GERMAN
by **POOL**

◆ CLAGE

Instantaneous Electric Water Heater | DSN

Online Warranty Registration

Please read these instructions and warranty information carefully before use and keep them handy for future reference.

USER MANUAL

Safety Instructions

Notice:

Please read these instructions carefully before installing or using the appliance!

Keep the instructions handy with the appliance for future use!

- Do not use the appliance until it has been correctly installed and unless it is in perfect working order.

- 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.

- The appliance must be earthed at all times.

- 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.

- The appliance is only suitable for domestic use and similar applications inside closed rooms, and must only be used to heat incoming water from the mains supply.

- The appliance must never be exposed to frost.

- 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.

- This appliance can be used by children aged from 3 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 made by children without supervision.

- If the appliance is factory equipped with a power supply cable, it must be replaced with an original spare cable from the manufacturer in case of damaged by an authorized technician in order to avoid any hazards.

- In accordance with VDE 0700, a circuit breaker with a contact opening gap of at least 3 mm for each pole must be provided on the mains side of the connecting box for appliances with a fixed connection.

- The wall bracket must be secured with the supplied screws and dowels. The appliance must be secured to the wall bracket. The appliance may only be operated if it has been properly mounted on the wall bracket.

Safety Instructions

- The prescribed nominal pressure stated on the rating plate may not be exceeded at any time.
- The required water resistance may not fall below the value stated on the rating plate at any time.
- To observe additionally for pressureless installation:
  - The water outlet behind the devices must not be blocked, and the water flow must not be restricted.
  - The water outlet facilities, such as shower head, jet control and other outlet unit, must be decalcified regularly. Deposits must be removed in regular intervals.
  - Only the fittings recommended by the manufacturer may be used.
  - If the appliance is exclusively connected to a single shower, only the shower heads recommended by the manufacturer may be used. No other fittings or appliances which decrease the water flow to the shower may be installed.

安全注意事項

注意

在安裝或使用本設備之前，請仔細閱讀這些説明！

請妥善保存本説明書，以備將來使用！

- ·除非已正確安裝本設備，且本設備處於正常工作狀態，否則請不要使用本設備。
- ·在任何情況下，切勿在關閉設備的主電源之前取下面蓋。
- ·切勿對本設備、電線或水管進行技術改造。
- ·本設備必須永久接地。
- ·當水溫超過43°C時，會被視為高溫，可能會令人體尤其是兒童引起灼痛。請注意，使用本設備一段時間後，配件和水龍頭可能會很熱。
- ·本設備僅適合在家居或類似的密閉環境中使用，並且只能用於加熱來自主供水的進水。
- ·切勿將本設備暴露在霜凍下。
- ·必須遵守銘牌上規定的數值。
- ·萬一發生故障，請立即斷開保險絲；萬一發生洩漏，請立即切斷主供水；並只能由客戶服務中心或授權的專業人員進行維修。
- ·3歲以上的兒童以及肢體、感官或精神能力較弱或缺乏經驗和知識的人員可以使用本設備，前提是他們必須受到安全使用本設備的監督或指導並了解當中可能發生的危險。兒童不得玩耍本設備，且不得在沒有監督的情況下進行清潔和用戶維護本設備。
- ·如果設備出廠時配備了電源線，在損壞的情況下，必須由被授權的技術人員用製造商提供的備用電纜替換，以免發生危險。
- ·根據VDE 0700，對於具有固定連接的設備，必須在接線盒的電源側上提供一個斷路器，該斷路器每個極的接觸開口間隙至少為3 mm。
- ·使用裝掛配件時，必須使用隨附的螺絲和銷釘進行固定。本設備必須固定在裝掛配件上，僅在將其正確地安裝在裝掛配件後才能進行操作。
- ·任何時候都不得超過銘牌上標明的額定壓力。
- ·所需的耐水性在任何時候都不得低於銘牌上標明的數值。
- ·如選擇無壓力安裝，要注意以下情況：
  - ·不得堵塞本設備後面的出水口，並且不得限制水流。
  - ·必須定期對花灑頭、射流調節器和其他排水裝置等出水設備進行脱鈣處理，且必須定期清除沉積物。
  - ·僅可使用製造商推薦的配件。
  - ·如果本設備僅連接到一個花灑頭，則只能使用製造商推薦的花灑頭。不得安裝其他會減少淋浴水流的配件或設備。

Contents

Note: Carefully read the enclosed safety instructions through in full <u>before</u> the appliance is installed, put into service, and used and follow them in the further steps and during use!

The E-convenience instant water heater DSN is a fully electronically controlled instantaneous water heater with touch display for a convenient and efficient water supply to one or more tap outlets.

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 on the touch-sensitive display within a range between 20 °C and 60 °C and can be read off that digital display. Alternatively, the appliance can be conveniently controlled via the CLAGE app with a smartphone or tablet or via the optional Bluetooth® remote control.

The DSN has an intuitive menu guide where different user profiles can be set up and where collected data can be read out

The inlet temperature can be up to 70 °C so that operation in connection with reheating, e.g. in solar systems, is possible.

It is possible to use the instantaneous water heater in combination with an external load shedding relay for electronically controlled instantaneous water heaters (refer to installing instructions).
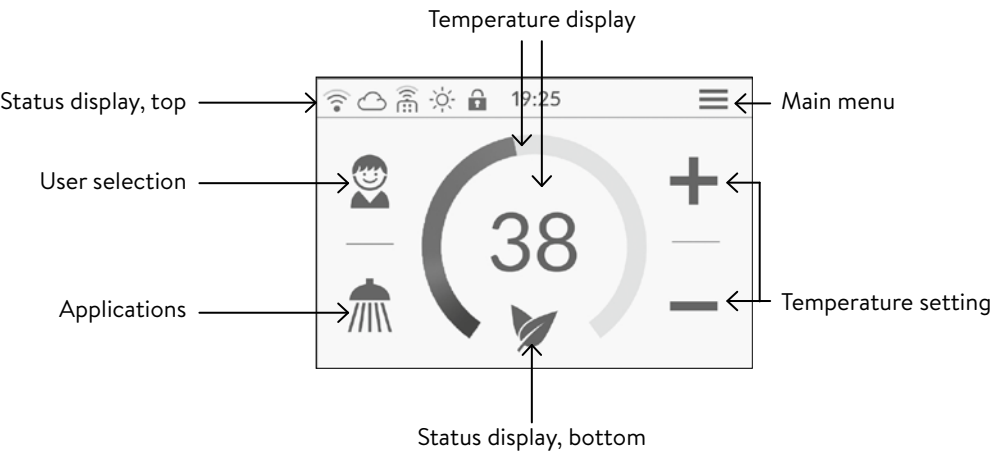
As soon as you open the hot water tap, the instantaneous water heater switches on automatically. When the tap is closed, the appliance automatically switches off. The water heater is operated at the device itself, via the CLAGE app with a smartphone or tablet or with the optional wireless remote control.

This device complies with Directive 2014/53/EU.

MAIN CONTROL

The display shows the main control by default. The current status is displayed and by tapping on the touch screen you get access to various submenus and functions.

Temperature display

Status display, top

Main menu

User selection

Applications

Temperature setting

Status display, bottom

Temperature Display

The coloured scale ring fills up as the temperature setting is increased and the colour changes from blue when the temperature is low to red when the temperature is high. In addition, the target temperature is displayed in °C as a figure in the middle of the display.

Temperature Setting

The desired temperature can be selected by tapping on ✚ and ▬ for the fine setting or by dragging along the coloured scale ring for a quick selection within a range of 20 °C to 60 °C. Tapping ✚ or ▬ once changes the temperature by 1 °C, in the comfort range between 35 and 43 °C by 0.5 °C. If the temperature is set below 20 °C, the symbol ▬▬ appears in the temperature display and the appliance switches off the heating function.

User Selection

Up to eight user profiles can be created. Every user has the option to save his desired temperatures for the different uses in a profile. The user profiles can be selected by tapping on the profile image and the temperatures saved in the profile are set (to create profile, see Section "User").
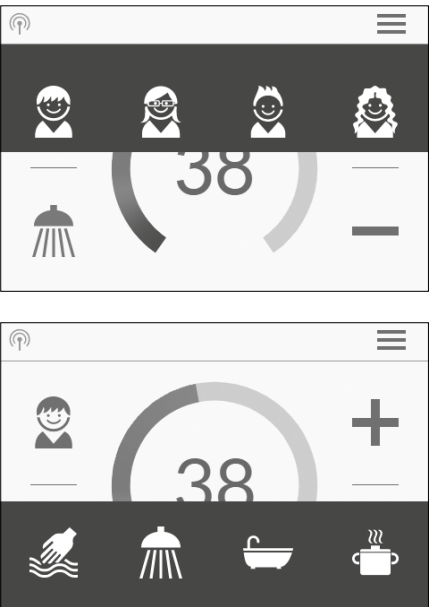
Applications

Preset applications can be selected here. Simply tap on the desired symbol. The temperatures set at the factory (🧼 handwash = 35 °C, 🚿 shower = 38 °C, 🛁 bath = 42 °C, 🍲 hot water = 48 °C) can be changed for each application via the temperature setting. If you touch the temperature value in the temperature display or the application symbol for 3 seconds, the temperature is saved for the selected application. The temperature display flashes once for confirmation. Application temperatures saved in the user profile can be called up at any time by tapping on the corresponding symbol.

Status Display, Top
🔒 Control lock active (PIN)
☀ The inlet temperature exceeds the target value (appliance does not heat up)
📶 An optional Bluetooth remote control is registered
📶 Wi-fi is activated
☁ The appliance is connected to the CLAGE Cloud

Status Display, Bottom
Display area for functions which require confirmation from the user or which are of great significance.

🌿 Eco active: The outlet temperature for all applications and the water flow are limited to an energy-efficient value. If the temperature is set higher via the temperature setting, the symbol start to flash.

🔧 Maintenance: Tap the symbol to open a status message with additional information.

MAX Maximum temperature reached: The temperature cannot be increased any further since the set temperature limit has been reached. The temperature limit can be changed in the main menu under "Settings".

Drawing Mode
If heated water is drawn from a tap, the main control changes to drawing mode and, depending on the set outlet temperature, changes the background colour from blue for low temperatures to red for high temperatures. In this mode the scale ring displays the actual power consumption of the appliance.
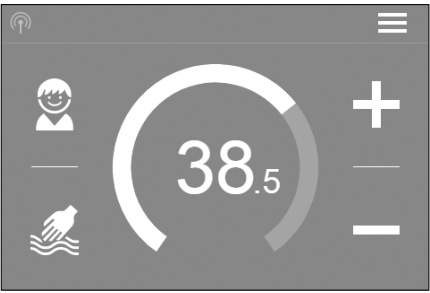
MAIN MENU

All function menus and saved values of the appliance can be selected from here. Tap on the 🏠 symbol to go back to the main control.
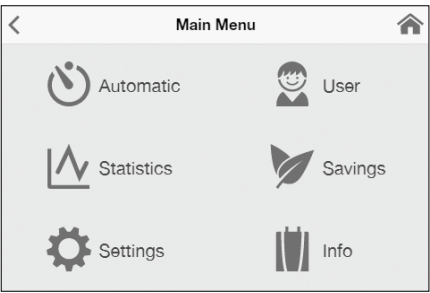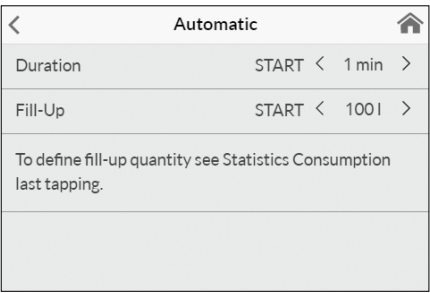

AUTOMATIC

In this menu, two functions can be selected. Automatic either measures the time in seconds via the function "Duration" or the flow of heated water in litres via the function "Fill-Up". Cold water added at the tap cannot be recorded by the appliance. In order to use the Automatic function correctly according to the fill quantity, it is therefore necessary to set the desired temperature on the appliance and only turn on the hot water tap.

For each function per user profile, the last set start value is saved and can be activated at any time.

Note: In Automatic mode, the operating functions are limited. When selecting a limited function, an instruction window appears. Tap on "OK" to deactivate Automatic mode and all functions are freely available again. Tap on "Cancel" to close the instruction window and Automatic mode remains active.

Duration: Under "Duration", tap on ‹ or › to set the desired time and then tap on "START" to activate Automatic mode. The view changes to the main control where the set time is displayed directly below the temperature display.
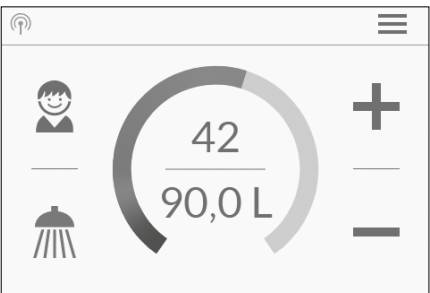
Tap on the time or turn on the hot water tap to start the function and the time starts to count down as seconds. Tap on the time again to pause and restart the function at any time. Turning off the tap does not pause the function. If hot water is already flowing whilst the function is activated, it starts immediately.
To cancel the function, touch the time for three seconds.

When the time has elapsed, "00:00" flashes briefly. In addition, the flow quantity, if it is being drawn, is reduced for around 10 seconds and then increased again. A short acoustic signal is heard.
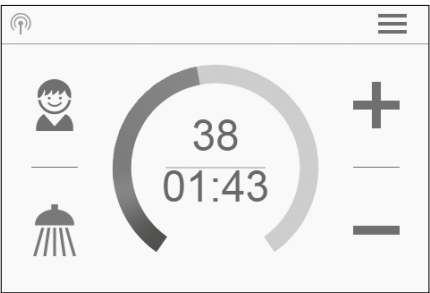
Fill-Up: Under "Fill-Up" tap on ‹ or › to set the desired water quantity and then tap on "START" to activate Automatic mode. The view changes to the main control where the set quantity is displayed directly below the temperature display. Turning on the hot water tap starts the function and the set fill quantity counts down in litre increments according to the flow measurement.

Continued turning off and on of the tap pauses and restarts the function. If hot water is already flowing whilst the function is activated, it starts immediately. To cancel the function, touch the fill quantity for three seconds or turn off the water flow for a minute.

When the fill quantity is reached, "01" flashes briefly on the display and the appliance stops the water flow by closing the motor valve. A long acoustic signal can also be heard and an instruction message appears on the display. The motor valve stay closed until the message is confirmed at the appliance or via app.
Turning off the tap is always necessary, the function must therefore not be used unsupervised.
Before using the bath, make sure that the water temperature is what you want it to be.

Hint: The water amount of the last draw-off is stored in the "Statistics" menu. To determine the necessary amount of water for your bathtub, fill it with warm water, then select "Statistics" in the main menu and read out the value of this last drawing. Enter this value in the automatic function "Fill-Up" to use it for the next bathtub filling.

Note: In the event of a power cut whilst the automatic is running according to the fill quantity, the water flow is stopped by the motor valve. After power is restored the valve remains closed a prompt appears on the display and an alarm signal can be heard until the prompt is acknowledged by tapping on "OK".
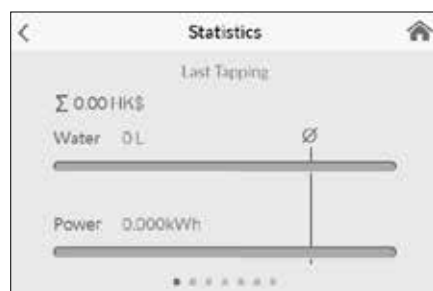
STATISTICS

The statistics save the consumption and usage data for the appliance and display them in graph format:

- ◆ Water consumption
- ⚡ Power consumption
- Σ Total consumption costs

Swipe from right to the left to scroll the different periods. The consumptions are displayed consecutively in diagrams over a period from the last drawing of water, the consumption today, the consumption yesterday, over the last seven days, the last four weeks, the last twelve months and the last four years.

Note: The consumption data are not suitable for billing purposes.

SETTINGS

This menu is used for the basic configuration on the appliance. Swipe to scroll through the different menu items and tap on the values to change settings directly or go to different submenus.

Date / Time: The DSN automatically receives its system time as soon as the device is connected to a network with Internet access. Alternatively, you can set the time manually and save it by tapping on "Save Date and Time". The time and date are lost in the event of a power failure if there is no network connection.

Language: Select the menu language.

Currency: Select a currency symbol (HK$).

Temperature Unit: Defined as °C.

Temperature Limit: The temperature limit can be activated / deactivated in this menu and the maximum outlet temperature can be limited to a desired value within the temperature setting range by tapping on ‹ or ›.

Note: If the instantaneous water heater supplies a shower, then the maximum temperature was limited during the installation of the appliance and can only be changed below this temperature. The Temperature Limit cannot be fully deactivated in this case.

Operation Lock: Secure your settings with a four-digit PIN.

Note: The operation lock can only be deactivated with the correct PIN under "Protected Sections" or under "Delete PIN". If you should forget your PIN, please contact after-sales Services.

Enter PIN: Numbers from 0 to 9 can be selected via the keypad. If you have selected four digits, confirm by tapping on "**OK**". The PIN must then be entered again and confirmed for security reasons.

If both entries match, you access the section "Protected Sections".

Protected Sections: Select the areas for a PIN lock.

- Lock Settings: Automatically active as soon as a password has been generated. Users can only access the settings menu with a PIN. Deactivating it deletes the current PIN.

- + Lock Main Menu: Users can only access the main menu with a PIN

- + Lock Temperature: The outlet temperature is set to the current value and can only be changed with a PIN. User profiles, applications and Eco mode can also only be changed with a PIN.

Brightness: Reduce the display brightness e.g. to safe energy. The brightness can be set separately for operation screen and standby mode.

- Operation 5-100%
- Standby 0-100% (0% = display OFF)

The setting of the standby mode will be activated after 1.5 minutes.

Sound: Activate / deactivate operating sounds.

Note: Alarm signals and instruction sounds cannot be disabled.

Value	Description
0	Operation without load shedding relay, factory setting
1	Operation with normal load shedding relay
2	Operation with sensitive load shedding relay

Load Shedding (Expert Mode): If further three-phase appliances are connected, a load shedding relay designed for electronic instantaneous water heaters (Art no. 82250) can be connected to phase conductor L2. This relay ensures the operation of the water heater by switching off other appliances until the end of heating operation.

Tap on ‹ or › and hold for two seconds to set a value of 0, 1 or 2.

Operating mode 1 must be selected first, thus to check the correct operation of the load shedding relay at low appliance output (35 degree celsius setpoint and low water flow rate). Mode 2 must be selected if the load shedding relay flickers.

Thermal Treatment: With this function, you can support a thermal treatment of your appliance and the following pipeline, including the tap. A thermal disinfection according to the accepted rules of technology is not replaced.

- Tap OK to start the treatment cycle and the outlet temperature is set to 70 °C. The function is disabled if the appliance is connected to a shower.

- Draw hot water for at least three minutes to heat the pipes to the tap completely.

- A change of the temperature or 30 sec without water flow terminates the treatment cycle.

- The number as well as the accumulated duration and the water amount of all thermal treatments will be saved and can be viewed under "Info".

Notes:
Ensure that no one can be injured by the elevated temperatures and that the installation can withstand the strain.

The exiting water and the tap become very hot! The water steam should not be inhaled.

Flow Limit: Setting of flow rate limitation.

Setting options:

"OFF"   no flow rate limitation (motor valve deactivated)

"AUTO"   automatic adjustment, i.e. flow rate is limited in a way so that the selected outlet temperature is reached

"ECO"   flow rate limitation to max. 8.0 l/min

e.g. "9.0" limitation to a freely selectable value between 4.5 and 25 l/min

Note: If the Eco function has been activated in the menu "Savings", the flow is automatically set to "ECO". Changing the flow to a higher value than 8 l/min deactivates the Eco function

Factory Settings: All factory settings can be recalled:

• Restart Device: Set the temperature back to factory setting and restart the appliance.

• Factory Reset: Deletes all entries made by the user inclusive statistics.

Synchronize Statistics: Use this function to reload the statistical data.

Devices: All settings for operation with the app and for integrating the DSN into a Wi-Fi network are made here. For more information, see chapter: "4. CLAGE app Smart Control".

Software Info: Information about the operating system, the imprint and licenses can be viewed here. The **"Expert Mode"** can also be activated here. In the Expert Mode you have access to sensitive system settings and functions.


USER

Up to eight users can enter their names and select their own profile image. This appears together with the first letters of the name in the main screen.

In the main control, every user can set up and save his own desired temperatures for the different applications.

Tap the **+** symbol to add more profiles, use the pen to edit existing profiles and tap the **✕** symbol to delete the adjacent user profile.

SAVINGS

Here, you can determine the parameters for the costs in the consumption statistics and activate / deactivate the ECO Mode. You can select a currency symbol under "Settings"(P.9).

Electricity Tariff (HK$/kWh): Indicate the electricity price from your electricity company.

Water Tariff (HK$/m³): Indicate the water price from your water company.

ECO Settings: In Eco mode the outlet temperatures are limited to an energy-efficient value (handwash = 35 °C, shower = 38 °C, bath = 42 °C, hot water = 48 °C).

Additionally the water flow is limited to 8 l/min.

INFO/DEVICE INFORMATION

The current status and appliance data is listed here. By wiping you can scroll through the different information values.

Power limit

If the full output of the instantaneous water heater DSN does not suffice to heat the tapped quantity of water, the control valve automatically reduces the flow rate so that the set temperature is reached.

Top-up Heating

When operating with preheated water (e.g. with solar systems), you must ensure that the inlet temperature does not exceed 70 °C.

If the inlet temperature exceeds the setpoint, the appliance is not providing any output. The symbol ☼ is displayed in the main screen
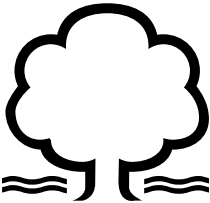
How to Save Energy

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.

WARNING!

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 (e.g. jet regulators 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.

DOWNLOAD APPS

ANDROID

APPLE IOS

DEVICE SETUP

Renaming the Device (For Personal Preference)

1. Enter Settings menu and select "Devices".

2. Select "DSX TOUCH [XXXX]" .

3. Tap on the name in Device Setup to change to "DSN" or other name of your choice.

INITIAL OPERATION

• **Protect the appliance from unauthorised access by connecting it to an Internet-connected IT infrastructure only if it is protected by a firewall.**

• **Protect the appliance against unauthorised access by using a secure Wi-Fi password. This should consist of letters, numbers and special characters and should not be listed in the lexicon.**

1. Make sure that the instantaneous water heater is connected to the power source.

2. Install the control app on your tablet / smartphone. Search the Apple AppStore or the Google Playstore for »CLAGE Smart Control« and install the app. Do not start the control app yet.

3. Establish the Wi-Fi connection between your home network and the DSN at the appliance. Enter "Device" in settings menu, select the DSN Home Server, tab on "Advanced" and select operation mode "Client" or "Accesspoint".

HOME SERVER - CONFIGURATION AS CLIENT

1. All networks found in range are listed at "Network". Tap your SSID to select your home network. If the SSID of your home network is hidden, it must be temporarily set to "visible" for the configuration.

2. Enter your Wi-Fi password and tab on "Apply"

3. The DSN updates the Wi-Fi settings and tries to log in on the router using the new access data. The tablet / smartphone must be connected to the same network.

4. Return to the control app and start it. After the successful log-in on the home network you have now access to your DSN via the app.

5. In the Smart Control app you can check the successful installation by entering "Device" in settings menu, selecting the DSN Home Server and tapping on "Connect...". The following text should appear: "DSN can be used."

Note: An error message appears if it is not possible to log in with the entered access data. Check the access data and repress "Apply".

Note: A time delay of a few seconds is normal and dependent on the network infrastructure and utilization.
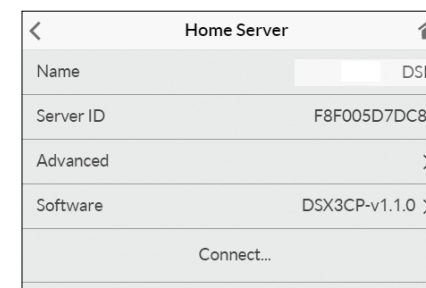
CONFIGURATION AS ACCESSPOINT

If you want to use the DSN as a stand-alone access point, please set up an individual and secure password to protect it from unauthorized access:

1. Connect the tablet / smartphone to the DSN via Wi-Fi.

2. Select Wi-Fi in the settings menu of your tablet / smartphone and type in the connecting data of your DSN: SSID = CLAGE-DSN... (see rating plate). The rating plate is located under the removable faceplate at the bottom of the appliance. Password = The password is a randomly generated code also printed on the rating plate.

3. Check the control by temperature change via the app. Temperature changes on smartphone / tablet must automatically update the display values at the instantaneous water heater and vice versa.

Note: If you have forgotten your password, please contact the factory customer service.
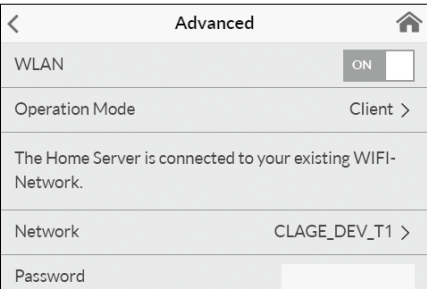
ACTIVATE/ DEACTIVATE WI-FI

Go to the device configuration, select the DSN Server and tap »Advanced«. By tapping on the button, you can enable / disable the WLAN.
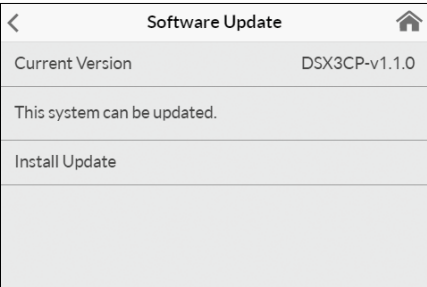
SOFTWARE UPDATE

Updating the Smart Control app

We recommend using the latest software in order to ensure the impeccable and secure operation of the DSN Home Server.

Any new control app version will be indicated in the app store.

- **Updating iOS-devices:** For updating your control app, select the "Updates" tab in the appstore and tap on the "Update" button which is to the right of the control app.

- **Updating Android-OS-devices:** For updating your control app, select the Smart Control app in the Google Playstore and tap on the "Update" button.

Updating the DSN Firmware

Note: Do not disconnect your DSN from power supply during updates.

For an update the DSN must be connected to a Wi-Fi network with internet access.

The instantaneous water heaters is unavailable during the update for several minutes.

1. Go to the device configuration in the settings menu: (Main menu - Settings - Device).

2. Select the DSN which you want to update.

3. Select "Software", then "Install update" and confirm the following message.

4. Wait for about 3-5 minutes until the control panel restarts and check the function of the DSN.

If an update is not possible even after multiple attempts, contact the after-sales service.

Use

All functions described in chapter "3. How to use" can also be controlled via the Smart Control app.
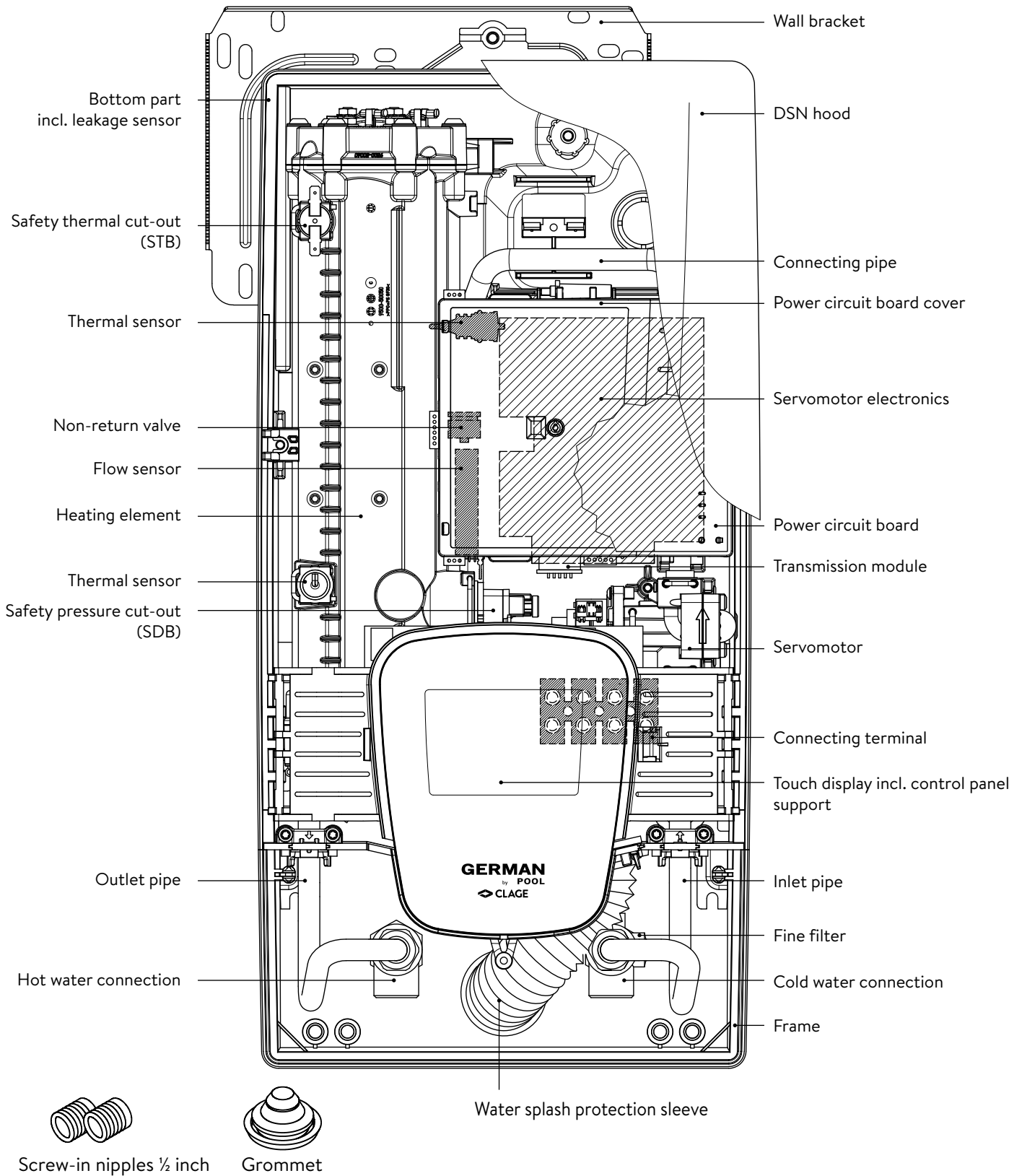
WARNING!

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 German Pool Customer Service & Repair Centre. 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.

DSN		
Problem	**Cause**	**Solution**
Water stays cold, touch display does not light up	Master fuse tripped	Renew or activate fuse
	Safety pressure cut-out tripped	Contact Customer Service
Display shows error symbol	The appliance has detected an error.	Switch fuses off and on. If symbol "wrench" is still indicated, 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 Customer Service
	Water flow is limited	Deactivate Eco mode and flow limit
Selected temperature is not reached	Water flow rate too high	(Re)activate motor-driven valve in the menu "Flow Limit"
	Cold water has been added via the tap	Tap hot water only; set temperature, check outlet temperature
Touch display does not respond correctly or only sporadically	Display glass is wet	Dry display by wiping it with a soft cloth
App can't find the DSN	Master fuse tripped	Renew or activate fuse
	Out of Wi-Fi range	Replace the tablet / smartphone near the access point (router or DSN)
	Wi-Fi deactivated (air plane mode)	Activate Wi-Fi at tablet / smartphone settings
	Tablet / smartphone is connected to another Wi-Fi as the DSN	Change to the same Wi-Fi as the DSN

1. Overview

Wall bracket

Bottom part
incl. leakage sensor

DSN hood

Safety thermal cut-out
(STB)

Connecting pipe

Power circuit board cover

Thermal sensor

Servomotor electronics

Non-return valve

Flow sensor

Heating element

Power circuit board

Thermal sensor

Transmission module

Safety pressure cut-out
(SDB)

Servomotor

Touch display incl. control panel
support

GERMAN
by POOL
CLAGE

Outlet pipe

Inlet pipe

Fine filter

Hot water connection

Cold water connection

Frame

Water splash protection sleeve

Screw-in nipples ½ inch   Grommet

2. Technical Specifications

Model	DSN			
Energy efficiency class	A *)			
Rated capacity / rated current	18 kW..27 kW (26 A..39 A)#			
Chosen capacity / current	18 kW / 26 A	21 kW / 30 A	24 kW / 35 A	27 kW / 39 A
Electrical connection	3~ / PE 380..415 V AC			3~ / PE 400 V AC
Min. required cable size [1] ^	4.0 mm²	4.0 mm²	6.0 mm²	6.0 mm²
Hot water (l/min) [2] max. at Δt = 28 K max. at Δt = 38 K	9.2 6.8	10.7 7.9	12.3 9.0	13.8 10.2
Rated volume	0.4 l			
Rated pressure	1.0 MPa (10 bar)			
Connecting type	pressure-resistant / pressureless			
Heating system	Bare wire heating system IES®			
@ 15 °C: Required spec. water resistance Spec. electrical conductivity	≥ 1100 Ωcm ≤ 90 mS/m			
Inlet temperature	≤ 70 °C			
Switch on – max. flow rate	1.5 l/min – automatic [3]			
Pressure loss	0.08 bar at 1.5 l/min 1.3 bar at 9.0 l/min			
Temperature range	20 – 60 °C [70 °C]			
Water connection	G ½ inch			
Weight (when filled with water)	4.5 kg			
VDE class of protection	I			
Type of protection / safety	VDE GS EMV IP25 CE			

*) The declaration complies with the EU regulation No 812/2013.
Rated current is provided based on Germany standard, ie. 400V, 18kW/√3/400=26A
^ Actual wiring size based on EMSD Code Of Practice For Electricity (wiring) Regulation's Appendix A6(1)
1) Maximum applicable cable size is 10 mm² in electrical connection from above.
2) Mixed water
3) Electronically controlled depending on the desired temperature and cold water temperature

• All information in this manual is for reference only. If there are any errors or omissions, the specifications produced by the factory shall prevail. Specification is subject to change without prior notice.
• If there is any inconsistency or ambiguity between the English version and the Chinese version of this manual, the English version shall prevail.
• Refer to www.germanpool.com for the most up-to-date version of the Operating Instructions.

3. 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 return used electronic devices to the recycling system. 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 equipment, please contact your dealer or supplier for further information.

4. Dimensions

Dimensions (in mm)

5. Installation

CLAGE

Lüneburg

DIN 4109

PA-IX 16952/I

MPA NRW.
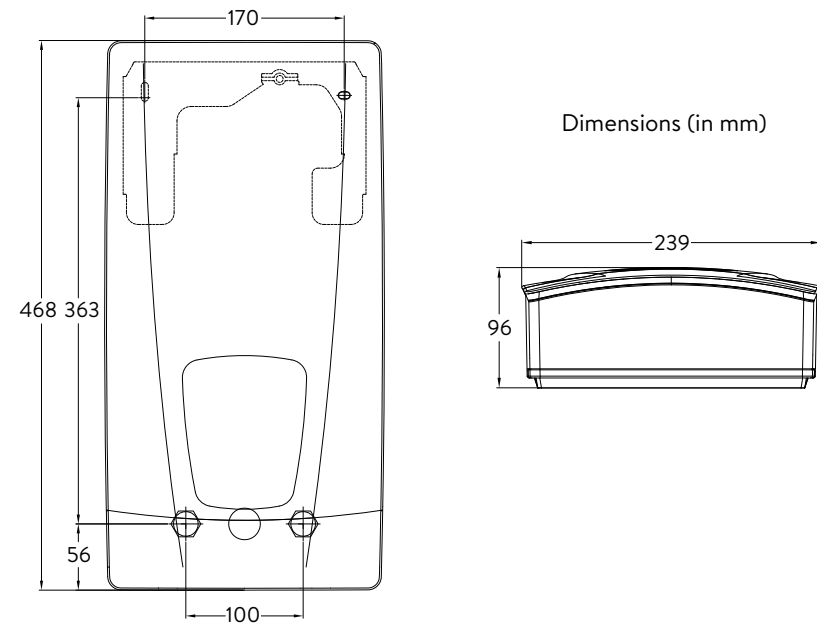
Based on Germany's guidelines a general test certificate concerning the evidence of applicability of noise behaviour is granted.

The following regulations must be observed:

- **e.g. VDE 0100**
- **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 must be wall mounted and has to be installed with water connectors downward or alternative transversely with water connections left.
- The appliance complies with protection type IP25 and may therefore be installed in protection zone 1 according to VDE 0100 part 701 (IEC 60364-7).
- In order to avoid thermal losses, the distance between the instantaneous water heater and the tap connection should be as small as possible.
- The appliance must be accessible for maintenance work.
- Plastic pipes may only be used if they conform to DIN 16893, Series 2.
- The specific resistance of the water must be at least 1100 Ω cm at 15 °C. The specific resistance can be asked for with your water distribution company.
- Do not install the device in the immediate proximity of metal surfaces to allow a reliable wireless connection and an optimal wireless range.

5. Installation

Mounting Accessories

For installations under difficult conditions, these mounting accessories are available:

Mounting Frame Kit RDX 3

(Art. no. 36100)

The instant water heater can be installed by means of this mounting kit when the power supply cable is coming out of the wall at any place from behind the unit, or the wall has unusual surface conditions, making it difficult for installing the water heater.

**When using the RDX the protection class changes from IP25 to IP24.**

RDX 3

Extension Kit VDX

(Art. no. 34120) – RDX is necessary! –

The instant water heater can be installed by means of this extension kit if the water pipes are coming displaced or exchanged out of the wall or if they are coming edgewise on the wall to the unit. The power supply could come out of the wall at any place under the unit or the wiring could be installed surface-mounted.
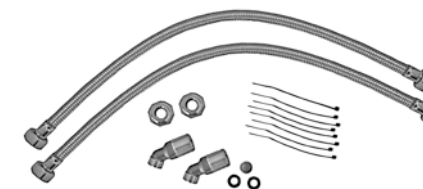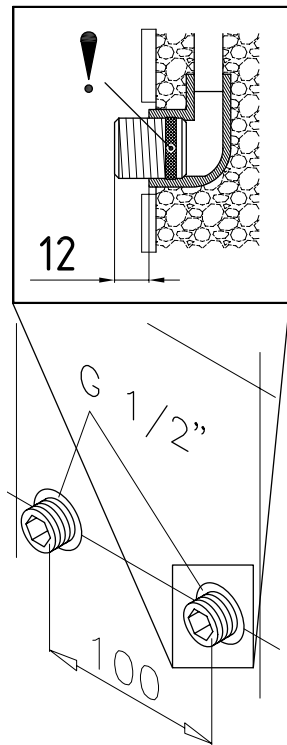

VDX
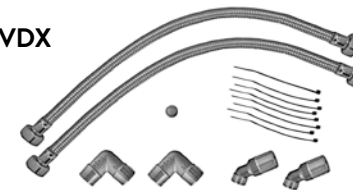
Extension Kit UDX

(Art. no. 34110) – RDX is necessary! –

The instant water heater can be installed by means of this extension kit if the water-connections are expiring above the unit. The power supply could come out of the wall at any place under the unit or the wiring could be installed surface-mounted.


UDX

Installing the Wall Bracket

Note: If you install this instantaneous water heater in exchange for a conventional instantaneous water heater, there is generally no need to drill holes for the wall bracket, in this case step 2 would not be necessary.

> Thoroughly rinse the water supply pipes before installation to remove soiling from the pipes.

1. Using a 12 mm hexagon socket screw key, screw the screw-in nipples into the wall connections. The seals must be fully screwed into the thread. After tightening, the double nipples must protrude by 12 – 14 mm.

2. Hold the included mounting template on the wall and align it so that the holes in the template fit over the double nipples. Mark the drill holes according to the template and drill them using a 6 mm drill. Insert the included dowels.

3. Pull down the faceplate and unscrew the main hood screw to open the appliance.

4. Loosen the knurled nut to remove the wall bracket and screw the wall bracket to the wall. Offset tiling or uneven surfaces can be compensated by up to 30 mm with the aid of the spacers supplied. The spacers are fitted between the wall and the wall bracket.
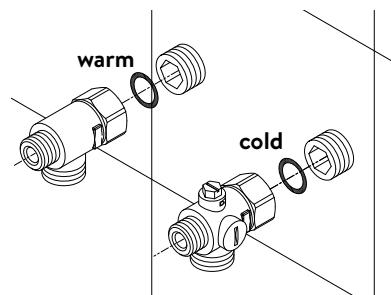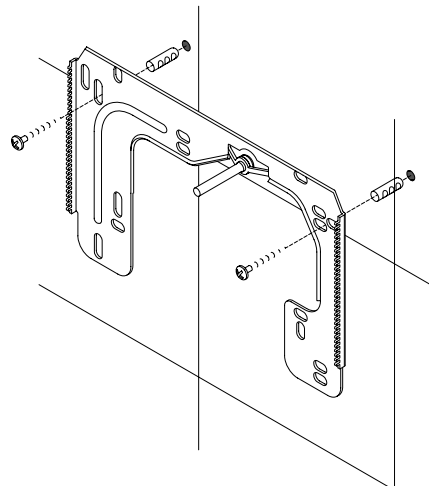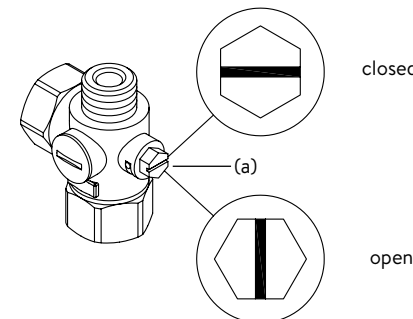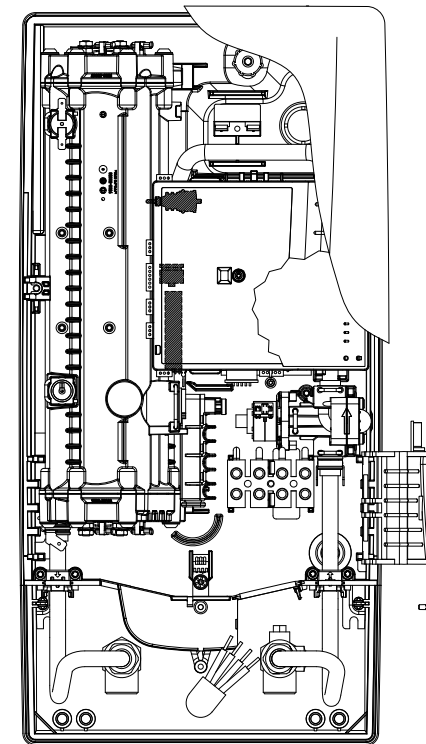
Installing Connection Pieces

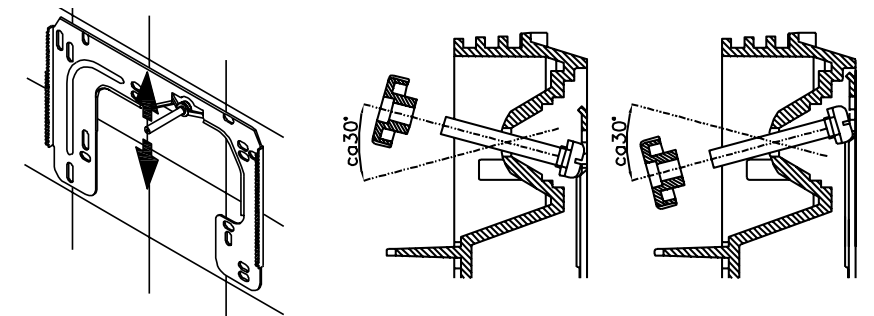Note: Fasten the screw nuts with caution, to avoid damage to the valves or the piping system.

1. As shown in the illustration, screw the cold water connection piece with the union nut and the ½ inch seal onto the cold water connection.

2. Screw the hot water connection piece with the union nut and the ½ inch seal onto the hot water connection.

Installing the Appliance

• The electrical power supply cable may be connected in the upper part or is surface mounted. Only in such case, first follow the steps one through three according to the description "Electrical connection from above" in chapter "Electrical connection".

1. Place the appliance on the heater bracket so that the threaded rod of the wall bracket fits in the corresponding hole of the appliance. If necessary, slight corrections are possible by carefully bending the threaded rod of the wall bracket. However, it must be possible to screw on the water connection pipes of the appliance without applying force.

2. Screw the plastic knurled nut onto the threaded rod of the wall bracket.

3. Screw the two ⅜ inch union nuts of the appliance's water connection pipes, each with the ⅜ inch seal, onto the fittings.

4. Open the water supply line to the unit and slowly open (position "open") the shut-off valve (a) in the cold water connection piece. Check all connections for leaks.

5. Next, open and close the hot water tapping valve several times until no more air emerges from the line and all air has been eliminated from the instantaneous water heater.

> Attention: Inspection Panel Opening
>
> If DSN is to be installed in a sealed space (eg. under the ceiling with decorative paneling), must leave a 600x600 mm inspection panel for future maintenance and repair.
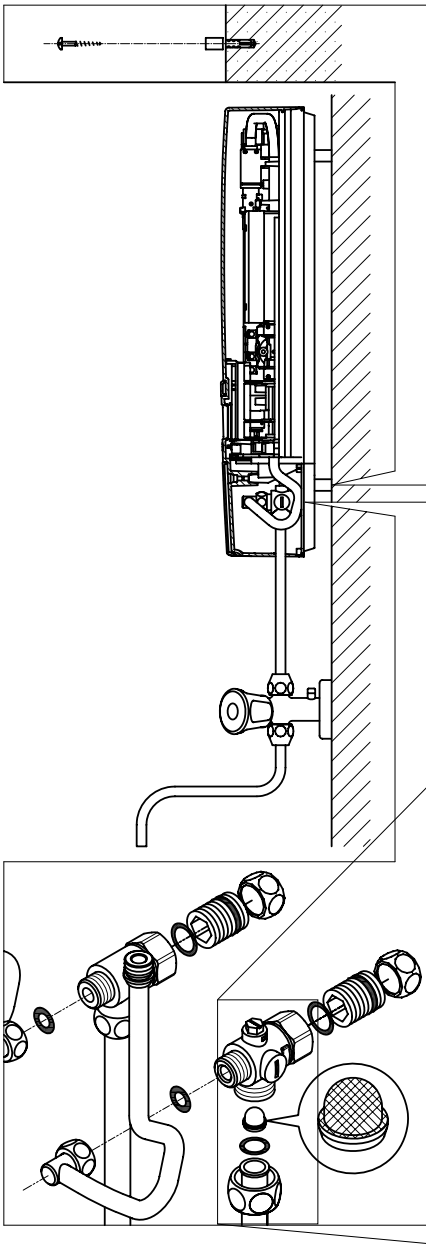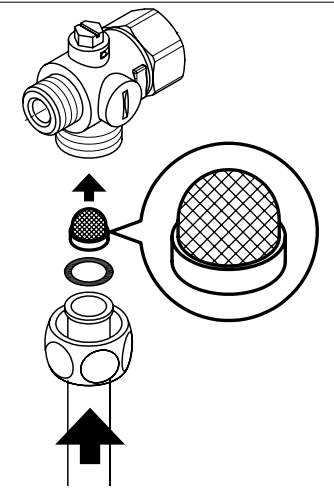
Note: Fasten the screw nuts with caution, to avoid damage to the valves or the piping system.

For direct connection, the two ½ inch screw-in nipples and the ½ inch seals must be screwed into the ½ inch union nuts of the hot-water and cold-water connectors. The two ½ inch caps of the side outlets of the hot-water and cold-water connectors must be removed and screwed onto the open end of the screw-in nipples. The hot-water and cold-water connectors must then be screwed into the $^3/_8$ inch union nut of the appliance inlet and outlet pipe, together with the $^3/_8$ inch seals.

For direct connection, it may be advisable to mount the appliance at a distance as illustrated alongside, using the spacer sleeves supplied. The two fixing holes near the lower pipe connections are also to be professionally fixed with 6 mm dowels and screws.
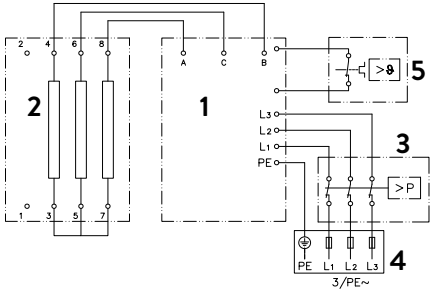
The flared end of the pipes must be screwed into the ½ inch side outlets of the hot-water and cold-water connectors with ½ inch union nuts and ½ inch seals. The holes required for the pipes must then be opened of the housing with the aid of a blunt implement.

Note: In case of direct connection, put the strainer into the cold water connection!

Wiring Diagram

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

Note: Installation work must only be conducted by an authorised professional.

Please observe:

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

Structural Prerequisites

- The appliance must be installed via a permanent connection. Heater must be earthed!

- 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 with trigger characteristic C must be fitted with a tripping current commensurate with the nominal current of the appliance.

Load Shedding Relay

If further three-phase appliances are connected, a load shedding relay designed for electronic instantaneous water heaters (Art no. 82250) can be connected to phase conductor L2.

To change the operating mode, after making the electrical connection and the initial operation call up the settings menu. Then select the point "Load shedding". If the menu item is grayed out, first activate the "Expert Mode" under Settings/Software.

You can set a value of 0, 1 or 2 bay tapping $\langle$ or $\rangle$.

The locking function must be activated then (see chapter "8. Initial operation" sub point "Locking function").

Value	Description
0	Operation without load shedding relay, factory setting
1	Operation with normal load shedding relay
2	Operation with sensitive load shedding relay

Operating mode 1 must be selected first, thus to check the correct operation of the load shedding relay at low appliance output (35 degree celsius setpoint and low water flow rate). Mode "2" must be selected if the load shedding relay flickers.
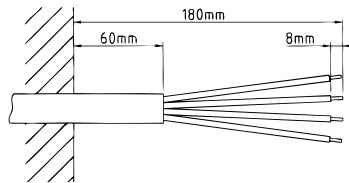
WARNING!
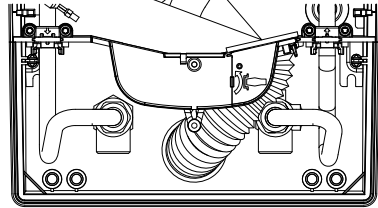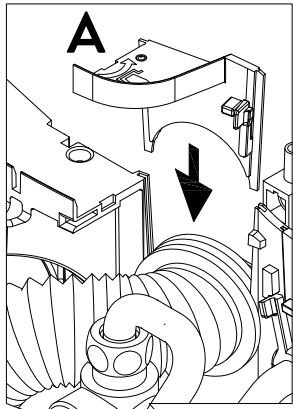
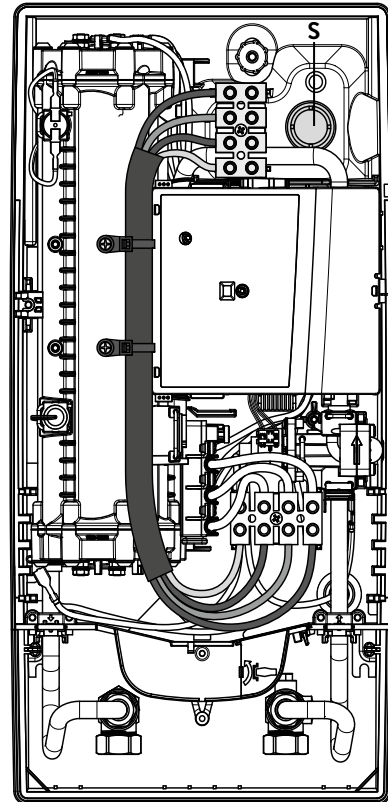## Electrical Connection from Below

Note: If necessary, the connecting terminal can be displaced to the upper part of the appliance. If you want to do so, please follow the instructions in the next chapter.

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

1. Dismantle approximately 6 cm off the connecting cable above the wall outlet. With the smaller opening ahead, slide the water splash protection sleeve over the connecting cable so that the sleeve is flush with the wall. This prevents any leaking water from coming into contact with the electrical leads. It must not become damaged! **The protection sleeve must be used!**

2. Open the control panel rightwards.

3. Strip the cables and plug them in the connecting terminals according to the wiring diagram. **The appliance must be earthed.**

4. Pull the protective sleeve over the connecting cables until the sleeve fits perfectly in the recess of the intermediate panel. Adjust the water splash protection sleeve as illustrated and fix it with the sleeve fixing (A). Reinsert the control panel and lock it on.

5. Place the hood on the appliance and screw in the fastening screw. After that you can slide on the faceplate from the bottom up to the stop.

Electrical Connection from Above

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

1. Open the prepared breaking point (S) in the upper part of the appliance by pressing with a blunt implement (e.g. srewdriver).For surface-mounted connection cable additional open the breakout at the right side of the bottom part.

2. Slit the grommet to match the cable size. The opening in the grommet should be slightly smaller than the cross-section of the cable in order to ensure optimum protection against water. Fit the grommet into the opening. **The protection grommet must be used!**

3. Strip the connection cable so that the sheath extends through the grommet into the appliance. Hold the prepared appliance in one hand and route the cable into the grommet with the other hand.

4. Place the appliance on the wall bracket so that the threaded rod of the wall bracket fits in the corresponding hole of the appliance and fix the appliance.

5. Screw the connecting terminal of the adapter cable to the upper connection point. Route the adapter cable past the power section on the left and attach the two brackets to the heating block.

6. Open the control panel. Connect the other end of the adapter cable to the lower connecting terminal according to the wiring diagram. **Observe outer conductor assignment!**

7. Strip the individual wires of the connection cable and plug them in the upper connecting terminal according to the wiring diagram. **The appliance must be earthed.**

8. Fold back control panel and lock it in place.

9. Place the hood on the appliance and screw in the fastening screw.

Note: To ensure IP25 protection class, please don´t remove the bottom water splash protection sleeve.
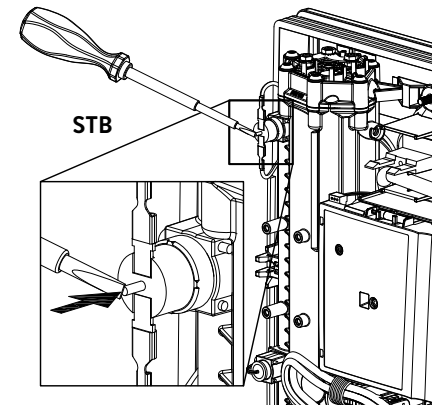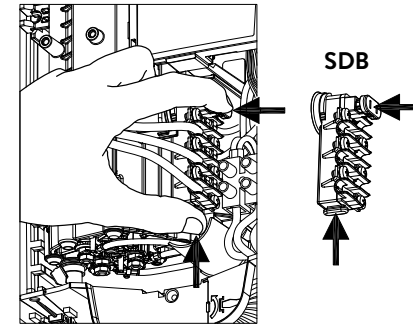
WARNING!
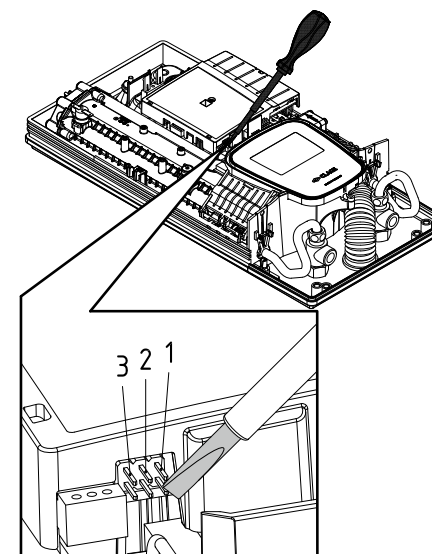
Before making the electrical connection, fill the mains and the appliance with water by carefully opening and closing the hot water tap in order to vent completely.

To ensure a maximum flow, remove any existing aerator from the faucet. Flush the warm and cold water pipes each at least for one minute.

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, check that the power supply is switched off and reset the cut-out.

Selection of Power Rating

Only by authorised professional, otherwise lapse of guarantee!

When the appliance is connected to the power source for the first time, 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. Switch on the power supply to the appliance.

2. When switching on the supply voltage for the first time, the touch screen shows the menu to select the language after about 40 seconds. Choose your language, after that the selection of power rating appears. If not, please follow the note "Reinstallation".

3. Select the maximum allowable power rating depending on the local situation via touch (18, 21, 24 or 27 kW).

4. Press "**OK**" to confirm the setting.

5. Mark the set power rating on the rating plate.

6. After having set the maximum allowable power rating, the heating element will be activated after approx. 10 – 30 sec of continuous water flow.

7. Open the hot water tap. Check the function of the appliance.

8. Explain the user how to use the instantaneous water heater and hand over the operating instructions.

9. Fill in the guarantee registration card and send it to German Pool Customer Service centre or use the online registration on our website (see also page 2).

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 on the right (see figure), e.g. with a screwdriver acc. to EN 60900, will reset all heater parameters to works setting and lock the heating. The display shows the menu to select the language. Choose your language, after that the selection of power rating appears. This condition will maintain when activating and deactivating the supply voltage.


Multiple Power System MPS®:

The rated capacity (max. power consumption) is 27 kW / 400 V and can be changed internally to 24 kW, 21 kW or 18 kW.

Shower Application

The water heater's temperature must be limited to 55 °C, if it is connected to a shower. The temperature limit must be set to a value less or equal 55 °C in the setting menu, in consultation with the customer and the lock level must be activated.

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

Locking Function

The operating mode of the appliance can be restricted.

Activation of the Locking Function

1. Select required parameters via the setting menu (see online user manual chapter "Settings", subpoints "Temperature limit" and / or "Load shedding").

2. Disconnect the appliance from the power supply (e.g. by switching off the fuses).

3. Take the jumper off the power electronics and change to position "**1**" (see picture).

4. Put the appliance into operation again.

Deactivation of the Locking Function

1. Disconnect the appliance from the power supply (e.g. by switching off the fuses).

2. Take the jumper off the power electronics and change to position "**OFF**" (see picture).

3. Put the appliance into operation again.

Pos. OFF   **Pos. 1**

closed

(a)

open
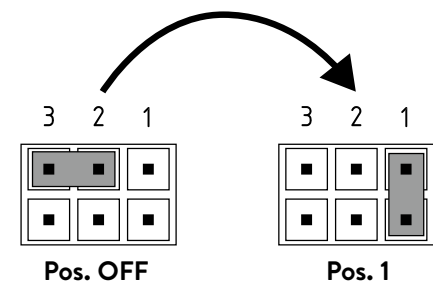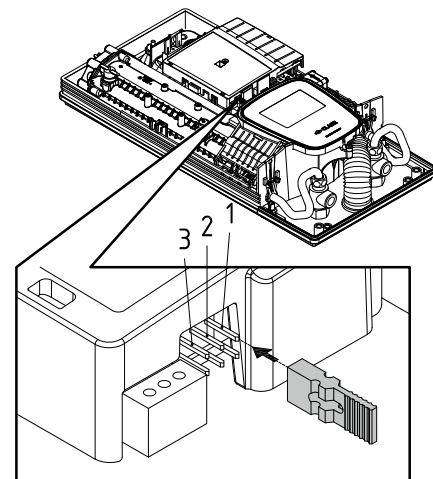
Note: Maintenance work must only be conducted by an authorised professional.

Cleaning and Replacing the Filter Strainer

The cold water connection of this instantaneous water heater is equipped with an integrated shut-off valve and a strainer. Soiling of the strainer may reduce the warm water output. Clean or replace the strainer as follows:
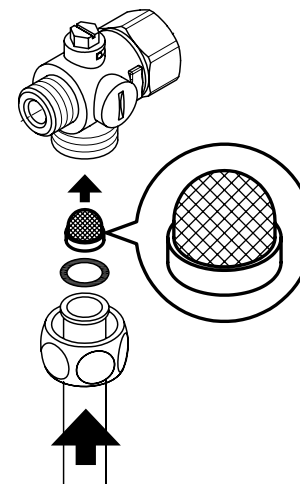
1. De-energize the instantaneous water heater (e.g. via deactivating the fuses) and prevent inadvertent reactivation of them.

2. To open the appliance, take off the small face plate, loose the screw behind this cover and detach the hood.

3. Close the shut-off valve (a) in the cold water connection piece (position "closed").

4. Unscrew the screw plug (b) from the cold water connection piece and take out the strainer (c).
   Note: Residual water can leak

5. The strainer can now be cleaned or replaced.

6. After fitting of the clean strainer tighten the screw plug.

7. Slowly reopen the shut-off valve in the cold water connection piece (position "open"). Check all connections for leaks.

8. Vent the appliance by carefully opening and closing the affiliated warm water tap valve several times until air no longer emerges from the pipe.

9. Fit the hood of the appliance. Then switch on the power again (e.g. via activating the fuses).

(b)   (c)
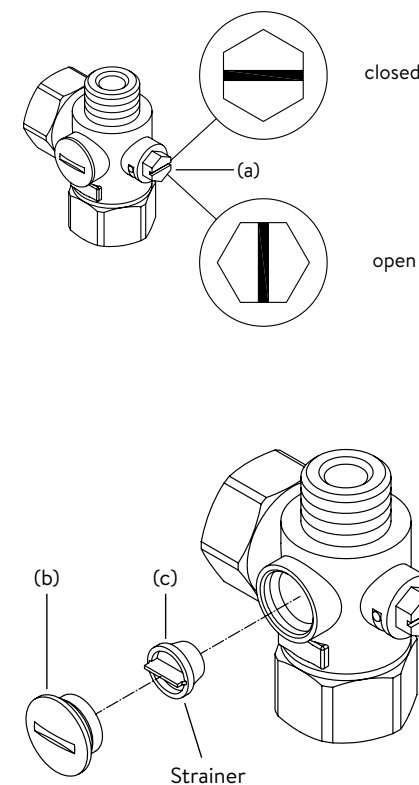
Strainer

Cleaning and Replacing the Filter Strainer if Direct Connected

The cold water connection of this instantaneous water heater is equipped with a strainer. Soiling of the strainer may reduce the warm water output. Clean or replace the strainer as follows:

1. De-energize the instantaneous water heater (e.g. via deactivating the fuses) and prevent inadvertent reactivation of them.

2. Close the shut-off valve in the mains water supply of the instantaneous water heater.

3. To open the appliance, take off the small face plate, loose the screw behind this cover and detach the hood.

4. Unscrew mains water inlet from connection piece and take out the strainer.
   Note: Residual water can leak

5. The strainer can now be cleaned or replaced.

6. After refitting the clean strainer reconnect the mains water inlet to the connection piece.

7. Slowly reopen the shut-off valve in the mains water supply. Check all connections for leaks.

8. Vent the appliance by carefully opening and closing the affiliated warm water tap valve several times until air no longer emerges from the pipe.

9. Fit the hood of the appliance. Then switch on the power again (e.g. via activating the fuses).

提示：在安裝、初次啟動和使用本設備前，請仔細閱讀安全説明，並在後續步驟和使用過程中嚴格遵循！

DSN即熱式熱水器是一種全電子控制的熱水器，並配備輕觸式電子顯示屏，可將熱水供應至一個或多個水龍頭出水位。

其電子控制系統會視乎選定出水溫度、相應入水位的水溫和流量自動調控耗電量，從而精準達到設定的出水溫度，並在水壓波動的情況下保持恒定。出水溫度可透過輕觸式電子顯示屏設定為20°C至60°C，並可從輕觸式電子顯示屏上讀取。另外，本熱水器可通過智能手機或平板電腦的應用程式或加配選購的藍芽遙控器進行遠距離控制。

DSN配備直觀的選單指南，可在其中設置不同的用戶資料，並從中收集各用戶的使用數據。

入水溫度可高達70°C，以便與再加熱設備同時使用，例如太陽能系統。
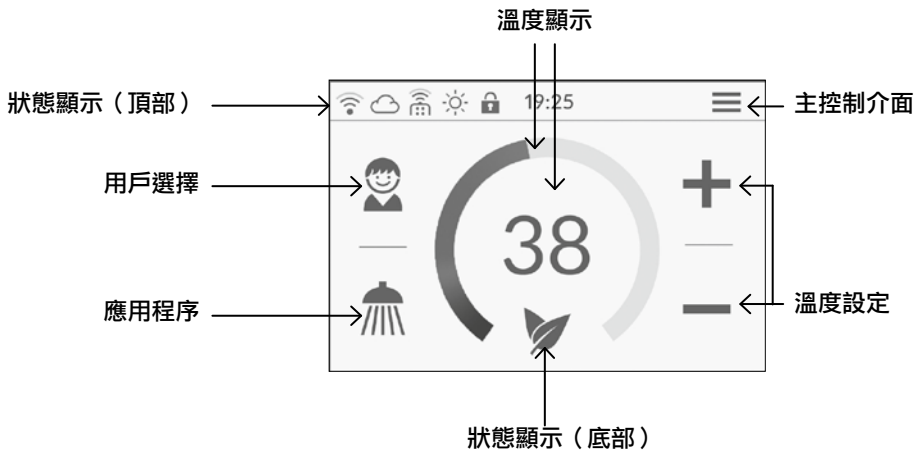
本即熱式熱水器可與電子式即熱式熱水器專用的外接減載繼電器搭配使用（請參閱安裝指示）。

打開熱水水龍頭時，本即熱式熱水器隨即自動啟動。關上水龍頭時，本熱水器即自動關閉。本熱水器可透過設備本身、智能手機或平板電腦的應用程式或另購的藍芽遙控器操作。

本設備符合Directive 2014/53/EU規格。

主控制介面

顯示屏默認顯示主控制介面及當前狀態，透過點擊輕觸式電子顯示屏，您可以存取各種選單和功能。

溫度顯示

狀態顯示（頂部）→ 主控制介面

用戶選擇

38

應用程序 → 溫度設定

狀態顯示（底部）

溫度顯示

隨著溫度設置的提升，彩色刻度環將逐漸加強或轉變，當溫度從低溫升至高溫時，刻度環將從藍色轉變為紅色。另外，目標溫度以℃顯示在顯示屏中間。

溫度設置

通過點擊 ✚ 和 ➖ 或拖動彩色刻度環在20℃至60℃的範圍內選擇所需的溫度。點擊一次 ✚ 或 ➖ 將溫度改變1℃，在35℃到43℃的舒適區之間點擊一次將溫度改變0.5℃。如果溫度設置低於20℃，「➖➖」符號將出現在溫度顯示屏中，而熱水器將關閉加熱功能。

用戶選擇

最多可以設定8個用戶。每個用戶都可以選擇自己所需的溫度並保存在其用戶資料中。用戶可透過點擊用戶圖案來選擇用戶（若要設立用戶資料，請參見「用戶」一節）。

應用程序

可在此處選擇預設應用程序。只需點擊應用程序圖案即可打開選單。溫度在出廠時預設為以下數值：（洗手=35℃，淋浴= 38℃，浴缸=42℃，熱水=48℃）每個應用程序均可在溫度設置中進行更改。當你點擊溫度顯示上的溫度數值，或應用程序圖案3秒，將會儲存當前溫度成為該應用程序新的預設溫度。溫度數值將會閃爍一次進行確認。應用程序的預設溫度將儲存在用戶資料中，您可隨時按相關的圖案啟用該啟序。
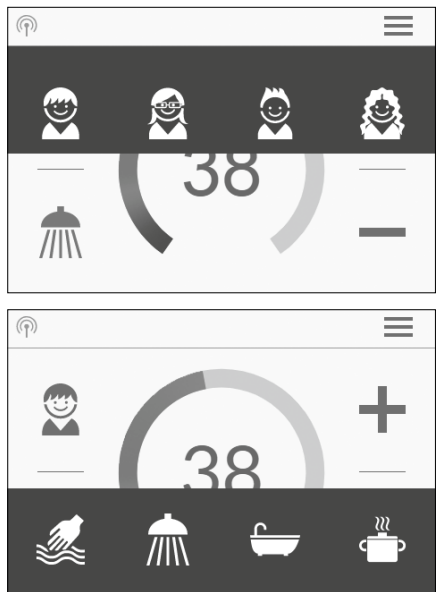

狀態顯示（頂部）

🔒 鎖定功能啟用中（PIN）
☀ 入水溫度大於目標溫度（熱水器不加熱）
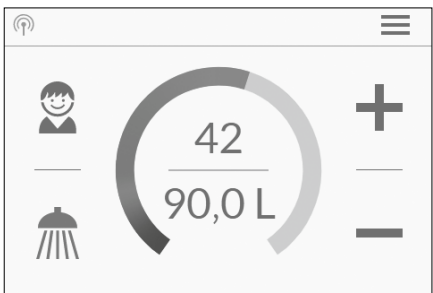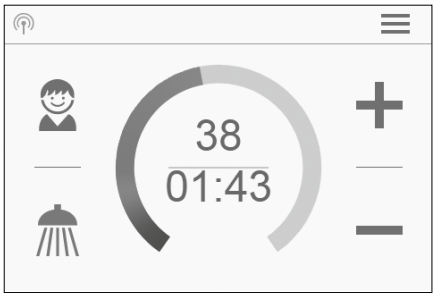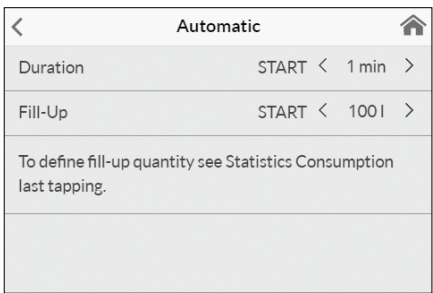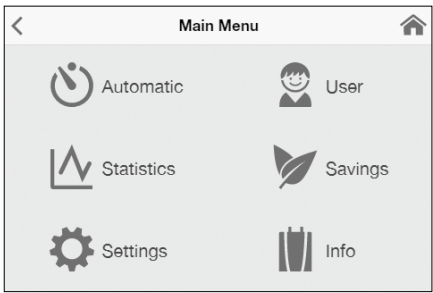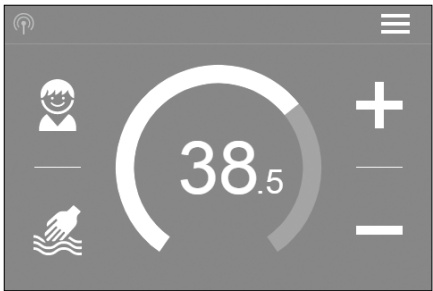📶 連接了藍芽遙控裝置（另配）
📶 Wi-Fi啟用中
☁ 熱水器已連接到CLAGE雲端

狀態顯示（底部）

需要用戶確認的功能，或重要功能的顯示區域。

🍃 節能模式啟用中：所有出水口的出水溫度和水流都限制在節能值內。如果溫度設置比節能值高，此符號將會閃爍。

🔧 維護工作：按此圖案以獲取更多信息。

MAX 達到最高溫度：由於已達到所設定的溫度極限，因此無法進一步提升溫度。通過選單中的「設置」更改溫度限制。

出水模式

如果從水龍頭出熱水，主控制介面將更改為出水模式，並根據設置的出水溫度將背景顏色從低溫顯示藍色更改為高溫顯示紅色。在此模式下，彩色刻度環會顯示熱水器的實際耗電量。

主選單(MAIN MENU)

可以在此選擇設備的所有功能選單和保存的數值。點擊🏠圖案可返回主控制介面。

自動運行模式(AUTOMATIC)

在此選單中，可以選擇兩個功能。通過「持續時間」功能以秒為單位自動測量時間，或者通過「注滿」功能以升為單位測量熱水流量。熱水器無法記錄水龍頭上添加的冷水。為了根據注滿量正確使用自動運行功能，因此有必要在熱水器上設置所需溫度，並且僅打開熱水龍頭。

在每個功能最後設置的起始溫度數值將會保存在用戶資料裡，並且可以隨時將其啟動。

注意：在自動運行模式下，操作功能將受到限制。當選擇受到限制的功能時，將顯示說明視窗。點擊「確定」以停用自動運行模式，所有功能將可再次自由使用。點擊「取消」關閉說明視窗，自動運行模式將繼續保持啟用狀態。

持續時間(Duration)：在「持續時間」功能下，點擊《或》設置所需的時間，然後點擊「開始」以啟動自動運行模式。 顯示屏將切換到主控制介面，並在溫度顯示下顯示所設置的時間。

點擊時間或打開熱水龍頭以啟動此功能，時間開始以秒鐘倒數。再次點擊時間可隨時暫停並重新啟動此功能。 關閉水龍頭不會暫停此功能。如果在啟動此功能時已經有熱水流入，則立即自動啟動。要取消此功能，請點擊時間3秒鐘。

倒數完成後，「00:00」短暫閃爍。另外，如果熱水龍頭正在出水，水流量將減少約10秒，然後再次增加。熱水器將發出短暫的聲音信號。

注滿(Fill-Up)：在「注滿」功能下，點擊《或》設置所需的水量，然後點擊「開始」以啟動自動運行模式。顯示屏將切換到主控制介面，並在溫度顯示下顯示所設置的水量。打開熱水龍頭以啟動此功能，注滿量數值將按以升為單位遞減。當關閉熱水龍頭時將會暫停計算，再打開水龍頭時恢復計算。如果在啟動此功能時已經有熱水流入，則立即自動啟動。要取消此功能，請長按注滿量3秒鐘，或關閉水流1分鐘。
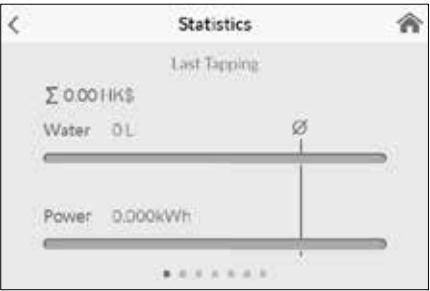

當達到設定的注滿量時，「01」短暫閃爍，熱水器通過關閉電動閥來停止出水。熱水器將發出長聲音信號，並在顯示屏上顯示一條信息。電動閥將保持關閉狀態，直至在熱水器或通過應用程式確認該信息為止。

由於必須人手關閉水龍頭，所以此功能不可在無人監督的情況下使用。
在使用浴缸之前，請確保水溫符合您的要求。

提示：最後一次取水的水量會儲存在「統計」選單中。要確定浴缸所需的水量，請先用溫水裝滿浴缸，然後在主選單中選擇「統計」，讀出最後一次取水的數值。在自動運行模式的「注滿」功能中輸入的數值，以用於下一次注滿浴缸。

注意：當「注滿」功能運行時發生斷電，將通過電動閥停止出水。恢復供電後，電動閥保持關閉狀態，顯示屏上會顯示提示，並發出警報信號，直至點擊「確定」以確認提示為止。

統計(STATISTICS)

在統計信息中，熱水器所記錄的消耗量和使用量數據將以圖形格式顯示：

- 💧 耗水量
- ⚡ 耗電量
- Σ 總消耗成本

從右向左滑動以顯示不同的時間段。圖表將顯示從上一次出水起計至當刻的消耗量、今天的消耗量、昨天的消耗量、過去7天的消耗量、過去4週的消耗量、過去12個月的消耗量，和過去4年的消耗量。

注意：此數據並不適合用於計費。

設定(SETTING)

此選單用於熱水器的基本配置。滑動以瀏覽不同的選單項目，點擊數值直接更改設置或進入子選單。

日期/時間(Date/Time)：當DSN連接到網絡後，將自動設定系統時間。 另外，您可以手動點擊「保存日期和時間」手動設置時間並進行保存。如果沒有網絡連接，當發生電力故障時，時間和日期設置將會丟失。

語言(Language)：選擇選單語言。

貨幣(Currency)：選擇貨幣符號(HK$)。

溫度單位：定義為°C。

溫度限制(Temperature Limit)：可以在此選單中啟用或停用溫度限制，點擊 ⟨ 或 ⟩ 可將最高溫度限制在溫度設置範圍內的所需數值。

注意：若將此即熱式熱水器連接到花灑頭，則最高溫度在熱水器安裝過程中受到限制，並只可更改至低於最高溫度的數值。在這種情況下，不能完全停用溫度限制。

操作鎖定(Operation Lock)：使用四位數的PIN保護您的設置。
注意：必須輸入正確的PIN密碼，才能解鎖進入「受保護的部分」或「刪除PIN」功能。如果您忘記了PIN碼，請聯繫客服中心。

PIN碼輸入：透過鍵盤在0至9之間選擇數字。選擇4位數字後，按「OK」進行確認。作為安全措施，必須重新輸入PIN碼並按「OK」再次確認。

如果PIN碼輸入正確，則可以進入「受保護的部分」。

受保護的部分(Protected Sections)：選擇要使用PIN進行鎖定的區域。

- 鎖定設置：儲存密碼後自動啟用。用戶必須使用PIN碼方能進入設置選單。當停用它時會刪除當前PIN碼。
- +鎖定主選單：用戶必須使用PIN碼方能進入主選單
- +鎖定溫度：出水溫度設置為當前數值，並且只能使用PIN碼進行更改。用戶資料、應用程序、節能模式也必須使用PIN碼方能進行更改。

亮度(Brightness)：降低顯示屏亮度(例如：為慳電)。可以分別為操作屏幕和待機模式設置亮度。

- 操作5-100%
- 待機0-100%（0%=關閉顯示屏）

待機模式的設置將會在設置完成的1.5分鐘後啟動。

聲音(Sound)：啟用或停用操作聲音。
注意：警報訊號和提示聲音不能停用。

減載繼電(專家模式)(Load Shedding - Expert Mode)：如同時接駁其他三相電器，可用特為電子即熱式熱水器設計的減載繼電器接駁至導電器L2相。該繼電器通過關閉其他電器直至加熱操作結束，以確保熱水器的加熱操作。

點擊 ⟨ 或 ⟩ 2秒鐘設置「0」、「1」或「2」。

數值	描述
0	無配用減載繼電器運行，出廠設置
1	配用正常使用正常減載繼電器運行
2	配用高靈敏度的減載繼電器運行

必需先選擇模式1，檢視低電量操作下的減載繼電器操作正常(35°C設定及低水流量)。如繼電器閃動，需選擇模式2。

高溫處理(Thermal Treatment)：使用此功能，您可對設備和管道（包括水龍頭）進行高溫處理。根據公認的技術規則進行的高溫消毒將不會被替換。

- 點擊「OK」開始高溫處理，出水溫度設置為70°C。若將此熱水器連接到花灑頭，則此功能將會停止運作。
- 出水至少3分鐘，以將管道至水龍頭完全加熱。
- 當溫度改變或30秒無水流動，將會終止高溫處理。
- 所有高溫處理的數值、持續時間、水量將被保存，並可以在「信息」查看。

注意：
請確保沒有人會因高溫而受傷，並確保安裝能夠承受壓力。排出的水和水龍頭將變得非常熱！切勿吸入水蒸氣。

Settings	
Flow Limit	‹ AUTO ›
Factory Settings	›
Initialize Statistics	›
Devices	›
Software Info	›

水流限制(Flow Limit)：設置水流限制。
設置選項：
「關」無水流限制（停用電動閥）
「自動」自動調節，即水流限制至達到所設置的出水溫度
「節能」水流限制至上限為8升/分鐘

可在4.5至25升/分鐘之間自由選擇限制的數值，例如「9.0」。

注意：如果在「保存」選單中啟動節能功能，則水流限制將自動設置為「節能」。將水流更改為高於8升/分鐘的數值將會停用節能功能。

Factory Settings	
Restart Device	
Factory Reset	

出廠設置(Factory Settings)：可以重置所有出廠設置。
· 重新啟動設備：將溫度恢復為出廠設置，然後重新啟動熱水器。
· 恢復出廠設置：刪除所有用戶設定及統計數據。

**同步統計數據(Synchronize Statistics)：**使用此功能可以重新加載統計數據。

設備(Devices)：可在此處利用Wi-Fi整合DSN以及應用程式的所有設置。詳細資料，請參見第4章「CLAGE應用程式Smart Control」。

Software Info	
Version	1.4.2
Imprint	›
Open Source Licenses	›
Expert Mode	OFF

軟件信息(Software Info)：可在此處查看有關操作系統、版本說明和許可證的信息。也可以在此啟動「專家模式」。在專家模式下，您可以存取敏感的系統設置和功能。

User	
Add User	⊕
Andreas	✎ ✕
Maria	✎ ✕

用戶(USER)
最多8個用戶可輸入名稱及設定用戶圖像。該圖像與用戶名稱並排出現在主屏幕中。

在主屏幕中，每個用戶都可以為不同的應用程序設置並保存自己想要的溫度。

點擊+符號添加更多用戶；點擊筆符號以編輯已存檔的用戶資料；點擊✕符號可刪除用戶資料。

Savings	
Electr. Tariff (HK$/kWh)	0.28
Water Tariff (HK$/kWh)	4.00
Eco Settings	OFF

節省設置(SAVINGS)
在這裡，您可以決定消耗統計中的成本參數，並啟用或停用節能模式。您可以在「設定」選單中選擇貨幣符號HK$(P.34)。

電費（HK$/kWh）：按電力供應商收費標準輸入電費單位價格。
水費（HK$/m³）：按水務署收費標準輸入水費單位價格。

節能設置：在節能模式下，出水溫度限制為節能值（洗手= 35°C，淋浴= 38°C，浴缸= 42°C，熱水= 48°C）。
另外，水流限制為8升/分鐘。

Device Information	
Power Consumption	0.0 kW
Flow Rate	0 l/min
Outlet Temperature	0.0 °C
Inlet Temperature	0.0 °C
Demand	0 kW

設備信息(INFO/DEVICE INFORMATION)
此處列出了當前狀態和設備數據。滑動以瀏覽不同的資料和數值。

功率極限
熱水器的最高功率輸出不足以加熱現時出水量至設定的溫度，控制閥會自動降低流量，以達到設定溫度。

補充加熱
當使用預熱水（例如太陽能系統）運行時，必須確保入水溫度不超過70°C。
如果入水溫度超過設定溫度，熱水器將不會輸出任何熱水。符號X顯示在主屏幕中。

如何節省能源
在熱水器上設置所需的溫度，然後打開熱水龍頭。一旦感覺到水太熱，請勿添加任何冷水，而應在熱水器上輸入較低的溫度。如果添加冷水，已經加熱的水將再次冷卻，浪費寶貴的能源。此外，水龍頭中添加的冷水將不受電子電路的控制範圍所覆蓋，可能導致溫度不恆定。

⚠️
警告

保養工作後的排氣程序

熱水器備有自動氣泡保護功能以防止非故意乾燒情
況。唯初次啟用前,必須先排氣。但每次熱水器因水喉工程、有結霜可能、或維修而需
排出儲水,必需將熱水器內空氣排出,方能再次使用。

1. 關掉熱水器電源總掣(例如保險絲)。
2. 拆下出水位的射流調節器,開啟冷水龍頭清洗水管,以免污染熱水器及射流調節器。
3. 開啟再關閉熱水掣,直至水管內不再排出空氣,及熱水器內空氣已完全排出。
4. 然後重新接駁電源(例如保險絲),裝回射流調節器。
5. 約10秒的不停水流將啟動熱水器。

清潔與保養

· 塑料表面及配件只可用濕布擦拭。請勿使用腐蝕性或含氯元素之清潔劑或溶劑。
· 為確保良好供水,應定期擰開並清洗出水口配件(特別水龍頭及花灑噴頭)。每隔三
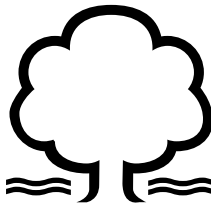 年,電氣和水管組件應由授權專業人士檢查,以確保安全正常運作。

安裝應用程式

ANDROID

APPLE IOS

熱水器設定 (DEVICE SETUP)

Device Setup	
Name	DSX TOUCH [XXXX]
Model	DSX TOUCH
Device Identifier	2049D7DC84

為熱水器重新命名

1. 進入設置選單,然後選擇「設備」。
2. 選擇 " DSX TOUCH [XXXX]"
3. 點擊設備名稱,更改為「DSN」或任何其他名稱。

初次啟動

· 僅當熱水器受防火牆保護時,才將之連接到互聯網,以防止未經授權的存取。
· 使用安全的Wi-Fi密碼保護熱水器,以防止未經授權的存取。該密碼應該由字母、
  數字和特殊符號所組成,並且不應用常見詞語。

1. 確保即熱式熱水器已連接電源。
2. 在平板電腦/智能手機上安裝應用程式。在Apple App Store或Google Play Store中搜
   索「CLAGE Smart Control」,然後安裝該應用程式。完成後,請暫時不要啟動該應
   用程式。
3. 將DSN以Wi-Fi連接至家庭網絡。在設置選單中進入「設備」(Device),選擇DSN 家
   用伺服器,在「進階」(Advanced)選項裡選擇操作模式為「客戶端」(Client)或「接
   入點」(Accesspoint)。

**注意:如果無法使用所輸入的存取數據登錄,則會出現一條錯誤消息。檢查存取
數據,然後按「確定」。**
注意:幾秒鐘的延遲是正常的,取決於網絡結構和使用效率。

設置為客戶端

Home Server	
Name	DSN
Server ID	F8F005D7DC84
Advanced	>
Software	DSX3CP-v1.1.0 >
	Connect...

1. 熱水器範圍內找到的所有網絡均在「網絡」(Network)中列出。點擊您的SSID以選擇
   您的家庭網絡。如果您的家庭網絡SSID是隱藏的,則必須將其臨時設置為可見以進
   行連接。
2. 輸入您的Wi-Fi密碼,然後點擊「確定」(Apply)。
3. DSN會更新Wi-Fi設置,並嘗試使用新的存取數據連接路由器。平板電腦/智能手機
   必須連接到同一網絡。
4. 啟動Smart Control應用程式,成功登入家庭網絡後,即可通過該應用程式連接
   DSN。
5. 在Smart Control應用程式中,可以透過設置選單中進入「設備」(Device),選擇DSN
   家用伺服器並點擊「連接...」(Connect...)來檢查是否安裝成功。如成功安裝,應用程
   式將顯示:可以使用DSN。
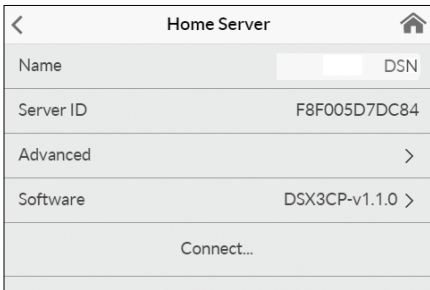
設置為接入點

如果您想將DSN用作獨立的存取點，請設置安全密碼以防止未經授權的存取：

1. 通過Wi-Fi將平板電腦/智能手機連接到DSN。
2. 在平板電腦/智能手機的設置選單中選擇Wi-Fi，然後輸入DSN的連接數據：
   SSID = CLAGE-DSN …（請參閱銘牌）。銘牌位於熱水器底部面板下方。
   密碼=密碼是隨機生成的，也印在銘牌上。
3. 通過應用程式控制熱水器溫度。於智能手機/平板電腦上改變溫度，將自動更新成為熱水器上的顯示值，反之亦然。

注意：如果您忘記了密碼，請聯繫客戶服務及維修中心。

啟用/停用Wi-Fi (WLAN ON/OFF)

在設置選單中進入「設備」，選擇DSN Server並點擊「進階」(Advanced)，您可以啟用或停用Wi-Fi。

<	Advanced	⌂
WLAN		ON
Operation Mode		Client >
The Home Server is connected to your existing WIFI-Network.		
Network		CLAGE_DEV_T1 >
Password		

軟件更新(SOFTWARE UPDATE)

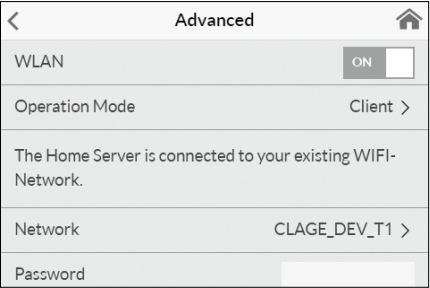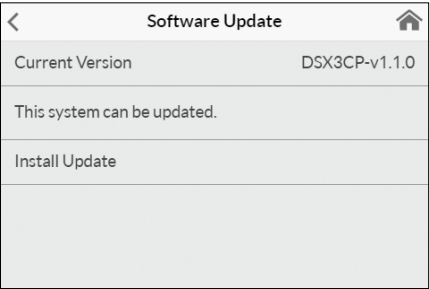| <	Software Update	⌂
Current Version		DSX3CP-v1.1.0
This system can be updated.		
Install Update		

更新Smart Control應用程式

我們建議使用最新的軟件，以確保DSN家用伺服器能安全及準確運行。

任何新的應用程式版本將在應用程式商店中顯示。

- **更新iOS設備**：如要更新應用程式，請在Apple App Store中點擊「更新」(Update)，然後點擊Smart Control應用程式右側的「更新」按鈕。
- **更新Android-OS設備**：如要更新應用程式，請在Google Play Store中選擇Smart Control應用程式，然後點擊「更新」按鈕。

更新DSN韌體

注意：更新期間，請勿斷開DSN的電源。

如要進行韌體更新，必須將DSN連接到具有互聯網存取權限的Wi-Fi網絡。
在更新期間，本熱水器將無法使用。

1. 在設置選單中進入設備設置：（主選單-設置-設備）。
2. 選擇需要更新的DSN。
3. 選擇「軟件」，然後選擇「安裝更新」並點擊確認。
4. 等待約3-5分鐘，直至控制面板重新啟動，然後請檢查DSN的功能。

如果嘗試多次仍無法更新，請聯繫客戶服務及維修中心。

使用(Use)

「使用指示」中描述的所有功能，均可透過Smart Control應用程式操控。

⚠️

警告

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，請聯繫客戶服務及維修中心。請記錄銘牌詳細資訊。

香港總代理
德國寶(香港)有限公司

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電郵: info@germanpool.com

本熱水器出廠前經多次反覆測試，如有故障，一般由小問題引致。首先可嘗試重新開關電源以重設電子設定。其次可參考以下列表措施解決問題，這樣可節省不必要的維修費用。

DSN		
問題	原因	解決方案
出水為冷水，輕觸顯示屏不亮	總保險絲跳閘	更換或接通保險絲
	限壓斷電安全裝置跳閘	聯繫客服中心
顯示屏顯示 🔧 符號	設備檢測到錯誤	關保險絲後再打開。如果仍然顯示「扳手」符號，聯繫客服中心
熱水流速過低	出水口配件變髒或鈣化	清潔花灑頭、射流調節器或過濾網
	精濾器變髒或鈣化	請客服中心專業人員清潔精濾器
	出水量受到限制	停用節能模式及水流限制
不能達致所選溫度	水流量過高	在「水流限制」選單中（重新）啟動機動閥
	通過水龍頭添加了冷水	僅使用熱水；設定溫度，檢查出水溫度
輕觸顯示屏無法正確回應或僅偶爾回應	顯示屏濕了	用軟布擦乾顯示器
應用程式無法找到DSN	總保險絲跳閘	更換或接通保險絲
	超出Wi-Fi接收範圍	將平板電腦/智能手機靠近連接點（路由器或DSN）
	Wi-Fi已停用（飛行模式）	在平板電腦/智能手機上啟用Wi-Fi
	平板電腦/智能手機連接至與DSN不同的Wi-Fi網絡	連接與DSN相同的Wi-Fi網絡

1. 概觀圖

熱水接駁
底部
DSN外殼
感溫斷電安全裝置
連接喉
PCB面蓋
恒溫感應器
伺服摩打電子組件
止回閥
流量感應器
加熱元件
PCB
恒溫感應器
傳輸模組
限壓斷電安全裝置SDB
伺服摩打
出水管
入水管
精濾器
熱水接駁
冷水接駁
框架
防濺水套

旋入杭牙1/2"
電線封套

2. 規格

型號	DSN			
歐盟能源效益標	A *)			
額定功率 / 額定電流	18 kW..27 kW (26 A..39 A)#			
選擇功率 / 電流	18 kW / 26 A	21 kW / 30 A	24 kW / 35 A	27 kW / 39 A
電氣連接	3~/PE 380..415 V AC			3~/ PE 400 V AC
所需最小電線尺寸 1)^	4.0 mm^2	4.0 mm^2	6.0 mm^2	6.0 mm^2
熱水（公升/分鐘）2) 最大值 Δt = 28 K 最大值 Δt = 38 K	9.2 6.8	10.7 7.9	12.3 9.0	13.8 10.2
額定容量	0.4 l			
額定壓力	1.0 MPa (10 bar)			
連接類型	耐壓 / 無壓			
加熱系統	裸線加熱系統IES®			
@ 水溫為15℃時的比電阻導電性	≥ 1100 Ω cm ≤ 90 mS/m			
入水溫度	≤ 70 °C			
啟動流速 - 最高流速	1.5 l/min – automatic 3)			
壓力損耗	0.08 bar at 1.5 l/min 1.3 bar at 9.0 l/min			
溫度選擇	20 – 60 °C [70 °C]			
水管接頭	G½ inch			
重量（裝滿水後）	4.5 kg			
VDE防護等級	I			
防護 / 安全類型	DVE GS VDE EMV IP25 CE			

*) 符合歐盟法規No.812/2013的要求
額定電流以德國標準計算，例如：18kW/√3/400=26A
^ 電線尺寸根據機電工程署的電力（線路）規例工作守則表A6(1)3. 混合熱水
1) 從熱水器頂部接駁電源，最大電線尺寸10平方毫米
2)混合熱水
3)電子恒溫以最低溫度及水溫差別作水流控制

· 所有資料僅供參考，如有錯漏以廠方生產的規格為準。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，一概以英文版為準。
· 本產品使用説明書以ww.germanpool.com網上版為最新版本。

3. 環保及循環再造

本產品由高質量、可重複使用的材料和組件製成。請注意在使用壽命結束時，如果要丟棄電子設備，應將其與生活垃圾分開處理。因此，請將本設備帶到市政收集點，將用過的電子設備進行回收。正確處理該設備將有助於保護環境，並避免在使用壽命到期時因對這些設備的不當處理而導致對人類和環境造成任何潛在的負面影響。請與您當地的當局聯繫，以獲取離您最近回收站的更多詳細信息。

商業客戶：如果您希望丟棄本設備，請聯繫您的經銷商或供應商以獲取更多信息。

尺寸單位為：mm（毫米）

CLAGE

Lüneburg

DIN 4109

PA-IX 16952/I

MPA NRW.
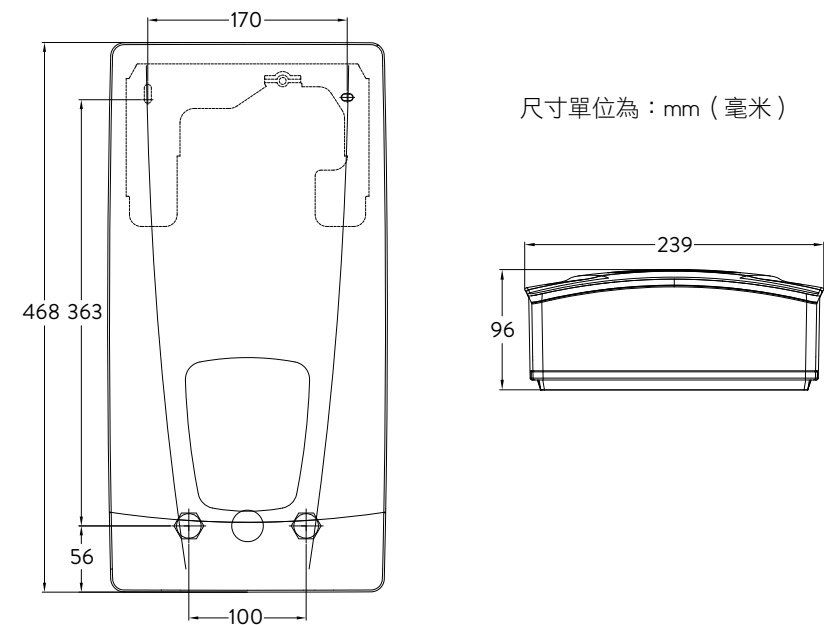
根據德國準則，頒發了有關噪音行為適用性證據的通用測試證書。

安裝時必需遵照下列守則：

· e.g. VDE 0100
· EN 806
· 當地有關之電線安裝條例、安全標準、電力供應商或水務署之安全條例。
· 銘牌上的產品規格。
· 必須使用完好和適當的工具。

安裝地點

· 必須安裝於全年都不結霜之房間內。切勿讓熱水器暴露於霜雪中。
· 此熱水器只可作掛牆式安裝，出入水接駁喉位向下；如橫向安裝，水管接駁喉必須置放於左邊。
· 根據VDE 0100 part 701（IEC 60364-7），熱水器的防護等級為IP25，熱水器必須安裝於保護區1內。
· 為避免失溫，應將熱水器安裝於最接近出水位置。
· 該設備必須安裝於易於維修保養的位置。
· 如選用膠喉，該膠喉必須符合DIN 16893 Series 2規格。
· 來水於15℃時，水電阻最少應為1,100Ω cm。有關詳情可向水務署查詢。
· 切勿將熱水器安裝在金屬表面附近，以確保無線連接穩定及最佳化無線接收範圍。

裝掛配件
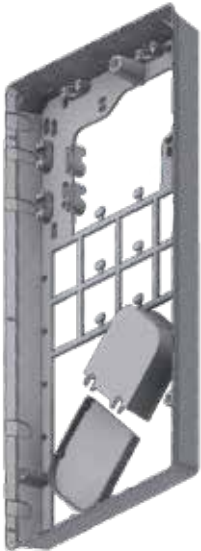
若所選熱水器安裝地點難以安裝，可選配下列裝掛

配件：
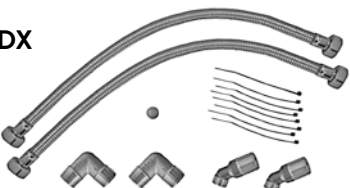**裝掛套裝 RDX3**
（序號：36100）
在下列情況，可以用此裝掛套裝來安裝熱水器。當安裝牆壁表面不平均，而電源線出線位又正在這表面之上，令熱水器難以安裝。
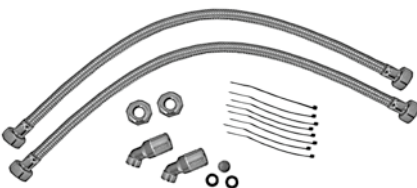使用RDX時，保護等級從IP25更改為IP24。

RDX3

VDX

擴展套件 VDX
（序號：34120）- 必須與RDX同時使用
在下列情況，此擴展套件可以用來安裝熱水器。當水管冷熱水位倒置、水管出牆位置需要改動、或熱水器位置貼近牆壁邊緣時使用。電源線可從熱水器的下方出牆或以明線安裝。

UDX

擴展套件 UDX
（序號：34110）- 必須選用RDX
在下列情況，可以用此擴展套件來安裝熱水器。當水管在熱水器之上方連接。電源線從熱水器的下方出牆或以明線安裝。
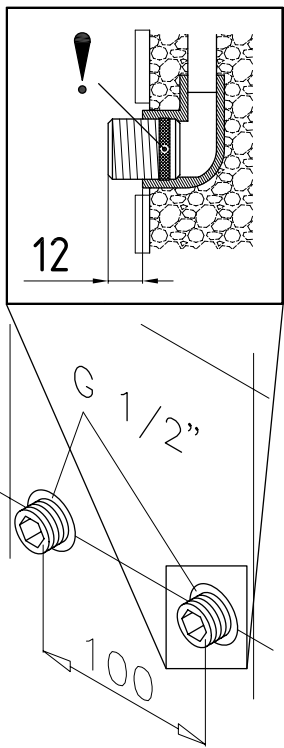
安裝牆上掛碼

注意：如果此即熱式熱水器用以更換傳統形式即熱式熱水器，一般無需於牆上再另外鑽孔安裝。在此情況下，無需理會步驟2。

安裝前先徹底清洗供水喉管，去除管內任何污垢。

1. 用12毫米六角匙將杭牙旋入牆上接駁位置，密封墊必須完全旋入螺齒內。旋妥杭牙後，杭牙應外露12-14毫米。
2. 將附上的模板放在牆上適當位置以配合杭牙位置。根據模板位置記下鑽孔位置，用6毫米鑽咀鑽孔，放入固定銷旋入掛碼。
3. 請拉下面板並撐下主蓋螺絲以打開設備。
4. 鬆開牆上掛碼的滾花螺母，卸下牆上掛碼，然後將掛碼撐在牆上。 借助隨附的墊片，最多可補償30毫米的傾斜瓷磚或不平整的表面。將墊片安裝在牆壁和牆上掛碼之間。
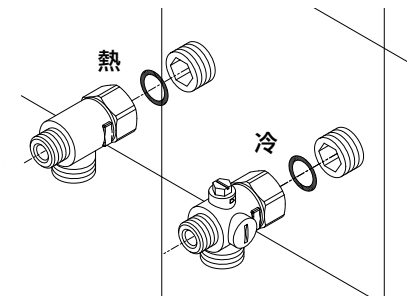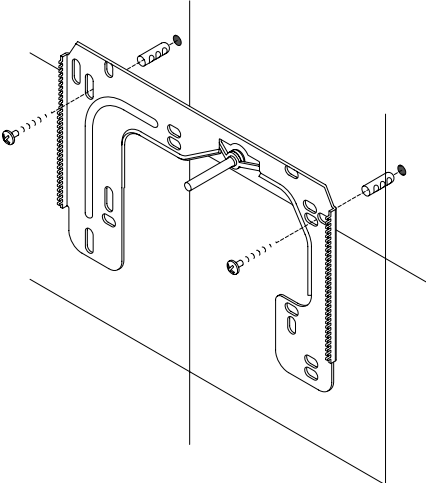
安裝接駁配件

注意：旋緊螺母時應小心避免損壞閥或喉管。
1. 如圖所示將緊固螺母及1/2"密封圈連接上冷水進水配件。
2. 將緊固螺母1/2"密封圈連接上熱水出水配件。
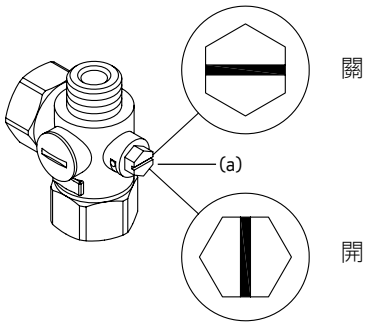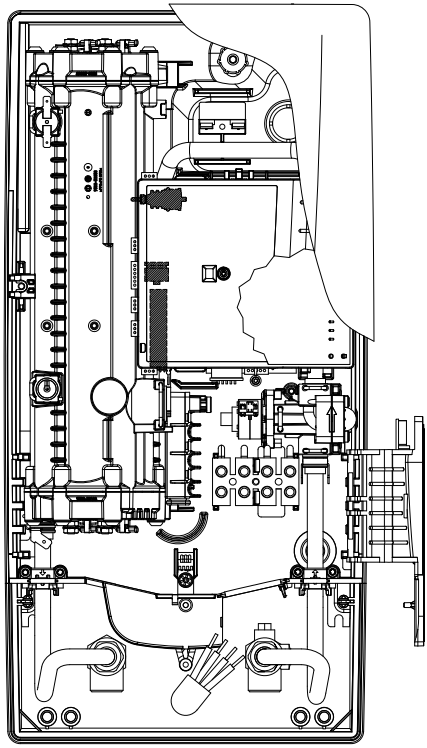
安裝熱水器

電源電纜可以連接在熱水器上部或以明線安裝。僅在這種情況下，首先按照「電線接駁」章節中的「從機頂接駁電線」部分的指示執行步驟1至3。

1. 將熱水器掛在掛接背板上，如有需要可小心將略為螺紋棒彎曲。注意，彎曲螺紋棒後旋上進出水配件時應無需使用蠻力。
2. 將塑膠滾花螺母旋入牆上掛碼螺紋棒上。
3. 將兩個3/8"緊固螺母及3/8"密封圈旋入進出水管連接配件內。
4. 打開連接熱水器的冷水供水喉，慢慢旋開冷水連接配件的閘掣(a)（位置：開），查看有否滲漏。
5. 接著連續來回打開及關閉熱水龍頭數次，直至水龍頭再沒有空氣排出，及熱水器內的空氣已完全排出。

關

開
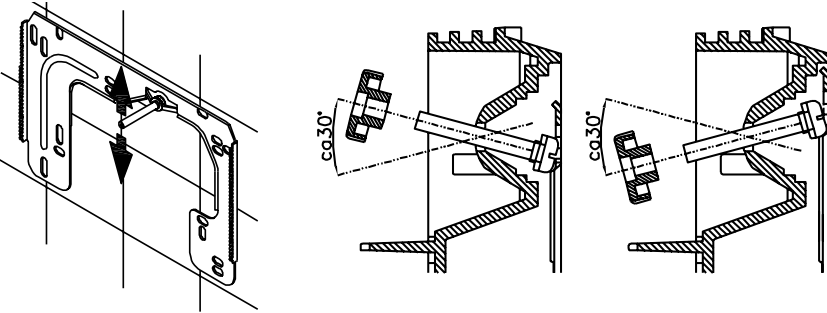
注意：預留生口位
如熱水器安裝在隱閉位置（例如石膏板假天花），必須預留600x600毫米生口位以便日後保養和維修之用。

6. 直接接駁
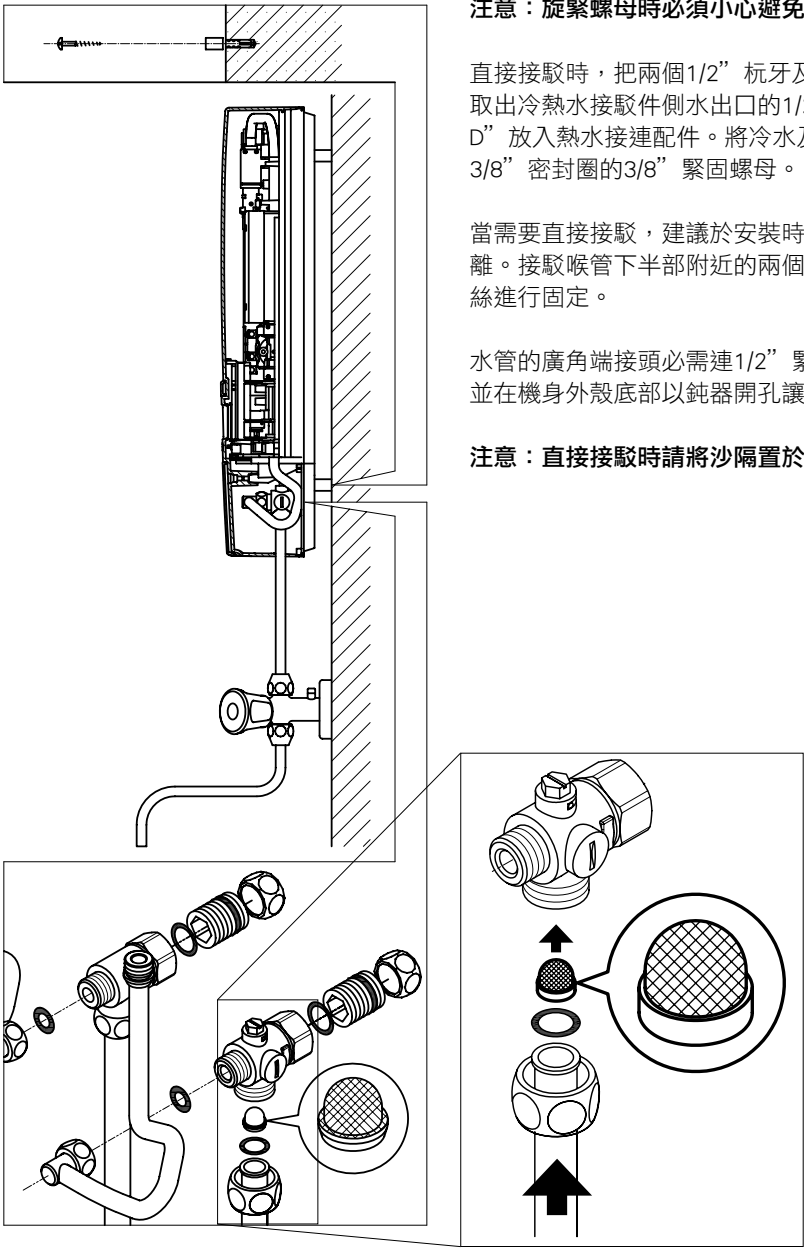
注意：旋緊螺母時必須小心避免損壞閥或喉管。

直接接駁時，把兩個1/2"杭牙及1/2"密封圈旋入冷熱水接駁件的1/2"緊固螺母內。取出冷熱水接駁件側水出口的1/2"密封帽，然後旋入杭牙外露的一端。將減水閥"D"放入熱水接連配件。將冷水及熱水的接連配件旋入熱水器入水位及送水管已加上3/8"密封圈的3/8"緊固螺母。

當需要直接接駁，建議於安裝時，使用跟機的間隔套讓熱水器跟牆壁保持一個合理距離。接駁喉管下半部附近的兩個固定孔，也應由專業技術人員以6毫米的固定銷和螺絲進行固定。

水管的廣角端接頭必需連1/2"緊固螺母及1/2"密封圈旋入冷熱喉的1/2"接連配件。並在機身外殼底部以鈍器開孔讓冷熱水喉穿過。

注意：直接接駁時請將沙隔置於冷水入水接駁位！

7. 電線接駁

線路圖
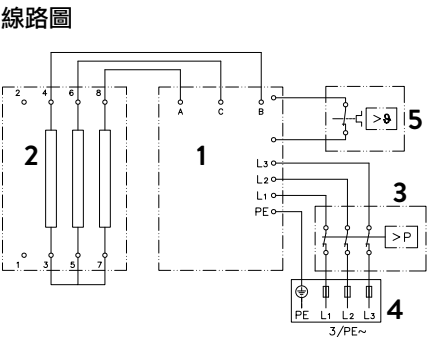
1. 電子電路板
2. 加熱元件
3. 限壓斷電安全裝置
4. 簪玉
5. 感溫斷電安全裝置

注意：必須由獲取認可資格的專業技師負責!

請注意：
- e.g. VDE 0100
- 必須按現行之IEC標準、當地的電線安全標準及法規、及根據任何當地電力供應商之標準或法規安裝。
- 參照銘牌上註明的技術規格。
- 熱水器必須接駁地線！

結構要求
- 熱水器必須穩固永久接駁安裝。熱水器必須接駁地線！
- 電線不應損壞，安裝後電線不應可以直接觸摸得到。
- 電源開關應為全極式開關（經保險絲），兩極之間應保持最少3毫米距離。
- 為保護熱水器，必須安裝符合熱水器標稱電流、並具過載電流功能及開關設定特性為C類的保險絲。

減載繼電器
如會同時接駁其他三相電器，可以將用專為電子即熱式熱水器設計的減載繼電器接駁至導電器L2。

如要更改操作模式，請在進行電線接駁和初次啟動時，開啟設置選單，然後選擇「減載繼電」模式。

選擇"x"進入調校模式。設置"0"、"1"或"2"，請按住x或x兩秒鐘。通過根據鎖定功能插入配線（請參閱章節7，初次啟動、鎖定功能），可以啟動減載繼電模式。

數值	描述
0	無配用減載繼電器運行，出廠設置
1	配用正常減載繼電器運行
2	配用高靈敏度的減載繼電器運行

必需先選擇模式1，以檢視低電量操作的減載繼電器操作正常(35℃設定及低水流量)。如繼電器閃動，需選擇模式2。

從機底接駁電線

注意：如有需要，可將簪玉移至熱水器上半部，如需這樣做，請參照下一部份指示。

接駁電線前，必須先確定電源已關上！

1. 從牆壁插座位拉出約6厘米電線，套入防水套管，使套管與牆身齊平，確保如有漏水也不會沾濕電線，以保護電線完好。必須使用防水套管！
2. 打開控制面板。
3. 剝去電線外皮並依著電路圖表將其接到簪玉上。此熱水器必須連接地線。
4. 將防水套管拉上套著接駁電線，直至防套管完全套入中間層板的凹位。依圖調整防水套管，並以套管固定件(A)進行固定。重新裝上控制面板並將其鎖緊。
5. 將外殼裝回熱水器上，然後擰緊螺絲。之後，您可以從下到上滑動面板。
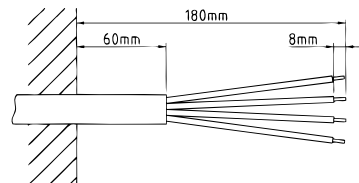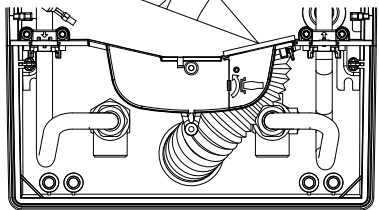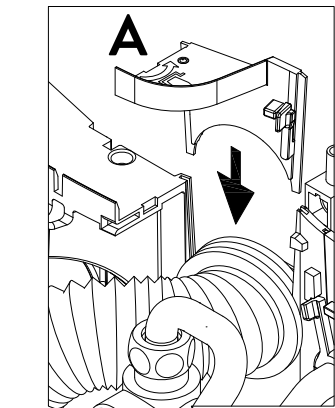
警告
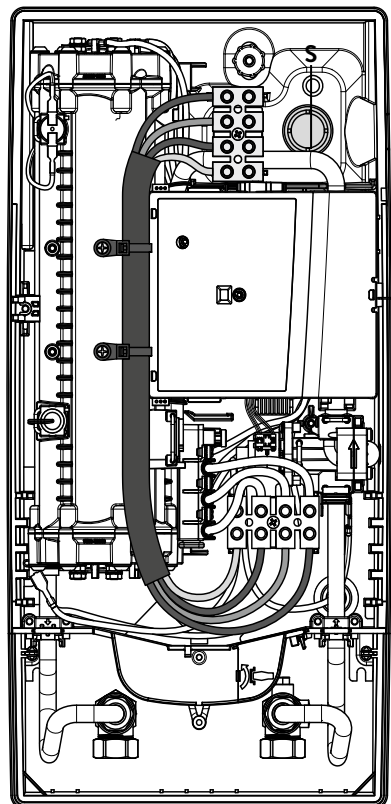
從機頂接駁電線

接駁電線前，請必先確定電源已關上。

1. 用鈍器（例如螺絲批）按壓打開熱水器膠板上部的預設孔口(S)。如果採用明線安裝，則須同時打開熱水器右下方的預設孔口。
2. 介開配件套裝的電線固定環至符合電線粗度。介開的面積應略為比電線窄少許，以確保最佳的防水性能。將電線固定環安裝到開口中。必須使用電線保護固定環！
3. 剝開電線，讓電線保護套穿過電線固定環延伸到設備中。握住熱水器，以便您可以用另一隻手將電線佈線到固定環中。
4. 將熱水器掛在背碼上，讓背碼的螺紋柱套入熱水器相應的孔內。
5. 打開控制面板。
6. 旋鬆電線簪玉的螺絲，簪玉移往上腳口，再接駁簪玉。
7. 剝開電線，按照線路圖接駁至簪玉。此熱水器必須接駁地線。
8. 重新裝上控制面板並將其鎖緊。
9. 將外殼裝回熱水器上，然後擰緊螺絲。之後，將面板從下滑上裝好。

注意：為確保達到IP25防護等級，請勿移除底部的防水管套。

警告

接駁電源前，先讓水注入喉管及熱水器內，然後慢慢開關熱水水龍頭數次，以將熱水器內的空氣完全排出。

為了確保最大流量，請拆除水龍頭上任何現有的加壓器。分別沖洗熱水和冷水管道至少1分鐘。

每次徹底排水之後(例如因為維修或水喉工程後)，必須先以此方法將熱水器內的空氣完全排出，方可再啟動熱水器。

SDB

若熱水器無法運行，有機會是運輸過程中感溫斷電安全裝置或限壓斷電安全裝置跳閘。如有必要，請檢查電源是否已關閉並重置安全裝置開關。

功率選擇

必須由獲取認可資格的專業技師調校，否則保養作廢！

熱水器送抵府上時，顯示屏會顯示「Approved」(見左圖)。如沒此圖示，則表示熱水器曾接通電源。此情況下，請參照「重新安裝說明」安裝。

初次接駁電源時，選擇最大功率。只在設定功率後，熱水器才進入標準操作模式。

STB

最大可容許功率需視乎安裝地點情況而定。必須注意技術規格表內所提供的全部資料，特別是電源線的要求及電線接駁的保險絲保護。所有電線接駁安裝必須遵照安裝地點的有關法例（德國：DIN VDE0100）。

1. 接通設備的電源。
2. 初次啟動時，顯示屏顯示語言選單。選擇您的語言，然後會出現功率等級的選擇。
3. 按感應鍵選擇安裝當地所容許之最大功率(18、21、24或27kW)。
4. 選擇”OK”確認設置。
5. 在銘牌上標記設置的額定功率。
6. 在設置最大可容許功率後，加熱元件將在持續水流約10-30秒後啟動。
7. 打開熱水龍頭，檢查熱水器功能。
8. 將使用說明交給客戶，並向客戶解釋熱水器怎樣操作。
9. 初步操作妥當後，請填妥及寄回保用證。

多功率調校系統MPS®：
額定功率(最高能源耗用量)為
27kW/400V，可內部轉換為
24kW、21kW或18kW。

重新安裝說明

當熱水器需要與初次安裝情況下有別的狀態下重新安裝，安裝時可能需要設定為最大功率。

暫時性的兩極短路，例如使用符合EN60900的螺絲批(如圖所示)，會將熱水器的所有參數回復到出廠設定，並鎖定溫度。及顯示屏會顯示語言選單。選擇您的語言，然後會出現功率等級的選擇。即使關掉熱水器電源也能保持這些設定。

3 2 1

淋浴應用

若將此熱水器連接到花灑頭，則熱水溫度必須限制在55℃以內。在與客戶協商後，必須在設置選單中將溫度極限值設置為等於或小於55℃，並且必須啟動鎖定功能。

使用預熱水操作時，亦必須確保將溫度限制在55℃以內。

鎖定功能
可以限制設備的操作模式。
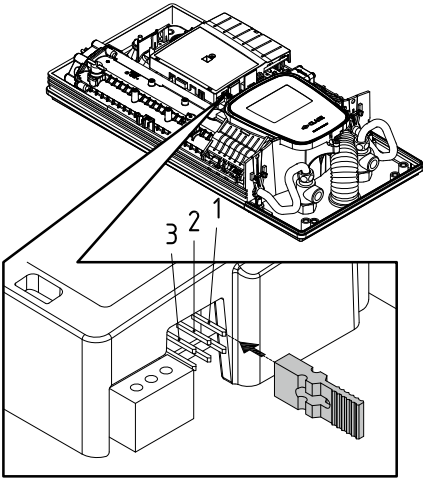
啟用鎖定功能
1. 通過設置選單選擇所需的參數（請參閱「使用指示」，「溫度限制」和／或「減載繼電器」）。
2. 斷開熱水器電源（例如關掉保險絲）。
3. 從電子控制板取下配線，並將其轉到位置"1"（參見圖片）。
4. 再次運行熱水器。

停用鎖定功能
1. 斷開熱水器電源（例如關掉保險絲）。
2. 從電子控制板取下配線，並將其轉到位置"OFF"（參見圖片）。
3. 再次運行熱水器。

關

開
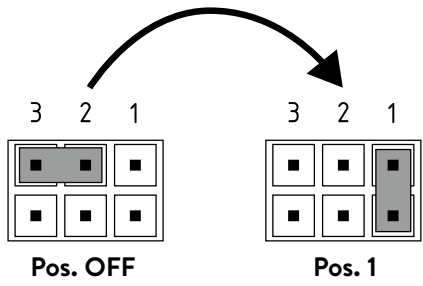
注意：必須由獲取認可資格的專業技師負責!

清洗及更換沙隔
熱水器的冷水入水接駁位配備有綜合式的閘制及沙隔，沙隔藏有污垢會減低熱水出水量，必須定時清理或更換。步驟如下：
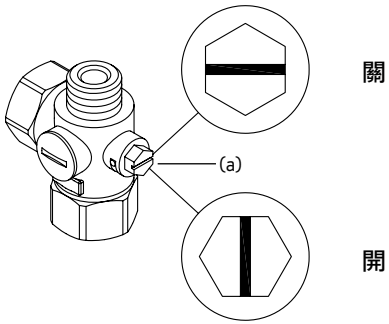
1. 先關掉電源（例如關掉保險絲）以防止電源意外接通。
2. 打開熱水器：先把小蓋掩取下，旋出蓋掩下面的螺絲，然後卸下外殼。
3. 關掉冷水接駁件的閘制(a)（狀態：「關」）。
4. 從冷水喉旋出螺絲塞子(b)，然後取出沙隔(c)。**注意：殘留的水可能會漏出。**
5. 清洗或更換沙隔。
6. 放回沙隔後，旋緊螺絲塞子。
7. 慢慢打開冷水接駁件的閘制（狀態：「開」）。確保沒有洩漏。
8. 慢慢開關相應的溫水龍頭數次直至熱水器內的空氣完全排出。
9. 將外殼裝回熱水器，然後再接通電源（例如打開保險絲）。

沙隔
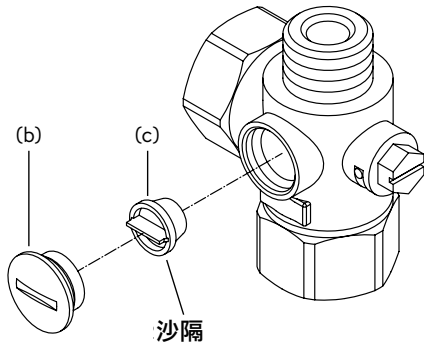
直接接駁時清潔並更換沙隔
熱水器的冷水入水接駁位配備有綜合式的閘制及沙隔，沙隔藏有污垢會減低熱水出水量，必須定時清理或更換。步驟如下：
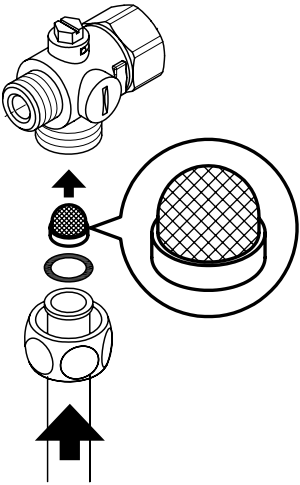
1. 先關掉電源（例如關掉保險絲）以防止電源意外接通。
2. 關掉向熱水器的主供水閘制。
3. 打開熱水器外殼，先把小蓋掩取下，旋出蓋掩下面的螺絲，然後卸下外殼。
4. 從冷水喉旋出螺絲塞子，然後取出沙隔。**注意：殘留的水可能會漏出。**
5. 清洗或更換沙隔。
6. 放回沙隔後，重新接駁上主供水組件。
7. 慢慢打開主供水閘制。確保沒有洩漏。
8. 慢慢開關相應的溫水龍頭數次直至熱水器內的空氣完全排出。
9. 將外殼裝回熱水器，然後再接通電源（例如打開保險絲）。

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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，郵寄至本公司。

另請填妥以下表格並與正本發票一併保存，以便維修時核對資料。用戶提供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 original purchase invoice will be required for any repairs. Warranty will be invalidated if information provided is found to be inaccurate.

型號 Model No. : **DSN**

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

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

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

中國香港

九龍灣啟興道1-3號

九龍貨倉10樓

電話：+852 2333 6249

傳真：+852 2356 9798

電郵：repairs@germanpool.com

中國澳門

澳門俾利喇街145號

寶豐工業大廈3樓

電話：+853 2875 2699

傳真：+853 2875 2661

Warranty Terms & Conditions

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

* This warranty is not valid until customer registration information is received by our Service Centre within 10 days of purchase via one of the following means:

1) Visit our website and register online: **www.germanpool.com/ warranty**

2) Complete all the fields on the attached Warranty Card and mail it back to our Customer Service Centre.

1. Customer who fails to present original purchase invoice will not be eligible for free warranty service.

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 material transfer and others);
   - operating failures resulting from applying incorrect voltage, improper usage, and unauthorized installations or repairs.

3. This warranty is invalid if:
   - the purchase invoice is modified by an unauthorized party;
   - the product is used for any commercial or industrial purposes;
   - the product is repaired or modified by unauthorized personnel, or unauthorized parts are installed;
   - the serial number is modified, damaged or removed from the product.

4. German Pool will, at 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

Hong Kong, China

10/F, Kowloon Godown

1-3 Kai Hing Road, Kowloon Bay,

Kowloon, Hong Kong

Tel   : +852 2333 6249

Fax   : +852 2356 9798

Email   : repairs@germanpool.com

Macau, China

3/F, Edificio Industrial Pou Fung,

145 Rua de Francisco Xavier Pereira,

Macau

Tel   : +853 2875 2699

Fax   : +853 2875 2661

此保用只適用於香港及澳門 | This warranty is valid only in Hong Kong and Macau

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，一概以英文版本為準。本產品使用說明書以 www.germanpool.com 網上版為最新版本。Specifications are subject to change without prior notice. If there is any inconsistency or ambiguity between the English version and the Chinese version, the English version shall prevail. Refer to www.germanpool.com for the most up-to-date version of the manual.

GERMAN
POOL

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Fax: +853 2875 2661

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十大影響力品牌
2008

CEO非凡品牌大賞
2007

香港星級品牌
企業獎
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2008

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創建品牌企業獎
2007

香港中小企業
最佳拍檔大獎
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