature rise

3) Without flow regulator

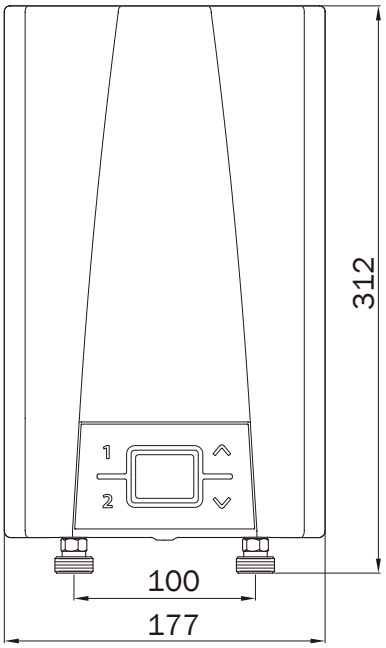
- Specifications are subject to change without prior notice.
- If there is any inconsistency or ambiguity between the Chinese versionand the English version, the English version shall prevail.
- Refer to www.germanpool.com for the most up-to-date version of the User Manual.

4. Technical Specifications

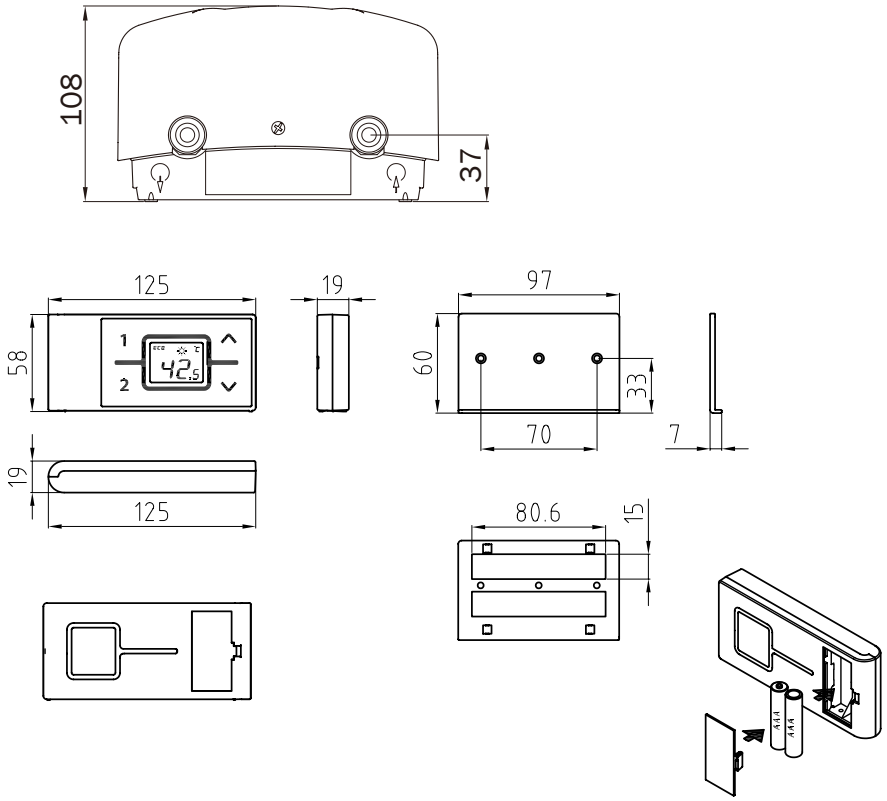
Model	**FX**
Operating voltage	3 V
Type of battery	2 × AAA Alkaline [1)]
Type of protection	IP 20
Transmission range	10 metres incl. barrier
Transmission power	max. 1 mW
Transmission and receiving frequency	868.3 MHz
Radiation	undirected
Approvals	CE

1) Do not use rechargeable batteries.

5. Dimensions

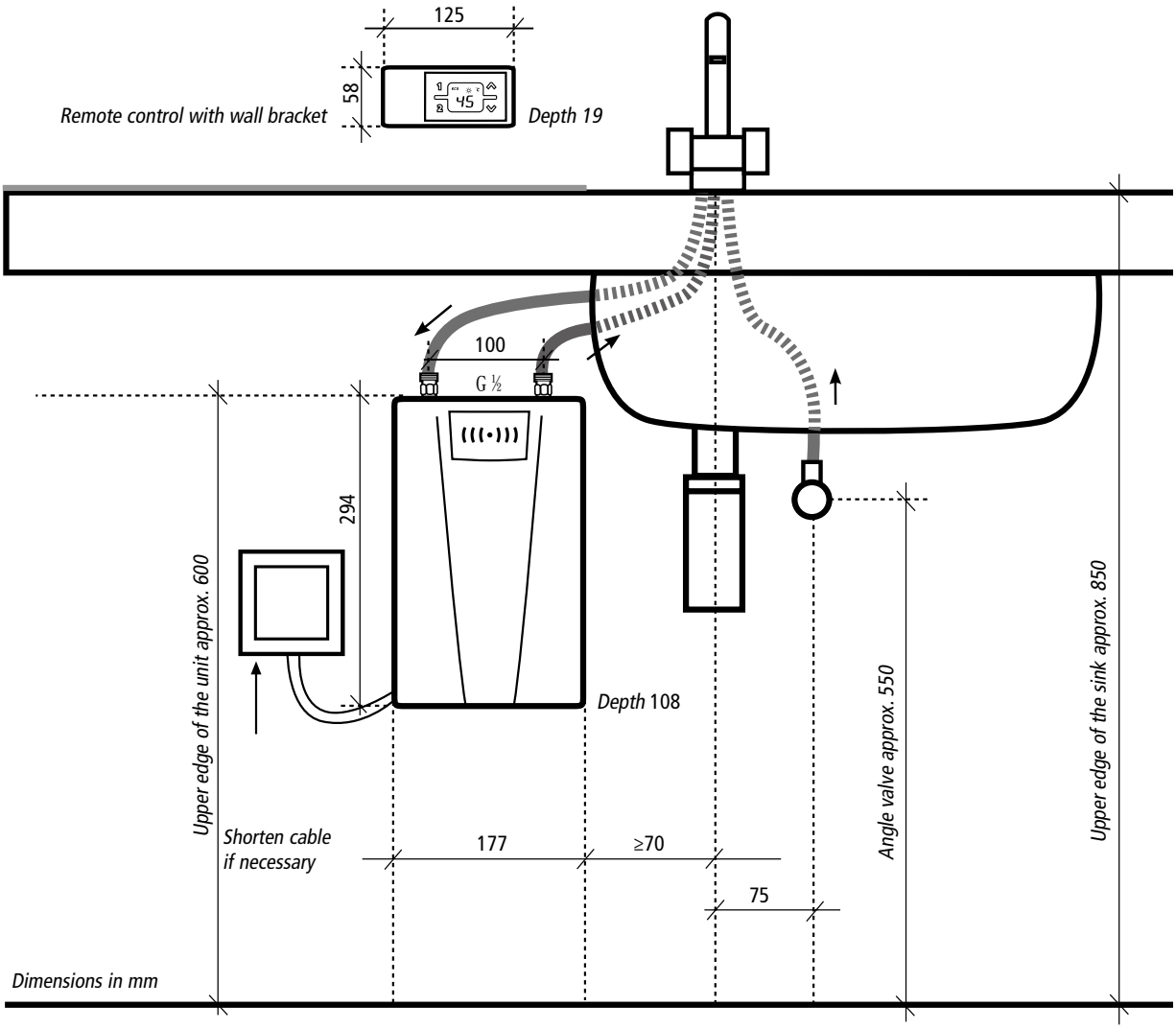


Dimensions in mm

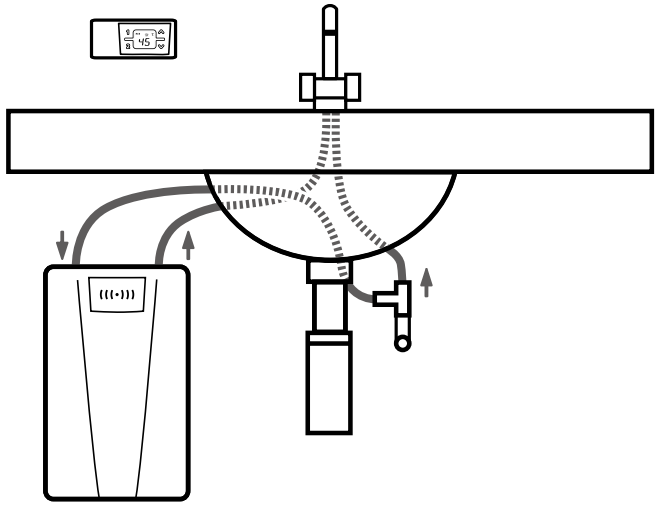


6. Typical Installation

Example of an open-outlet installation with special tap:



Example of a closed-outlet installation:



7. Installation

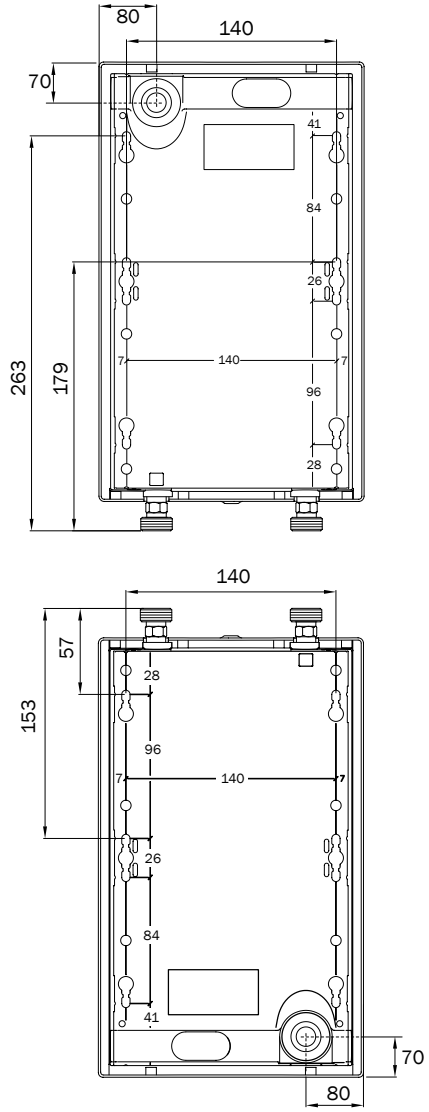
The following regulations must be observed:

- **EN 806**
- **Installation must comply with all statutory regulations, as well as those of the local electricity and water supply companies.**
- **The rating plate and technical specifications**
- **Only intact and appropriate tools must be used.**

Installation site

- Appliance must only be installed in frost-free rooms. Never expose appliance to frost.
- The Appliance is designed for undersink installation and has to be installed with water connectors upward.
- The appliance complies with protection type IP24.
- In order to avoid thermal losses, the distance between the instantaneous water heater and the tapping point should be as small as possible.
- For maintenance work, a shut-off valve should be installed in the supply line. The appliance must be accessible for maintenance work.
- Copper or steel connecting pipes may be used. Plastic pipes may only be used if they conform to DIN 16893, Series 2. The hot water pipes must be thermally insulated.
- The specific resistance of the water must be at least 1000 Ωcm at 15 °C. The specific resistance can be asked for with your water supply company.

7. Installation

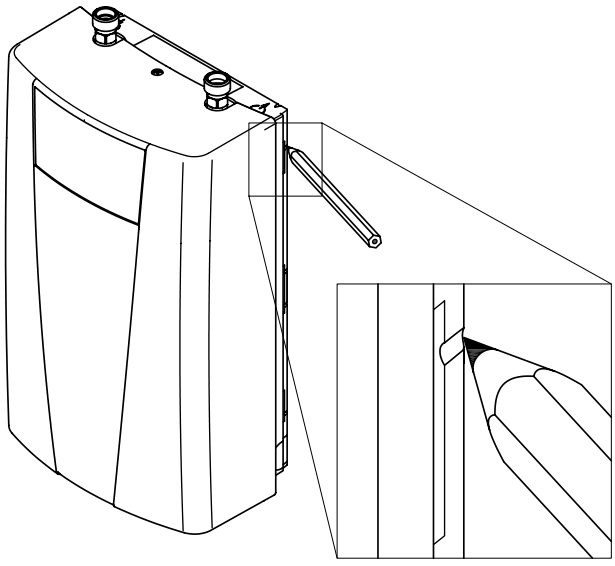


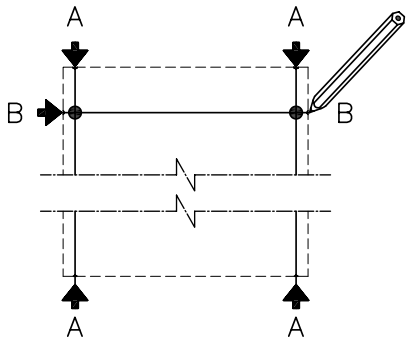
Mounting the appliance

1. Thoroughly rinse the water supply pipes before installation to remove soiling from the pipes.
2. Hold the appliance on the wall, and mark the drill lines at top and bottom, right and left, corresponding to the small notches at the edge of the appliance hood (see bottom figure). The alignment template (located on the back inside cover of this manual) may be used for this purpose alternatively.
3. Connect the top and bottom marks vertically with each other (A-A).
4. Connect the right and left marks horizontally with each other (B-B).
5. The intersections of these lines are the drill points.
6. Drill the holes using a 6 mm drill. Insert the included dowels and screws. The screws have to protrude 5 mm.
7. Hang up the appliance into the rear hanging openings until it clicks into place.

Installing the appliance

1. Attach the water connection pipes to the appliance's water connection. Use the ½ inch seals.
2. Open and close the hot water tap until no more air emerges from the pipe and all air has been eliminated from the water heater.





7. Installation

Figure A:
Installation with adhesive tape

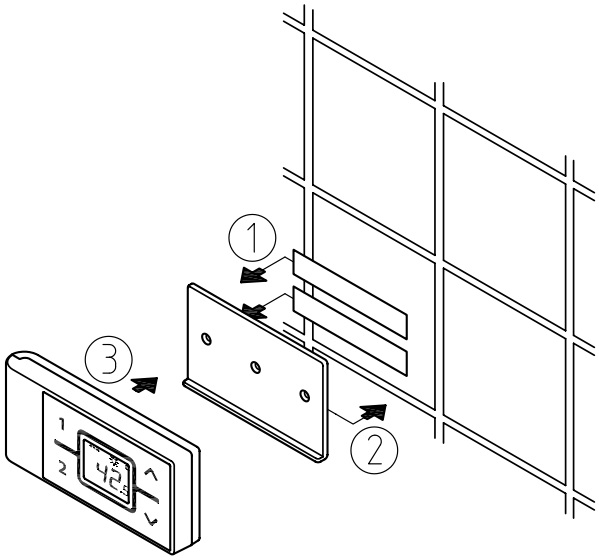
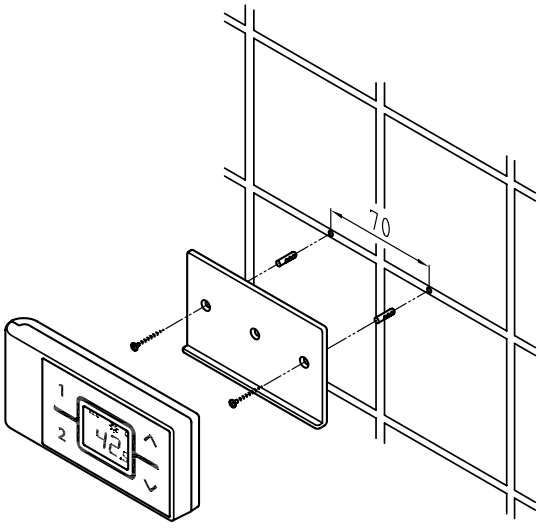


Figure B:
Optional installation with dowels and screws



Mounting the remote control's wall bracket

- **Before attaching the wall bracket to the wall, ensure that the remote control has radio contact to the instantaneous water heater from its designated position.**
- The wall bracket of the remote control can either be attached securely with the included adhesive tape, after stripping off the protection film (as shown in the figure A), on a rigid board (e.g. tile) or with suitable dowels (Ø 4 mm) and screws (as shown in the figure B).
- When using the adhesive tape it is not possible to further adjust the position because of the strong adherence of the glue. Therefore, pay attention to a horizontal alignment when attaching it.
- The remote control is magnetically retained at the wall bracket.

Note:

Do not expose the remote control to moisture.

Initial operation

After inserting the batteries in the remote control its display indicates all symbols for about 4 seconds. By the time the power settings have been carried out, the remote control indicates the current setpoint (factory setting 38 °C) and the state of the appliance. In case of a failing radio contact, the display indicates "no" and a cyclical, flashing radio symbol (see Troubleshooting).

The water heater's temperature must be limited to 55°C, if it is connected to a shower. Refer to the heaters installation and operating instructions to this.

Registration of remote control at the instant water heater

The remote control is registered as-delivered condition.

Only register again after performed work reset at the CFX or when the remote control display continually indicates "NO".

1. Make sure that the power supply to the instantaneous water heater is switched on (fuse)
2. Remove the batteries until the display expires. After inserting the batteries, the display indicates all symbols for about 4 seconds. During this time, press and hold the arrow keys ⌄ and ⌃ for a short time. Then the display shows the current channel (1 to 99) and a flashing radio symbol.
3. Using the arrow buttons ⌄ and ⌃ chooses the desired channel. Press button ① to confirm the selected channel number. The display changes to registration mode and shows "- -"as well as a flashing radio symbol.
4. Place the remote control directly in front of the instantaneous water heater.
5. The display switches to the setpoint value display.

7. Installation



Note: For initial installation we basically recommend to change the radio channel.

In the case of an unsuccessful registration the display indicates “NO” by a flashing radio signal after 45 seconds. The remote control quits the registration process and switches to standby mode. By pressing a key the registration process will be repeated.

Notes:

- If the power selection of power rating has not been carried out, the operation is not possible without a registered remote control.
- With no remote control registered or without working radio connection, the instantaneous water heater heats to the prior selected set temperature .
- For the professional: After a reset at the water heater (refer to installing instructions, chapter “Reinstallation”) a registration is required!

Safety notes

- At malfunction of the remote control remove the batteries immediately.
- The remote control and the wall bracket should not get close to items with magnetic strips, like credit cards etc. The built in magnets can damage the card’s magnetic strip.
- Do not expose the remote control to moisture.
- Flat batteries can leak and damage the remote control. Hence, replace flat batteries right away as soon as battery symbol lights up in the display or the remote control does not response after keystroke.
- When the remote control is not to be used in the long term, remove the batteries.
- After a keystroke the remote control refreshes every 10 seconds when water is flowing. When the water flow stops the remote control refreshes again 3 more times.
- Without working radio connection, the appliance heats to the prior selected set value.

Battery replacement

Replace the batteries with new AAA batteries when the battery symbol flashes up. Do not use rechargeable batteries!

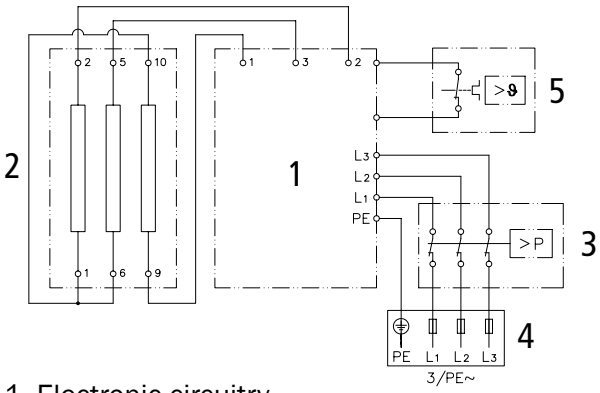
Disposal

Batteries may contain environmentally hazardous substances. Therefore, used batteries must be disposed of at special collecting points and not be mixed with general household waste.

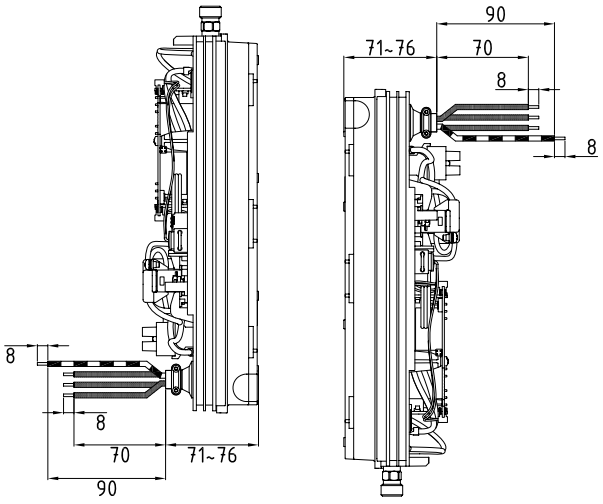
At the end of the remote control’s lifetime, the batteries must be disposed of separate from the appliance.

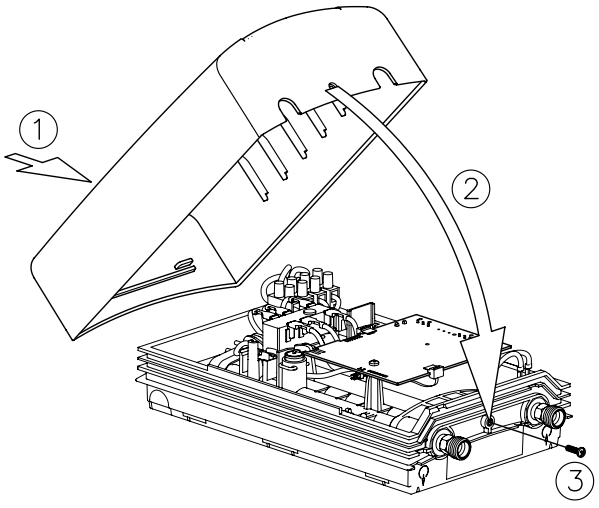
8. Electrical Connection

Wiring diagram



1. Electronic circuitry
2. Heating element
3. Safety pressure cut-out
4. Terminal strip
5. Safety thermal cut-out





Only by a specialist! Please observe:

- **VDE 0100**
- **The installation must comply with current IEC or national local regulations and any particular regulations, specified by the local electricity supply company**
- **The rating plate and technical specifications**
- **The unit must be earthed!**

Structural prerequisites

- The appliance must be installed via a permanent connection. Heater must be earthed! A maximum cable size must be observed: 10 mm^2.
- The electric wiring should not be injured. After mounting, the wiring must not be direct accessible.
- An all-pole disconnecting device (e.g. via fuses) with a contact opening width of at least 3 mm per pole should be provided at the installation end.
- To protect the appliance, a fuse element must be fitted with a tripping current commensurate with the nominal current of the appliance.

Electrical connection

Check that the power supply is switched off prior to electrical connection!

Electrical connection with preinstalled power cable

The appliance is to be connected with the pre-installed power cable to a terminal box. If necessary, use one of the three predetermined breaking points for the cable entry (at the right, left, bottom or top).

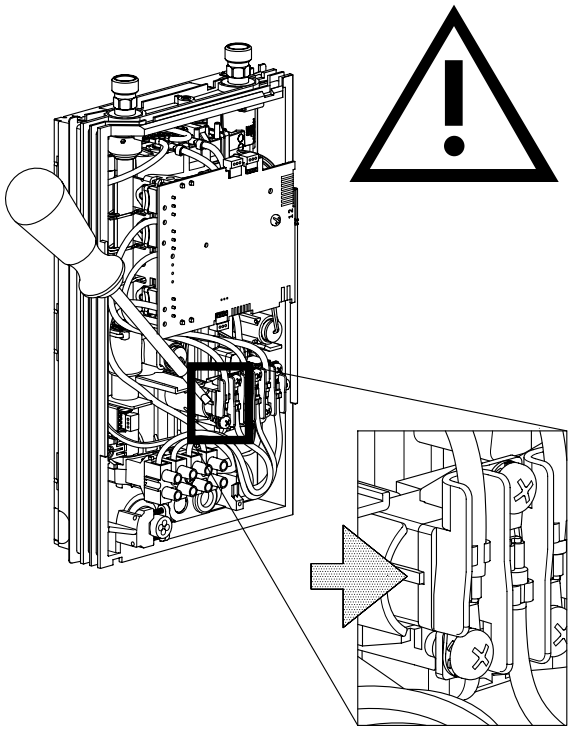
Alternative:

Electrical installation to a permanent connection

If, in case of particular local circumstances, connecting to a permanent connection is the only possibility, continue as follows.

1. Disassemble the pre-installed power cable.
2. Dismantle off the power cable so that you can insert the cable with the cladding through the water splash protection sleeve up to the cord grip into the appliance.
3. Lead the cable through the water splash protection sleeve into the appliance so that one can securely fix the cladding of the cable with the cord grip. If necessary, use one of the three predetermined breaking points for the cable entry (at the right, left or bottom). The protective sleeve prevents water from entering the appliance alongside the connection line. The protection sleeve has to be used!
4. Mount the cord grip. The cord grip must be used!
5. Strip the cables and plug them in the connecting terminals according to the wiring diagram. The appliance must be earthed.
6. After successful electrical connection, fit the hood of the unit. Make sure not to jam any cables between the appliance hood and the base part of the appliance.

9. Initial Operation



Before making the electrical connection, fill the mains and the appliance with water by carefully opening and closing the hot water tap in order to vent completely. After every draining (e.g. after work on the plumbing system or following repairs to the appliance), the heater must be re-vented in this way before starting it up again.

If the water heater cannot be put into operation, the temperature cut-out or the pressure cut-out may have tripped during transport. If necessary, reset the cut-out.

Selection of power rating

Only by authorised specialist, otherwise lapse of guarantee!

Upon first connection of the appliance to the supply voltage, select the maximum power rating. Only after having set the power rating, the heater provides its standard operation mode.

The maximum allowable power rating at installation site depends on the local situation. It is imperative to observe all data shown in the table “Technical specifications”, in particular the required cable size and fuse protection for the electrical connection. Moreover, the electrical installation must comply with the statutory regulations of the respective country and those of the local electricity supply company (Germany: DIN VDE 0100).

1. Remove the battery case cover of the remote control and insert batteries (2 × AAA Alkaline). Mind the polarity of the batteries. Insertion should take place when the power supply of the water heater is turned on (see below). The remote control is registered to the water heater by the factory. The display indicates all symbols for about 4 seconds after inserting the batteries. The power indication appears.

Remote control

The water heater’s temperature must be limited to 55 °C, if it is connected to a shower and controlled with a remote control system. The service menu parameter “Temperature Limit “(“tL”) must be set to a value less or equal 55 °C, in consultation with the customer and the lock level must be activated.

When the device is operated with preheated water, it must be ensured that this temperature is limited to 55 °C as well.

Notes in case of remote control connection problems

In case of a failing connection between the remote control and the water heater, the display indicates “NO” and a cyclical flashing radio symbol. A keystroke restarts the registration.

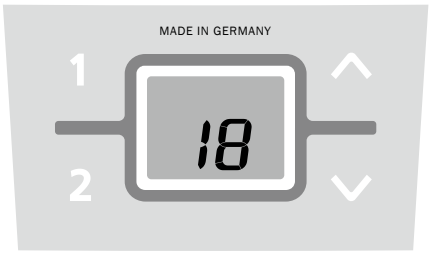
Under those circumstances reduce the distance to the water heater and check whether the power supply is turned on.

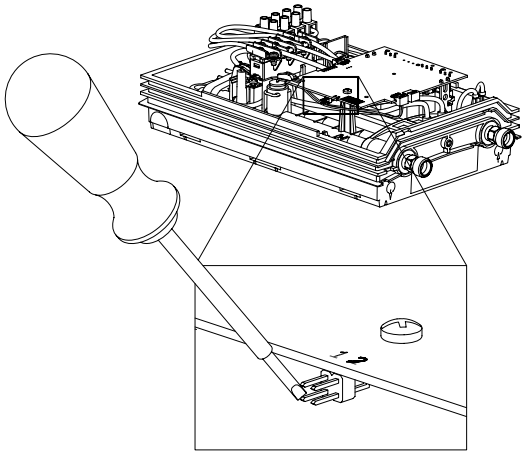
After the batteries have been replaced and the selection of power rating, the display of the remote control indicates the prior selected set value and the status of the appliance.

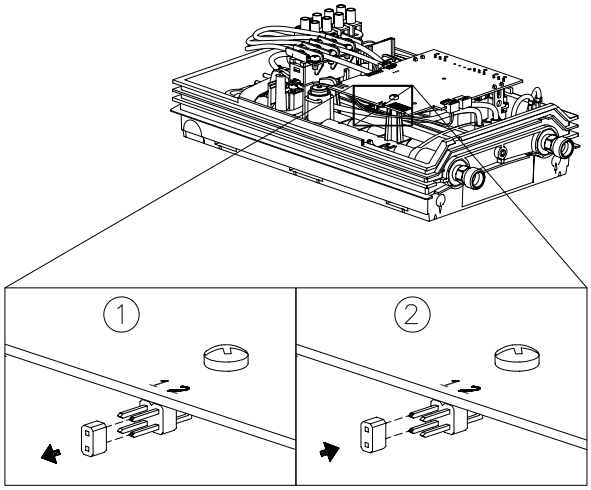
Multiple Power System:

The capacity (max. power consumption) can be changed internally to 18 kW or 21 kw / 400 V.

9. Initial Operation







1. Switch on the power supply to the appliance. The digital display on the appliance must light up.
2. When switching on the supply voltage for the first time, the value “18“ flashes in the display of the remote control. If not, please carefully read the below note “Reinstallation“.
3. Select the maximum allowable power rating depending on the local situation via the up ⌃ and down ⌄ arrow keys: 18 or 21 kW.
4. Press key ① to confirm the setting. The appliance starts operating.
5. Mark the set power rating on the rating plate.
6. Open the hot water tap. Check the function of the appliance.
7. After having set the maximum allowable power rating, the heating element will be activated after approx. 10 sec of water flow.
8. Explain the user how the instantaneous water heater works and hand over the operating instructions.

Reinstallation

In case the appliance will be commissioned again under different installation conditions than during its initial operation, it may be necessary to adapt the maximum power rating. A temporary short-circuit of the two pins, e.g. with a screwdriver acc. to EN 60900 (see figure), will reset all heater parameters to works setting and lock the heating.

It is now necessary to manually register the remote control (see operating instructions).

After the new registration, value “18“ flashes in the display until the maximum power rating has been selected. This condition will maintain when activating and deactivating the supply voltage.

Lock Level

The operating mode of the appliance can be restricted. The service menu can be used to configure the appliance.

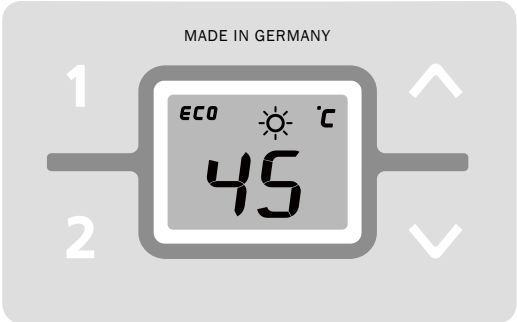
Activation of the lock level

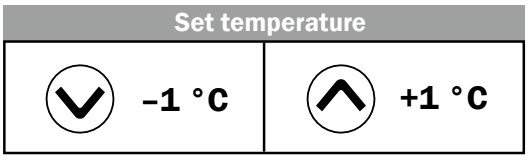
1. Set required lock level in the service menu (refer to chapter “Service menu” in this installing instructions).
2. Disconnect the appliance from the power supply (e.g. by switching off the fuses).
3. Move the jumper on the power electronics from pin 2 to pin 1 (see figure).
4. Put the appliance into operation again.

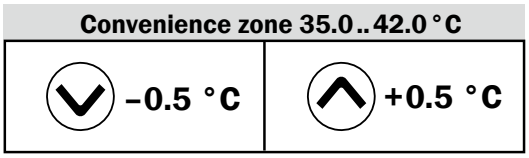
Deactivation of the lock level

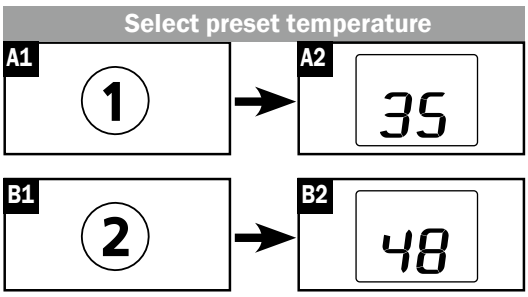
1. Disconnect the appliance from the power supply (e.g. by switching off the fuses).
2. Move jumper from pin 1 to pin 2.
3. Put the appliance into operation again.

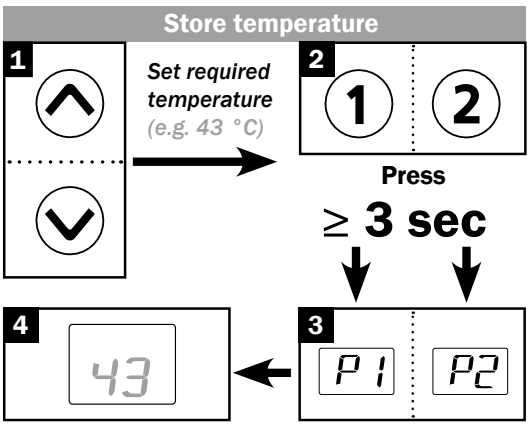
10. How to Use











Display of new value
(e.g. 43 °C)

The water heater is operated with the wireless remote control.

As soon as you open the hot water tap, the instantaneous water heater switches on automatically. When the tap is closed, the appliance automatically switches off.

Temperature setting

You can set the required temperature gradually to a lower or higher value with the arrow keys ⌄ and ⌃.

The temperature changes by 1 °C, in the convenience zone between 35 °C and 42 °C by 0.5 °C, if key is pressed shortly one time. Pressing a key for a longer time changes the temperature continuously.

Note: If temperature is set below 20 °C with arrow key ⌄ the display shows "- -" and the appliance switches off the heating function.

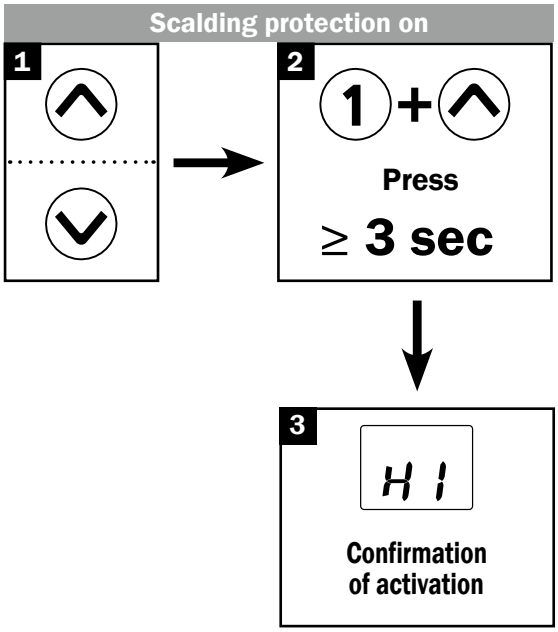
Note: If the water heater supplies a shower and is connected to a remote control system, the maximum temperature was reduced during initial operation. This limitation cannot be exceeded.

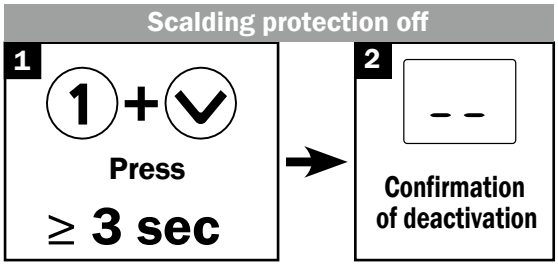
Programme buttons

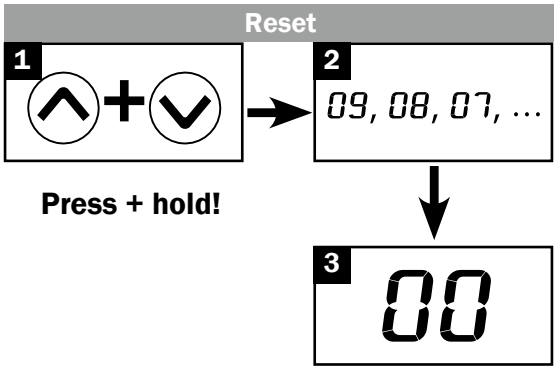
The two programme buttons allow to quickly select the preset temperature. When pressing a programme key, the preset temperature is selected and displayed. The factory setting for programme ① is 35 °C and for programme ② it is 48 °C. You can assign your own settings for the programme keys:

- Prolonged pressing of the programme key stores the previously selected temperature. The display changes from "P1" or "P2" to the newly stored temperature value. This newly set temperature is now available to you each time you press the corresponding program key.

10. How to Use







Reset completed

Temperature limitation

This instantaneous water heater is equipped with an optional temperature limiting function. This scalding protection is deactivated in the factory setting.

- Switch on: Select the limit temperature, then press ① and ⌃ simultaneously for at least 3 sec. The display briefly confirms the activation by “HI“.
- Switch off: press program key ① and ⌄ simultaneously for at least 3 sec. The display briefly confirms the deactivation by “- -“.

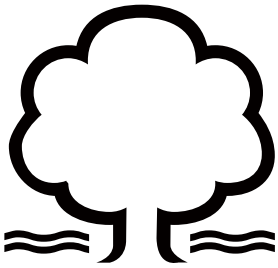
Note: By activation of the temperature limit also the programme keys are affected. Therefore, the fixed values of the programme keys must be checked after changing the temperature limitation.

Reset to factory setting

All factory settings can be recalled:

- Press ⌄ and ⌃ and simultaneously. The display now counts backwards from “10“ to “00“ in second intervals. The appliance is reset at value “00“ - if you stop pressing the keys earlier, you will cancel the process.

10. How to Use



How to save energy

Set the exact temperature you need on the appliance and open the hot water tap. Once you feel that the water is too hot, do not add any cold water and, instead, enter a lower temperature on the appliance. If you were to add cold water, the water already heated would cool down again and valuable energy would be wasted. Moreover, the cold water added in the tap is not covered by the control range of the electronic circuitry, with the result that temperature constancy is no longer guaranteed.

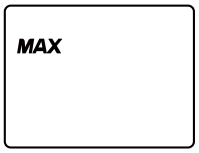
ECO mode



ECO mode

The symbol ***ECO*** shows that the appliance works in an energy saving mode (i.e. the momentary energy consumption is subject to the selected temperature and to the flow rate in the energy saving mode.

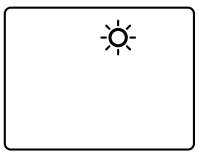
Power limit



Power limit

If the full output of the instantaneous water heater does not suffice to heat the tapped quantity of water, this will be indicated by ***MAX*** on the LCD (e.g. in winter time, when opening several taps at once). When you reduce the hot water flow rate, ***MAX*** stops lighting because the output of the appliance is sufficient to reach the set temperature again. You can now use the full output to fill larger containers, for instance.

Unit provides no output



Operation with solar systems

When operating with solar systems, e.g. an automatic mixing tap must ensure that the maximum inlet temperature is not exceed. If the inlet temperature exceeds the setpoint, the icon ☼ on the digital display indicates that the heating power is switched off.

10. How to Use



Venting after maintenance work

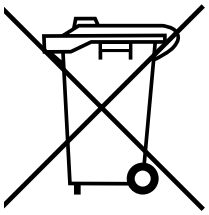
This instantaneous water heater features an automatic air bubble protection to prevent it from inadvertently running dry. Nevertheless, the appliance must be vented before using it for the first time. Each time the appliance is emptied (e.g. after work on the plumbing system, if there is a risk of frost or following repair work), the appliance must be re-vented before it is used again.

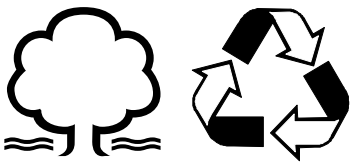
1. Disconnect the instantaneous water heater from the mains (e.g. via deactivating the fuses).
2. Unscrew the jet regulator on the outlet fitting and open the cold water tap valve to rinse out the water pipe and avoid contaminating the appliance or the jet regulator.
3. Open and close the hot water tap until no more air emerges from the pipe and all air has been eliminated from the water heater.
4. Only then should you re-connect the power supply again (e.g. via activating the fuses) to the instantaneous water heater and screw the jet regulator back in.
5. The appliance activates the heater after approx. 10 seconds of continuous water flow.

Cleaning and maintenance

- Plastic surfaces and fittings should only be wiped with a damp cloth. Do not use abrasive or chlorine-based cleaning agents or solvents.
- For a good water supply, the outlet fittings (special tap aerators and shower heads) should be unscrewed and cleaned at regular intervals. Every three years, the electrical and plumbing components should be inspected by an authorised professional in order to ensure proper functioning and operational safety at all times.

11. Environment and Recycling

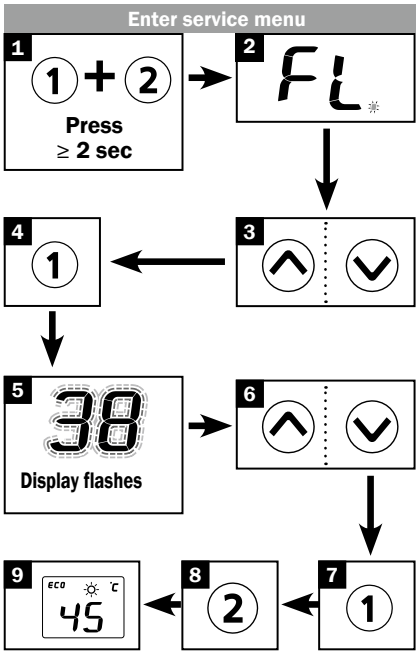




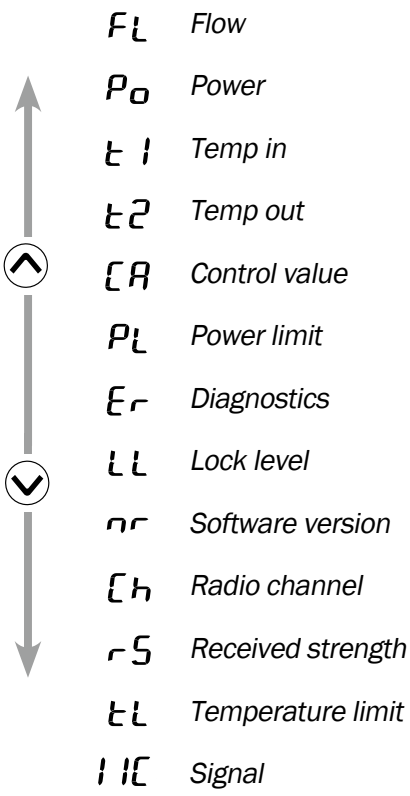
Your product was manufactured from high-quality, reusable materials and components. Please respect in case of discarding that electrical devices should be disposed of separately from household waste at the end of their service life. Therefore, please take this device to a municipal collection point that accepts electronic scrap. Disposing it correctly will support environmental protection and will prevent any potential negative effects on human beings and the environment that could arise from inappropriate handling of these devices at the end of their service life. Please contact your local authority for further details of your nearest designated collection point or recycling site.

Business customers: If you wish to discard electronic equipment, please contact your dealer or supplier for further information.

12. Service Menu



Menu item order of "Service menu":



The service menu offers an overview of system parameters and is used for diagnostics.

Press key ① and key ② simultaneously for at least 2 seconds to call up the service menu, the display confirms by "FL" and by a flashing point. Using the arrow keys ⌃ and ⌄, you can switch between the individual menu items.

Press key ① to see the value of the currently selected menu. The value flashes in the display. (The values of some menus can be switched over by using the arrow keys ⌃ and ⌄.) You will get back to the drop-down-menu when pressing key ① again. With key ② you will get back to the standard display (nominal value). After two minutes without any key stroke the system automatically switches back to the standard display.

Individual menu items as follows:

"FL": Flow

Indication of current flow rate given in l/min.

"Po": Power

Indication of current power consumption (kW).

"t1": Temp in

Indication of inlet temperature (°C).

"t2": Temp out

Indication of outlet temperature (°C).

"CA": Control value

Indication of calibration value of the control system. Regular range: 40 – 60.

"PL": Power limit

Indication of the current maximum power rating (kW) of the appliance.

"Er": Diagnostics

Indication of the last ten diagnostic messages.

The error code is indicated by the first displayed value after pressing key ① (refer to "Abstract for Trouble-Shooting & Diagnostics" in the hood). By using the arrow keys ⌃ and ⌄ the last 10 error codes are displayed chronologically. Thereby the display indicates in turns the error numbers from "0" to "9" and the corresponding error. The last error will be recorded at position "0" and the former ones each shifted 1 position backwards.

"LL": Lock level

The operating mode of the appliance can be restricted.

Setting Options:

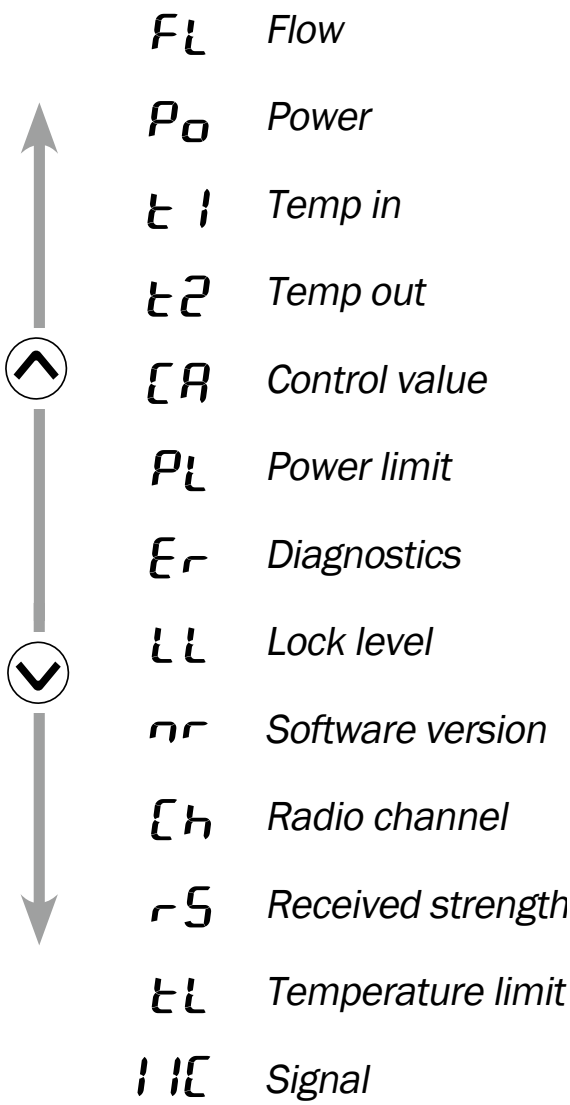
"0" no restriction (factory setting)
"1" factory reset via key (countdown) not possible, parameters can be seen, but not be modified in setup menu
"2" same as "1", additionally the setup menu cannot be opened
"3" same as "2" additionally nominal value memory 1 and 2 not changeable
"4" same as "3", additionally nominal value not changeable

Note: When the setting 1, 2, 3 or 4 was chosen, the system parameters can no longer be modified in the service menu.

In order to modify these system parameters, it is necessary to remove the jumper on the power electronics, as specified in the chapter "Deactivation of the lock level".

12. Service Menu

Menu item order of “Service menu“:



“nr”: Software version

Information about installed software version.

“Ch”: Radio channel

(with wireless module only)

Information about the current radio channel of the water heater and its remote control.

“rS”: Received strength

(with wireless module only)

Information about the current signal quality of the remote control as percentage. Depending on the distance between remote control and water heater the value varies between 10% and 100%.

“tL”: Temperature limit

The maximum setable temperature can be reduced to any value within the temperature limit.

The Lock Level must be activated by placing the jumper to enable the limitation.

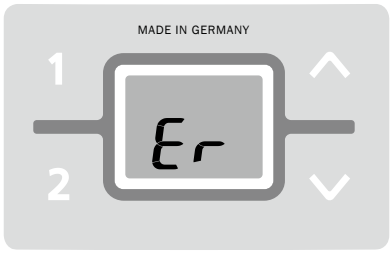
“IIC”: Signal

Information about the quality of the radio contact when a diagnostic display is connected.

13. Trouble-shooting and Service

Repairs must only be carried out by authorised professionals.

If a fault in your appliance cannot be rectified with the aid of this table, please contact the service organisation of your importer or the Central Customer Service Department. Please have the details of the typeplate at hand.



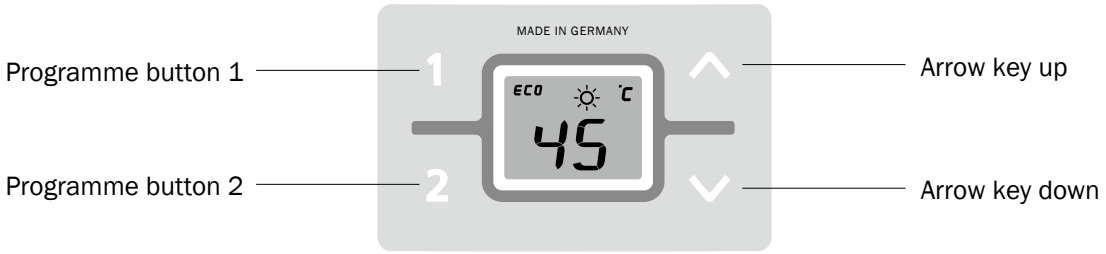
This instantaneous water heater was manufactured conscientiously and checked several times before delivery. Should malfunctions nevertheless occur, it is usually only due to a bagatelle. First attempt to switch the house fuses off and on again in order to reset the electronics. Next, try to remedy the problem with reference to the following table. In doing so, you will avoid unnecessary expense of customer service assistance.

Problem	Cause	Solution
Water stays cold, digital display does not light up	Master fuse tripped	Renew or activate fuse
	Safety pressure cut-out tripped	Contact customer service
Water stays cold, digital display does light up	Safety thermal cut-out tripped	Contact customer service
Display flashes error message “Er“	Control system has switched off	Switch fuse off and on. If “Er“ still flashes contact customer service
Flow rate of hot water too weak	Outlet fitting dirty or calcified	Clean shower head, jet regulator or sieves
	Fine filter dirty or calcified	Let clean fine filter by a specialist
Appliance heats, the display does not light	No radio contact	Press key
	Flat batteries	Replace batteries
Remote control display: value is incorrect	Standby mode of the remote control	Press a key on the remote control
Symbol “battery“ lights	Flat batteries	Insert two new type AAA batteries
Display: “NO” and appliance does not response to the remote control	Transmission range exceeded	Place the remote control closer to the appliance, press key
	Disturbance through other radio emitters	Repeat login with different radio channel
Display: “ - -“ and radio symbol flashes	Registration in process	Hold the remote control in front of the water heater

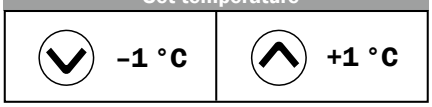
If the connection cable is damaged, it must be replaced with an original spare cable from the manufacturer by an authorised technician in order to avoid any hazards.

If you cannot rectify the fault with the aid of the troubleshooting table, please contact the customer service.

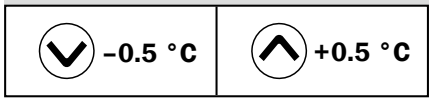
Quick reference guide



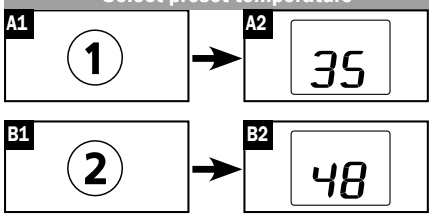
Set temperature



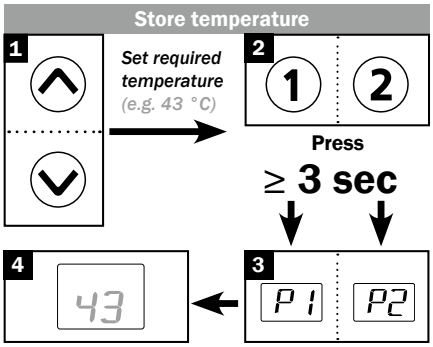
Convenience zone 35.0..42.0 °C



Select preset temperature

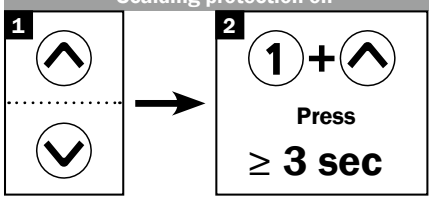


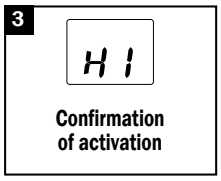
Store temperature



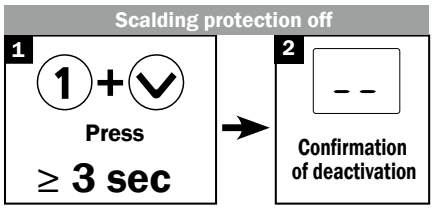
Display of new value
(e.g. 43 °C)

Scalding protection on





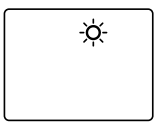
Scalding protection off



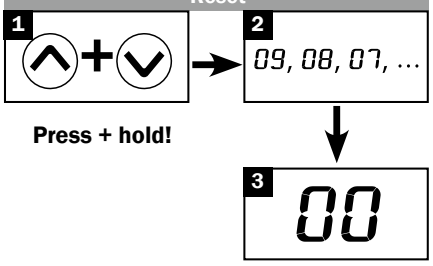
Power limit



Unit provides no output

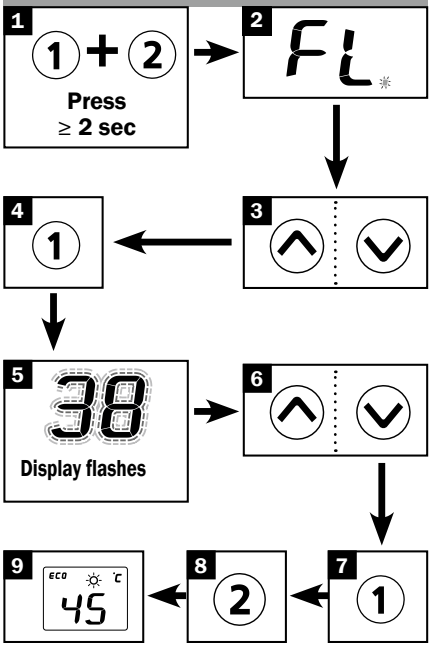


Reset



Reset completed

Enter service menu

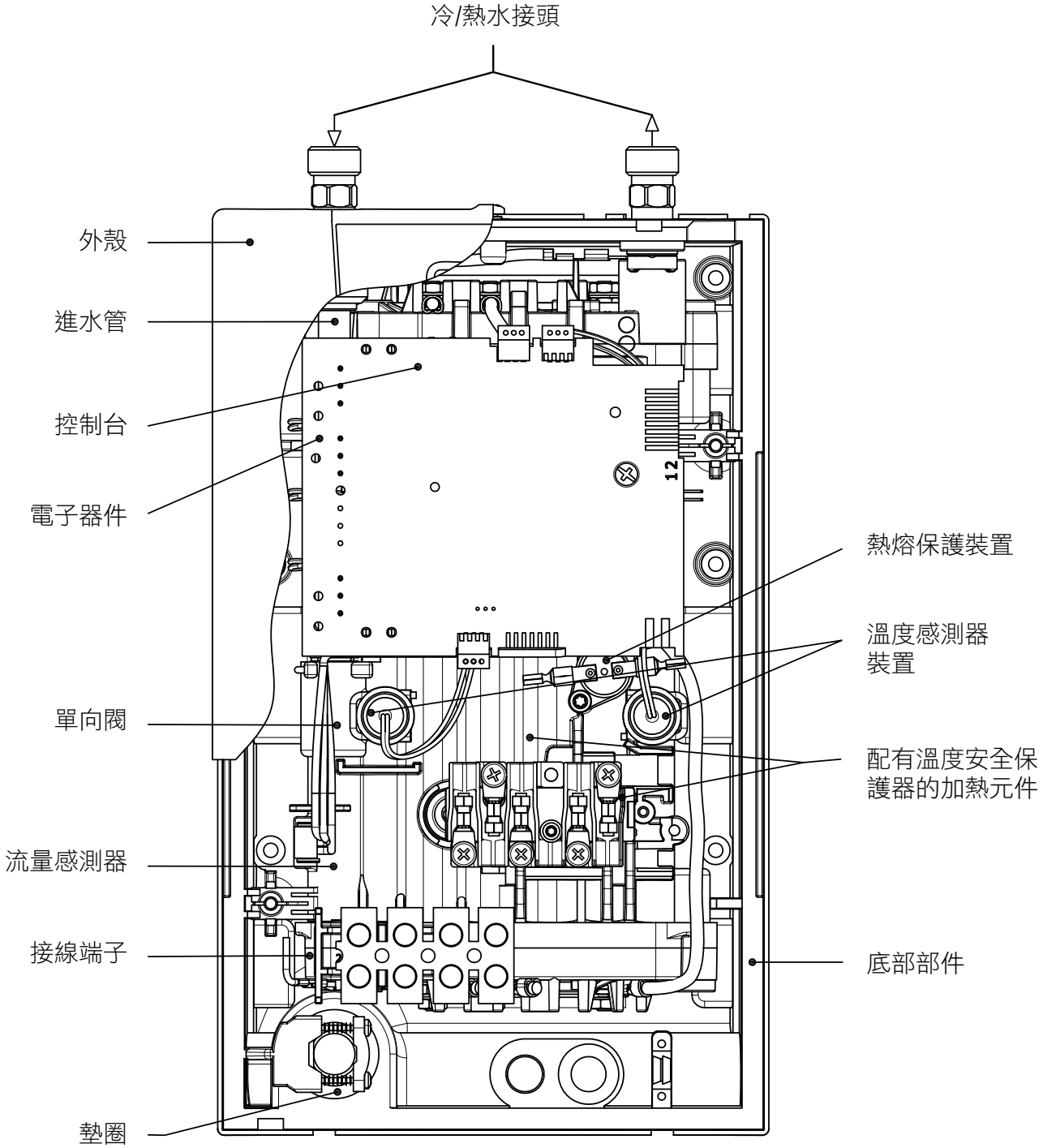


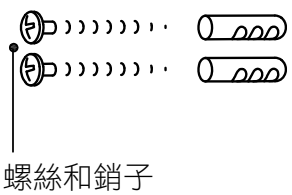
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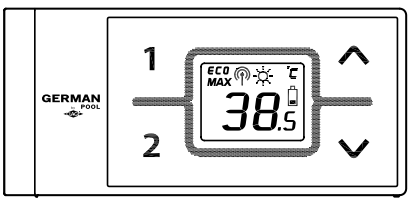
1. 概述

訂購零部件時，務請說明熱水器型號和序列號。





螺絲和銷子



無線遙控器 (附電池)

2. 安全説明



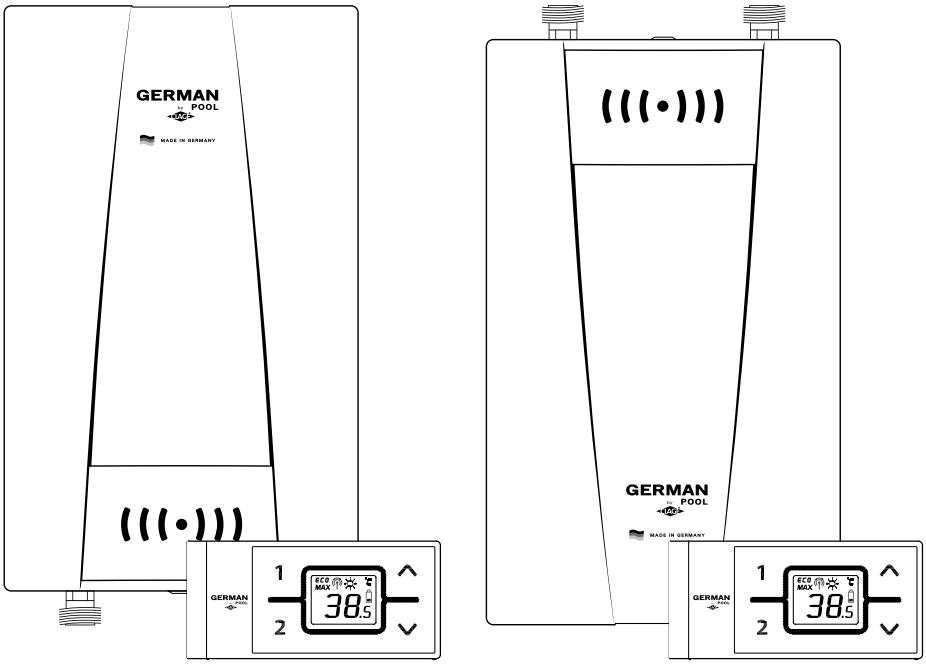
安裝或使用設備前請仔細閱讀本操作指引，並妥為保存。

安裝指引為合資格的設備安裝技師所用。操作指引為終端客戶所用。

用戶可登錄 www.germanpool.com.獲得最新的操作指引。

- 使用本款熱水器之前須確保其安裝正確且處於良好工作狀態。
- 本款熱水器僅可在家庭和封閉、無霜的房間使用，僅可用於加熱統一供應的飲用水。
- 本款熱水器禁止暴露於霜凍環境中。
- 本款熱水器須始終接地。
- 切斷總電源之前，任何情況下均勿拆下前蓋。
- 勿對熱水器、電路導線及水管進行技術改造。
- 請注意：水溫超過43℃即被視為熱水，對兒童而言尤其如此，使用者可產生灼傷感。熱水器使用一段時間後，配件和龍頭均可能過熱。
- 凡在有適當監督或指導下，8歲或以上兒童及身體、感官或心理障礙者或經歷及知識不足者，亦可使用本款熱水器。應對兒童進行妥善照管，避免其隨意觸碰熱水器。
- 禁止兒童在未經適當監督的情況下清潔或保養設備。
- 請仔細閱讀銘牌上的資訊。
- 若發生故障，立即斷開保險絲。若發生滲漏，立即切斷冷水供應。只有客戶服務部和經認可的專業人員方可進行維修。
- 遙控器和掛接背板不可太靠近信用卡等附磁條的物品，否則內嵌磁鐵可能會破壞卡片磁條。
- 首次試運行之前以及每次排空熱水器時· （例如由於維修管道系統、存在凍結風險或進行維護保養)，鬚根據本手冊使用説明採取正確方法排空熱水器。
- 進水口溫度切勿超過70℃。

3. 熱水器説明



即熱式電熱水器CFX21/CFX21-U由微處理器控制，為耐壓設計，分散提供熱水，可接多個龍頭。

熱水器的電子控制裝置可根據所選擇的出水口溫度、進水口溫度以及流速調節功耗，因此可精確達到設定溫度，並可在壓力波動的情況下保持恒溫。操作可通過無線遙控器進行。您可以使用遙控器上的按鍵輸入所需出水溫度，範圍介於20℃和60℃之間，另可透過數位顯示幕讀出水溫。

最高入水溫度可達70℃，因此設備可相容太陽能加熱系統。

4. 技術規格

型號	CFX21-U FUNKTRONIC MPS® / CFX21 FUNKTRONIC MPS®	
歐盟能源效益標籤	A *)	
額定功率 / 額定電流	18 / 21 kW (26 / 30.3 A)	
選擇功率 (選擇電流)	18 kW (26A)	21 kW (30.3 A)
電氣連接	3 / PE 380..415V AC	
所需最小電線尺寸	4 mm^2	4 mm^2
熱水(公升/分鐘)最大值 Δt = 33 K	7.8	9.1 1)
額定容量	0.3 l	
類型	1.0MPa (10 bar) 壓力類型	
加熱系統	明線加熱系統 IES®	
水溫為15℃時的比電阻 導電性	≥ 1000 Ω cm ≤ 100 mS/m	
出水口溫度	≤ 70℃	
啟動流速-最高流速	2.0 - 8.0 l/min 2)	
壓力損耗	0.2 bar：2.5 l/min 1.3 bar：9.0 l/min 3)	
溫度選擇	20 - 60℃	
水管接頭	G½"	
重量(裝滿水後)	2.7kg	
VDE防護等級	I	
防護 / 安全類型	IP24 4) CE	

*) 報告內容根據歐盟第812/2013規章編繪
1) 混合水
2) 根據最佳溫升調節水流量
3) 無流量調節器

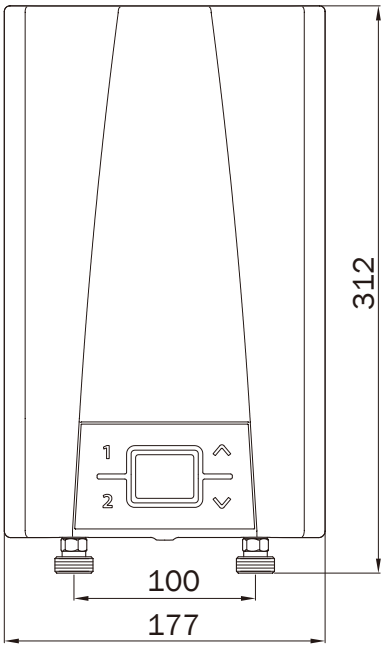
- 產品規格及設計如有變更，恕不另行通知。
- 中英文版本如有出入，一概以英文版為准。
- 本產品使用說明書以 www.germanpool.com 網上版為最新版本。

4. 技術規格

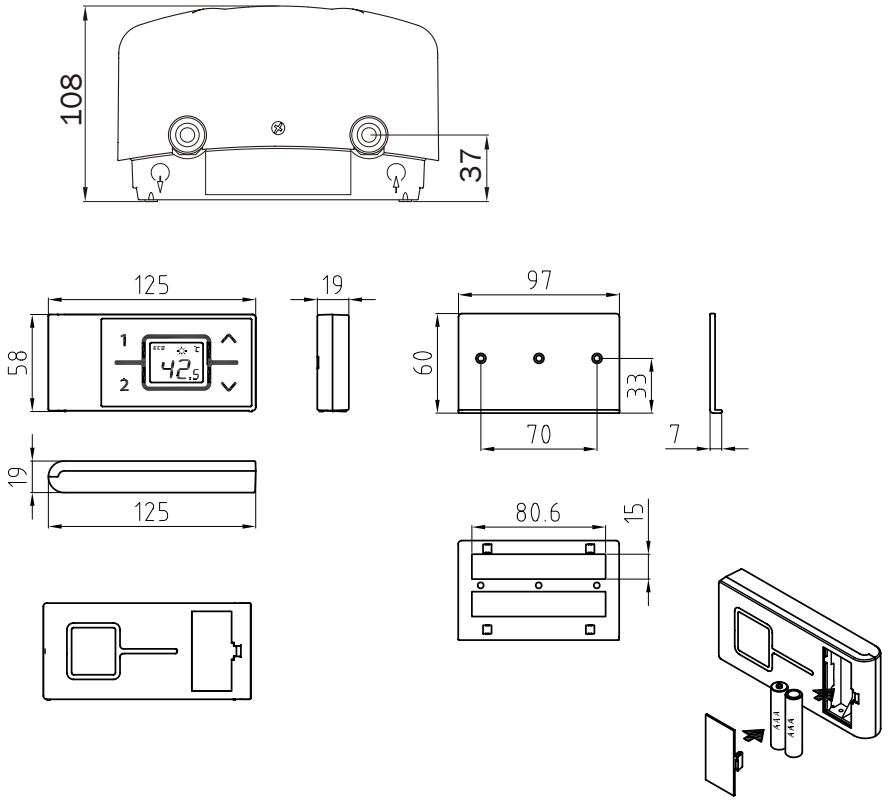
型號	FX
運轉電壓	3 V
電池類型	2顆AAA鹼性電池 1)
防護類型	IP 20
傳輸範圍	10公尺 (含障礙物)
傳輸功率	最高 1 mW
傳輸和接收範圍	868.3 MHz
輻射	無定向
認証	CE

1) 不可使用充電電池。

5. 尺寸

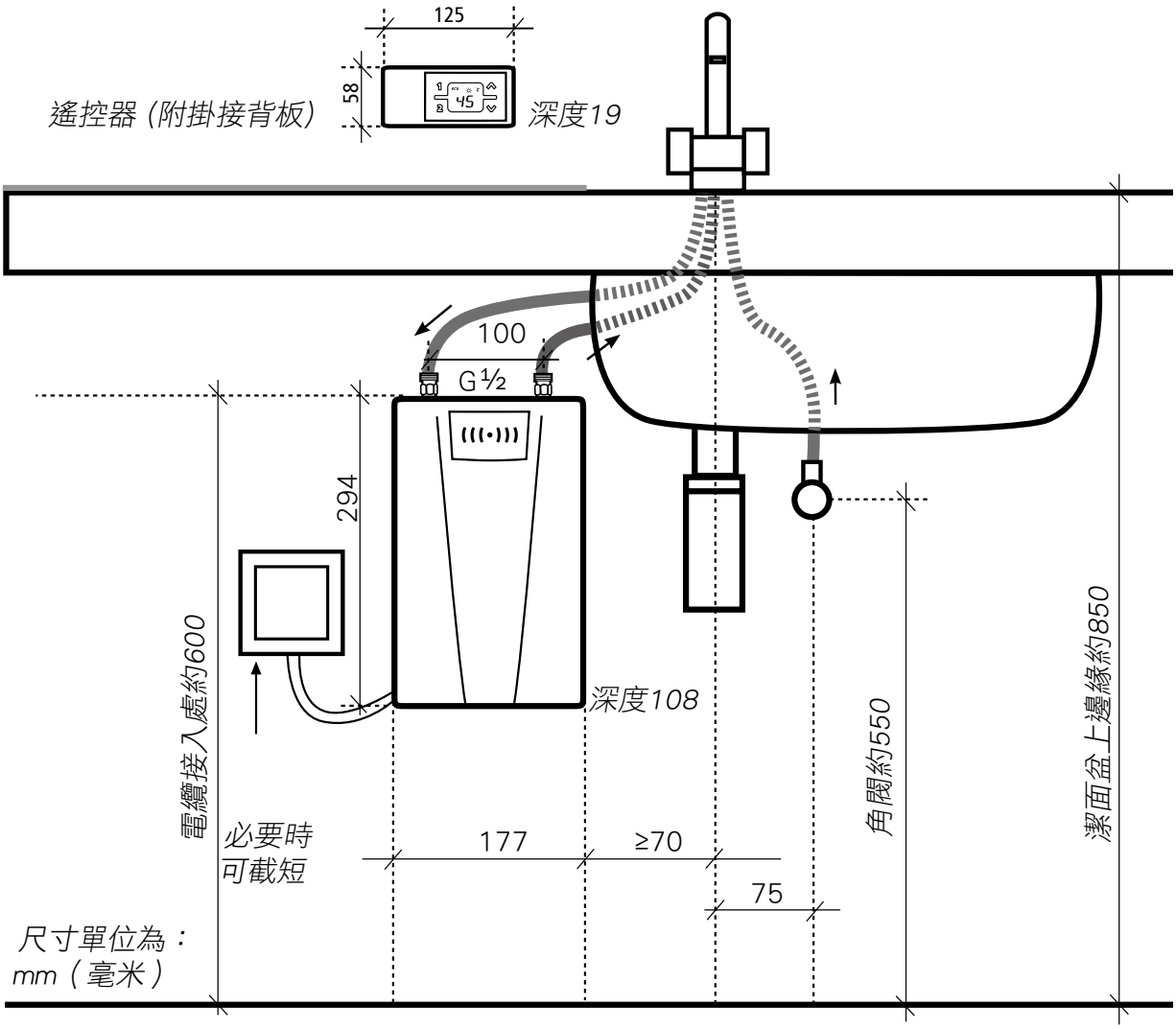


尺寸單位為：mm（毫米）

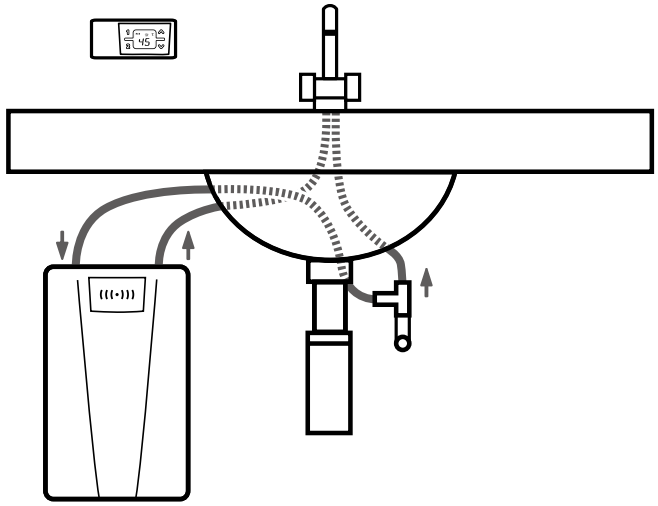


6. 典型安裝

配備專用龍頭敞流式安裝示例



封閉式出水管安裝示例



7. 安裝

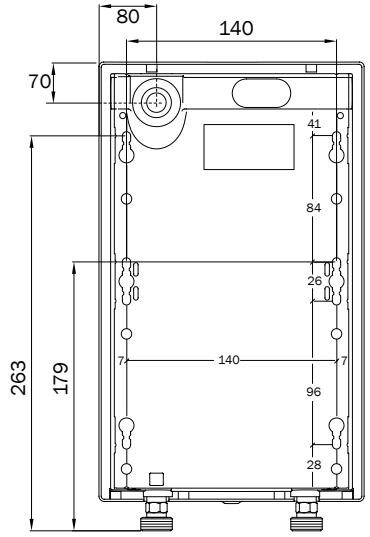
必須遵守以下規定：

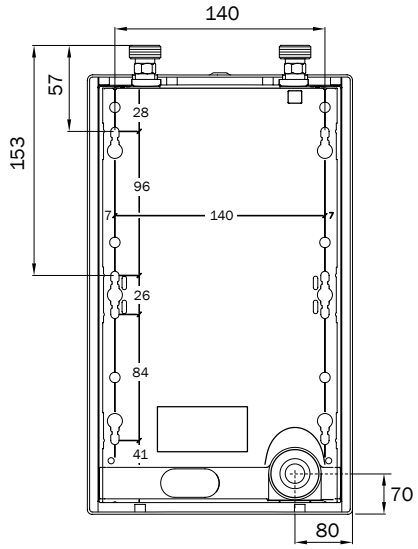
- EN 806
- **安裝期間須遵守所有相關法規以及當地供電和供水公司規定**
- **銘牌及技術規格**
- **請務必使用完好並適當的工具**

安裝地點

- 熱水器僅可安裝在無霜房間內。禁止將熱水器暴露於結霜環境中。
- 本電熱水器適宜安裝于水槽下方，且水管接頭必須朝上。
- 熱水器符合保護類型IP24規定。
- 為避免出現熱損失，應儘量縮短即熱式電熱水器與觸點之間的距離。
- 為了便於進行維護保養工作，應在供水管線內安裝切斷閥。熱水器須便於進行維護保養工作。
- 可使用銅制或鋼制連接管。若使用塑膠管，必須符合德國工業標準（DIN)16893，2系列要求。熱水管須為保溫設計。
- 水的比電阻在15℃時最低須達1000Ωcm。可向您所在地區的供水公司諮詢電阻率數值。

7. 安裝



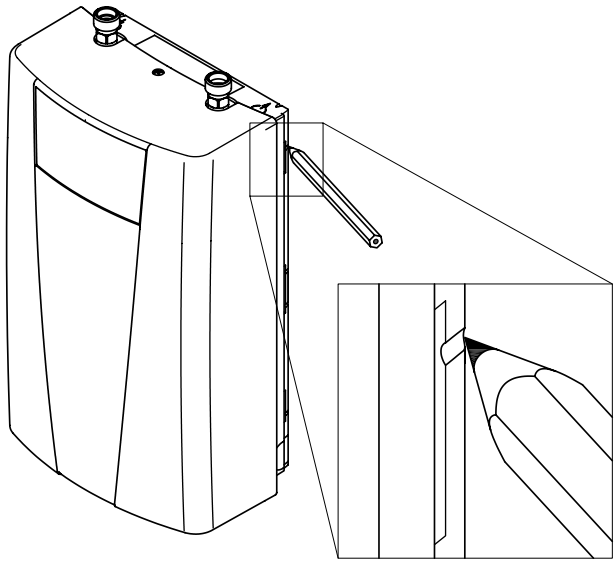


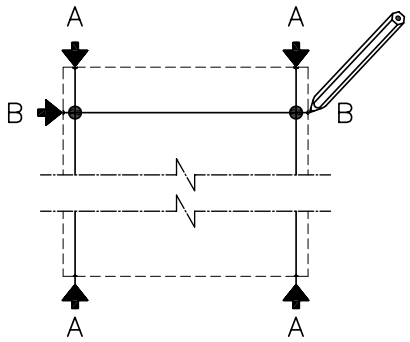
安裝地點

1. 安裝前徹底清洗供水管，清除管內汙物。
2. 將熱水器貼牆放置，標注頂部和底部以及左右兩邊的鑽孔線，與熱水器防護罩邊緣的小孔對應（參見下圖)。對齊樣板（本手冊封底內頁）可用於校準熱水器位置。
3. 垂直連接頂部和底部標記（A-A)。
4. 水準連接左右兩邊標記（B-B)。
5. 鑽孔線的交叉點為鑽孔點。
6. 使用6mm鑽孔器鑽孔。插入銷子和螺絲。螺絲須伸出5mm。
7. 將熱水器放入後掛開孔，然後將其滑入設定位置。

安裝熱水器

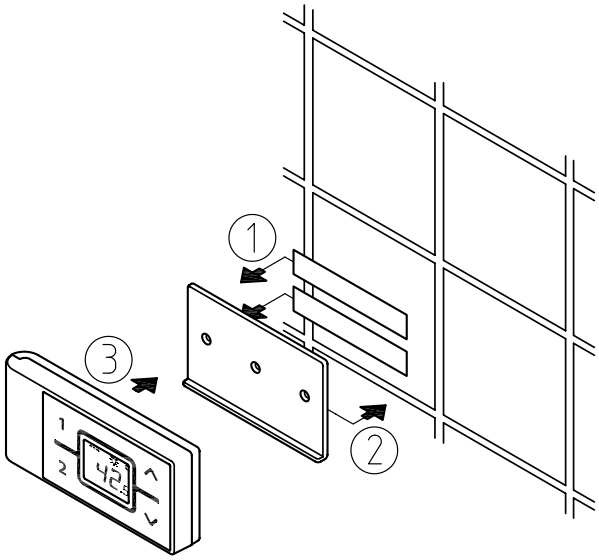
1. 在熱水器水管接頭處安裝連接水管。使用1/2英寸密封墊。
2. 開關熱水龍頭，直至水管內無空氣逸出且熱水器排出所有空氣。



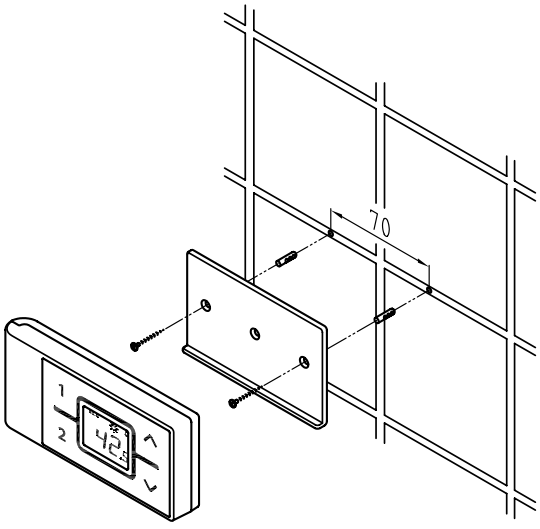


7. 安裝

圖A：
使用膠帶貼固定



圖B：
使用暗榫和螺絲安裝 (可選擇)



安裝遙控器的掛接背板

- **將掛接背板裝於牆上之前，請確定遙控器的安裝位置能讓即熱式電熱水器接收到其無線電訊號。**
- 可以使用隨附的膠帶貼，撕去保護膜後，將遙控器的掛接背板固定於磁磚等堅固的平面上(如圖A所示)。也可使用大小適當的暗榫 (Ø 4mm) 和螺絲固定掛接背板 (如圖B所示)。
- 膠帶貼具有強力黏性，一旦使用即不可再改變位置。因此，黏貼時請注意水準高度。
- 遙控器藉由磁力吸附在掛接背板上。

注意：

請勿讓遙控器長時間置於高濕度環境。

初始操作

遙控器裝入電池後，顯示屏上所有標示會亮起約4秒。通電後，遙控器會顯示當前設定值（出廠設定38℃）及熱水器當前狀態。當無線電連接失敗時，顯示屏會出現“NO”和一個閃爍的圓形無線電符號（詳情見“故障檢修”部分）。

用作淋浴時，熱水器的水溫不得超過55℃。詳情請見熱水器安裝及操作部分。

在即熱式電熱水器登錄遙控器遙控器出廠前已完成登錄。

除非在CFX執行重設，或者遙控器顯示幕不斷顯示“NO”，否則請勿重新登錄。

1. 確定即熱式電熱水器的電源已經打開 (接上保險絲)。
2. 取出電池，直到顯示幕畫面消失為止。裝入電池後，顯示幕會顯示所有符號約4秒鐘。請於此時按住方向鍵 ⊗ 和 ⊙ 片刻之後再放開。接著，顯示幕會顯示目前的頻道 (1到99) 和閃爍的無線電符號。
3. 使用方向按鈕 ⊗ 和 ⊙ 選擇所需頻道。按下 ① 按鈕確認所選的頻道號碼。顯示幕會變更為登錄模式，並顯示“_ _”以及閃爍的無線電符號。
4. 將遙控器直接朝向即熱式電熱水器正面。
5. 顯示幕會切換為設定值顯示畫面。

7. 安裝

注意：初次安裝時，通常建議您變更無線電頻道。

若登錄失敗，顯示幕會在45秒後出現“NO”及閃爍的無線電訊號。遙控器會結束登錄程式並切換為待機模式。按下按鍵將重複進行登錄程式。

注意：

- 如未正確選擇功率，就無法使用未登錄的遙控器進行操作。
- 若未登錄遙控器或未順利完成無線電連線，即熱式電熱水器會加熱到之前選擇的設定溫度。
- 專業人員：重設熱水器後 (參閱安裝指示的“重新安裝”一章)必須進行登錄！



安全指示

- 遙控器發生故障時，請立即取出電池。
- 遙控器和掛接背板不可太靠近信用卡等附磁條的物品，否則內嵌磁鐵可能會破壞卡片磁條。
- 請勿讓遙控器長時間置於高濕度環境。
- 電量已耗盡的電池可能會漏液而損壞遙控器。因此，當顯示幕上的電池符號亮起，或者按下按鍵後遙控器仍無任何反應時，請立即更換電量已耗盡的電池。
- 如長時間不使用遙控器，請取出電池。
- 按下按鍵後，當水流出時，遙控器每10秒會更新一次。水流停止後，遙控器會再更新3次。
- 若無線電連線異常，熱水器會加熱到之前選擇的設定值。

更換電池

電池符號 閃爍時，請更換新的AAA電池。不可使用充電電池！

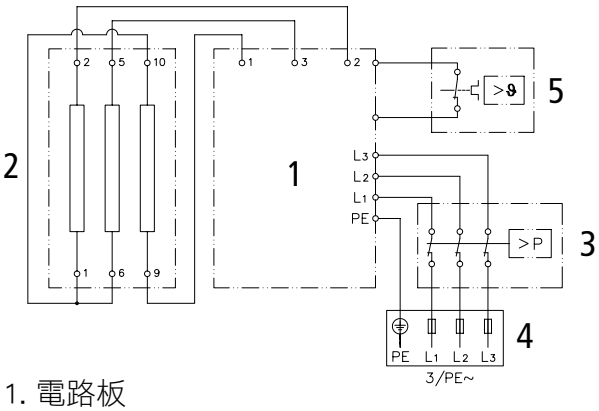
棄置

電池可能含有對環境有害的物質。因此，請將用過的電池棄置於指定回收點，不可和一般家庭廢棄物一同丟棄。

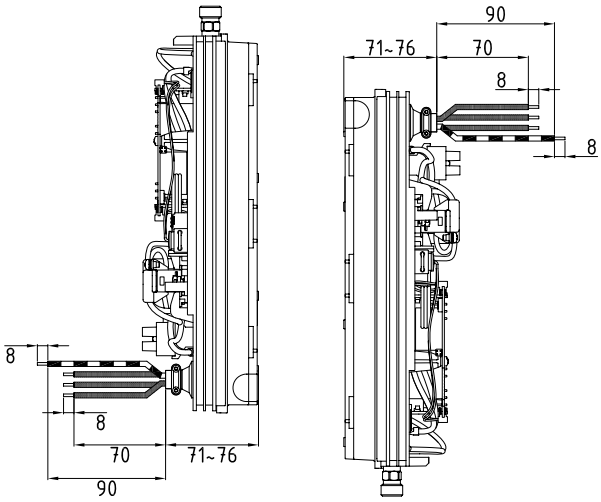
遙控器使用壽命結束時，必須將遙控器和電池分別棄置。

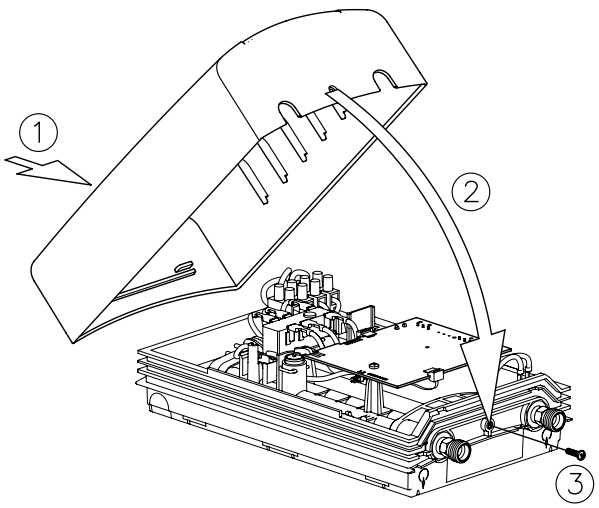
8. 電氣連接

接線圖



1. 電路板
2. 加熱元件
3. 壓力保護裝置
4. 接線盒
5. 熱熔保護裝置





僅專業人員方可操作！請注意：

- VDE 0100
- **安裝過程須遵守國際電工委員會或國家地方現行法規以及當地供電公司的相關規定。**
- **遵守銘牌和技術規格**
- **裝置必須接地！**

結構前提

- 必須通過永久連接裝置安裝熱水器。熱水器必須接地！請使用最大尺寸電纜：10 mm^2。
- 不可損壞電線。安裝完成後，電纜需佈置妥當，避免直接接觸。
- 安裝結束時，應提供全極斷開裝置（例如通過保險絲），每極接觸開孔寬度須超過3mm。
- 為保護熱水器，須安裝保險絲，其脫扣電流應等於熱水器額定電流。

電氣連接：

請在電氣連接之前檢查電源是否關斷！

採用預先安裝電纜的電氣連接

熱水器通過預先安裝電纜連線至終端盒。如果必要，請使用三個預定中斷點的一個用於電纜引入裝置（右、左、下或上）。

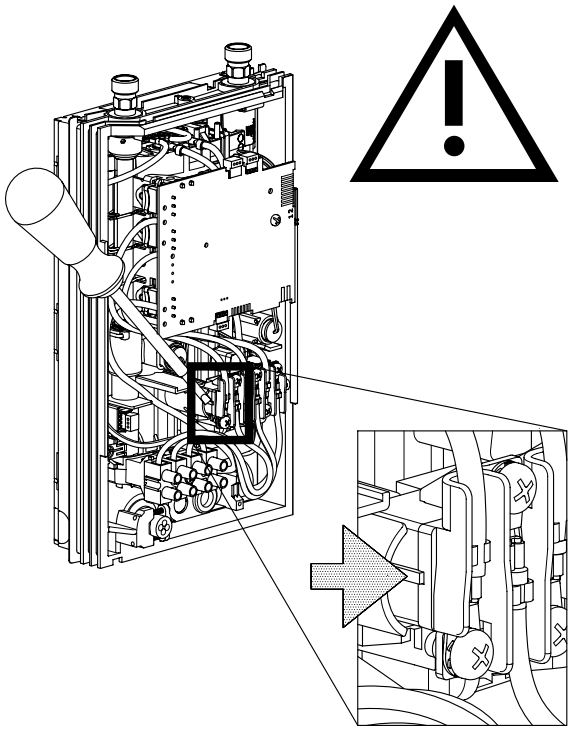
其他選擇：

利用永久連接進行電氣安裝

若受安裝環境限制，設備僅可永久連接時，請按下述步驟進行：

1. 去掉電源線表皮。
2. 去掉電源線表皮，將帶有鍍層的電源線通過防濺式保護套管插入熱水器的線纜接頭。
3. 將電源線通過防濺式保護套管插入熱水器，將電源線鍍層與線纜接頭安全固定。如有必要，採用三個預留中斷點之一（分別設在左邊、右邊及底部）作為線纜接入端。保護套管可防止水順著連接線進入熱水器。必須使用保護套管！
4. 安裝線纜接頭。必須使用線纜接頭!
5. 對電線進行絕緣處理，參照接線圖將電線插入接線端子。熱水器必須接地。
6. 成功進行電氣連接後，安裝設備防護罩。確保勿將任何連接線卡在熱水器防護罩與基座之間。

9. 初始操作



進行電氣連接前，小心開關熱水龍頭，向總水管和熱水器注水，使其徹底排空。每次排水後（例如維護管道系統或修理熱水器之後），必須採用該方法將熱水器重新排空後方可再次啟動。

電熱水器可能因在運輸過程中溫度保護或壓力保護跳閘，導致不能正常啟動。必要時，可重定溫度或壓力保護。

額定功率選擇

僅經認可的專業人員方可操作，否則安全保證失效!

首次將熱水器連接電源電壓後，請選擇最大額定功率。設定額定功率後，熱水器的標準操作模式方可使用。

安裝地點可允許的最大額定功率取決於現場情況。必須遵守“技術規格”表中的所有資料規定，尤其是電氣連接要求達到的電線尺寸和熔斷保護相關資料。此外，進行電氣安裝工作期間必須遵守所在國家和當地供電公司的相關法規 (德國：DIN VDE 0100)。

1. 打開遙控器電池蓋並裝入電池 (2顆AAA鹼性電池)。請注意電池的極性。請在熱水器電源打開時裝入電池 (參閱下方)。遙控器出廠前已於熱水器上完成登錄。裝入電池後，顯示幕會顯示所有符號約4秒鐘。隨即出現電源指示。

多電源系統：

額定容量(最大功耗)可設定為18kW或21kW/400V。

遙控

熱水器應用於淋浴且由遠端控制系統控制時，溫度最高不得超過55℃。手冊上“溫度範圍”參數應設定應不超過55℃，且必須鎖定，詳情可諮詢客服中心。

當待加熱的水已被預熱，請確保入水口的水溫低於55℃。

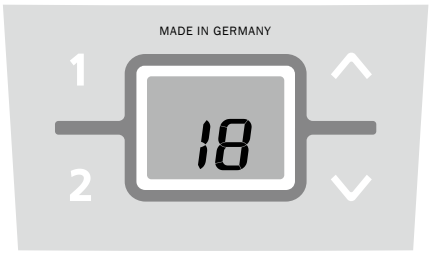
搖控器無法連線時的注意事項

如遙控器和熱水器無法完成連線，顯示幕會出現“NO”和一個閃爍的圓形無線電符號。按一下即可重新登錄。

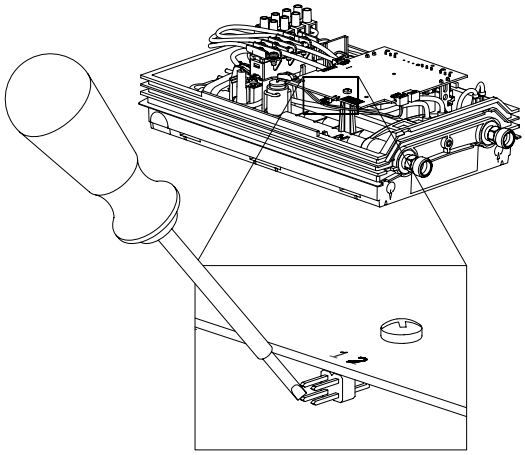
若發生此情況，請縮短遙控器和熱水器之間的距離，並且檢查熱水器電源是否已打開。

裝回電池並選擇功率後，遙控器顯示幕會出現之前選擇的設定值，以及熱水器的狀態。

9. 初始操作



1. 打開電器電源開關，電器的顯示屏發亮。
2. 初次開啟電源時，遙控器顯示幕會閃爍“18”這個值。否則請詳閱下方的“重新安裝”指示。
3. 根據當地情況，使用 ⌃ 和 ⌄ 按鍵選擇可允許的最大額定功率：18或21kW。
4. 按下按鍵 ①，確認設置。熱水器開始運行。
5. 在銘牌上標注已設定的額定功率。
6. 設定可允許的最大額定功率。水流約10秒鐘後，加熱元件將被啟動。
7. 打開熱水龍頭。檢查熱水器功能。
8. 向用戶說明即熱式電熱水器工作原理，將操作說明書交給客戶。

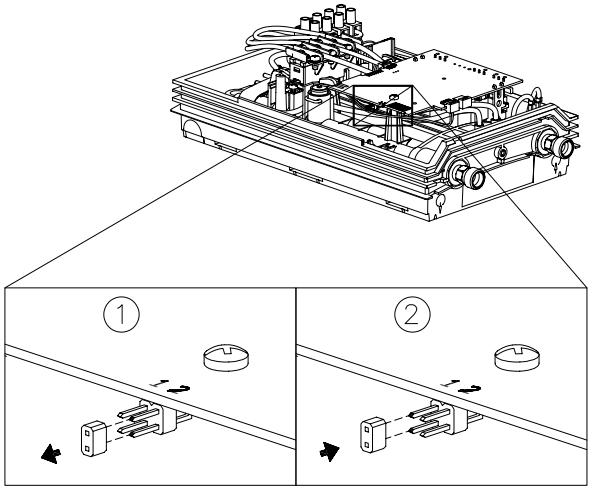


重新安裝

除首次運行外，熱水器在不同安裝環境中可能重新啟動。在此情況下，可能需要改變最大額定功率。兩個引腳之間短時短路（例如使用螺絲刀按照EN60900）會使熱水器所有工作參數復位並鎖定加熱。

現在您必須手動登錄遙控器 (請參閱操作指示)。

顯示器閃爍數值“18”，直至選擇最大額定功率。該狀況在啟動和關閉電源電壓期間保持不變。



功能許可權

熱水器運行模式可能受限。可使用服務功能表安裝熱水器。

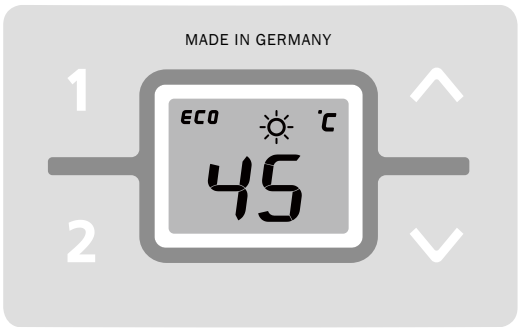
功能許可權啟動

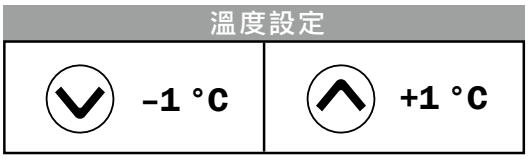
1. 確定服務功能表中的所需功能許可權 (參見本安裝說明書中的“服務功能表”章節)。
2. 切斷熱水器電源 (例如斷開保險絲)。
3. 將供電電路上的跳線從引腳1切換至引腳2 (參見示意圖)。
4. 重新運行熱水器。

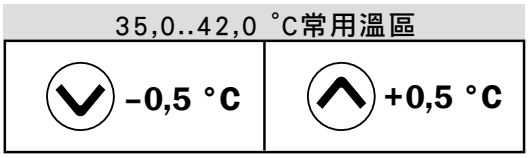
功能許可權取消

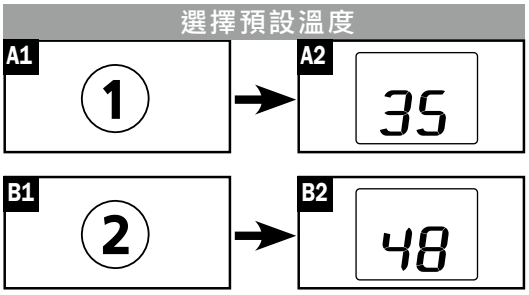
1. 切斷熱水器電源 (例如通過斷開保險絲)。
2. 將跳線從引腳1切換至引腳2。
3. 重新運行熱水器。

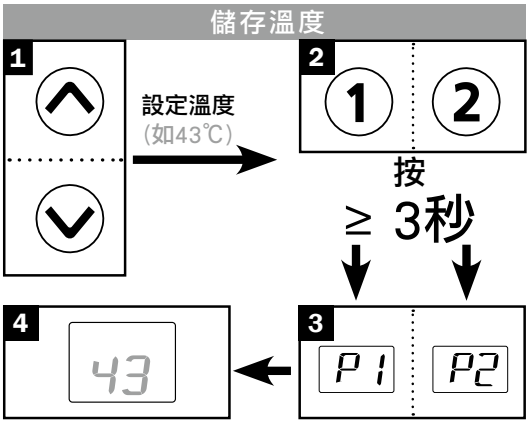
10. 使用方法











顯示新設定數值（如43℃）

本熱水器使用無線遙控器操作。

打開熱水龍頭後，即熱式電熱水器自動啟動。關閉龍頭後，熱水器自動關閉。

溫度設定

您可使用 ⊗ 和 ⊗ 按鍵逐漸調低或調高所需溫度。

溫度每次變化1℃，在35℃和42℃之間的常用溫區，若快速按鍵，溫度可變化0.5℃。延長按鍵時間可連續改變溫度。

說明：若使用 ⊗ 按鍵將溫度設在20℃以下，顯示器將顯示“_ _”，熱水器將關閉加熱功能。

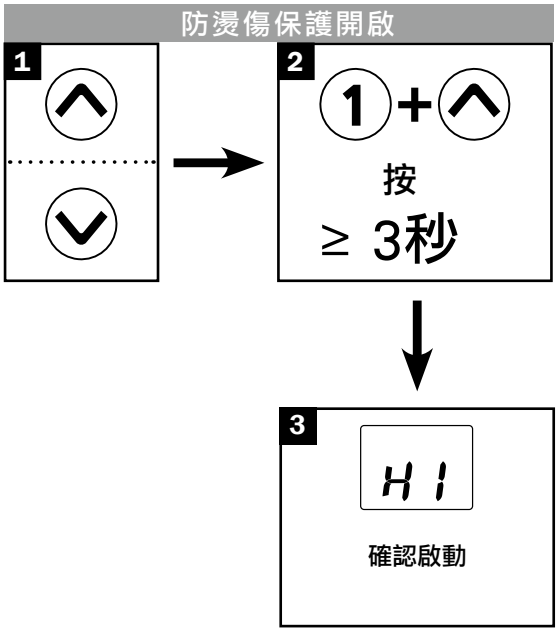
說明：熱水器應用於淋浴且由遠端控制系統控制時，啟動操作時，最高溫度值降低。不能超過溫度範圍。

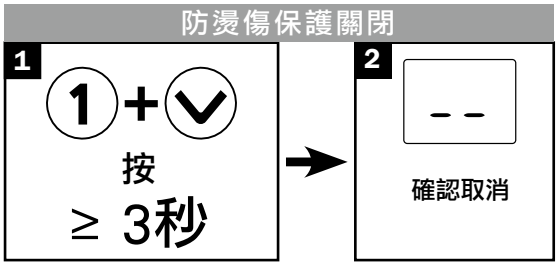
程式按鈕

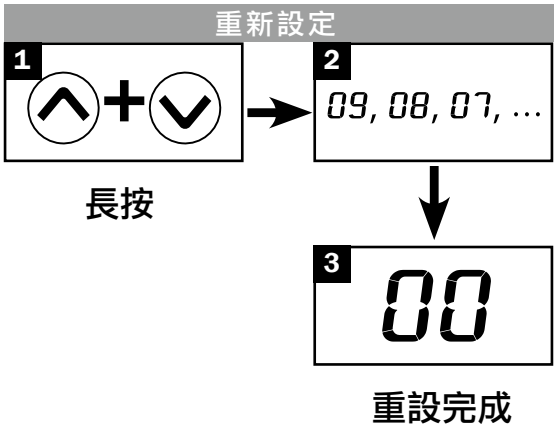
可使用兩個程式按鈕快速選擇預設溫度。按下程式鍵後，即選擇並顯示預設溫度。程式 ① 和程式 ② 的出廠設定值分別為35℃和48℃。您可使用程式鍵自行設定。

- 長時間按下程式鍵可儲存以往選擇的溫度。顯示值從“P1”或“P2”變為新儲存的溫度值。現在，您每次按下相應程式鍵後即可獲得新設定的溫度。

10. 使用方法







溫度限制

本款即熱式電熱水器設有可選溫度限制功能。防燙傷保護功能已在出廠設置中取消。

- 啟動：選擇極限溫度。同時按下程式鍵 ① 和 ^ 至少3秒鐘。顯示器即刻以“HI”確認啟動。
- 關閉：同時按下程式鍵 ① 和 v 至少3秒鐘。顯示器即刻以“_ _”確認取消。

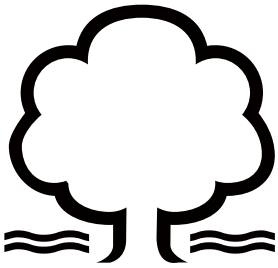
說明：啟動溫度限值會對程式鍵構成影響。因此，改變溫度限值後必須檢查程式鍵的固定值。

恢復出廠設置

所有出廠設置均可恢復：

- 同時按下 v 和 ^ 。現在，顯示器從“10”倒數至“00”，逐秒遞減。熱水器重設值為“00”—提前終止按鍵將取消該過程。

10. 使用方法



節能方法

設定您需要的熱水器準確溫度，打開熱水龍頭。若感到水溫過熱，切勿添加冷水，而應降低熱水器溫度。若添加冷水，已加熱的水會重新冷卻，導致浪費寶貴能源。此外，在水龍頭中添加冷水將造成電子電路控制失效，從而導致無法保證溫度恒定。

標誌表示熱水器以節能模式工作 (即短時能耗由節能模式下的選定溫度和流速決定)。

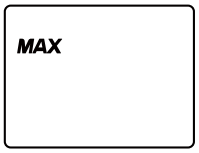
ECO模式



ECO模式

ECO 標誌表示熱水器以節能模式工作 (即短時能耗由節能模式下的選定溫度和流速決定)。

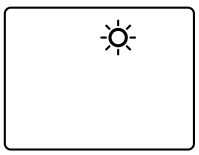
功率極限



功率極限

若即熱式電熱水器在全功率運行的情況下不足以將水加熱至所需溫度，顯示器將顯示 ***MAX*** （例如，冬季一次性打開多個水龍頭的情況）。此時，可通過降低水龍頭的熱水流速調節。降低流速後，顯示燈熄滅，設備恢復，可有效提供所需出水溫度。此時，用戶可提高水龍頭流速。

無輸出單元



相容太陽能系統

與太陽能系統一同使用時，例如使用自動混合龍頭，需保證不能超過最高入水溫度。入水溫度高於設定值時，顯示幕顯示圖示 ☼ ，表示加熱系統已關閉。

10. 使用方法



保養工作後的排空

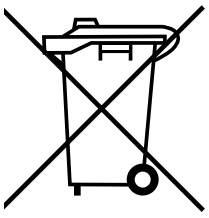
本款即熱式電熱水器設有自動氣泡保護裝置，可防止由於疏忽造成幹燒現象。然而，必須在首次使用前排空熱水器。每次排空熱水器後（例如由於維修管道系統、存在霜凍風險或進行維修後），須在再次使用前重新排空熱水器。

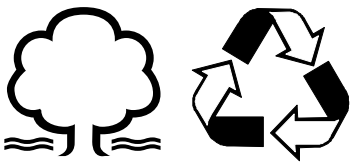
1. 關閉即熱式電熱水器的總電源（例：通過斷開保險絲）。
2. 卸下出水口配件上射流調節器的螺絲，打開冷水龍頭閥門，將水管沖洗乾淨，避免污染熱水器和射流調節器。
3. 打開並關閉熱水龍頭，直至水管內無空氣逸出且熱水器排出所有空氣。
4. 此後方可將即熱式電熱水器重新接通電源（例：通過啟動保險絲）並擰上射流調節器的螺絲。
5. 水流持續約10秒後，熱水器啟動。

清潔保養

- 塑膠表面和配件僅可用濕布擦拭。請勿使用腐蝕性或含氯清潔劑。
- 為確保穩定供水，應定期卸下出水口配件（噴流調節器和噴頭）的螺絲並清洗配件。電氣和管道部件應由經認可的專業人員每三年檢查一次，以此確保始終正常工作和運行安全。

11. 環境和回收利用

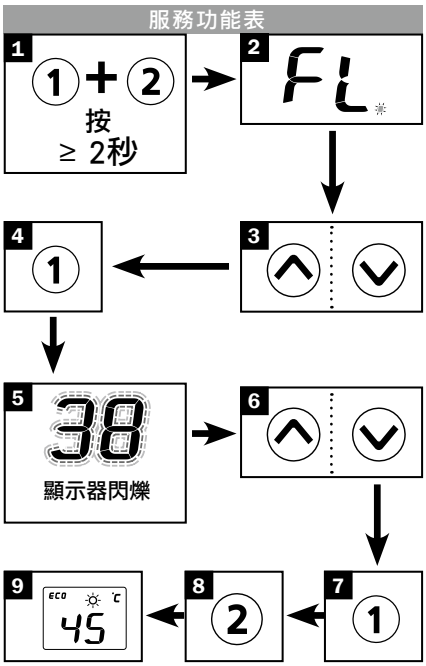




我司產品均採用優質、可回收利用的物料或零件。丟棄電子設備時應與生活垃圾分類處置，應將其運送至接收電子廢物的收集點進行處理。有效分類有利於保護環境，可避免因電子產品的棄置不當而對人類或環境造成不利影響。用戶可聯繫當地政府獲得附近收集點或回收點的相關資訊。

對於商業用戶，棄置電子產品前可聯繫您的經銷商或供應商獲得詳細資訊。

12. 服務功能表



“服務功能表”條目順序



服務功能表列有系統參數，供診斷期間使用。

同時按下按鍵 ① 和按鍵 ② 至少2秒鐘調用服務功能表，顯示器以“FL”和閃點形式確認啟動。使用按鍵 ⌃ 和 ⌄ 在不同功能表之間切換。

按下按鍵，觀察當前所選菜單數值。顯示器閃爍數值 ① (可使用按鍵 ⌃ 和 ⌄切換至某些菜單的數值)。再次按下按鍵 ① 後可回到下拉菜單。按下按鍵 ② 可回到標準顯示狀態 (標稱值)。若兩分鐘內未按下任何按鍵，系統將自動切換回標準顯示狀態。

菜單條目如下：

“FL”：流量

顯示當前流速，單位：升/分鐘。

“Po”：功率

顯示當前功耗 (kW)。

“t1”：進水口溫度

顯示進水口溫度 (℃)。

“t2”：出水口溫度

顯示出水口溫度 (℃)。

“CA”：控制值

顯示控制系統的校準值。正常範圍：40 - 60。

“PL”：功率極限

顯示熱水器當前最大額定功率 (kW)。

“Er”：診斷

顯示最近十條診斷資訊。

按下按鍵 ① 後，首次出現的數值顯示錯誤代碼 (參見防護罩上的“故障檢查與診斷概要”)。使用按鍵 ⌃ 和 ⌄ 可按時間順序顯示最近10條錯誤代碼。顯示器從“0”到“9”依次顯示錯誤號和相應錯誤。最近一次錯誤記錄在“0”位置，以往錯誤每條移動1個位置。

“LL”：功能許可權

可限制熱水器的運行模式。

設置選擇：

“0”無限制 (出廠設置)
“1”無法使用按鍵重設出廠值，可觀察到參數，但不可在設置菜單中修改
“2”與“1”相同。此外，設置功能表無法打開
“3”與“2”相同。此外，標稱值記憶體1和2不可改變
“4”與“3”相同。此外，標稱值不可改變

說明：選擇設置“1”、“2”、“3”或“4”後，服務功能表中的系統參數將不可修改。

若要修改系統參數，必須去除供電電路的跳線。“功能許可權取消”部分已說明。

12. 服務功能表

“服務功能表”條目順序



“nr”：軟件版本

關於已安裝軟件版本的資訊。

“Ch”：無線通道

（僅限無線模組）

關於熱水器及其遙控器當前無線通道的資訊。

“rS”：接收強度

（僅限無線模組）

關於遙控器當前信號品質的資訊，以百分比表示。根據遙控器與熱水器之間的距離，該數值在10%至100%之間變化。

“tL”：溫度範圍

最高可設定溫度可降低至在限值範圍內的任何溫度。

功能許可權必須在安裝跳線限制溫度後才可啟動。

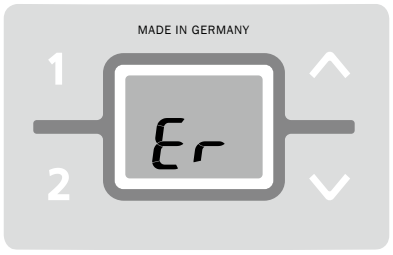
“IIC”：信號

關於連接診斷顯示器後無線通訊品質的資訊。

13. 故障檢修

只有經認可的專業人員方可進行維修。

若按照以上表格所列方法無法排除熱水器故障，請聯繫您的出口商的服務機構或佳捷客戶服務中心。請記錄銘牌詳細資訊。



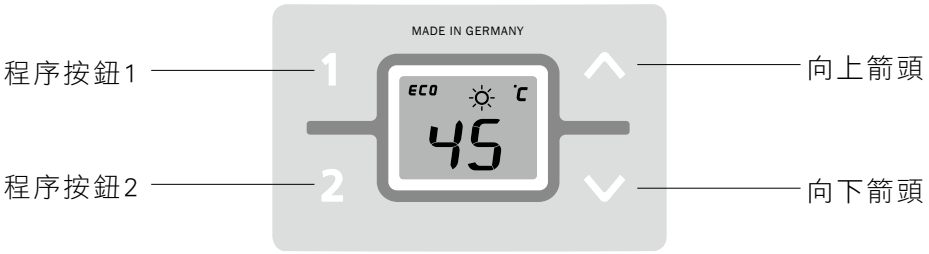
德國寶在生產即熱式電熱水器CEX期間盡心盡責，並在發貨前檢驗數次。通常不會發生嚴重故障。若發生故障，首先切斷並打開總保險絲，以此重設電路。然後參考以下表格解決問題，從而避免產生不必要的客服開支。

問題	原因	解決方案
水溫一直處於低位；電子顯示幕不亮	總保險絲跳閘	更換或接通保險絲
	安全壓力保護器跳閘	請聯繫客服中心
水溫一直處於低位；電子顯示幕不亮	安全熱熔保護器跳閘	請聯繫客服中心
顯示閃爍錯誤資訊“Er”	控制系統切斷	斷開後接通保險絲。若仍閃爍“Er”，請聯繫客服人員。
熱水流速過低	出水口配件變髒或鈣化	清潔淋浴頭、射流調節器或過濾網
	精濾器變髒或鈣化	請專業人員清潔精濾器
熱水器會加熱，但顯示幕未亮起	無線電無法順利連線	按下按鍵
	電池電量耗盡	更換電池
遙控器顯示幕：值不正確	遙控器待機模式	按下遙控器上的按鍵
“電池”符號亮起	電池電量耗盡	裝入兩顆新的AAA電池
顯示幕：“NO”，熱水器對遙控器無反應	超出傳輸範圍	縮短遙控器和熱水器之間的距離，按下按鍵
	縮短遙控器和熱水器之間的距離，按下按鍵	使用不同的無線電頻道重新登入
顯示幕：“_ _”，無線電符號閃爍	正在進行登錄	遙控器保持對準熱水器正面

若連接電線有損壞，應通知合格技師更換原廠配送的備用連接線，避免損壞設備或造成傷害。

若按照以上表格所列方法無法排除熱水器故障，請聯繫客服中心。

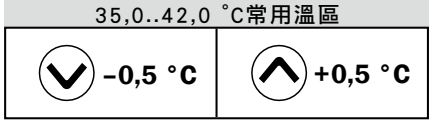
快速指南



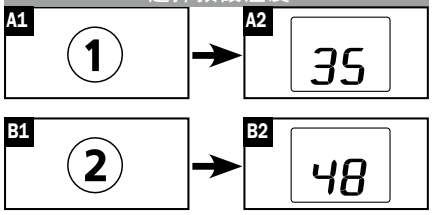
溫度設定



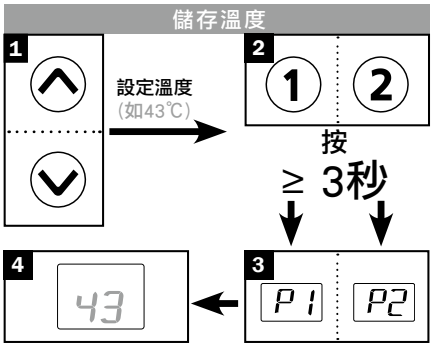
35,0..42,0 °C常用溫區



選擇預設溫度

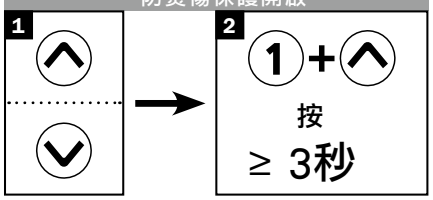


儲存溫度



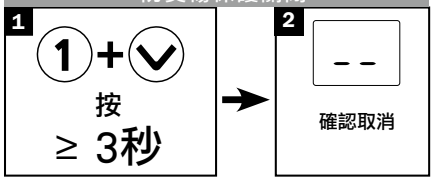
顯示新設定數值 (如43℃)

防燙傷保護開啟





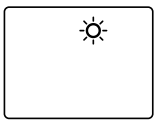
防燙傷保護關閉



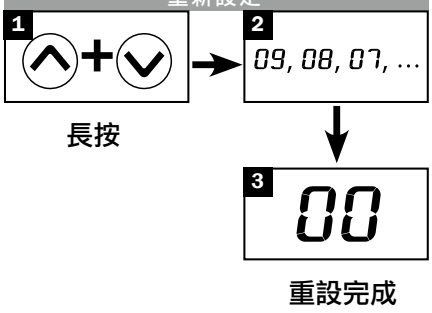
功率極限



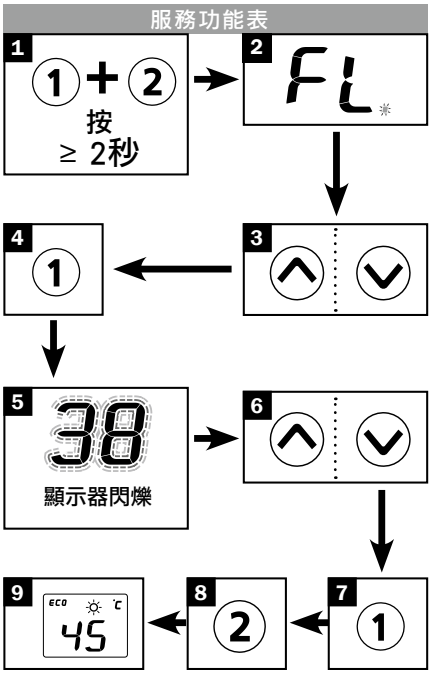
無輸出單元



重新設定



服務功能表



請填妥以下表格並與發票一併保存，以便維修時核對資料。用戶提供本公司之所有資料必須正確無誤，否則免費保用將會無效。

Please fill out the form below. This information and the purchase invoice will be required for any repairs. Warranty will be invalid if information provided is found to be inaccurate.

型號 Model No.： ☐ CFX21 ☐ CFX21-U

機身號碼 Serial No.：_____ 發票號碼 Invoice No.：_____

購買商號 Purchased From：_____ 購買日期 Purchase Date：_____

保用條款

此保用提供德國寶產品之機件在正常使用下壹年保用(自購買日起計算)。

* 貴戶須在購機十天內，以下列其中一種方式向本公司登記資料，保用手續方正式生效：

1)填妥本公司網頁內之保用登記表格 **www.germanpool.com/warranty**。
2)填妥保用登記卡，並連同購機發票之副本一併郵寄到客戶服務部 (本公司將不發還發票副本或登記卡)。

1. 未能出示購買發票正本者，將不獲免費維修服務。
2. 用戶應依照說明書的指示操作。本保用並不包括：
   - 上門安裝、檢驗、維修或更換零件之人工以及一切運輸費用；
   - 因天然與人為意外造成的損壞 (包括運輸及其他)；
   - 電源接合不當、不依說明書而錯誤或疏忽使用本機所引致之損壞。
3. 於下列情況下，用戶之保用資格將被取消：
   - 購買發票有任何非認可之刪改；
   - 產品被用作商業或工業用途；
   - 產品經非認可之技術人員改裝或加裝任何配件；
   - 機身編號被擅自塗改、破壞或刪除。
4. 總代理有權選擇維修或更換配件或其損壞部份。
5. 產品一經被轉讓，其保用即被視作無效。

客戶服務及維修中心

德國寶(香港)有限公司
香港九龍紅磡暢通道1號
中旅貨運物流中心8樓
電話：+852 2333 6249
傳真：+852 2356 9798
電郵：repairs@germanpool.com

Warranty Terms & Conditions

Under normal operations, the product will receive a 1-year full warranty provided by German Pool (effective starting from the date of purchase).

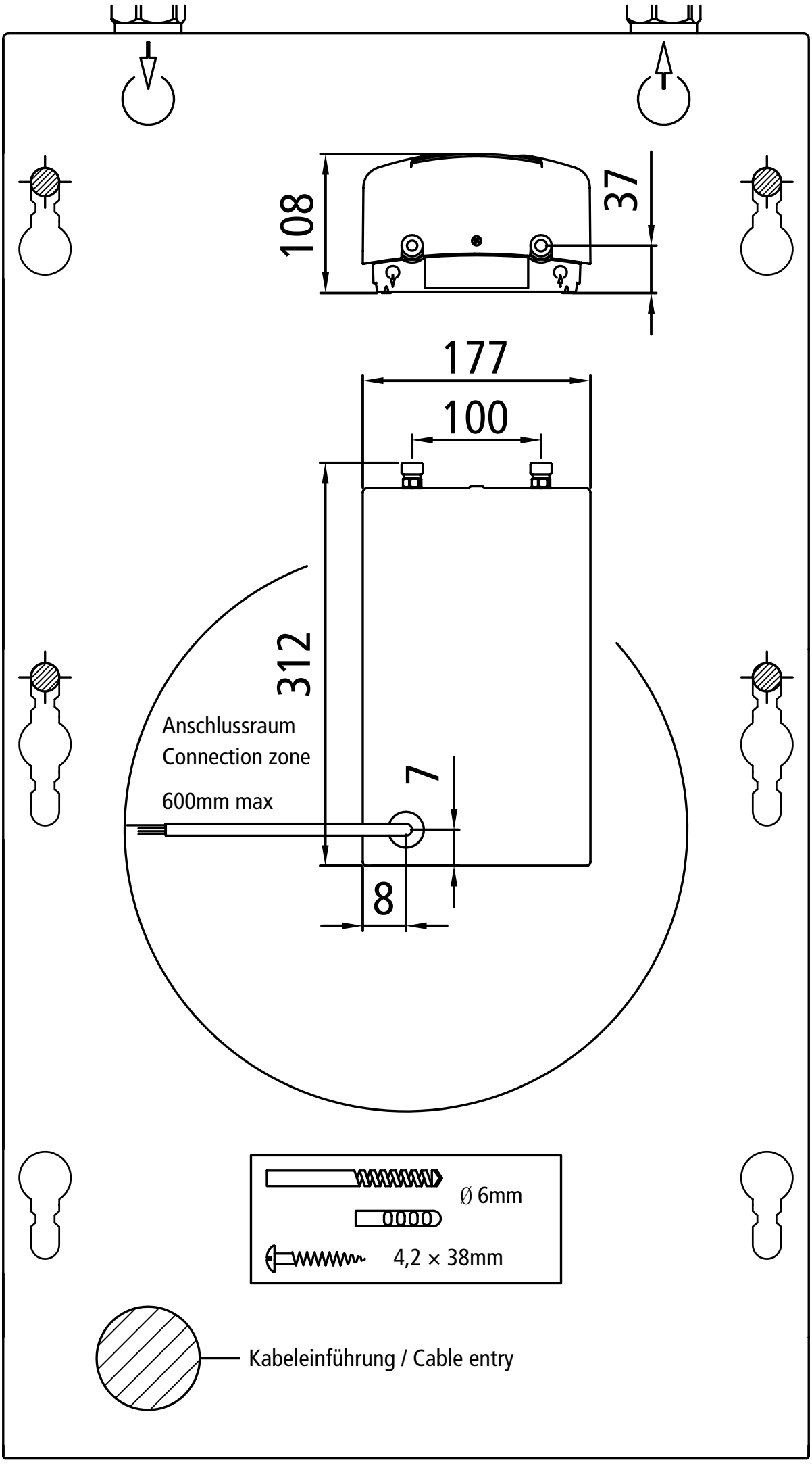
* This warranty is not valid until Customer's registration information is returned to and received by our Service Centre within 10 days of purchase via one of the following methods:
1) Visit our website and register online: **www.germanpool.com/warranty.**
2) Complete all fields on the attached Warranty Card and mail it back to our Customer Service Centre along with a photocopy of the purchase invoice (Warranty Card and invoice copy will not be returned to Customer).

1. Customer who fails to present original purchase invoice will be disqualified for free warranty.
2. Customer should always follow the operating instructions. This warranty does not apply to:
   - labour costs for on-site installation, check-up, repair, replacement of parts and other transportation costs;
   - damages caused by accidents of any kind (including transport and others);
   - operating failures resulted from incorrect voltage, improper operations and unauthorized installations or repairs.
3. This warranty is invalid if:
   - purchase invoice is modified by unauthorized party;
   - product is used for any commercial or industrial applications;
   - product is repaired or modified by unauthorized personnel, or unauthorized parts are installed;
   - serial number is modified, damaged or removed from the product.
4. German Pool will, in its discretion, repair or replace any defective part.
5. This warranty will be void if there is any transfer of ownership from the original purchaser.

Customer Service & Repair Centre

German Pool (Hong Kong) Limited
8/F, China Travel (Cargo) Logistics Centre
1 Cheong Tung Road
Hung Hom, Kowloon, Hong Kong
Tel : +852 2333 6249
Fax : +852 2356 9798
Email : repairs@germanpool.com

此保用只適用於香港 | This warranty is valid only in Hong Kong


108
37
177
100
312
Anschlussraum
Connection zone
600mm max
7
8
Ø 6mm
4,2 × 38mm
Kabeleinführung / Cable entry

GERMAN POOL 德國寶



Subject to technical changes, design changes and errors. 保留技術更改、規格變動的權利，疏忽之處在所難免。

9120-25605 08.15

德國寶（香港）有限公司 | 德国宝（香港）有限公司
German Pool (Hong Kong) Limited

香港
Hong Kong
香港九龍土瓜灣馬頭角道116號
新寶工商中心2期113號室
Room 113. Newport Centre Phase II. 116 Ma Tau Kok Road. Tokwawan. Kowloon. Hong Kong.
電話 Tel: +852 2773 2888
傳真 Fax:+852 2765 8215

中國
China
廣東省佛山市順德區
大良南國東路德順廣場三層
3/F, Takshun Plaza, Nanguo East Road, Shunde, Foshan, Guangdong
電話 Tel:+86 757 2980 8308
傳真 Fax:+86 757 2980 8318

澳門
Macau
澳門宋玉生廣場263號
中土大廈15樓I座
Alameda Dr. Carlos D'Assumpcao No. 263, Edif. China Civil Plaza, 15 Andar, I. Macau
電話 Tel:+853 2875 2699
傳真 Fax:+853 2875 2661

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www.germanpool.com