

Instantaneous Electric
Water Heater

DBX



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

Online Warranty Registration



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



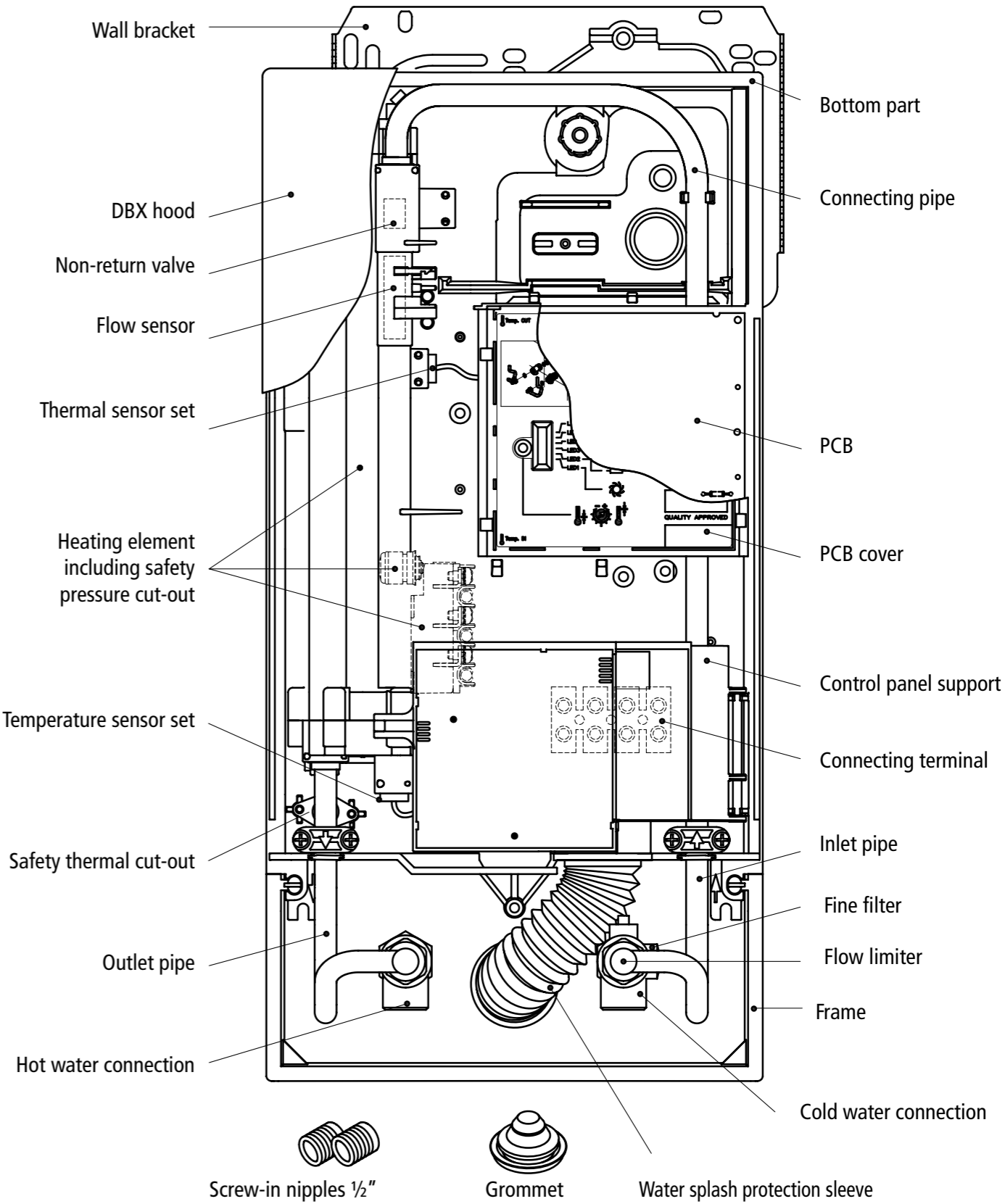
USER MANUAL

Contents

1. Overview	03
2. Safety instructions	04
3. Technical specifications	08
4. Dimensions	09
5. Installation	09
Installation site	09
Mounting accessories	10
Installing the wall bracket	11
Installing connection pieces	12
Installing the appliance	12
6. Direct connection	13
Wiring diagram	14
7. Electrical connection	14
Structural prerequisites	14
Load shedding relay	14
Electrical connection from below	15
Electrical connection from above	16
8. Initial operation	17
Modification of factory preset outlet temperature	17
9. Maintenance work	18
Cleaning and replacing the filter strainer	18
Cleaning and replacing the filter strainer if direct connected	19
10. Environment and recycling	19
11. How to use	20
12. Troubleshooting	21

1.Overview

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



2.Safety Instructions

Note

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

Part1-10 is intended for the specialist who is responsible for the installation of the appliance. Part2, 11 and 12 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.
- 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.

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 authorised 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 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.

2. 安全守則

注意：
安裝及使用本熱水器前請細閱本說明書。妥為保存本說明書。

說明書1–10部分為負責安裝的專業人員必讀內容。第2、11和12部分為使用者必讀內容。本說明書內容與產品的技術規格相一致。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

本說明書最新版本請查閱www.germanpool.com。


- 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。
- 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。
- 本熱水器必須時刻接地。
- 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。
- 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。
- 必須注意銘牌上所標籤之數值。
- 凡在有適當監督下，或已事前獲悉熱水器使用安全說明，並瞭解相關危害的前提下，3歲以上兒童及身體、感官或心理障礙者或經驗及知識不足者，亦可使用本熱水器。禁止兒童隨意操作本熱水器。禁止兒童在未經適當監督的情況下進行清潔與使用者維修保養工作。
- 如果設備配備了原裝電源線，當電源線有損壞而需要更換時，必須由由合資格的技術人員換上原裝的備用電源線，以避免任何危險。
- 根據VDE 0700，必須為固定連接的設備的連接盒的主電源側提供每個至少3毫米的接觸開口。
- 牆壁支架必須使用隨附的螺釘和銷釘固定。該電器必須固定在牆壁支架上。設備只可在已正確安裝在牆壁支架的情況下方可使用。
- 額定壓力任何時刻都不可超出標示的額定壓力。
- 來水電阻任何時刻都不可超出標示的來水電阻

2. 安全守則

無壓安裝設備必須遵守以下事項：

- 不得堵塞設備後面的出水口和不得限制水流量。
- 出水設施，如花灑噴頭，噴射控制和其他出口單位，必須定期脫鈣。沉積物必須定期清除。
- 只能使用製造商建議的配件。
- 如果設備只單獨連接花灑噴頭，只可可以使用製造商建議的花灑噴頭。其他任何減慢出水量的配件或零件均不可使用。

3.Technical specifications

DBX 18.. 27 BASITRONIC®				Model
DBX 18	DBX 21	DBX 24	DBX 27	
A #)				Energy efficiency class
18 kW (26 A)	21 kW (30 A)	24 kW (35 A)	27 kW (39 A)	Capacity set / current
3~ / PE 380..415 V AC			3~ / PE 400 V AC	Electrical connection
4.0 mm ²	4.0 mm ²	6.0 mm ² 2)	6.0 mm ²	Min. required cable size 1)
9.2 6.8	10.7 7.9	12.3 9.0	13.8 10.2	Hot water (l/min) 3) max. at Δt = 28 K max. at Δt = 38 K
0.4 l				Rated volume
Pressure type 1.0 MPa (10 bar)				Type
Open outlet / closed outlet				Connecting type
Bare wire heating system IES®				Heating system
≥ 1300 Ωcm ≤ 90 mS/m				Required specific water resistance @ 15 °C Specific electrical conductivity
≤ 30 °C				Inlet temperature
2.5 – 7.0 l/ min	2.5 – 8.0 l/ min	2.5 – 8.0 l/ min	2.5 – 9.0 l/ min	Flow rate to switch on – max. flow rate 4)
0.2 bar at 2.5 l/min		1.3 bar at 9.0 l/min 5)		Pressure loss
30 °C – 60 °C				Temperature range
G ½"				Water connection
3.65 kg				Weight (when filled with water)
I				VDE class of protection
PA-IX 6762/I				Noise level test certificate
 IP25				Type of protection / safety

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

1) Maximum applicable cable size is 10mm² .

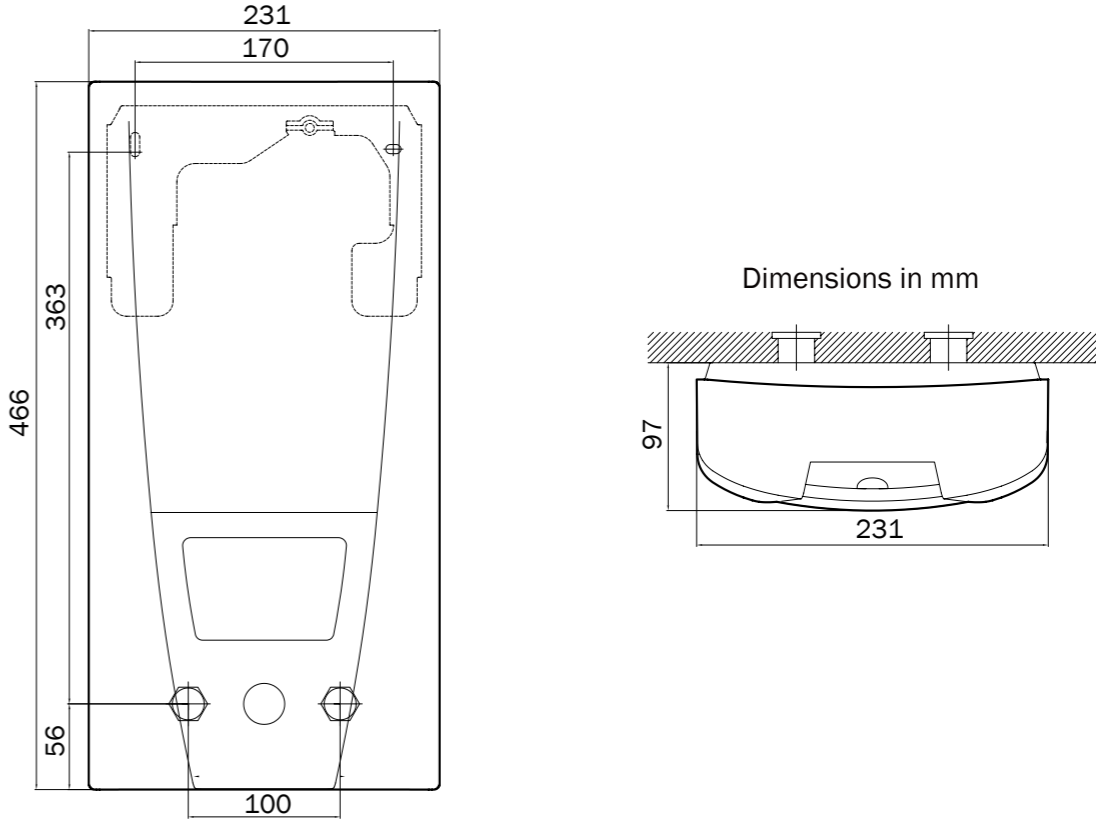
2) Mixed water.

3) Flow rate limited to achieve optimum temperature rise.

4) Without flow regulator.

- Specifications are subject to change without prior notice.
- If there is any inconsistency or ambiguity between the Chinese version and the English version, the English version shall prevail.
- 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



5.Installation

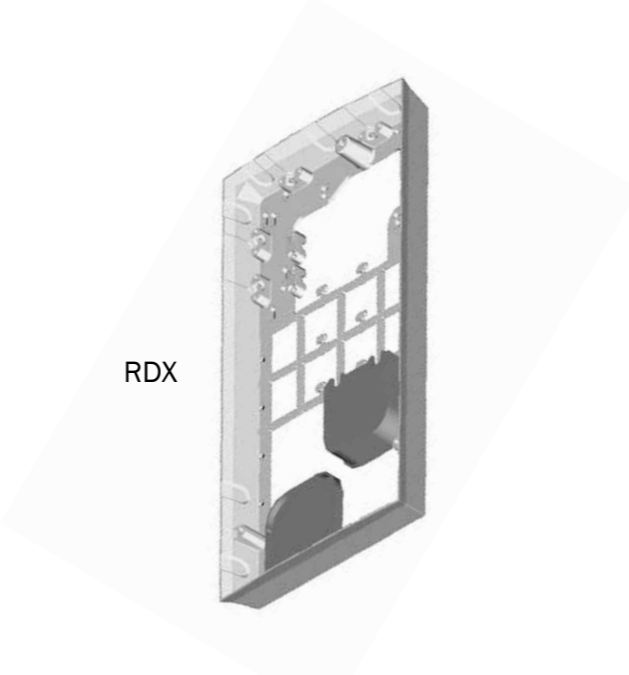


Based on the national constitution guidelines a general test certificate concerning the evidence of applicability of noise behaviour is granted.

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 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.
 - 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.
 - For maintenance work, a shut-off valve should be installed in the supply line. The appliance must be accessible for maintenance work.
 - Plastic pipes may only be used if they conform to DIN16893, Series2. The hot water pipes must be thermally insulated.
 - The specific resistance of the water must be at least 1300Ω cm at 15 °C. The specific resistance can be asked for with your water distribution company.

5.Installation



Mounting accessories

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

Mounting kit RDX

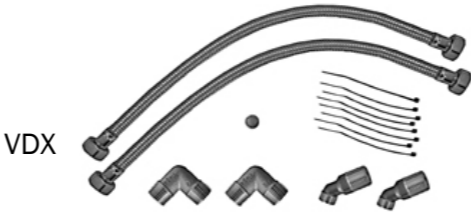
(Art. no. 34100)

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!

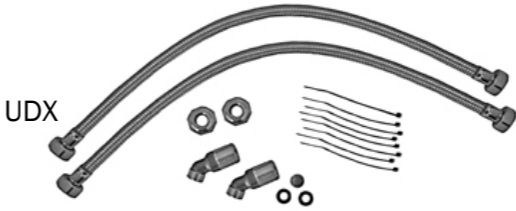
The instant water heater can be installed by means of this extension kit if the water pipes are coming displaced or exchanged out of the wall or if they are coming edgewise on the wall to the unit. The power supply could come out of the wall at any place under the unit or the wiring could be installed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



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.



5.Installation



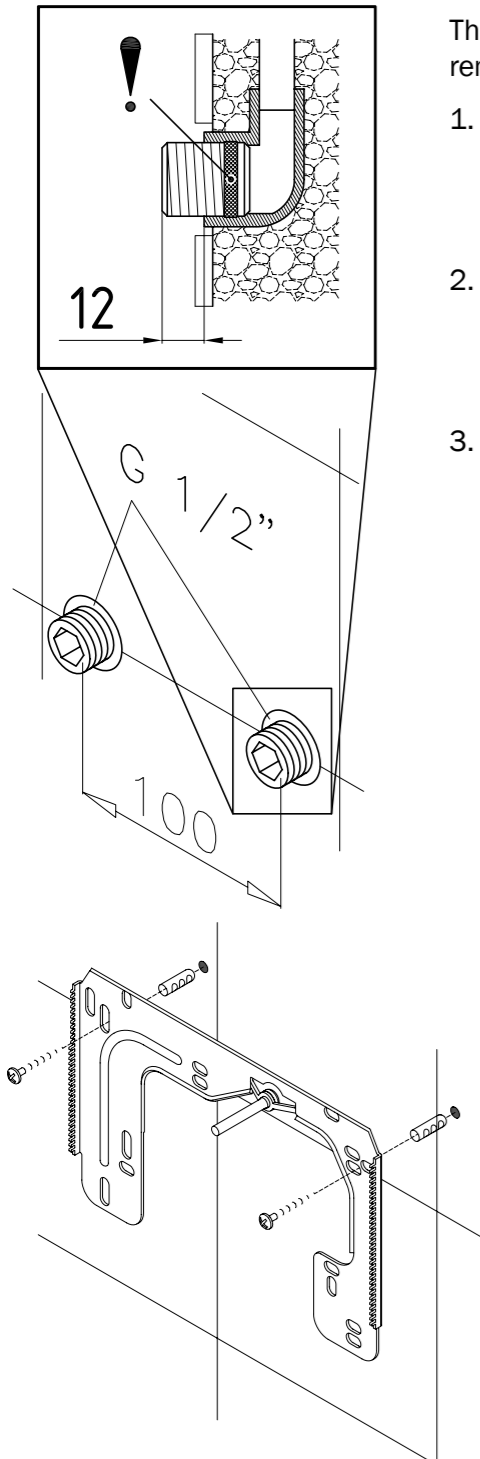
Installing the wall bracket

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 at least 12 mm.
2. 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.
3. 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.



5.Installation

Installing connection pieces

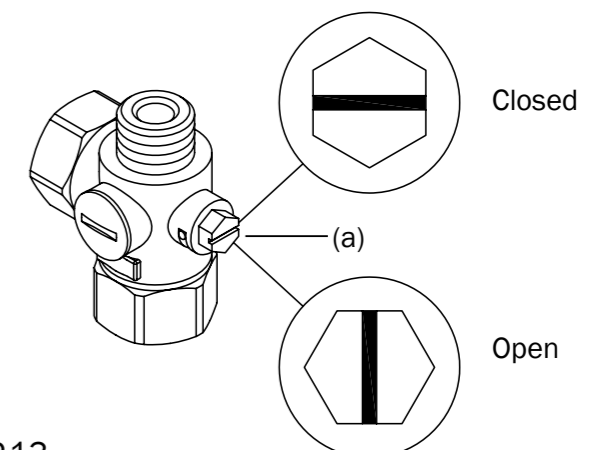
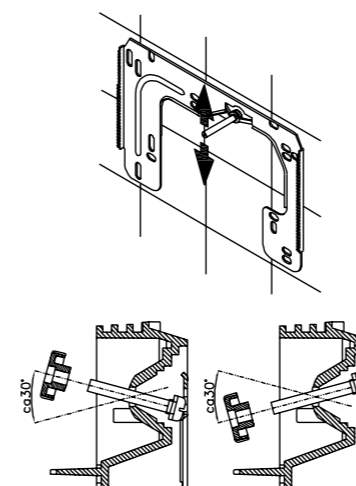
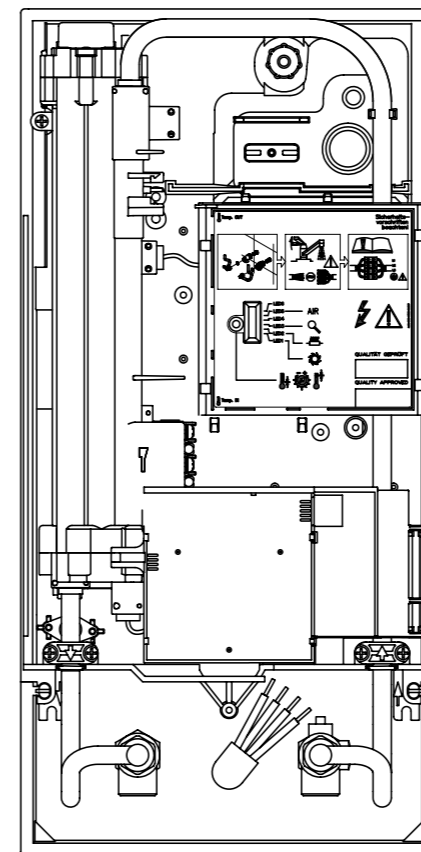
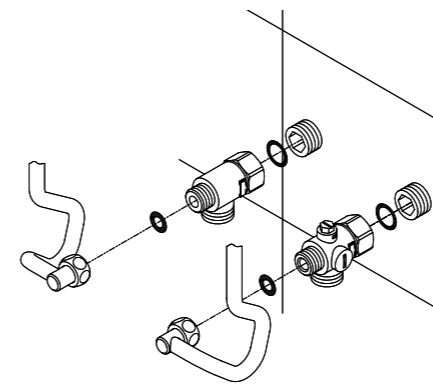
Note

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

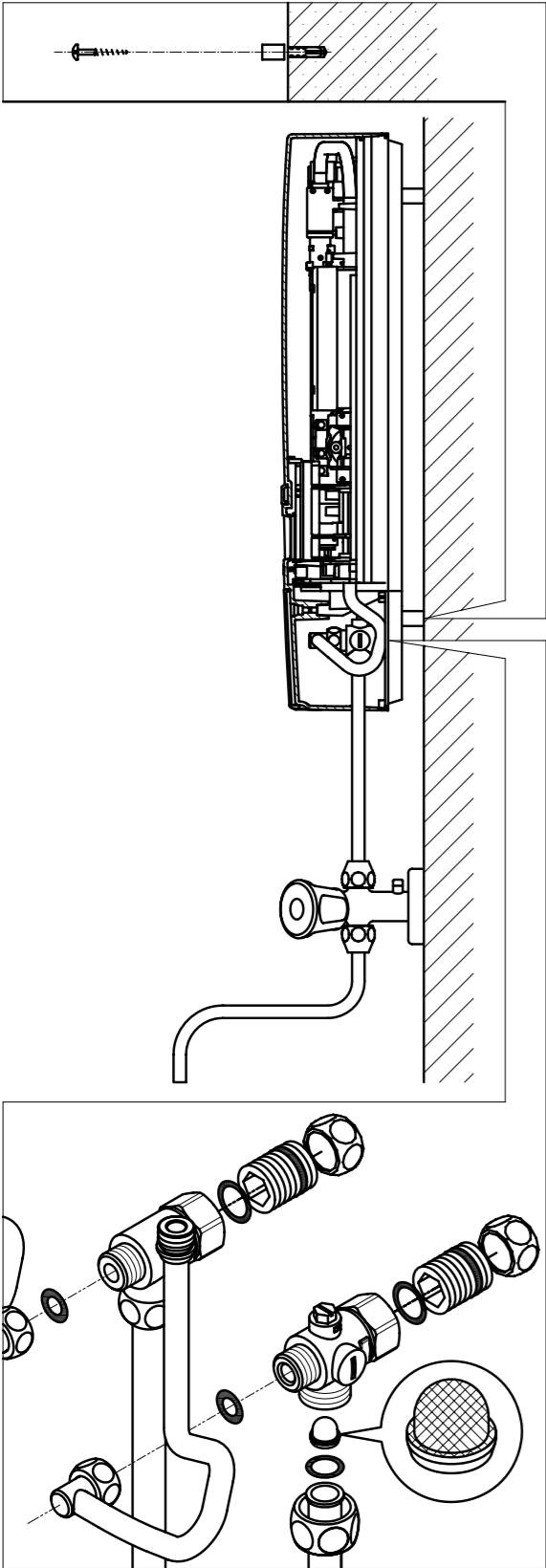
1. As shown in the illustration, screw the cold water connection piece with the union nut and the 1/2" seal onto the cold water connection.
2. Screw the hot water connection piece with the union nut and the 1/2" seal onto the hot water connection.

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 3/8" union nuts of the appliance's water connection pipes, each with the 3/8" 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.



6.Direct Connection



Note

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

For direct connection, the two 1/2" screw-in nipples and the 1/2" seals must be screwed into the 1/2" union nuts of the hot-water and cold-water connectors. The two 1/2" 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" union nut of the appliance and delivery pipe, together with the 3/8" seals.

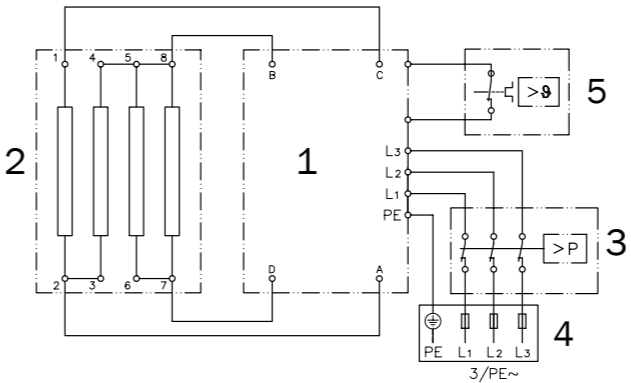
For direct connection, it is advisable to mount the appliance at a distance as illustrated alongside, using the spacer sleeves supplied. It should therefore be noted that the two fixing holes near the lower pipe connections are also used.

The flared end of the pipes must be screwed into the 1/2" side outlets of the hot-water and cold-water connectors with 1/2" union nuts and 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!

Please observe:

- 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 unit must be earthed!

Structural prerequisites

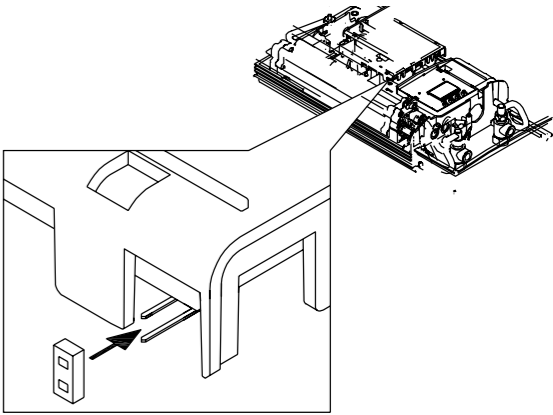
- The appliance must be installed via a permanent connection. Heater must be earthed!
- The electric wiring should not be injured. After mounting, the wiring must not be direct accessible.
- An all-pole disconnecting device (e.g. via fuses) with a contact opening width of at least 3mm per pole should 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.

Load shedding relay

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

To avoid possible jitter of the load shedding relay caused by low power consumption (low temperature set point and low water flow rate) the "Load-sheddingmode" can be activated as followed:

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



7. Electrical Connection

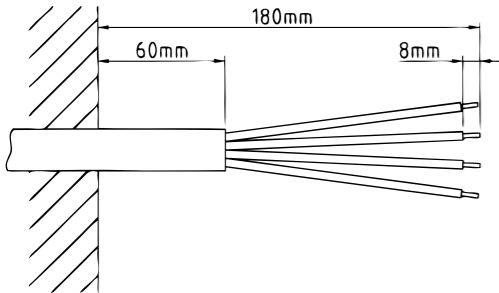
Electrical connection from below



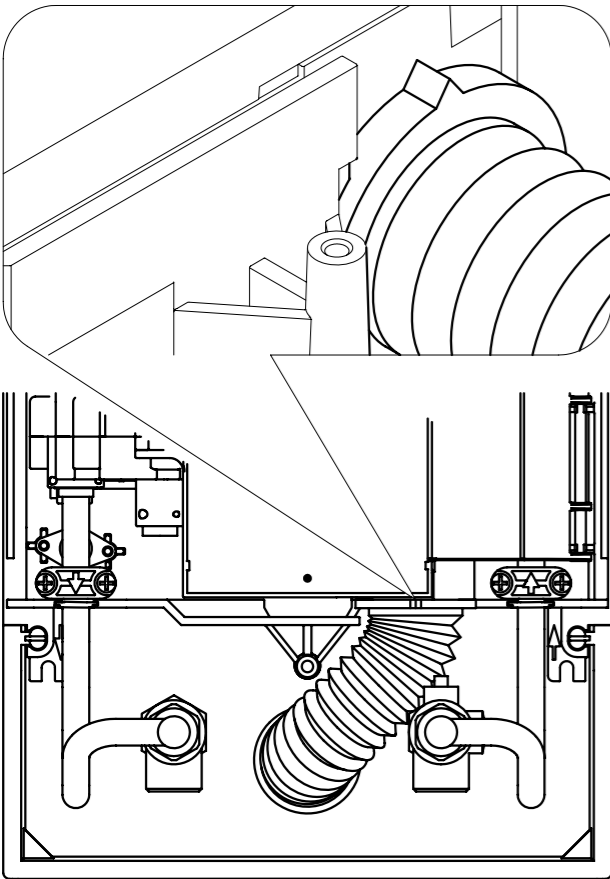
Note

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.



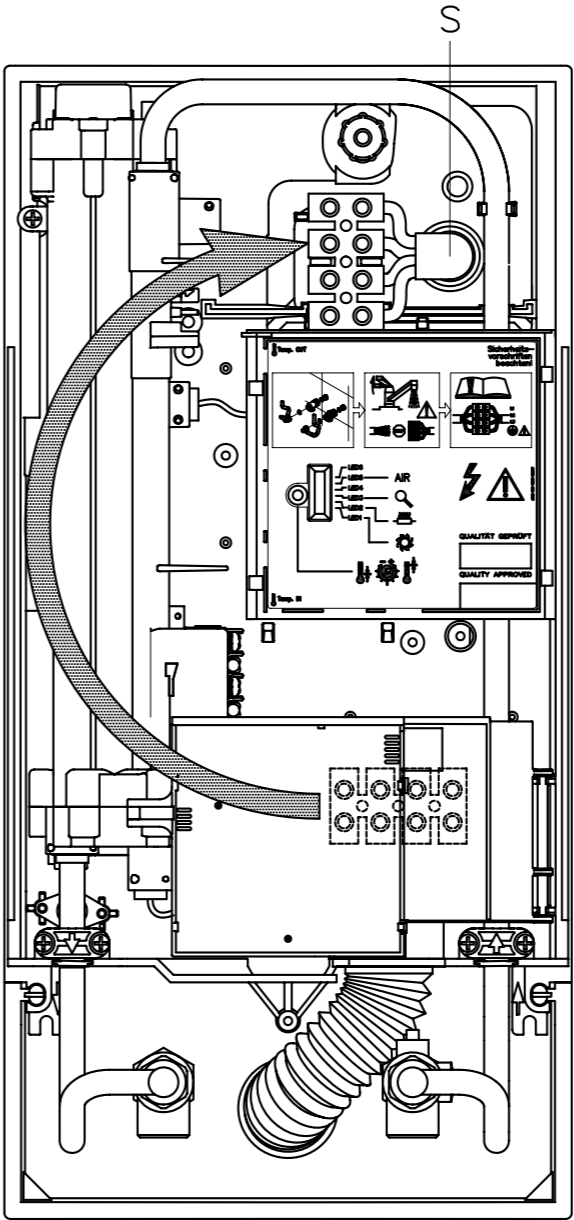
7. Electrical Connection

Electrical connection from above

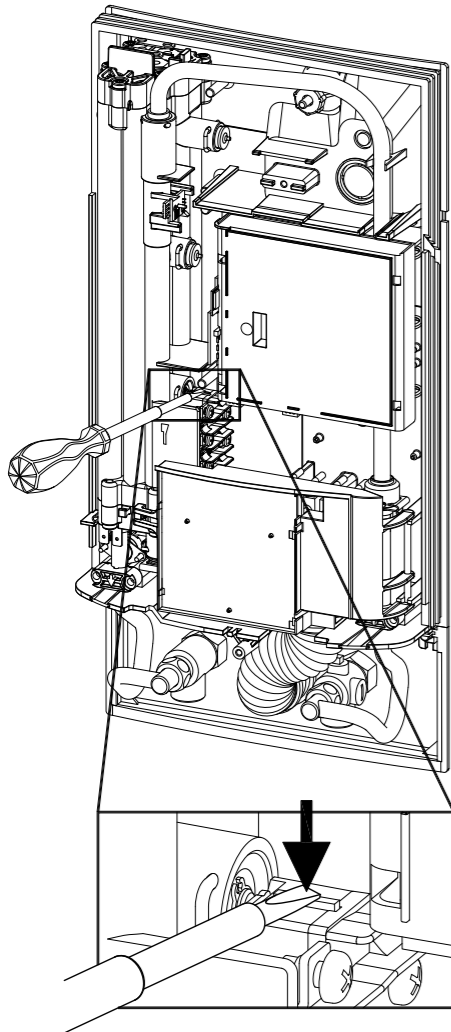


Check that the power supply is switched off prior to electrical connection!

1. Open the prepared breaking point (S) in the upper part of the appliance by pressing with a blunt implement (e.g. 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!
3. Dismantle the cable roughly 6cm 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



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, reset the cut-out.

1. Switch on the power supply to the appliance.
2. Open the hot water tap. Check the function of the appliance. The heating element will be activated after approx. 10-30 seconds of continuous water flow.
3. Explain the user how the instantaneous water heater works and hand over the operating instructions.
4. Fill out the guarantee registration card and send it to the Central Customer Service or use the online registration.

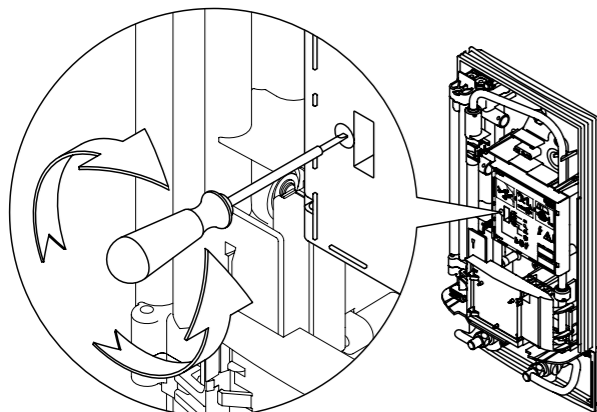
Modification of factory preset outlet temperature

The factory set hot water outlet temperature is 50 °C.

This factory setting can be modified within the range of approx. 30 °C to 60 °C by turning the readout potentiometer with a slotted screwdriver (width approx. 2mm).

The hot water outlet temperature will be decreased by clockwise rotation and increased by counterclockwise rotation.

Remark: The hot water temperature may not exceed 55 °C if the appliance is connected to a shower.

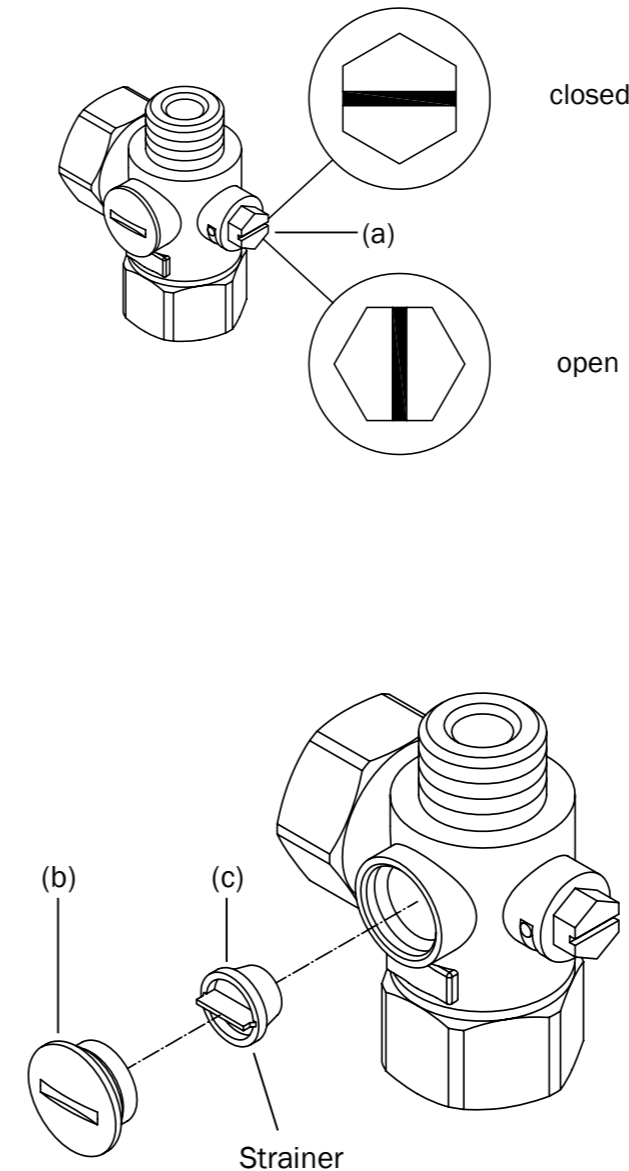


9. Maintenance work

Maintenance work must only be conducted by an authorised professional.

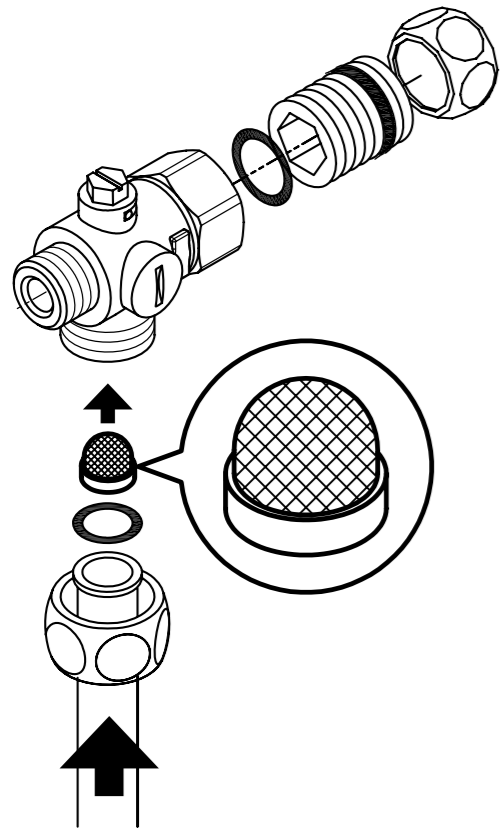
Cleaning and replacing the filter strainer

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.
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").
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).

9. Maintenance work

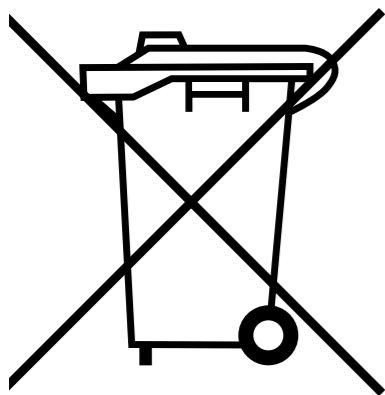


Cleaning and replacing the filter strainer if direct connected

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.
4. 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).

10. Environment and recycling



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

11. How to use

Venting after maintenance work

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

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

Cleaning and maintenance

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

12. 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.

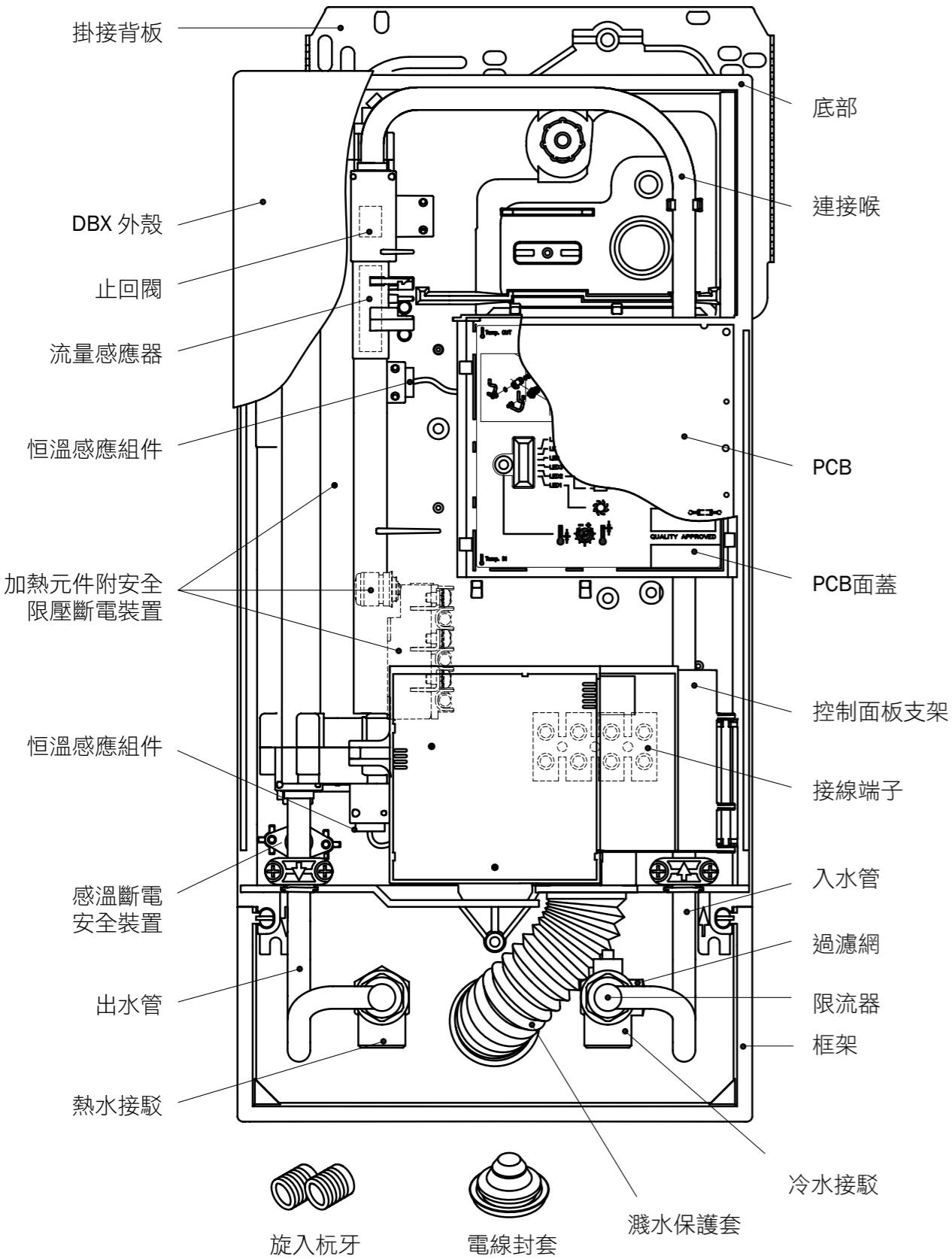
Problem	Cause	Solution
Water stays cold	Master fuse tripped	Renew or activate fuse
Flow rate of hot water too weak	Outlet fitting dirty or calcified	Clean shower head, jet regulator or sieves
	Fine filter dirty or calcified	Clean fine filter
Selected temperature is not reached	Excessive water flow (winter?)	Reduce water flow rate at the outlet
Selected temperature is perceived to be too cold	Set temperature too low	Increase set temperature by a specialist
Selected temperature is perceived to be too hot	Set temperature too high	Decrease set temperature by a specialist

目錄


1. 概觀圖	23
2. 安全守則	06
3. 規格	24
4. 尺寸	25
5. 安裝	25
安裝地點	26
裝掛配件	26
安裝牆上掛碼	27
安裝接駁配件	28
安裝熱水器	28
6. 直接接駁	29
線路圖	30
7. 電線接駁	30
結構要求	30
電量調校繼電器	30
底部標準電線接駁	31
上面部份電線接駁	32
8. 初步操作	33
出廠預設出水溫度的修改	33
9. 保養	34
清洗及更換沙隔	34
直接接駁時清潔並更換濾網	35
10. 環保及再造	35
11. 使用指示	36
12. 檢查要點	36

1. 概觀圖

訂購個別零件時，請註明熱水器型號及機身編號。



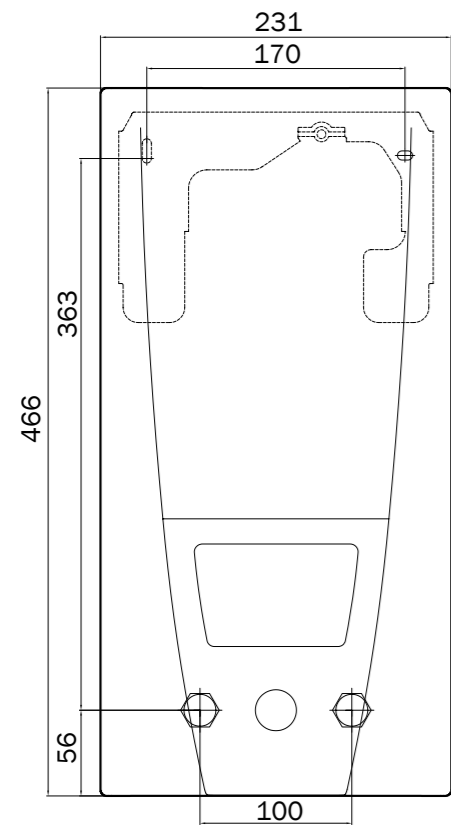
3. 規格

DBX 18 .. 27 BASITRONIC®				型號
DBX 18	DBX 21	DBX 24	DBX 27	
A #)				能源標籤
18 kW (26 A)	21 kW (30 A)	24 kW (35 A)	27 kW (39 A)	接駁電源
3~ / PE 380..415 V AC			3~ / PE 400 V AC	最低電線尺寸要求
4.0 mm ²	4.0 mm ²	6.0 mm ² 2)	6.0 mm ²	Min. required cable size 1)
9.2 6.8	10.7 7.9	12.3 9.0	13.8 10.2	熱水量 (公升/分) 3) max. at Δt = 28 K max. at Δt = 38 K
0.4 l				額定容量
Pressure type 1.0 MPa (10 bar)				額定壓力
開放式/封密式				連接類型
Bare wire heating system IES®				加熱系統
≥ 1300 Ωcm ≤ 90 mS/m				要求來水電阻 @ 15 °C 導電性能
≤ 30 °C				入水水溫
2.5 – 7.0 l/ min	2.5 – 8.0 l/ min	2.5 – 8.0 l/ min	2.5 – 9.0 l/ min	要求最低流量至最高流量 4)
0.2 bar at 2.5 l/min		1.3 bar at 9.0 l/min 5)		壓力損失
30 °C – 60 °C				溫度選擇
G ½"				水管接駁
3.65 kg				重量 (注水後)
I				VDE安全保護級別
PA-IX 6762/I				嘈音測試憑證
 IP25				安全認證

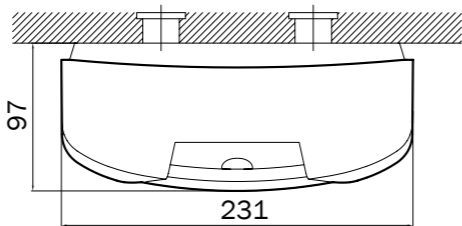
#) 符合歐盟法規No. 812/2013的要求。
1) 最大電線尺寸10平方毫米。
2) 混合水。
3) 限流目的為達到最佳溫度上升效果。
4) 不設限流器。

• 產品規格及設計如有變更，恕不另行通知。
• 中英文版本如有出入，一概以英文版為準。
• 本產品使用說明書以 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：（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。
- 根據VDE0100 part701，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。
- 為方便保養工作，應在供水喉位置裝上閘掣。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°C時，水電阻最少應為1,100Ωcm。有關詳情可向水務署查詢。

5. 安裝

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

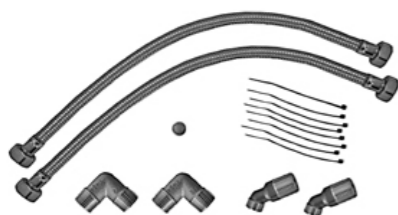
(序號：34110) - 必須選用RDX

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。

RDX



VDX



UDX



5. 安裝



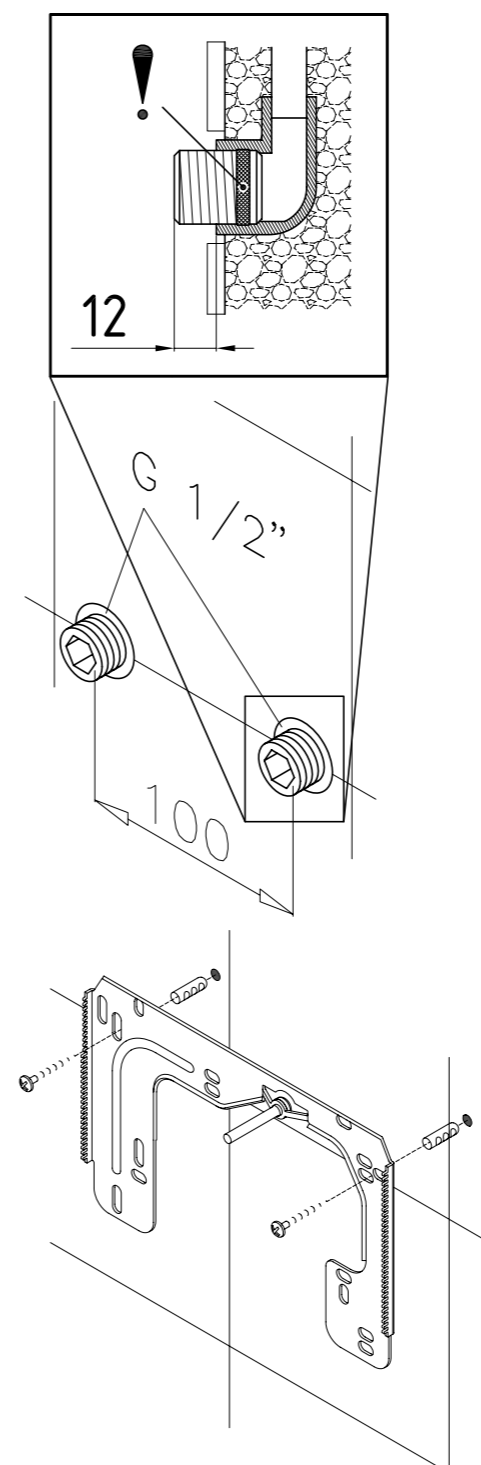
安裝牆上掛碼

注意

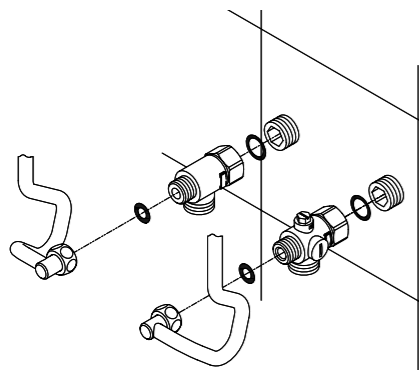
如果此即熱式熱水器用以更換傳統形式即熱式熱水器，一般無需於牆上掛碼上鑽孔。在此情況下，無需理會步驟2。

安裝前先徹底清洗供水喉管。

1. 用12毫米六角匙將杭牙旋入牆上接駁位置，旋妥杭牙後，杭牙應外露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，放入合縫釘旋入掛碼。
3. 可用附上的水平板碼調校達30毫米之牆面不平或傾斜情況。水平板碼應裝在牆壁與掛碼之間。



5. 安裝



安裝接駁配件

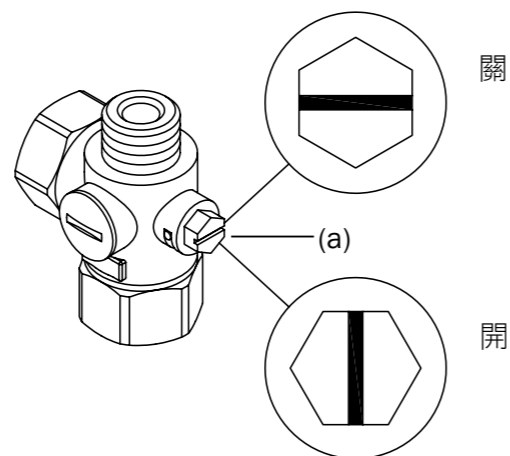
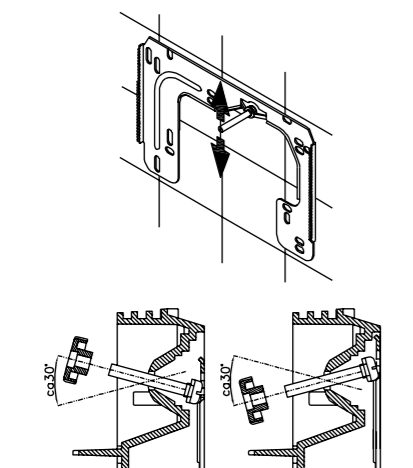
注意

旋緊螺母時應小心避免損壞閥或喉管。

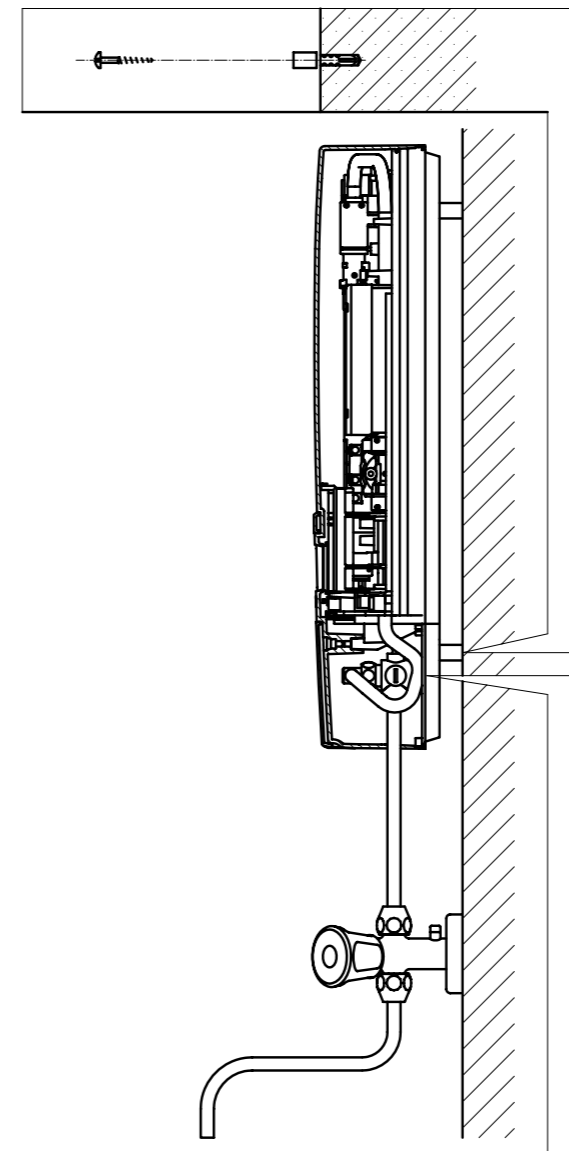
1. 如圖所示將緊固螺母1/2" 密封圈與冷水進水配件連接。
2. 如圖所示將緊固螺母1/2" 密封圈與熱水出水配件連接。

安裝熱水器

1. 旋鬆螺絲，打開面蓋。當更換熱水器時，電源線可從熱水器上半部接駁，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棒。注意，彎曲螺紋棒後旋上進出水配件時應無需使用蠻力。
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。



6. 直接接駁



直接接駁

注意

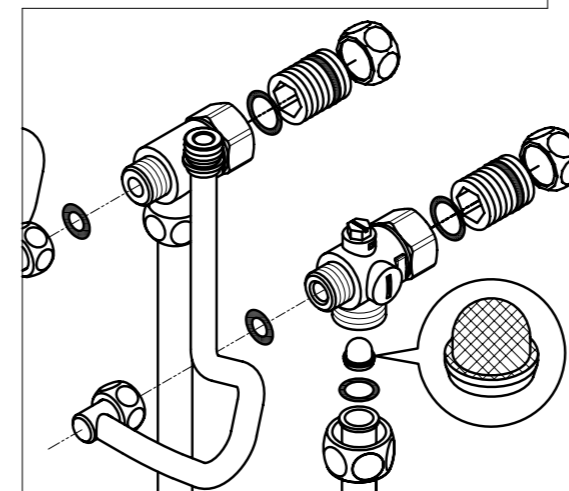
旋緊螺母時應小心避免損壞閥或喉管。

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，應利用附上的水平板，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。

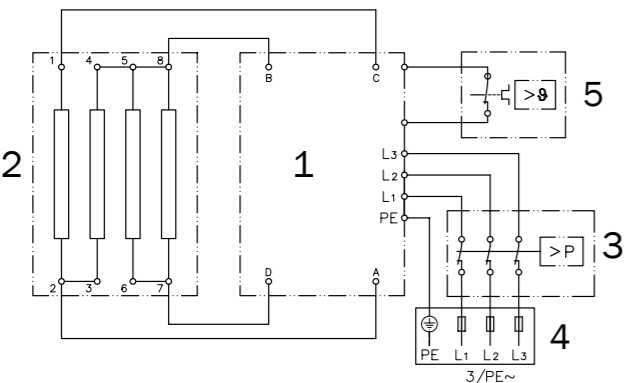
喉管的喇叭接頭必需連1/2" 緊固螺母及1/2" 密封圈旋入冷熱喉的1/2" 接連配件。並在機身外殼底部開孔讓冷熱水喉穿過。

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

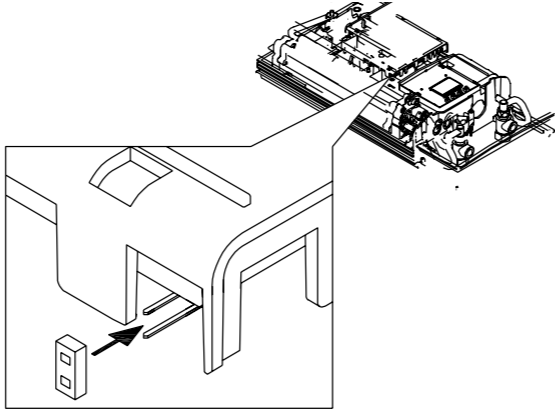
- 熱水器必須穩固永久接駁安裝。熱水器必須接駁地線！
- 電線不應損壞，安裝後電線不應可以直接觸摸得到。
- 電源開關應為全極式開關（經保險絲），兩極之間應保持最少3毫米距離。
- 應安裝保險絲。

電量調校繼電器

如進一步接駁其他三相電器，可將電量調校繼電器接駁至導電器L2。

為避免電量調校繼電器於低功耗（低溫設定或低水流）時抖動，可以啟動以下模式：

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



7. 電線接駁

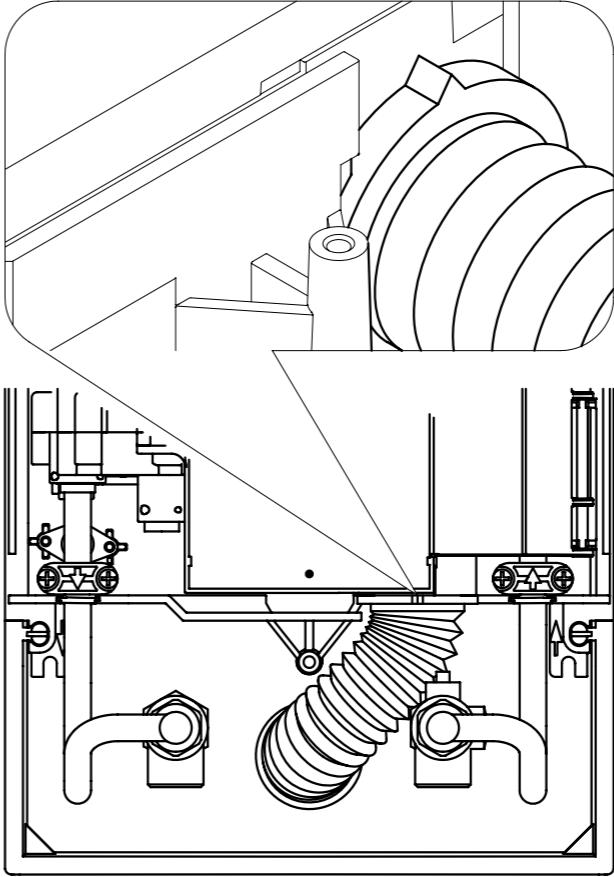
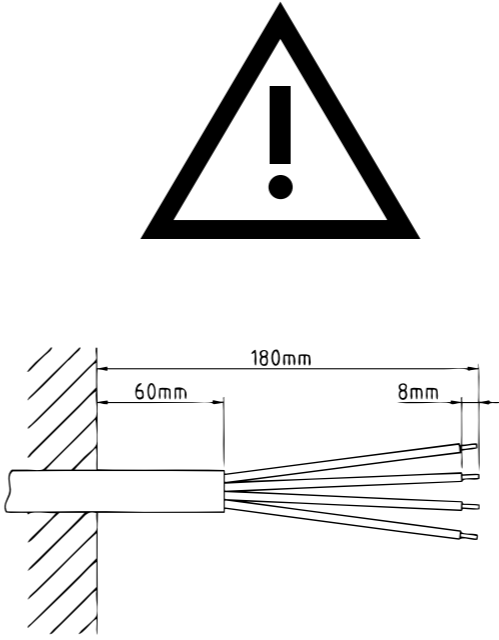
底部標準電線接駁

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，請必先確定電源已關上。

1. 從牆上插座位上拆除約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。



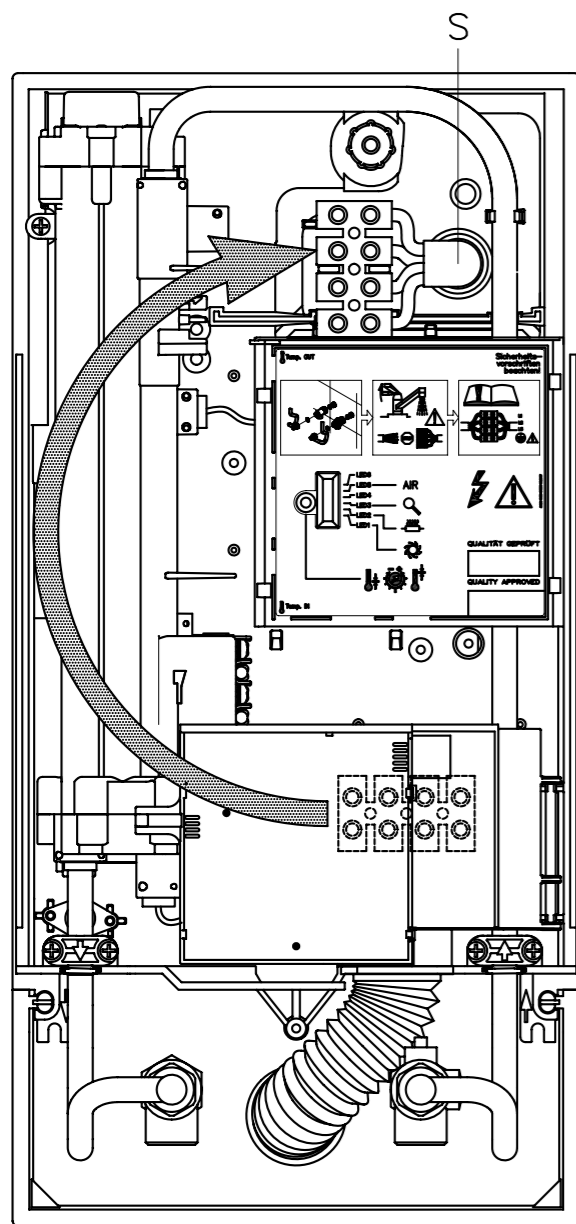
7. 電線接駁



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



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。

如果熱水器不能運作，可能溫度切斷裝置或限壓斷電裝置在運輸過程中跳制，如有需要，請重設裝置。

1. 開啟熱水器電源。
2. 開啟熱水龍頭。測試熱水器性能。發熱線會在水流開始10-30秒後啟動。
3. 將使用說明書交給客戶，並向客戶解釋熱水器怎樣操作。
4. 初步操作妥當後，請填妥及寄回保用証。

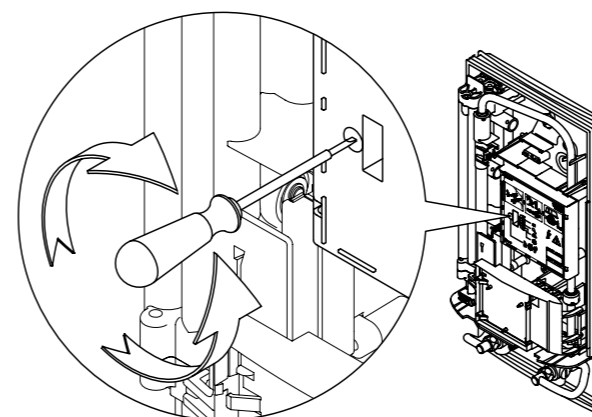
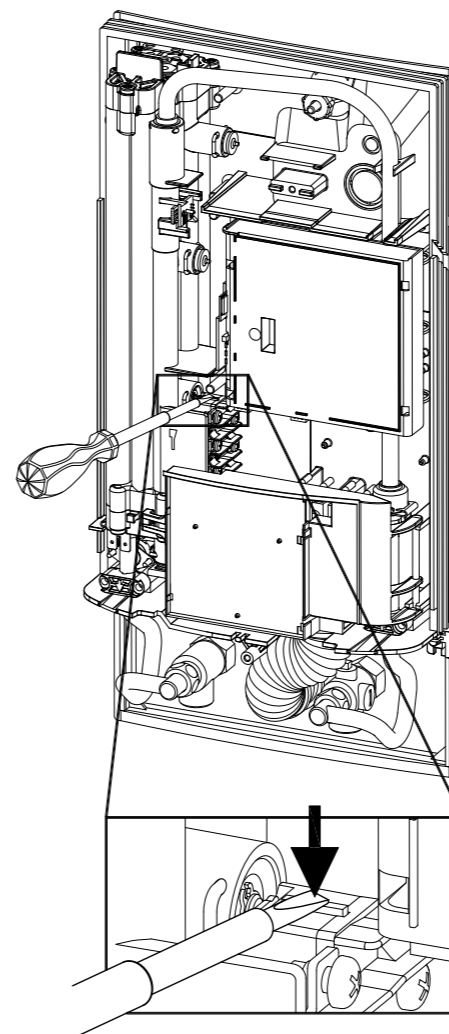
出廠預設出水溫度的修改

出廠時熱水出水溫度預設為50°C。

此出廠設置可以通過使用開蓋螺絲批子（寬度大約為2毫米）旋轉調壓器來修改，其範圍大約為 30°C 到 60°C。

順時針旋轉可以降低熱水出水溫度，而逆時針旋轉則可升高熱水出水溫度。

備註：如果設備連接到淋浴間，熱水溫度不得超過55° C。

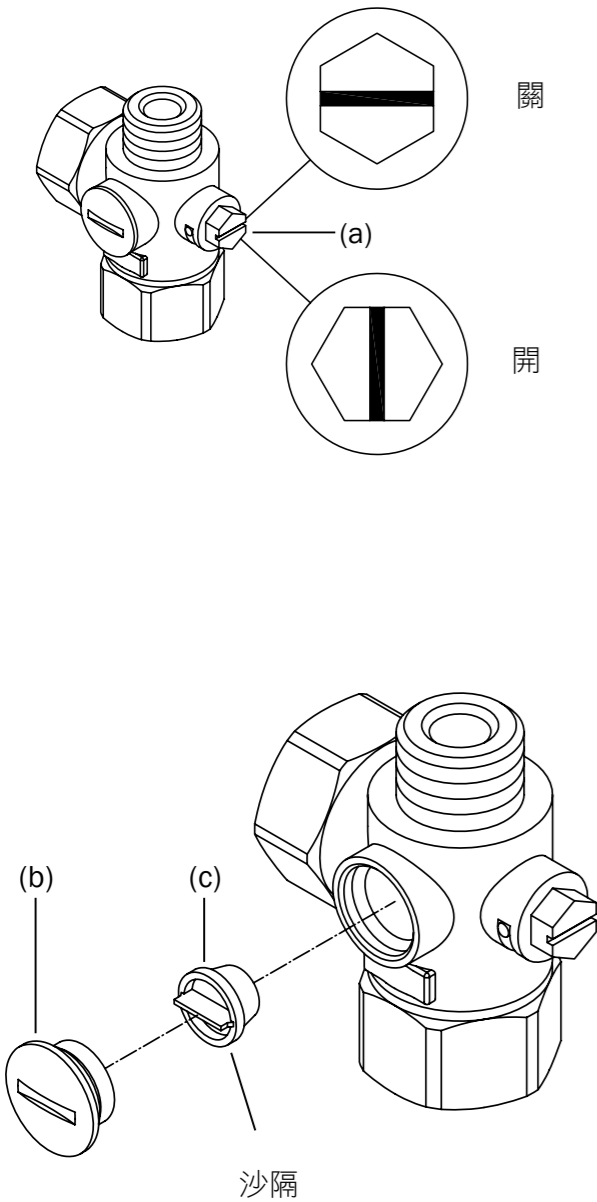


9. 保養

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，必須定時清理或更換。步驟如下：

1. 先關掉電源 (例如關掉保險表士) 以防止電源意外接通。
2. 打開熱水器蓋掩。先把蓋掩取下，旋出蓋掩下面的螺絲，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. 沙隔可以清洗或更換。
6. 放回沙隔後，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，再接通電源 (例如打開保險表士)。

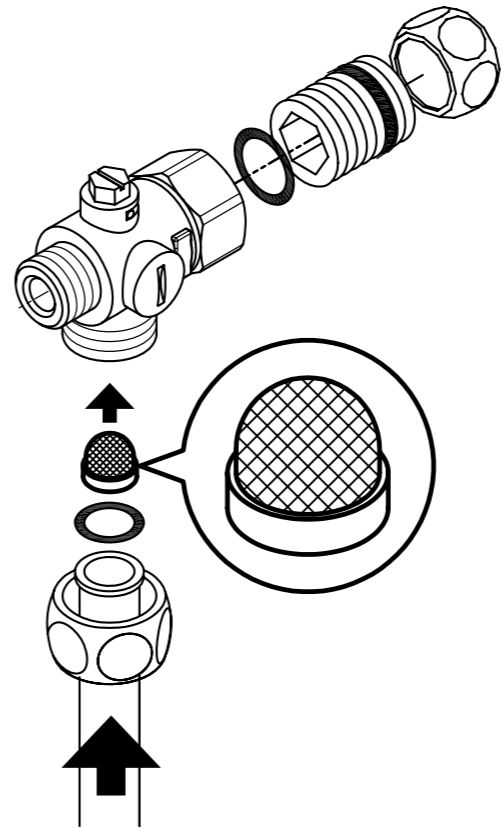


9. 保養

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 (例如關掉保險表士) 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. 打開熱水器蓋掩。先把蓋掩取下，旋出蓋掩下面的螺絲，然後卸下面蓋。
4. 從冷水喉旋出螺絲塞子，然後取出沙隔。
5. 沙隔可以清洗或更換。
6. 放回沙隔後，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，再接通電源 (例如打開保險表士)。



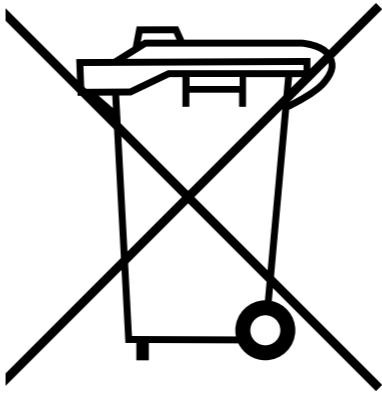
10. 環保及再造

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。

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。

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。

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。



11. 使用指示



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。

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，使熱水器內空氣完全排出。
- 4. 然後再接駁電源。
- 5. 十秒的不停水流將啟動熱水器。

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，電氣和管道組件應由授權專業人士檢查，以確保正常運作。

12. 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。

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

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	總電源保險絲跳制	更新或啟動保險絲
熱水流量太弱	過濾網骯髒或鈣化	清洗過濾網
	出水配件骯髒或鈣化	清洗花灑頭沙隔等配件
不能達致所選溫度	出水流量太大（冬天？）	減低出水流量
所選溫度感覺太冷	預設溫度太低	請專業人士調高溫度
所選溫度感覺太熱	預設溫度太高	請專業人士調低溫度

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. :	DBX		
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	中國澳門
九龍灣啟興道1-3號	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	電話：+853 2875 2699
傳真：+852 2356 9798	傳真：+853 2875 2661
電郵：repairs@germanpool.com	

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	Macau, China
10/F, Kowloon Godown	3/F, Edificio Industrial Pou Fung,
1-3 Kai Hing Road, Kowloon Bay,	145 Rua de Francisco Xavier Pereira,
Kowloon, Hong Kong	Macau
Tel : +852 2333 6249	Tel : +853 2875 2699
Fax : +852 2356 9798	Fax : +853 2875 2661
Email : 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



4 010436 255079

912025507 10.18
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。

German Pool (Hong Kong) Limited

Hong Kong, China

Room 113, Newport Centre Phase II, 116 Ma Tau
Kok Road, Tokwawan, Kowloon, Hong Kong.
Tel: +852 2773 2888
Fax: +852 2765 8215

Mainland China

8th, Xinxiang Road, Wusha Industrial Park,
Daliang, Shunde, Foshan, Guangdong
Tel: +86 757 2980 8308
Fax: +86 757 2980 8318

Macau, China

3/F, Edificio Industrial Pou Fung,
145 Rua de Francisco Xavier Pereira, Macau
Tel: +853 2875 2699
Fax: +853 2875 2661



香港《S MARK》
安全認證
2005



中國櫥櫃/家電行業
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
2015



香港工商業獎
2008



最具潛質
創建品牌企業獎
2007



香港中小企業
最佳拍檔大獎
2015



香港消費者推崇品牌
2014



香港《Q獎》
優質服務證書
2015



香港名牌十年成就獎
HONG KONG TOP BRAND TEN YEAR
ACHIEVEMENT AWARD
2015

© All rights reserved. Copying, reproducing or using the contents of this manual is not allowed without prior authorization from German Pool, violators will be prosecuted.