

**CLAGE** 

### Instantaneous Electric Water Heater

# DEX12



歐盟A級能源效益認證 EU ENERGY EFFICIENCY CLASS A

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











USER MANUAL

Printed in Germany WH-DEX-12-M-18(6)

### 請即進行保用登記!

有關保用條款細則,請看本説明書最後一頁。

Please register your warranty information now!

For Warranty Terms & Conditions,

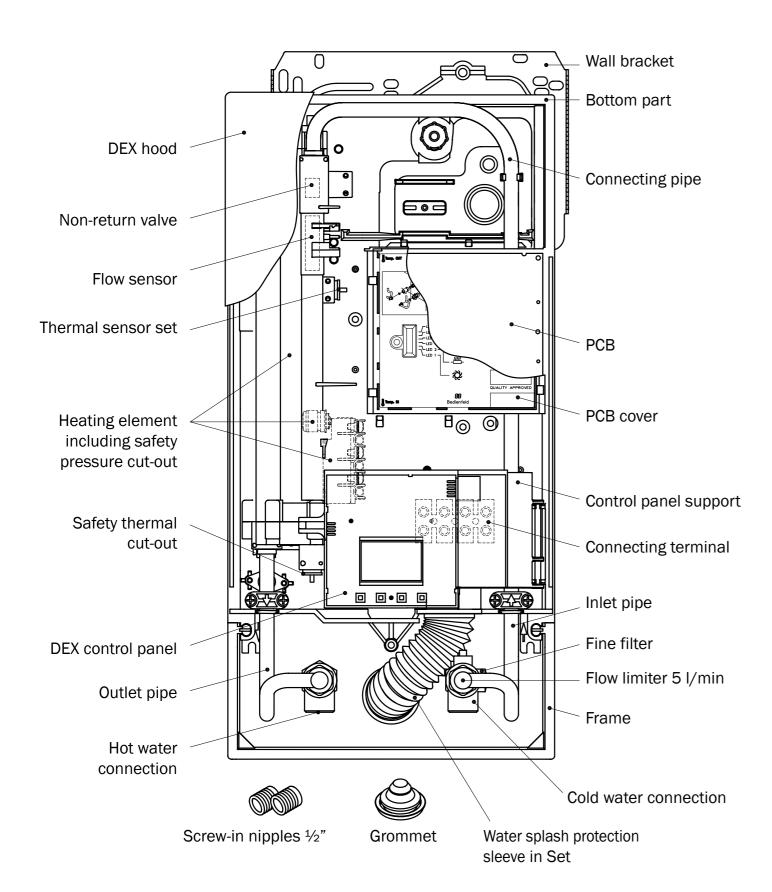
please refer to the last page of this user manual.

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Note: Carefully read the enclosed safety instructions through in full before and follow them during use.	ore using the appliance

### 1.0verview

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



### 2. Safety Instructions

### Warning

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

Part1-11 is intended for the specialist who is responsible for the installation of the appliance. Part2, 12 and 13 are for the end user. The provided manuals correspond to the technical specifications of the appliance.

The latest version of the instructions can be found online at German Pool website.

- 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, frost-free 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.
- The minimal specific water resistance must not fall below the value stated on the label.
- Do not remove the front cover under any circumstances before switching off the 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.
- 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 cold 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.

## 2. Safety Instructions

- 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.
- 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 pressure less 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.

## 2. 安全守則

### 注意

本熱水器必需由合格技師負責安裝、初始操作及保養,以確保符合有關安全標準及安裝條例。本公司對未遵照此規定而引致之損失或問題概不負責。

安裝及使用本熱水器前請仔細閱讀本説明書。妥為保存説明書。

説明書1-11部分為負責安裝的專業人員必讀內容。第2、12和13部分為使用者必讀內容。本説明書內容與產品的技術規格相一致。

本説明書最新版本請查閱德國寶官方網站。

- 熱水器尚未完全穩妥安裝或被確定一切操作正常之前,請勿使用熱水器。
- 本熱水器只適宜用於室內不結霜的環境作家居用途,並只適宜將自來水加熱。
- 切勿將本熱水器暴露於結霜的環境中。
- 本熱水器必須時刻接地。
- 來水電阳不可低於規格表上列明之數值。
- 任何情況下,在關掉電源前,不能打開面蓋。
- 切勿對本熱水器(包括熱水器機體、電線或水管)作出任何技術性改動。
- 請注意溫度高於43°C的水會被界定為熱水(對於小童尤甚),並可引致燙傷。熱水器經使用一段時間後,水喉配件可能會很熱。
- 必須注意銘牌上所標籤之數值。
- 如遇上故障,請即關掉電源。如有漏水,應即關掉冷水水源。並必須由總代理的合格技師維修。
- 除有負責其安全的人士監督或收到如何使用本熱水器指示,否則任何活動能力有限或情緒、神智有問題的人士不可使用本熱水器。必需監督兒童以確保兒童不會把玩熱水器。
- 如果熱水器配備的原廠電源線損壞,必須用原廠電源線並由授權之專業人員更換,以避免發生危險。
- 固定連接的熱水器,接線箱必須要有符合VDE 0700標準的斷路器,斷路器每一極的接觸 開口至少要有3厘米。
- 掛接背板必須用螺絲和壁塞固定在牆上,然後將熱水器安裝在掛接背板上。熱水器必須 正確裝妥於掛接背板,才能正常運作。
- 任何時候,水壓力都不可超過銘牌上的數值。
- 任何時候,來水電阻都不可低於銘牌上的數值。
- 無壓安裝須注意以下事項:
- 切勿堵塞熱水器後的出水管或限制水流。
- · 必須定期清潔熱水器的水管、花灑頭和噴水調節器,清除堆積的污物和水垢,以免影響熱水器功能。
- · 必須使用生產商指定的配件。
- · 如需安裝花灑,必須使用生產商指定的花灑頭。請勿使用任何會減少水流量的配件。

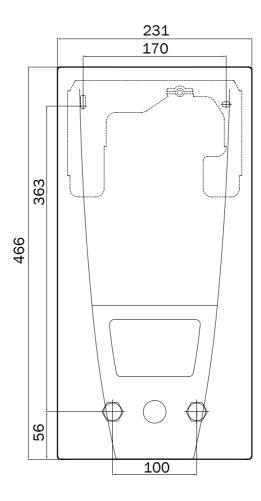
## 3. Technical Specifications

DEX 12 ELEC	TRONIC MPS®	Model
Д	<b>\</b> #	Energy efficiency class
8.8	12	Power setting
8.0 kW (36.6 A)	10.5 kW (47.7 A)	Chosen capacity (Current) @ 220 V
8.8 kW (38 A)	11.5 kW (50 A)	@ 230 V
9.6 kW (40 A)	12.5 kW (52.2 A)	@ 240 V
1/N/PE 220V	230V 240V	Electrical connection
10.0	mm²	Minimum required cable size required cable size
4.5 3.3	5.9 <sup>1)</sup> 4.3	Hot water (I/min) max. at $\Delta t$ = 28 K max. at $\Delta t$ = 38 K
0.	41	Rated pressure
Pressure type 1	, 0 MPa (10 bar)	Maximum static pressure
Pressure resista	nt / Pressureless	Connecting type
Bare wire heati	ng system IES®	Heating system
≥ 1,30	00 Ωcm	Required spec. water resistance @ 15 ° C
≤ 77 r	mS/m	Spec. electrical conductivity
Below	25°C	Inlet temperature
2.5 - 5.0	0 l/min <sup>2)</sup>	Flow rate to switch on - max. flow rate
0.2 bar/at 2.5 l/min mi	1.3 bar/ at 9.0 l/ n <sup>3)</sup>	Pressure loss
20 °C -	- 55 °C	Temperature choice
G <sup>1</sup>	1/2"	Water connection
3.7	0 kg	Weight (when filled with water)
	I	VDE class of protection
IP25		Type of protection / safety

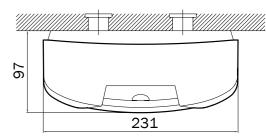
- #) The declaration complies with the preliminary requirements of the EU regulation No 812/2013
- 1) Mixed water.
- 2) Flow rate limited to achieve optimum temperature rise.
- 3) Without flow regulator.
- 4) Specifications are subject to change without prior notice.
- 5) If there is any inconsistency or ambiguity between the Chinese version and the English version, the English version shall prevail.
- 6) Refer to www.germanpool.com for the most up-to-date version of the User Manual.

Under normal working conditions, incoming pressure should not exceed 0.6 MPa. Otherwise, a separate pressure control device is necessary. When incoming water pressure exceeds 0.6 MPa, German Pool will not provide any repair service until a pressure control device is installed.

### 4.Dimensions



#### Dimensions in mm



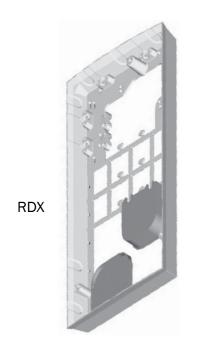
### 5.Installation

The following regulations must be observed:

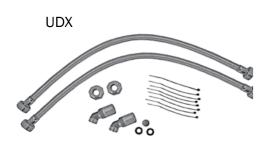
- VDE 0100
- EN 806
- Installation must comply with all statutory regulations, as well as those of the local electricity and water supply companies.
- The rating plate and technical specification.
- · Only intact and appropriate tools must be used.

### 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.
- The appliance complies with protect-ion type IP25 and may therefore be installed in protection zone 1 according to VDE 0100 part 701.
- In order to avoid thermal losses, the distance between the instantaneous water heater and the tapping point should be as small as possible.
- 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 least1,300 $\Omega$  cm at 15 °C. The specific resistance can be asked for with your water distribution company.







### Mounting accessories

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

### Mounting kit RDX

(Art. no. 34100)

The instant water heater can be installed by means of this mounting kit in the below situations. The power supply cable is coming out of the wall at any place from behind the unit, but the wall has unusual surface conditions, making it difficult for installing the water heater. The power supply cable is coming from elsewhere and has to be connected to the back of the unit.

### Extension kit VDX

### (Art. no. 34120) - RDX is necessary!

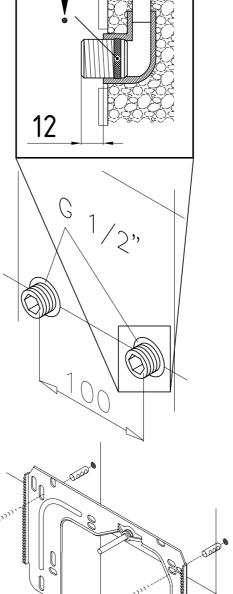
The instant water heater can be installed by means of this extension kit if the water pipes are coming displaced or exchanged out of the wall or if they are coming edgewise on the wall to the unit. The power supply could come out of the wall at any place under the unit or the wiring could be installed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

### **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.





### Installing the wall bracket

#### Note

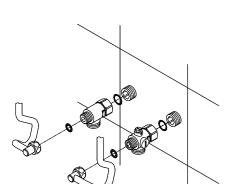
If you install this instantaneous water heater in exchange for a conventional instantaneous water heater, there is generally no need to drill holes for the wall bracket, in this case step 2 would not be necessary.

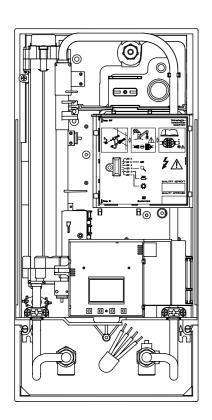
Thoroughly rinse the water supply pipes before installation to remove soiling from the pipes.

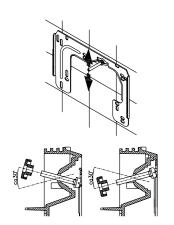
- Using a 12 mm hexagon socket screw key, screw the screwin nipples into the wall connections. The seals must be fully screwed into the thread. After tightening, the double nipples must protrude by at least 12 mm.
- Hold the included mounting template on the wall and align it so that the holes in the template fit over the connections. Mark the drill holes according to the template and drill them using a 6mm drill. Insert the included dowels.
- Screw in the wall bracket.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.

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### **6.Direct Connection**







### Installing connection pieces

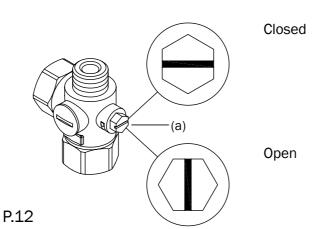
### Note

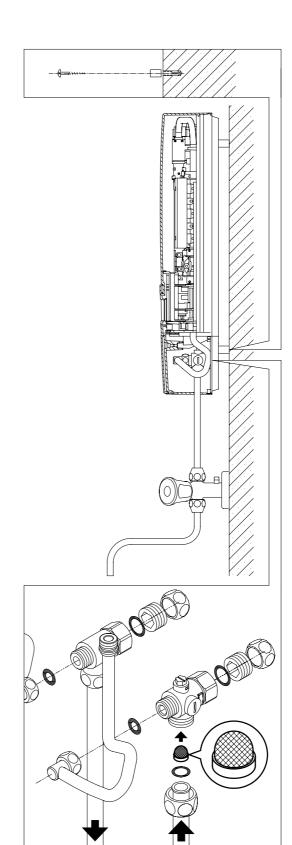
Fasten the screw nuts with caution, to avoid damage to the valves or the piping system.

- 1. As shown in the illustration, screw the cold water connection piece with the union nut and the ½" seal onto the cold water connection.
- 2. Screw the hot water connection piece with the union nut and the  $\frac{1}{2}$ " seal onto the hot water connection.

### Installing the appliance

- 1. To open the appliance hood, take off the faceplate and unscrew the main hood screw.
- When replacing an appliance, the electrical power supply cable may be connected in the upper part. Only in such case, follow the instructions "Electrical connection from above".
- 2. Place the appliance on the heater bracket so that the threaded rod of the wall bracket fits in the provided 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.
- 3. Screw the two %" union nuts of the appliance's water connection pipes, each with the %" seal, onto the fittings.
- 4. Screw the plastic knurled nut onto the threaded rod of the wall bracket.
- 5. 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.
- 6. 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.





#### Note

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

For direct connection, the two  $\frac{1}{2}$ " screw-in nipples and the  $\frac{1}{2}$ " seals must be screwed into the  $\frac{1}{2}$ " union nuts of the hot-water and cold-water connectors. The two  $\frac{1}{2}$ " caps of the side outlets of the hot-water and coldwater 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  $\frac{3}{8}$ " union nut of the appliance and delivery pipe, together with the  $\frac{3}{8}$ " seals.

For direct connection, it is advisable to mount the appliance at a distance as illustrated alongside, using the spacer sleeves supplied. It should therefore be noted that the two fixing holes near the lower pipe connections are also used.

The flared end of the pipes must be screwed into the  $\frac{1}{2}$ " side outlets of the hot-water and cold-water connectors with  $\frac{1}{2}$ " union nuts and  $\frac{1}{2}$ " seals. The holes required for the pipes must then be broken out of the housing with the aid of a blunt implement.

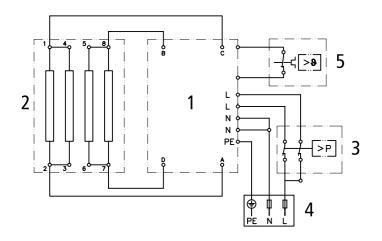
In case of direct connection please note:

Put the strainer into the cold water connection!



### 7. 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!

• VDE 0100

### Please observe:

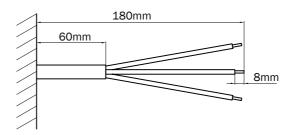
- The installation must comply with current IEC and national local regulations or any particular regulations, specified by the local electricity supply company
- The rating plate and technical specifications
- The unit must be earthed!

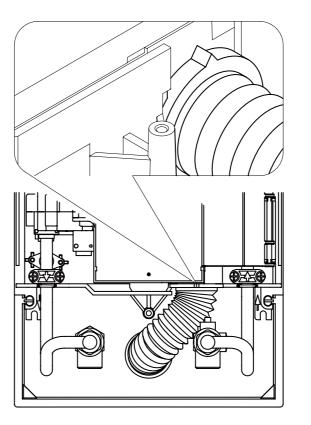
### Structural prerequisites

- The appliance must be installed via a permanent connection. Heater must be earthed! A cable size of 10mm<sup>2</sup> must be observed.
- 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.

### 7. Electrical Connection







#### 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.

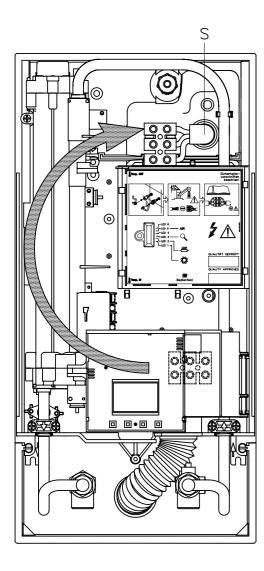
Check that the power supply is switched off prior to electrical connection!

- 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. Reinsert the control panel and lock it on the heating element.
- 5. Place the hood on the appliance and screw in the fastening screw. After that you can reinsert the faceplate.

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### 7. Electrical Connection



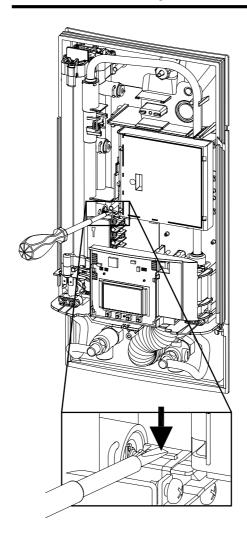


#### Electrical connection from above

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

- Open the prepared breaking point (S) in the upper part of the appliance by pressing with a blunt implement (e.g. screwdriver).
- 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!
- Dismantle the cable roughly 6 cm above the point where it emerges from the wall. Hold the prepared appliance so that you can route the cable into the grommet with the other hand.
- 4. Place the appliance on the heater bracket so that the threaded rod of the wall bracket fits in the provided hole of the appliance.
- 5. Open the control panel rightwards.
- 6. Unscrew the fastening screw of the connecting terminal. Displace the connecting terminal to the upper foot. Affix the connecting terminal again.
- 7. Strip the cables and plug them in the connecting terminals according to the wiring diagram. The appliance must be earthed.
- 8. Reinsert the control panel and lock it on the heating element.
- 9. Place the hood on the appliance and screw in the fastening screw. After that you can reinsert the faceplate.

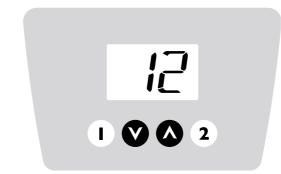
### 8. Initial Operation





Multiple Power System MPS®:

The rated capacity (max. power consumption) is 10.5kW/220V and can be changed internally to 8.0 kW.



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 pressurecut out may have tripped during transport. If necessary, reset the cut out.

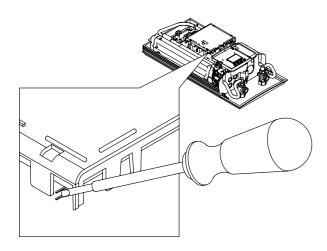
### Selection of power rating

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. 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 "12" flashes in the display. If not, please follow the below note "Reinstallation".
- 3. Select the maximum allowable power rating depending on the local situation via the up ♠ and down ♥ arrow keys ("88" or "12", see details at "Technical Specifications").
- 4. Press key ① to confirm the setting. The appliance starts operating.
- 5. Mark the set power rating on the rating plate.
- After having set the maximum allowable power rating, the heating element will be activated after approx. 30 sec of continuous water flow.
- 7. Open the hot water tap. Check the function of the appliance.
- 8. Explain the user how the instantaneous water heater works and hand over the operating instructions.
- 9. Fill in the warranty card on P.51 and return to German Pool according to the instructions.

### 8. Initial Operation



#### 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. Value "12" flashes in the display until the maximum power rating has been selected. This condition will maintain when activating and deactivating the supply voltage.

### **Shower application**

The water heater's temperature must be limited to 55 °C, if it is connected to a shower. 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  $55\,^{\circ}\text{C}$  as well.

#### Lock level

The operating mode of the appliance can be restricted.

#### **Activation of the Lock level**

- 1. Disconnect the appliance from the power supply (e.g. by switching off the fuses)
- 2. Insert the jumper on the power electronics (see picture)
- 3. Put the appliance into operation again

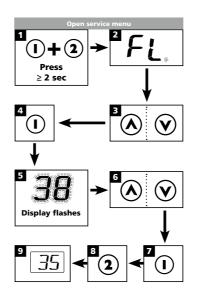
#### **Deactivation of the Lock level**

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

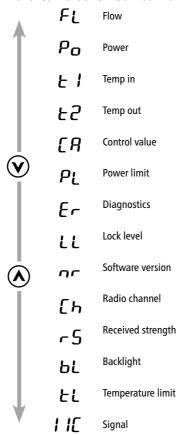
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3. Put the appliance into operation again

### 9. 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  $\bigcirc$  and  $\bigcirc$ , 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 ② and ②.) You will get back to the drop-downmenu 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 I/min.

"Po": Powe

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.

"PI" Power limit

Informs about 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 2 and 3 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".

"nr": Software version

Information about installed software version.

### 9. Service menu

### Menu item order of "Service menu":

FL Flow
Power
FI Temp in
FI Temp out
FI Control value
PL Power limit

Software version

Er

Radio channel

[h h

ЬL

OL

CL

Signal

Backlight

Diagnostics

Lock level

Received strength

Temperature limit

#### "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%.

"bL": Backlight (optional)

The display illumination can be activated and deactivated.

Setting options:

"0" Backlight always on

"1" Backlight switches on automatically, if button is pressed, or water is heated (preset)

"2" Backlight always off

"tL": Temperature limit

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

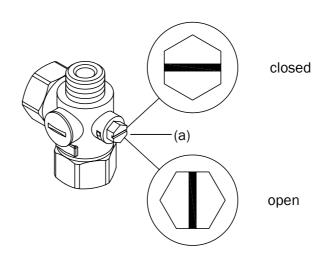
The Lock level must be activated via placing the jumper to enable the limitation. Refer to the installation manual to this.

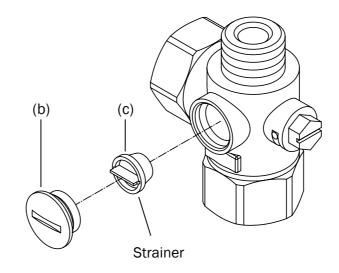
"IIC": Signal

Information about the quality of the radio contact when a

diagnostic display is connected.

### 10. Maintenance work





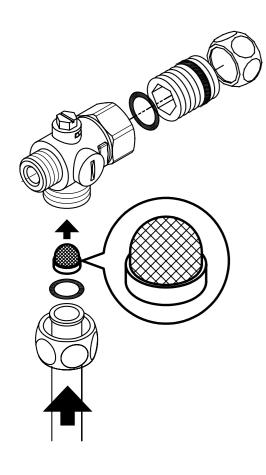
Maintenance work must only be conducted by an authorised professional.

### 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 hood, 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).
- 5. The strainer can now be cleaned or replaced.
- 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").
- 8. Vent the unit 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 unit. Then switch on the voltage again (e.g. via activating the fuses).

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### 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 hood, take off the small faceplate, loose the screw behind this cover and detach the hood.
- Unscrew mains water inlet from connection piece and take out the strainer.
- 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.
- 8. Vent the unit 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 unit. Then switch on the voltage again (e.g. via activating the fuses).

### 11. Environment and recycling





GERMAN POOL is conscious of the importance of environmental protection. We extend our belief to our packaging materials. You can help the environment by carefully segregating waste.

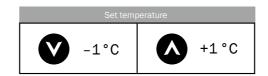
The packaging is essential for protecting the components during transportation. The packaging is made from environmentally-friendly, re-usable corrugated cardboard. The plastic bags are made of recyclable polythene(PE).

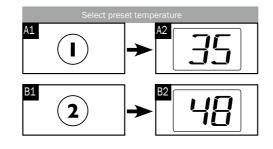
The plastic components of the appliance are marked with a material code so that they can be recycled at the end of their useful life. These valuable materials are 100 % recyclable, provided they are correctly segregated.

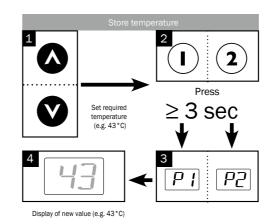
Electrical devices should be disposed of separately from household waste at the end of their service life. Please take this device to a collection point that accepts electronic scrap.

### 12. How to use









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  $\odot$  and  $\odot$ . The temperature changes by 1°C if key is pressed shortly one time. Pressing a key for a longer time changes the temperature continuously. You can select the outlet temperature from 20°C to 55°C.

#### Note

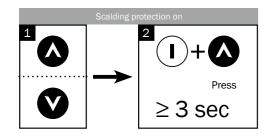
If temperature is set below 20°C with arrow key the display shows "−" and ⊙ the appliance switches off the heating function.

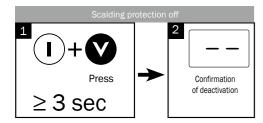
If the water heater supplies a shower, the maximum temperature was reduced during initial operation. This limitation cannot be exceeded.

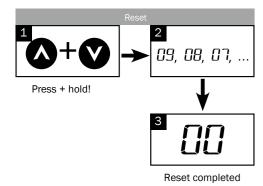
### **Programme buttons**

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.









### 12. How to use

### Temperature limitation

The instantaneous water heater DEX12 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  $\odot$  and  $\odot$  simultaneously for at least 3 sec. The display briefly confirms the activation by "HI".

Switch off: press program key  $\odot$  and  $\odot$  simultaneously for at least 3sec. The display briefly confirms the deactivation by "--".

### Note

By activation of the temperature limit also the programme keys are limited. Therefore, the fixed values of the programme keys may be set again after deactivation of the temperature limitation.

### Reset to factory setting

### All factory settings can be recalled:

Press 

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.

### 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.



#### **Power limit**

If the full output of the instantaneous water heater DEX12 does not suffice to heat the tapped quantity of water, this will be indicated by the LCD decimal point (e.g. in winter time, when opening several taps at once). When you reduce the hot water flow rate, the LCD point stops indicating because the output of the appliance is again sufficient to reach the set temperature.



### Top-up heating

When operating with preheated water, you must ensure that the inlet temperature does not exceed 25 °C.

If the inlet temperature exceeds the setpoint, the appliance is not providing any output, the flashing decimal point of the digital display indicates that the heating power is switched off.



### Venting after maintenance work

The instantaneous water heater DEX12 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 by disactivating 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.
- 4. Only then should you reconnect the power supply 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.

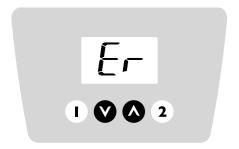
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## 13. Troubleshooting



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 Central Customer Service Department at GERMAN POOL. Please have the details of the typeplate at hand.



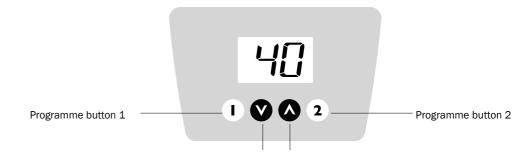
### **Hong Kong Sole Agent**

German Pool (Hong Kong) Limited Room 113, Newport Centre Phase II, 116 Ma Tau Kok Road, Tokwawan, Kowloon, Hong Kong Tel: +852 2773 2888

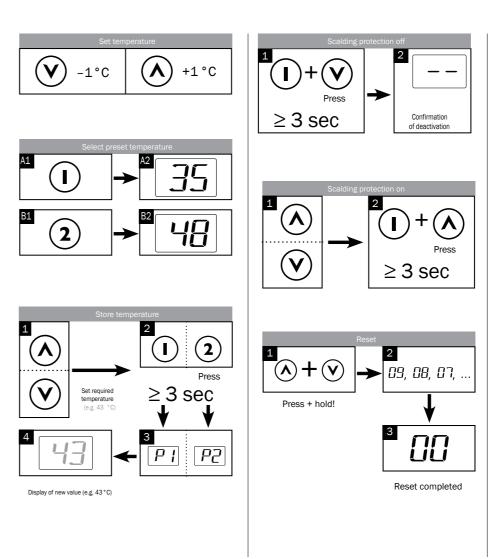
Fax: +852 2765 8215 Email: info@germanpool.com The instantaneous water heater was manufactured conscientiously and checked several times before delivery. Should malfunctions nevertheless occur, it is usually only due to a bagatelle. First attempt to switch the house fuses off and on again in order to 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.

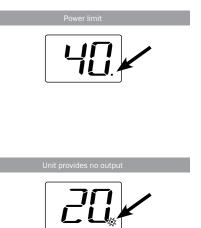
Problem	Cause	Solution
Water stays cold,	Master fuse tripped	Renew or activate fuse
digital display does not light up	Safety pressure cut-out tripped	Contact customer service
Water stays cold, digital display lights up	Safety thermal cut- out tripped	Contact customer service
Display flashes error message "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 customer service
Selected temperature is notreached, decimal point lights up	Water flow rate too high	Reduce water flow rate at the tap
Selected temp. is not reacheddecimal point does not light	Cold water has been added via the tap	Tap hot water only; set temperature for use
Decimal point flashes	Inlet temperature exceeding nominal	Reduce inlet temperature
No response upon keypress	Hood is not fitted properly	Refit the hood properly

### Quick reference guide



Arrow keys up and down



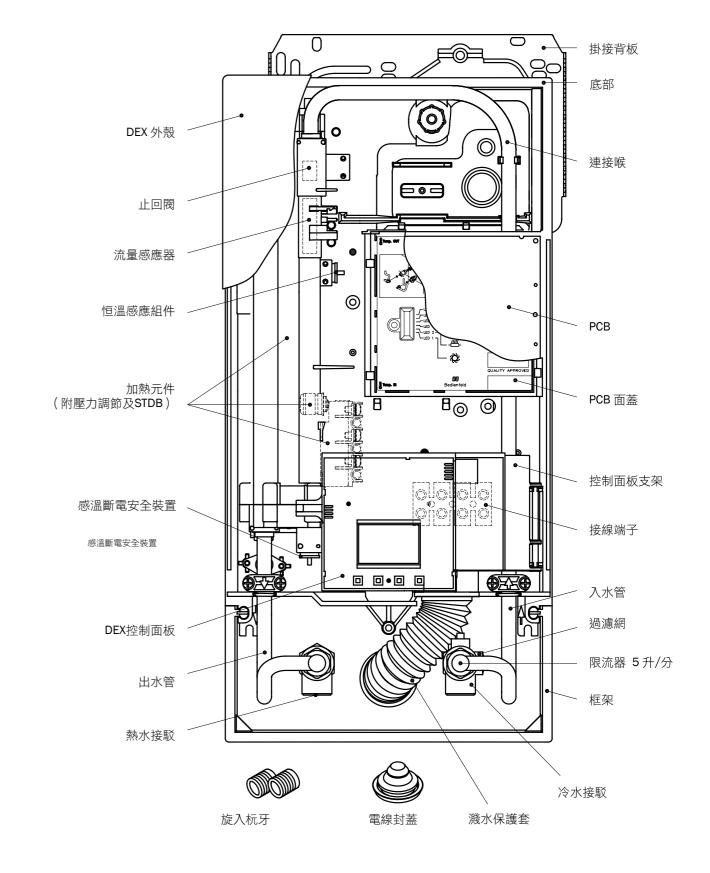


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## 1. 概觀圖

訂購個別零件時,請註明熱水器型號及機身編號。



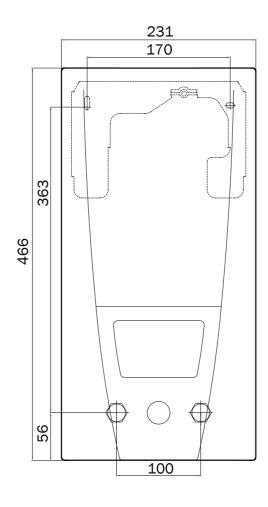
DEX 12電子	· 控制 MPS®	型號
A#		
8.8	12	功率設定
8.0 kW (36.6 A)	10.5 kW (47.7 A)	額定功率(電流) @ 220 V
8.8 kW (38 A)	11.5 kW (50 A)	@ 230V
9.6 kW (40 A)	12.5 kW (52.2 A)	@ 240V
1/N/PE 220V	230V 240V	接駁電源
10.0	mm <sup>2</sup>	最低電線尺寸要求
4.5	F O 1)	最高熱水量(升/分)
4.5 3.3	5.9 <sup>1)</sup> 4.3	max. at $\Delta t = 28 \mathrm{K}$
3.3	7.5	max. at Δt = 38 K
0.	41	額定容量
Pressure type	1 MPa (10 bar)	額定壓力
開放式,	/封密式	安裝方式
Bare wire heati	ng system IES®	加熱系統
≥ 1,30	)0Ωcm	要求來水電阻@15℃
≤ 77 r	mS/m	導電性能
<b></b>	25°C	入水水溫
2.5 - 5.0	OI/min <sup>2)</sup>	要求最低流量至最高流量
0.2 bar/at 2.5 l/min	1.3 bar/ at 9.0 l/min <sup>3)</sup>	壓力損失
20 °C -	- 55 °C	溫度選擇
G <sup>1</sup>	<del>/</del> 2"	水管接駁
3.70	0 kg	重量(注水後)
	I	VDE安全保護級別
IP25 (	E PE G	安全認證

- #)符合歐盟法規No.812/2013的初步要求。
- 1) 混合水。
- 2) 限流目的為達到最佳溫度上升效果。
- 3) 不設限流器。
- 4) 產品規格及設計如有變更,恕不另行通知。
- 5) 中英文版本如有出入,一概以英文版為准。
- 6) 本產品使用説明書以 www.germanpool.com 網上版為最新版本。

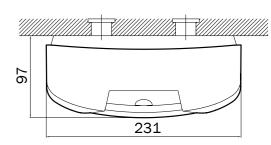
正常情況下,如供水系統之來水水壓超過0.6 MPa,用戶必須額外加裝減壓器將水壓調低。

如來水壓力超過0.6 MPa而用戶未有安裝減壓器,本公司有權拒絕為熱水器進行任何維修。

## 4. 尺寸



尺寸單位:(毫米)



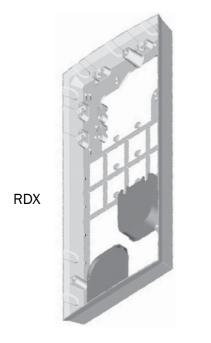
## 5. 安裝

安裝時必需遵守下列指示:

- 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。
- •此熱水器只可作掛牆式安裝,出入水接駁喉位向下。
- 熱水器的防護等級為IP25,根據VDE 0100 part 701,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。
- 熱水器必須處於易於接近的地方。
- 如選用膠喉,該膠喉必須符合DIN16893 Series 2規格。熱水喉必須有保溫保護。來水於15℃時,水電阻最少應為1,300Ωcm。有關詳情可向水務署查詢。







### 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 RDX

(序號:34100)

在下列情況下,此裝掛套裝可以用來安裝熱水器。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。電源線需從其他表面拉到已選安裝位置才能被連接到熱水器的背面。

### 擴展套件 VDX

(序號:34120) - 必須選用RDX

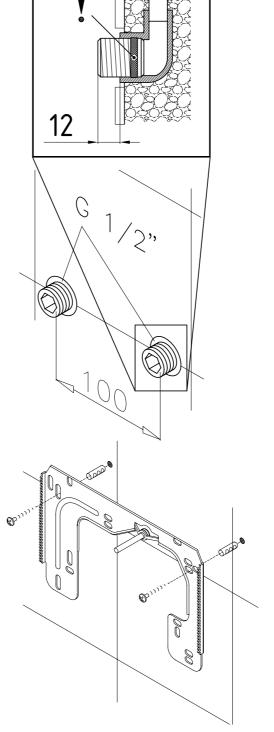
下列情況下,此擴展套件可以用來安裝熱水器。 當水管冷熱水位倒置、水管出牆位置需要改動來 迎合熱水器的安裝位置時。電源線從熱水器的下 方出牆或電線可作表面安裝。

### 擴展套件 UDX

(序號:34110) - 必須選用RDX

下列情況下,此擴展套件可以用來安裝熱水器。 當水管在熱水器之上方終結時。電源線從熱水器 的下方出牆或電線可作表面安裝。





### 安裝牆上掛碼

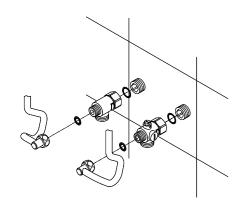
### 注意

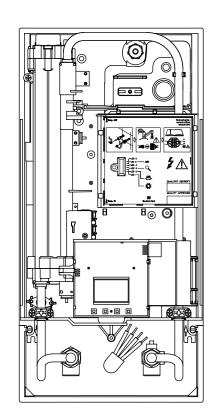
如果此即熱式熱水器用以更換傳統形式即熱式熱水器, 一般無需於牆上掛碼上鑽孔。在此情況下,無需理會步 驟2。

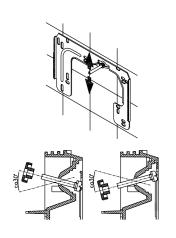
安裝前先徹底清洗供水喉管。

- 1. 用**12**毫米六角螺絲鎖匙將杬牙旋入牆上接駁位置,旋妥 杬牙後,杬牙應外露**12**毫米。
- 2. 將附上的範本放在牆上適當位置以配合冷熱水位置。根據範本位置記下鑽孔位置,用6毫米鑽咀鑽孔,放入合縫 訂旋入掛碼。
- 3. 可用附上的水準板碼調校達30毫米之牆面不平或傾斜情況。水準板碼應裝在牆壁與掛碼之間。

## 6. 直接接駁







### 安裝接駁配件

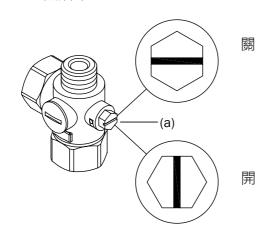
### 注意

旋緊螺母時應小心避免損壞閥或喉管。

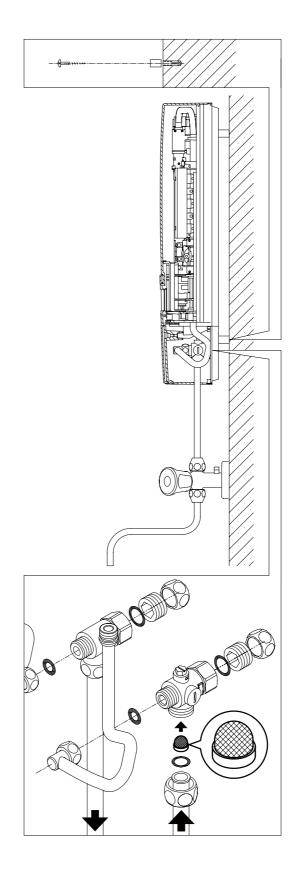
- 1. 如圖所示將緊固螺母1/2"密封圈與冷水進水配件 連接。
- 2. 如圖所示將緊固螺母1/2"密封圈與熱水出水配件 連接。

### 安裝熱水器

- 旋鬆螺絲,打開面蓋。
   當更換熱水器時,電源線只可從熱水器上半部接
   駁,只在此情況下,參考「上面部份電線接駁」。
- 2. 將熱水器掛在掛接背板上,如有需要可略為彎曲螺 紋桿。注意,彎曲螺紋桿後旋上進出水配件時應無 需使用彎力。
- 3. 將兩個3/8"緊固螺母及3/8"密封圈旋入進出入連接配件內。
- 4. 將膠螺母旋入牆上掛碼螺紋棒上。
- 5. 打開冷水供水喉,慢慢旋開閘掣(a) (位置:開),查看有否滲漏。
- 6. 接著連續打開及關閉熱水龍頭閥數次將熱水器內的空氣排出。



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### 注意

旋緊螺母時應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。取出冷熱水接駁件的1/2" 密封帽,然後旋入杭牙的開放一端。將冷水及熱水的接連配件旋入熱水器機身及送水管的3/8" 緊固螺母及3/8" 密封圈。

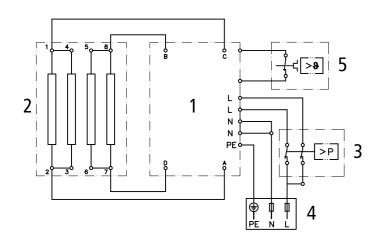
直接接駁安裝時,應利用附上的水準板,儘量垂直緊 貼牆身安裝,可同時利用接駁喉管下半部的固定孔固 定位置。

喉管的喇叭接頭必需連1/2"緊固螺母及1/2"密封圈 旋入冷熱喉的1/2"接連配件。並在機身外殼底部開 孔讓冷熱水喉穿過。

直接接駁時請注意:將沙隔置於冷水入水接駁位!

## 7. 電線接駁

### 線路圖



- 1. 電子線路
- 2. 發熱元件
- 3. 安全限壓斷電裝置
- 4. 端子板
- 5. 感溫斷電安全裝置

### 必須由合格技師負責!

### 請注意:

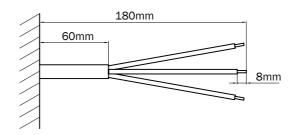
- VDE 0100
- 必須按現行之IEC標準、當地的電線安全標準及法規、及根據任何當地電力供應商之標準或法規 安裝。
- 參照銘牌上註明的技術規格。
- 熱水器必須接駁地線!

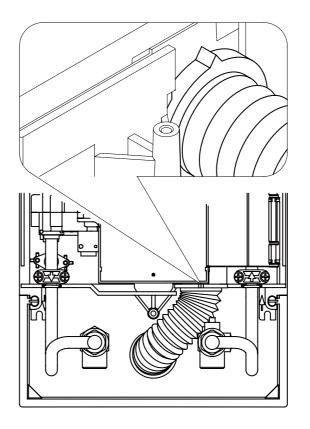
### 結構要求

- 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。
- 應安裝保險絲。

## 7. 電線接駁







### 底部標準電線接駁

### 注意

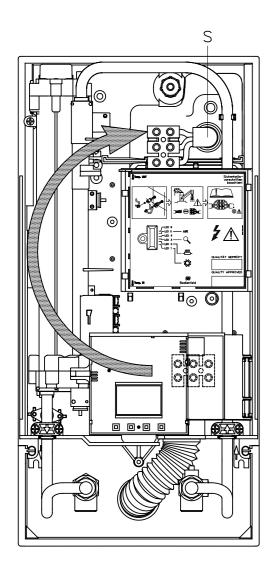
如有需要,可將接駁線插改放置於熱水器上半部,如需這樣做,請參照下一部份指示。

接駁電線前,請必先確定電源已關上。

- 1. 從牆上插座位元拆除約6厘米電線,套入濺水保護套,使保護套與牆身齊平,確保如有漏水也不會沾濕電線。
- 2. 打開控制板。
- 3. 按本頁頂部的線路圖剝去電線外皮並將其接到接線端子上。此熱水器必須連接地線。
- 4. 將電線的保護套拉上並套入中間層板的凹位,再蓋 上中間層板的面板,再用螺絲將電路板蓋面鎖緊。
- 5. 用螺絲將熱水器面蓋鎖緊。

## 7. 電線接駁



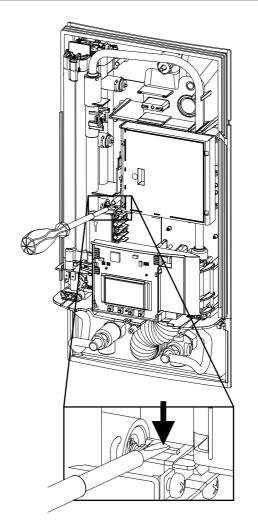


### 上面部份電線接駁

接駁電線前,請必先確定電源已關上。 1.用工具(例如螺絲批)按壓預先預備的開孔位置(S)。

- 2.介開電線位密封膠蓋,介開的面積應略為少於電線 的面積以確保最佳的防水性能。將密封膠蓋套入入 線孔。
- 3.從牆身電線出線位預留約6厘米電線,將電線經密 封膠蓋穿入熱水器內。
- 4.將熱水器掛在背碼上, 背碼有螺紋的支柱應套入熱水器的孔內。
- 5.打開控制面板。
- 6.旋鬆電線接駁線插的螺絲,將線插移往上部位置, 再接駁線插。
- 7.按照線路圖接駁電線,此熱水器必須接駁地線。
- 8. 裝回控制面板,並將其固定在發熱元件上。
- 9. 裝回及固定外殼,然後裝回面板。

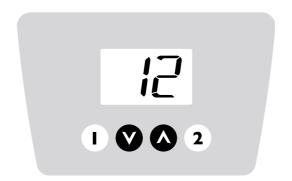
## 8. 初步操作





多功率調校系統 MPS®:

額定容量(最大功耗)為10.5kW/220V,可降至8.0kW。



接駁電源前,先將水注入熱水器內,然後開關熱水器龍頭數次,以將熱水器內的空氣排出。

為確保最大流量,需除去水龍頭的起泡器。,對熱水管及冷水管分別排水至少1分鐘。

每次維修或水喉工程後,必須將熱水器內的空氣排 出,然後再啟動熱水器。

如果熱水器未能啟動,可能因為壓力調節或感溫斷 電安全裝置於運輸期間錯誤啟動。如有需要,請先 重設有關裝置。

### 功率選擇

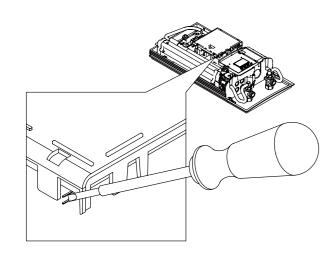
必須由註冊技師調校,否則保養作廢。

初次接駁電源後,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。

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. 開著熱水器後,顯示屏亮。
- 2. 初次啟動時,數值(12)會在顯示屏上閃動,否則,請細心閱讀「重新安裝説明」。
- 3. 按◎及①箭咀鍵選擇安裝當地所容許之最大功率 分別為:(88)或(12),詳情請參閱規格。
- 4. 按◎鍵確定設定,熱水器將開始操作。
- 5. 在銘牌上註明所設定的功率。
- 6. 設定最高容許功率後,發熱線會在水流開始30秒 後啟動。
- 7. 開啟熱水龍頭,熱水器開始操作。測試熱水器性能。
- 8. 將使用説明交給客戶,並向客戶解釋熱水器怎樣 操作。
- 9.初步操作妥當後,請填妥及寄回保用証。

## 8. 初步操作



### 重新安裝説明

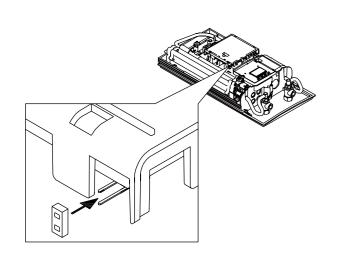
當熱水器需要與初次安裝情況下有別的狀態下重新安裝,安裝時可能需要設定最大功率。

暫時性的兩極短路,例如使用符合EN60900的螺絲批(如圖所示),會重新設定熱水器的參數。數值「12」會在顯示幕閃動直至熱水器最大功率被用戶選定為止。此情況會在啟動或取消電源電壓時維持。

### 淋浴功能

當熱水器連接花灑,熱水器的最高溫度必須設定為 55攝氏度。服務菜單中的最高溫度鎖定必須設置為 55攝氏度或更低。根據客戶的要求,功能許可權也 必須被啟動。

當熱水器使用預熱熱水時,註意預熱熱水最高溫度也必須為55攝氏度。



### 鎖定等級

熱水器的操作模式可加以限定。

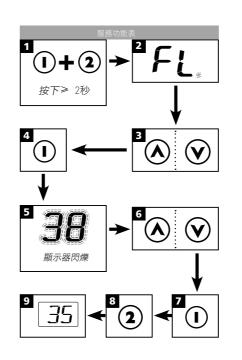
### 啟動鎖定等級:

- 1. 斷開熱水器電源(例如關掉保險絲)。
- 2. 跳線接通電源(見圖)。
- 3. 再次運行熱水器。

### 關閉鎖定等級:

- 1. 斷掉熱水器電源(例如關掉保險)
- 2. 移除跳線
- 3. 再次運行熱水器

### 9. 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<sup>①</sup>和按鍵<sup>②</sup>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。使用方向鍵◎和◎,您可在功能表項目之間進行切換。

按下按鍵,觀察當前所選功能表數值。顯示器閃爍數值(可使用按鍵○和○切換至某些菜單的數值)。再次按下按鍵①後可回到下拉功能表。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。

### 功能表條目如下:

"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

## 9. 服務功能表

"服務功能表"條目順序

FL  $\rho_{0}$ 功率

 $(\mathbf{V})$ 

£2

 $\mathcal{L}\mathcal{R}$ 

 $\rho_L$ 

Er

功能許可權 LL

[h

חר

軟件版本

-5 接收強度

ЬL 顯示器照明

LL 最高溫度鎖定

1 IE 信號 説明: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"部分已説明。

"nr": 軟件版本

關於已安裝軟件版本的資訊。

"Ch":無線通道

關於熱水器及其遙控器當前無線通道的咨詢。

"rS":接收強度(只適用於無線產品)

根據遙控器與熱水器之間的距離,以百分比顯示信號強 度的資訊,該數值在10%至100%之間。

"bL":顯示器照明(可選設定)

啟動或停用顯示器背光照明

設置選項:

"0" 顯示器照明敞開

"1" 顯示器照明於按下按鈕或當水被加熱時自動開啟 (預設設定)

"2" 顯示器照明長關

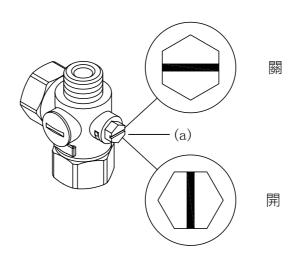
"tL":最高溫度鎖定

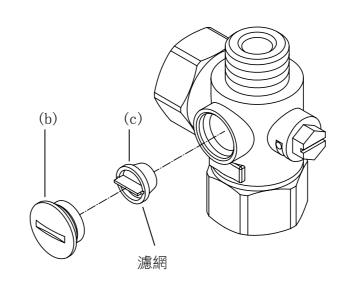
使用者可以鎖定熱水器之最高可選溫度,該溫度數值需 於熱水器的出水溫度範圍之內。啟動最高溫度鎖定功能 時,必須先將熱水器跳線。請參閱安裝手冊啟動此設定。

"IIC":信號

關於連接診斷顯示器後無線通訊品質的資訊。

## 10. 保養





必須由合格技師負責保養。

### 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

1. 先關掉電源 (例如關掉保險絲) 以防止電源意外接通。

2.打開熱水器面蓋。先把面蓋取下,旋出面蓋背面 的螺絲,然後卸下面蓋。

3. 關掉冷水入水喉內的閘制(a)(狀態:「關」)。

4.從冷水喉旋出螺絲塞子(b),然後取出沙隔(c)。

5.沙隔可以清洗或更换。

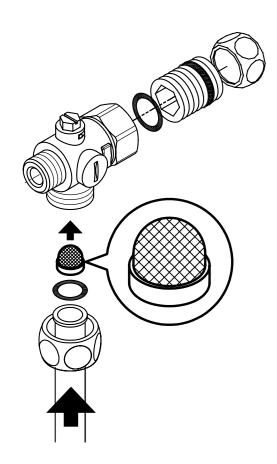
6.放回濾網後,旋緊螺絲塞子。

7.慢慢打開閘制(狀態:「開」)。

8. 開關熱水龍頭數次將熱水器內的空氣排出。

9. 裝回面蓋,再連接電源(例如接通保險)。

## 12. 使用指示



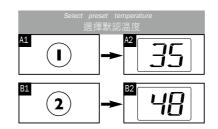
### 直接接駁時清潔並更換濾網

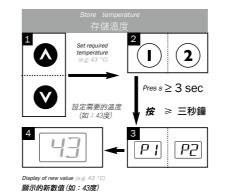
熱水器的冷水入水接駁位配備有綜合式的閘制及沙隔, 沙隔藏有污垢會減低熱水出水量,必須定時清理或更 換。

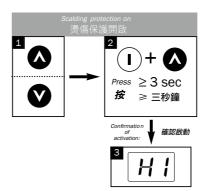
- 1. 先關掉電源(例如關掉保險絲)以防止電源意外接通。
- 2. 關掉向熱水器輸水的冷水喉閘制。
- 3. 打開熱水器面蓋。先把面蓋取下,旋出面蓋背面的 螺絲,然後卸下面蓋。
- 4. 從冷水喉旋出螺絲塞子,然後取出沙隔。
- 5. 沙隔可以清洗或更换。
- 6. 放回濾網後,重新把冷水入水管連接到連接件上。
- 7. 慢慢打開閘制。
- 8. 開關熱水龍頭數次將熱水器內的空氣排出。
- 9. 裝回面蓋,再連接電源(例如接通保險絲)。

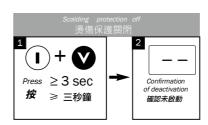
## Set temperature 溫度設定 1 -1°C +1°C

1 🗸 🛕 2









開啟熱水龍頭,熱水器會自動開著,關掉熱水龍頭,熱水 器會自動關掉。

### 調較溫度

可以按⊙及⊙鍵調校所需水溫。輕按按鍵一次會調校1℃,按鍵時間較長會每次不斷更改溫度。你可以在20℃。 至55℃範圍選擇出水水溫。

### 注意

如用箭咀鍵<sup>⊙</sup>設定溫度低於**20**℃會顯示"--", 熱水器會停止加熱。

當熱水器連接花灑時,初始動作時最高溫度將會降低。此限制不能超標。

### 程式按鍵

兩個程式按鍵讓你迅速選擇預先設定的溫度。當按下程式鍵,預設溫度便會顯示。出廠前①的設定溫度為35℃②為48℃,你亦可將自己選擇的溫度設定於程式按鍵。延長按著程式按鍵會儲存選擇的溫度,新的數值顯示可會從然後轉到P2。再按有關程式按鍵時會顯示新設定的溫度。

### 温度限制

DEX12系列即熱式熱水器備有可選擇的溫度限制功能, 此防燙傷保護在出廠前預設關閉了。

- 開啟:選擇溫度限制,然後同時按①及②最少3秒,顯示屏會顯示"--"確認關閉。
- 關閉:同時按程式鍵①及♡最少3秒,顯示屏會示 "—" 確認關閉。

説明: 啟動溫度限值會對程式鍵構成影響。因此,改 變溫度限值後可重新設定程式鍵的固定值。

## 11. 環保及再造





- 德國寶注重環保,選用包裝物料方面亦以環保為原則。請妥善處理廢棄物以改善環境。
- 2. 包裝物料對保護熱水器免於運送途中受損致為重要。選用的物料為環保可循環再用的紙盒,膠袋亦為可循環再用的 PE塑料。
- 3. 塑設備的塑膠元件均標有材料代碼,以便在使用壽命結束 時予以回收。如處理得當,這些有用材料可**100**%循環再 用。
- 4. 電器產品應在其使用壽命完結後與生活垃圾分開處理。請 把這件產品棄置到電子廢料回收點。



重設完成





Unit provides no output 勢水器沒有輸出





### 重設至出廠設定

所有出廠設定均可喚回。

- 同時按◎及◎鍵,顯示屏會以秒計從"10"至"00"倒數。 熱水器的重設值為"00"。如太早停止按鍵會取消程序。

### 如何節省能源

將熱水器調校至所需溫度,然後開啟熱水器龍頭。當感覺水 溫過熱時,不要加入冷水,應將溫度調低。如加入冷水,已 加熱的水會被冷卻,因而浪費能源。

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。

### 電量限制

如DEX12熱水器的功率未能將熱水器加熱至所需溫度

(例如同時打開多個水龍頭),LCD會以右邊圖點顯示,當你調低水流量,LCD圖點會熄滅,表示功率已足夠將水加熱至所需溫度。

### 加熱預熱來水

加熱預熱來水時,需確保入水溫度不超過25℃。

若入水溫度超過設定溫度,熱水器將不輸出熱水,顯示屏閃爍,表示熱水器停止加熱。

### 保養工作後的排氣程序

DEX12熱水器備有自動氣泡保護功能以防止非故意乾燒情況。但 每次熱水器因水喉工程或維修而需排出儲水,必需將熱水器 內空氣排出,然後再使用。

- 1. 關掉電源總掣。
- 2. 開啟冷水龍頭清洗水喉以免污染熱水器及水喉配件。
- 3. 開啟再關閉熱水掣,直至管內不再排出空氣,使熱水爐內 空氣完全排出。
- 4. 然後再接駁電源。
- 5. 十秒的不停水流將啟動熱水器。

### 保養及維護

- 必須使用濕布清潔塑膠表面及配件。切勿使用磨蝕性或含 氯的清潔劑或溶劑。
- 要供水系統運作良好,需定時清洗出水喉配件,每三年應由 合格技師檢查熱水器、電源接駁及水喉配件以確保熱水器 性能及操作安全。

## 13.檢查要點



必需由合格技師維修。 如參考列表未能處理有關問題, 請聯絡德國寶客戶服務部。



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。

故障	原因	措施
出水為冷水,數字顯	總電源開關跳制	重新啟動電源開關
示沒有亮著	壓力調節跳制	聯絡客服
電子顯示屏亮;水不熱	感溫斷電安全裝置 跳製	聯絡客服
顯示屏 (Er) 閃動	控制系統關掉	嘗試關掉系統, 然後 再開啟。如ER仍然 閃動, 請聯絡客戶服 務部
熱水流量太弱	出水配件骯髒或 釫化	清洗花洒頭沙隔等 配件
	過濾網骯髒或釫化	清洗過濾網
不能達致選擇溫 度,""顯示亮著	出水流量太大	減低出水流量
不能達致選擇溫度, 有""顯示不亮	開著冷水龍頭	只開著熱水龍頭,調 校使用水溫
""顯示閃爍	入水水溫高於額定 水溫	調低溫水水溫
按鍵沒有反應	面蓋未能正確裝上	重新正確裝上面蓋

香港總代理

德國寶(香港)有限公司

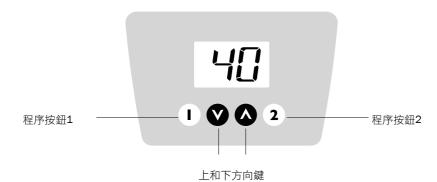
香港九龍土瓜灣馬頭角道116號新寶工商

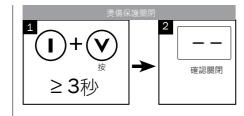
中心2期113號室

電話:+852 2773 2888 傳真:+852 2765 8215 電郵:info@germanpool.com

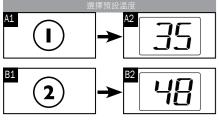
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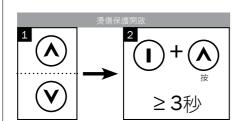
### 快速參考指引



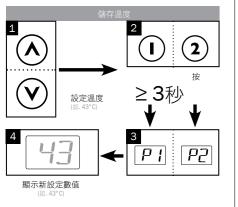


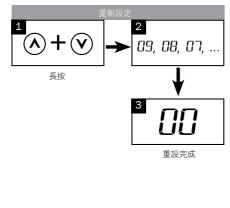












如欲獲取更多有關本產品最新資訊,歡迎瀏覽本公司網站。 For additional product information, please visit our website.

www.germanpool.com

Notes	

### 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。



### 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.



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.: **DEX-12** 

購買商號 Purchased From:

機身號碼 Serial No.:

發票號碼 Invoice No.:

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. 用戶應依照説明書的指示操作。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、不依説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 中國澳門

中國香港

澳門俾利喇街145號

九龍貨倉10樓

寶豐工業大廈3樓

電話: +852 2333 6249

九龍灣啟興道1-3號

電話: +853 2875 2699

傳真: +852 2356 9798

傳真: +853 2875 2661

電郵: repairs@germanpool.com

- 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
- 3. This warranty is invalid if:

or repairs.

- 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 Macau, China

10/F, Kowloon Godown

1-3 Kai Hing Road, Kowloon Bay,

145 Rua de Francisco Xavier Pereira, Macau

3/F, Edificio Industrial Pou Fung,

Kowloon, Hong Kong

: +852 2333 6249 Tel : +852 2356 9798 Fax

: +853 2875 2699 : +853 2875 2661

: repairs@germanpool.com

此保用只適用於香港及澳門

This warranty is valid only in Hong Kong and Macau

# GERMAN



Subject to errors, technical & design changes.如有錯誤、技術規格或設計更改,恕不另行通知。9120-34242 **4** 

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