

# 使用說明 / 安裝說明

Operating Instruction / Mounting Instructions

## 輕巧型即熱式電熱水器

耐壓設計

Instantaneous water heater

pressure-resistant (encapsulated) construction

德國寶

GPI-6 / GPI-6 O

**GERMAN**  
POOL



Made in Germany

德國製造

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**GERMAN**  
POOL



TM

# 使用說明

尊敬的用戶：

在您使用 GPI- 即熱式電熱水器前請您仔細閱讀本使用說明。本說明包括熱水器使用和維護須知。請您仔細保管此使用和安裝說明，必要時傳給您的下一位使用者。

## 1 安全須知

請在使用和維護本熱水器時注意以下安全須知。

### 1.1 安裝

請對比一下電熱水器參數標牌上的值和您使用處的電源電壓，看它們是否相符。

安裝和首次調試須通過專業技術人員照此說明執行。檢驗和修理同樣要他們來完成。

### 1.2 使用

GPI- 型即熱式熱水器可接一個出水口，連續不斷地供應熱水，熱水器最好接在離出水口最近處。只有在打開水龍頭有水流經熱水器後，液壓控制器才會啟動加熱系統。此耐壓熱水器可連接一般的耐壓或不耐壓混水龍頭及配件。

GPI- 即熱熱水器適于在封閉的（有圍牆的），無霜凍的房間使用。

GPI型即熱熱水器符合德國VDE規定和德國DIN工業標準，有檢驗合格證書。

### 1.3 安裝調試

在首次安裝調試前或是在每次倒空熱水器後，必須使熱水器中通水部分空氣完全排出，才能通電。具體做法是：多次開合熱水龍頭，直到有不含氣泡的連續水流從水管流出。之後再把熱水器與電源接通。

### 1.4 故障處理

發生故障時立即切斷電源。

排除故障需通過專業技術人員。如無相應知識請您勿自行處理。

# 使用說明

## 2 GPI型即熱熱水器的工作原理

熱水器重要部件（見圖1）：

- 6000 W, 220 V的加熱器①，分為各3000 W的兩部分。
- 水流開關②，在達到接通水量時與兩個微型開關一起自動接通加熱器。

- 兩個溫度過熱保險③④，保證在使用過程中熱水器溫度不會超高。
- 電線接線柱⑤。
- 進水管座⑥，出水管座⑦，管螺紋 1/2"（英寸）。

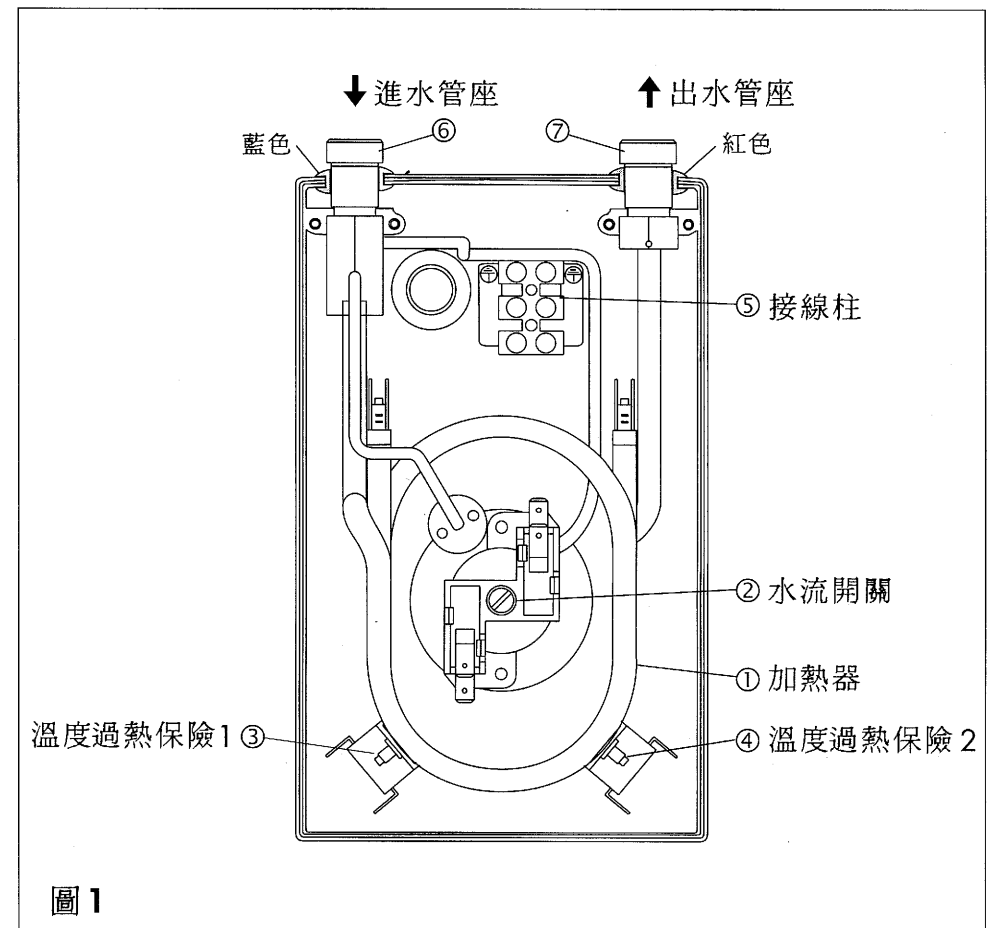
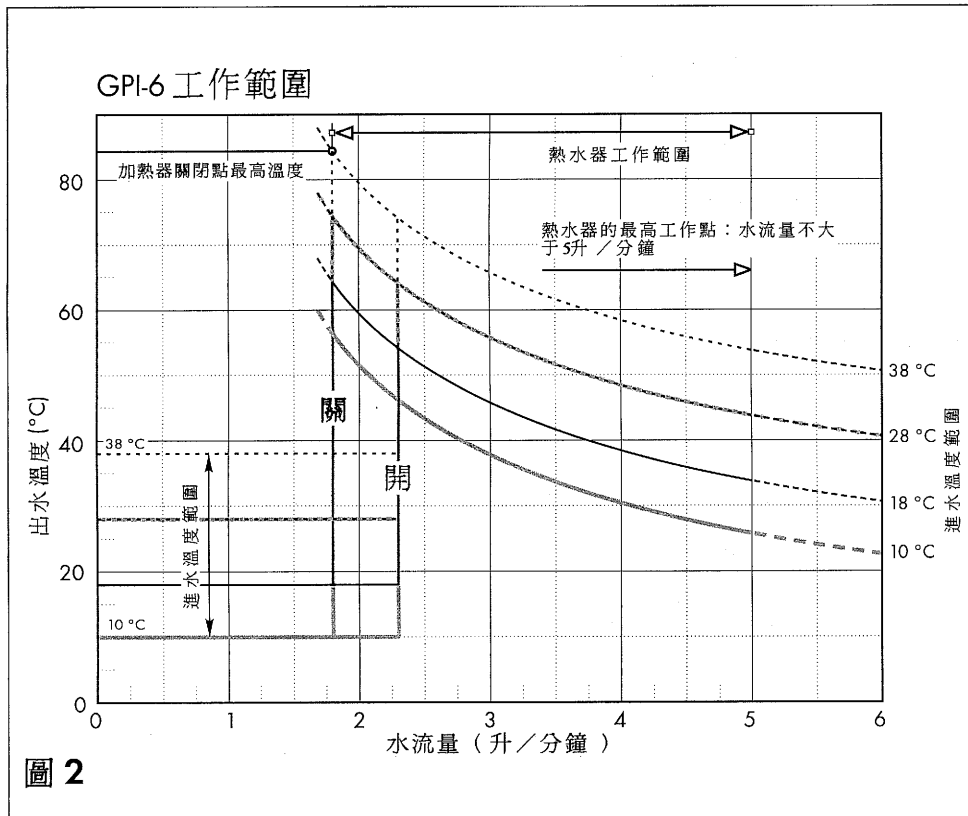


圖 1

## 使用說明



即熱熱水器運行過程如下：

打開熱水龍頭後水開始流入熱水器中的管道系統。當達到接通水量 2.3 l/min 時，水流開關自動啟動加熱器。熱水龍頭繼續開大，則水流量繼續增加。根據所調的水流量和冷水進水溫度可得出如圖 2 的熱水出水溫度。

水流量調大，出水溫度相應變低；同理水溫調高，水流量則變小。當水流量低到關閉水量 1.8 l/min 時加熱器被自動關閉。也就是說此熱水器的出水溫度範圍（從 1.8 l/min 到 5.0 l/min）完全是由通過水量和進水溫度決定的。

## 使用說明

### 3 使用指導

GPI 型即熱式電熱水器採取自動運行方式。打開熱水龍頭則加熱器自動開啓，關閉時則自動關上。打開熱水龍頭後您的熱水器即提供熱水。水溫可通過龍頭開合大小稍加調節。水龍頭如開得很大，裝在出水口的流量限制器會把水流量自動控制在最佳狀態 5 l/min。

• 注意

如果您認為熱水器有結冰現象，請勿立即使用。

### 4 維護和保養

此熱水器設計新穎，無需特別維護。清除外殼上可能產生的污垢時請您使用柔軟的浸濕的海綿，或用布和液體、不磨損的清潔劑。請勿使用有機溶劑。

• 注意

沉積在流量限制器口的水垢或其它污垢會使水流量變小。這會造成加熱器不能啓動。

因此，當您發現水流量達不到正常標準時，應定期除垢。只需把安在出水口的流量限制器擰下并倒頭沖洗乾淨。難除的水垢可請專業人員幫助用除垢劑清除。

# 安裝說明

## 1 注意事項

此熱水器只能由專業人員按本說明安裝并調試。 安裝所需的螺絲，定縫銷（膨脹螺絲）和墊片附在包裝里。

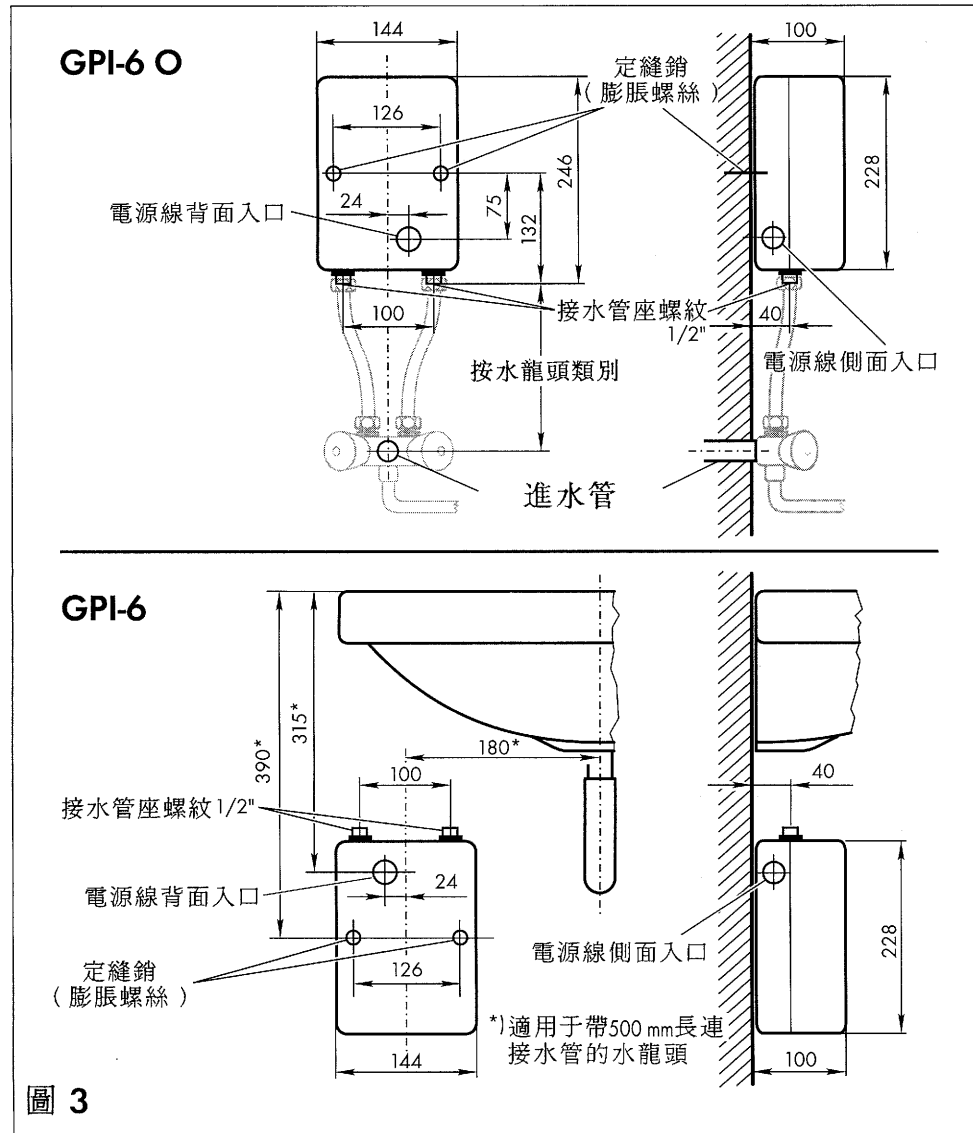


圖 3

# 安裝說明

- 按圖3所示尺寸把兩個螺絲的位置畫在牆上，鑽孔。
  - 嵌入定縫銷（膨脹螺絲）。
  - 打開熱水器外殼。
  - 電源線可從如圖所示的側面或背面的孔進入熱水器。
  - 釘螺絲固定熱水器，墊片安在外殼背面及牆壁之間。
- 2.1 GPI-6 O 型號的水喉連接**
- 旋緊水龍頭於進水管
  - 按生產廠家規定裝好墊片及墊圈
  - 連接水喉時要注意喉管必需垂直平衡
  - 用扳手將迫模旋緊於熱水器出入水位及水龍頭

## 2 接水

- 接水時請注意當地供水系統的規定。
  - 水龍頭及配件的接法請參照其生產廠家的說明。
  - 接水龍頭及配件時的工作壓力值須遵循第9頁上的技術數據。
  - 每個熱水器都附帶一個流量限制器，它出廠時被散裝在熱水器面殼內。它的作用是保持水流量恆定，請務必把它裝在龍頭出水口，（螺紋 M 22x1），以使熱水器達到理想效果。
- 2.2 與不耐壓水龍頭配件連接，即熱式熱水器進行無壓工作**
- 把水龍頭固定在水池上。
  - 按龍頭生產廠家規定裝好墊片及密封墊圈等。
  - 水連接管與角閥用螺絲相連。

如果水龍頭出水口是內螺紋形式（例如單柄混水龍頭），則需另裝上墊圈（已附在包裝內）。流量限制器會把水流量自動限制在 5 l/min 的範圍內。

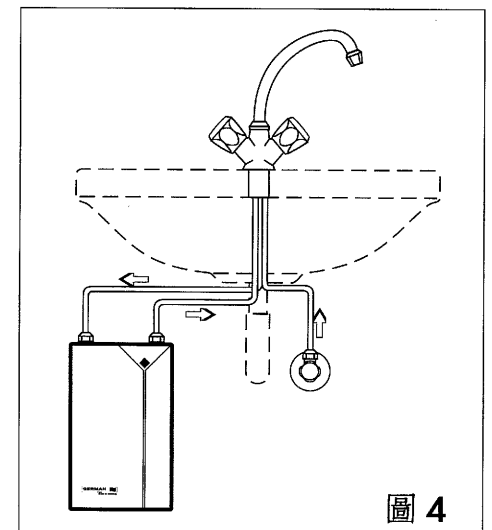


圖 4

## 安裝說明

- 與水龍頭相連的冷水進水管道（帶藍色箭頭）與熱水器的進水管座（帶藍色墊圈）相連。
- 與水龍頭相連的熱水出水管道（帶紅色箭頭）與熱水器的出水管座（帶紅色墊圈）相連。
- 水管與管座連接時不得歪斜！
- 旋緊外螺帽。

### 2.3 與耐壓水龍頭配件相連，熱水器進行有壓式工作

- 把水龍頭固定在水池上。
- 按龍頭生產廠家規定裝好墊片及密封墊圈等。
- 與水龍頭相連的冷水進水管道（帶藍色箭頭）和熱水器的進水管座（帶藍色墊圈）通過一個“T”字結構與角閥相連。

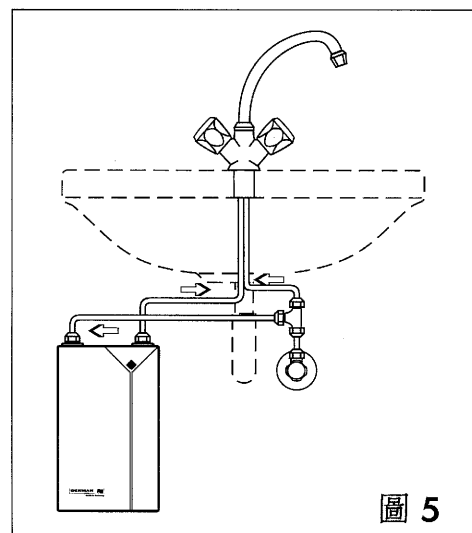


圖 5

- 與水龍頭相連的熱水出水管道（帶紅色箭頭）與熱水器的出水管座（帶紅色墊圈）相連。
- 水管與管座連接時不得歪斜！
- 旋緊外螺帽。

### 2.4 直接與家用水管連接(圖6)

熱水器如直接與家用水管連接，請注意以下要點：

- 熱水管道鋪設得越短越好。
- 須嚴格遵守一個熱水器只接一個出水口。
- 建議：請盡量使用薄型的銅或優質鋼管和相應配件，以防熱水流經管道時不必要的熱散失。

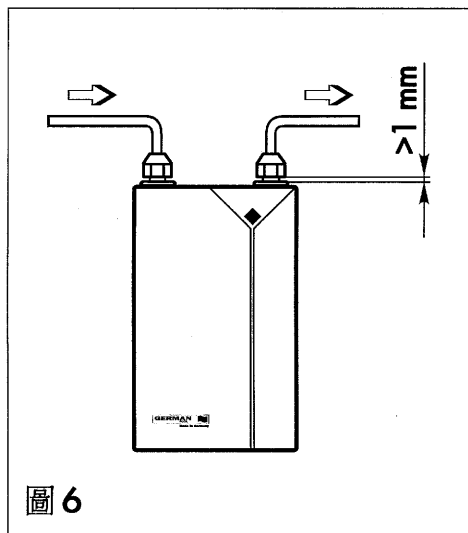


圖 6

## 安裝說明

- 密封縫隙用的膠帶請使用特氟綸膠帶。
- 在熱水器的出、入水管座只能使用螺紋長度適合的配件。配件必須密閉，但也不可擠壓紅色和藍色的外殼密封墊圈。

### 3 接電

圖7為熱水器的電路圖。

- 接電時請注意當地供電系統的接線要求。
- 電線只可從熱水器背面或側面的一個孔穿入，請按需選一個。
- 如果熱水器電源線入口處有空隙，須封閉。
- 請勿在外殼上自行打孔，以使電線穿入，這樣會造成水滲入熱水器內。

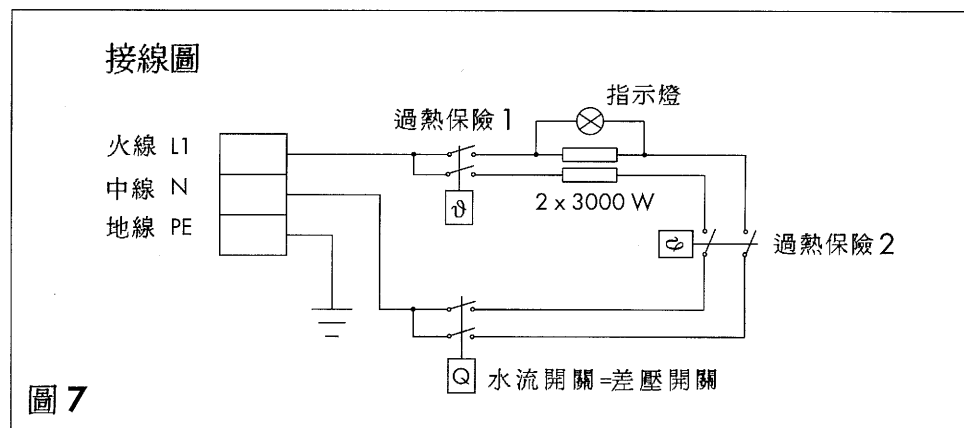


圖 7

當兩處過熱保險的彈簧片又合上時，表明過熱保險接通了。

在每次倒空熱水器後，（例如為防止內部結冰），或是在進行維修或安裝之後，請按以上步驟再次讓熱水器運行。

### 4 安裝調試

注意！為避免熱水器過熱而損壞，必須首先在其中通水部分放滿水。

首次安裝調試請遵循以下步驟：

- 熱水龍頭開到最大，直到有水均勻地流出。
- 關上熱水龍頭。
- 裝上流量限制器。
- 裝上電源保險。
- 打開熱水龍頭。
- 檢查熱水器的功能。

當兩處過熱保險的彈簧片又合上時，表明過熱保險接通了。

在每次倒空熱水器後，（例如為防止內部結冰），或是在進行維修或安裝之後，請按以上步驟再次讓熱水器運行。

# 安裝說明

## 5 技術數據

型號		GPI 6
構造		耐壓式
功率	KW	6.0
電源電壓	V	1/零線/地線 220V~
保險	A	32
頻率	Hz	50
防護等級		I
防護形式		IP24 (防濺水型)
操作類型		連續操作
接線方式		固定式 (永久式)
熱水器外形尺寸	mm	246 × 144 × 100
接水管座		管螺紋 1/2" 管座與牆距 40mm, 兩管座距 100mm
重量	kg	1.8
最低通流水壓	bar	1.0
最高水壓	bar	10.0

## 保修條例

本熱水器保修單由銷售國代理商提供。按用戶要求經銷商會告知具體的保修項目。享用保修服務必須出示標有購買日期，有經銷商印章或簽名的收據。

# OPERATING INSTRUCTION

Dear customer:

Please read this operating instruction carefully before using your GPI instantaneous water heater. It contains important tips for the use and the maintenance of the device. Please keep the operating instruction and mounting instructions carefully and forward these documents to a possible second owner.

## 1. Safety instructions

Please follow the following instructions when using and maintaining the device.

### 1.1 Installation

Check the specifications on the name plate of the device and compare them with your supply voltage!

The installation and initiation are to be performed according to this instruction by a specialist company or a specialist. He is also responsible for the inspection or the repair of the device.

### 1.2 Usage

Instantaneous water heaters type GPI are devices serving for the continuous water heating for one water tap. They should be installed as near to the water tap as possible. A hydraulic control switches on the heater only when water runs through the device after having opened the tapping valve. Due to its pressure-resistant design, normal (pressure-resistant) mixing taps can be used.

GPI instantaneous water heaters may only be used for heating drinking water for domestic purposes or for similar purposes in closed, frost-protected rooms.

The instantaneous water heaters of the GPI line are produced and checked in compliance with the German VDE regulations and the DIN standards.

### 1.3 First initiation

**Before realizing the first initiation or after having emptied the device, the instantaneous water heater may on no account be connected with the mains supply until all the air has been removed from the parts bearing water.** For this purpose please open and close the hot water tapping valve several times until a continuous water jet without air bubbles streams out of the water outlet. Only then the device may be connected with the mains supply.

### 1.4 In case of malfunctions

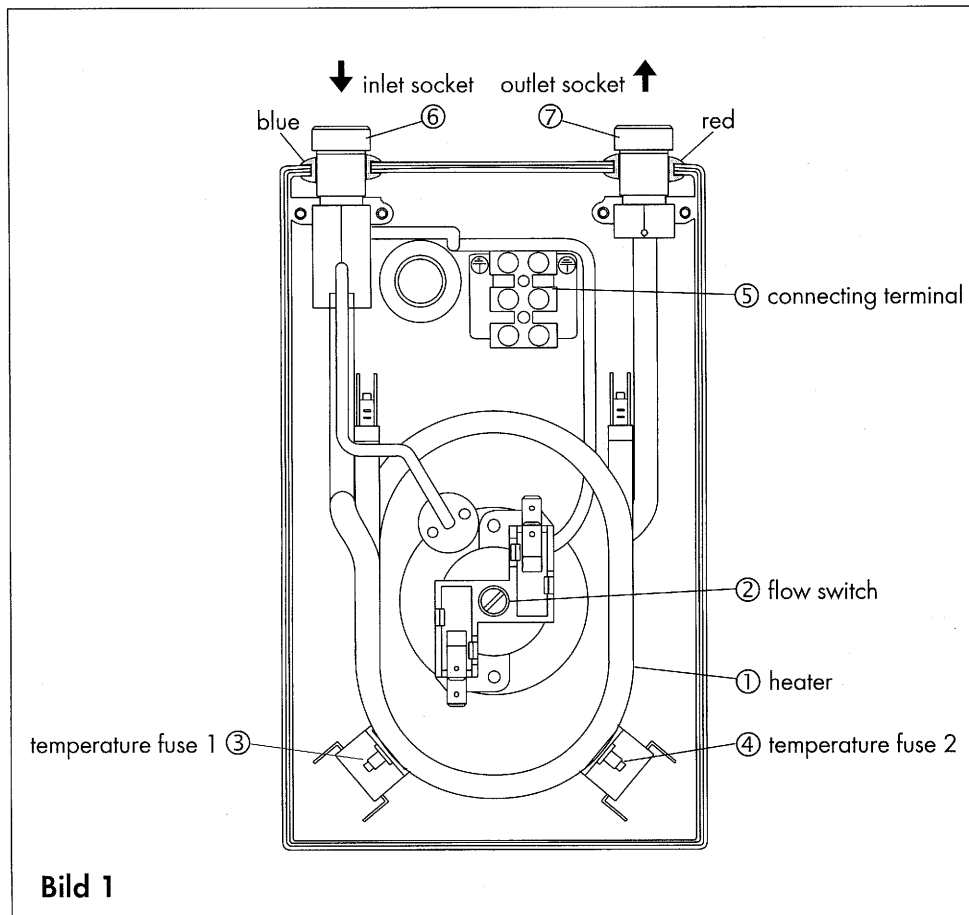
In case of malfunction, the device is to be disconnected immediately from the mains supply (unscrew mains fuse or switch off overload release). Ask a specialist company or a specialist to remove the malfunction. Do not perform any operation without corresponding specialist knowledge!

# OPERATING INSTRUCTION

## 2. Working method of the GPI instantaneous water heater

The most important function elements of the instantaneous water heater are (fig. 1):

- The heater with 6000 W at 220 V ① that is separated into two parts with 3000 W each.
- A flow switch ② that switches on the heaters with the two switches upon reaching the switch-on water quantity.
- 2 safety temperature limiters ③ ④ that safely protect the device against high temperatures in case of errors.
- Connecting terminal ⑤ for the electrical supply line.
- Inlet socket ⑥ and outlet socket ⑦ with 1/2" pipe threads.



# OPERATING INSTRUCTION

## Working range GPI 6

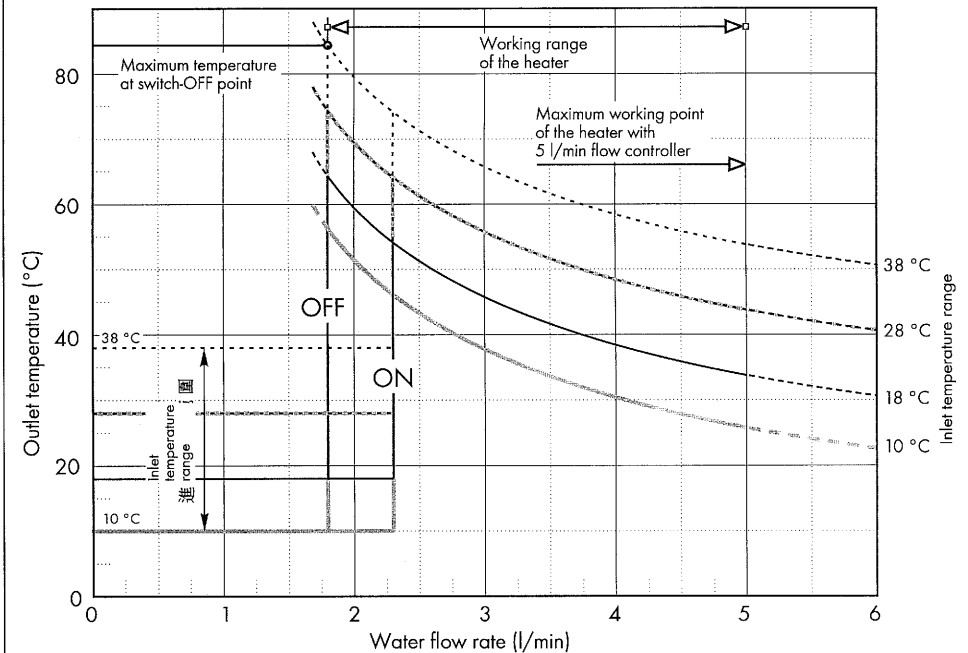


Bild 2

The instantaneous water heater works as follows:

When opening the hot water valve at the tap, water starts to flow through the pipe system in the device. As soon as the on-value of 2.3 l/min is reached, the flow switch switches on the heater. By further opening the hot water valve, the rate of flow increases.

Depending on the set rate of flow and on the temperature of the cold water at the inlet socket, a hot water temperature according to figure 2 is produced.

If the rate of flow is increased, the temperature of the water running out is reduced correspondingly; the water temperature rises by analogy when the rate of flow is reduced. When reaching the off-point of the flow switch at 1.8 l/min the heater is switched off. That means within the working range of the instantaneous water heater (from 1.8 l/min up to 5 l/min) the outlet temperature is solely determined by the rate of flow and by the temperature of the water running in.

# OPERATING INSTRUCTION

## 3. Operating instructions

The instantaneous water heaters of the GPI line work automatically. Upon opening the hot water valve, they switch on automatically, and upon closing it they switch off again.

After having opened the hot water valve, the device supplies hot water. It is possible to slightly regulate the water temperature by opening the hot water valve a bit more or a bit less.

When opening the valve more, the jet regulator automatically limits the flow onto an optimum water flow of 5 l/min.

- **Caution!** Do not switch on the device when it is evident that the device is frozen!

## 4. Maintenance and service

Due to its modern conception, the instantaneous water heater is a low-maintenance device. Please use a soft, damp sponge or cloth for cleaning possible impurities. Use a liquid non-scouring cleaning agent. Do not use any organic solvents!

### Please note:

- Due to furrings or other impurities at the outlets of the jet regulator at the swivel outlet, the aperture width of the jet outlet is reduced and with it the rate of flow. This may have the effect that the heater of the device does not switch on any more. Remove these furrings regularly when it is evident that the normal rate of flow is not reached any more. Simply screw off the jet regulator at the outlet and flush it against the normal flow direction. When furrings are persistent, a specialist can help you applying a descaler.

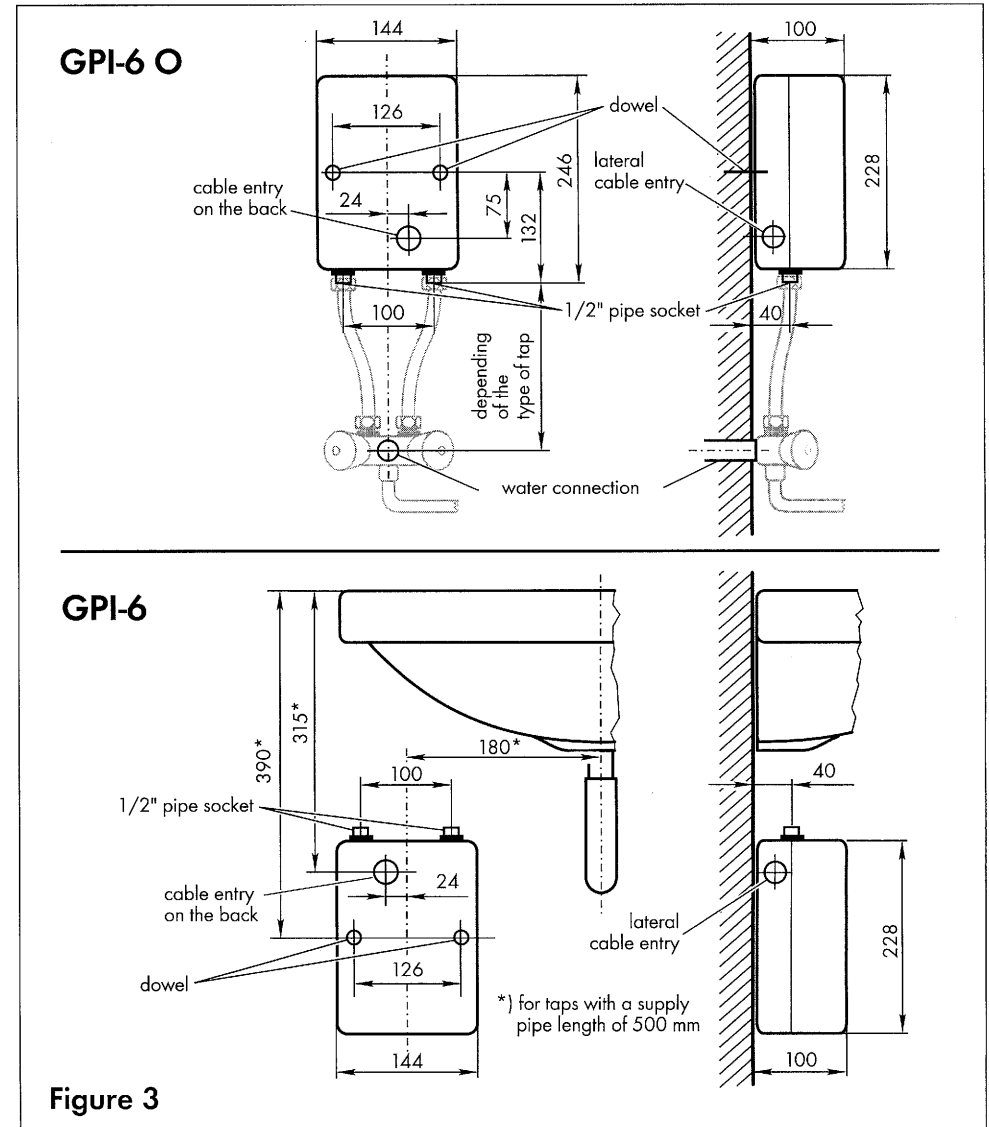
# MOUNTING INSTRUCTIONS

## 1. General instructions

The mounting and the first initiation may only be performed by a specialist or a specialist company!

The screws, dowels and distance disks necessary for fastening are part of the delivery.

- Mark drill hole according to figure 3
- Set dowels





## MOUNTING INSTRUCTIONS

- Open cover of the device
- Plug connecting cable through one of the two cable bushings in the lateral or back panel of the device
- Fasten device with screws. The distance disks are mounted between back panel and wall.

### 2. Water connection

- For the water connection, the regulations of the waterworks are to be followed.
- The taps are to be mounted according to the instructions of the manufacturer.
- When connecting the taps, the working pressure values according to the Technical data on page 19 are to be observed.
- At works, a jet regulator is enclosed to each device lying inside the package in unpacked form. It keeps the rate of flow constant. It is absolutely necessary to mount the jet regulator at the outlet (thread M 22 x 1)! Otherwise it will not be possible to reach the optimum performance of the device.

For taps with female thread at the outlet (e.g. single-lever mixers) the enclosed intermediate ring is to be mounted additionally. The jet regulator automatically limits the water flow onto 5 l/min.

#### 2.1 Water connection for GPI-6 O instantaneous water heater

- Screw the tap onto the water connection and check for tightness.
- Insert washers and gaskets according to the manufacturer's instructions.
- Pay attention to the necessary axial connection of the extension pipes.

- Use an open-end wrench to firmly tighten the sleeve nuts, first on the appliance, and then on the tap.

#### 2.2 Connection to an open mixing tap for depressurized operation of the GPI-6 instantaneous water heater (fig. 4)

- Fasten the tap to the wash-basin with screws.
- Insert disks and packing rings according to the instructions of the manufacturer.
- Fasten water supply pipe at the corner valve with screws.
- Fasten inlet pipe (blue arrow) to the water inlet of the device (blue packing ring) with screws.
- Fasten outlet pipe (red arrow) to the water outlet of the device (red packing ring) with screws.
- Do not jam pipes in the connecting branch!
- Thoroughly tighten union nuts.

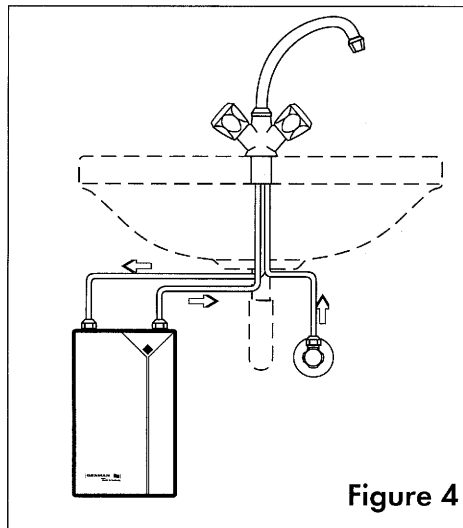


Figure 4

## MOUNTING INSTRUCTIONS

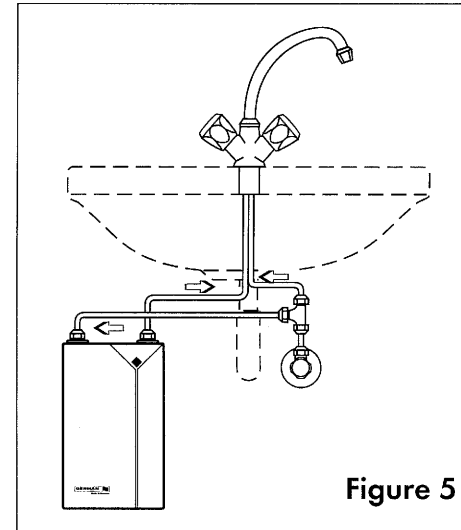


Figure 5

#### 2.2 Connection to a compression-resistant mixing tap for the operation of GPI-6 as instantaneous water heater under pressure (fig. 5)

- Fasten the tap to the wash-basin with screws.
- Insert disks and packing rings according to the instructions of the manufacturer.
- Connect cold water pipe of the tap and cold water supply pipe of the instantaneous water heater (blue packing ring) via a T-piece with the corner valve.
- Fasten hot water pipe of the tap to the water outlet pipe of the device (red packing ring) with screws.
- Do not jam pipes in the connecting branch!
- Thoroughly tighten union nuts.

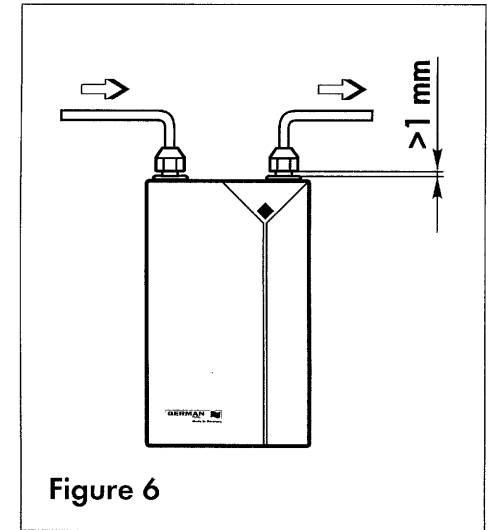


Figure 6

#### 2.3 Direct integration into the domestic water pipe (fig. 6)

When integrating the device directly into the domestic water pipe, please take the following points into account:

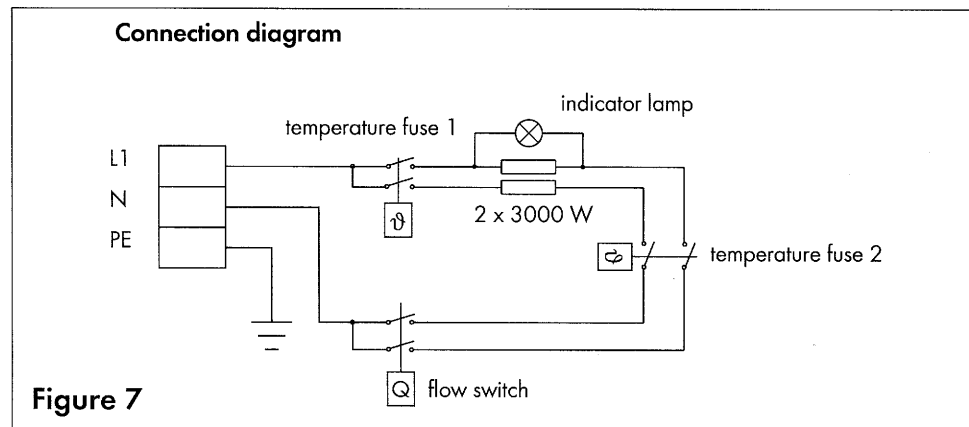
- Lay the hot water pipe as short as possible!
- Connect merely one water tap to the device!
- Recommendation: Use extremely thin-walled pipes made of copper or special steel and the corresponding taps so that as little heat as possible is taken away from the outgoing hot water.
- Use PTFE tape for sealing purposes.
- Use only taps with suitable thread lengths at the connecting branch of the device. They must be tight without pressing down onto the red or blue housing seal.

## MOUNTING INSTRUCTIONS

### 3. Electrical connection

The electrical connection of the device is represented in fig. 7.

- The "Technical connecting conditions" of the electric energy supply company are to be followed!
- Use only one of the two cable entries installed at the case back panel when connecting the electric supply.
- Make sure that the cable at the cable bushing is sealed.
- Do not breach the case at any other place in order to lay the connection cable. Water may trickle into the device.



### 4. Initiation

**Caution!** In order to prevent the device from being destroyed due to overheating, it is absolutely necessary that the parts in the device bearing water are completely filled with water! The following actions are to be executed to ensure this:

- Completely open hot water valve and wait until a steady water jet streams out of the tap.
- Close hot water valve
- Insert jet regulator
- Screw in mains fuse
- Open hot water valve
- Check the functioning of the device!

The temperature fuses are switched on after the spring steel sheet at the two temperature fuses has been pushed again.

After having emptied the device, e.g. due to danger of frost, after maintenance or installation works, the device is to be commissioned according to above specification.

## MOUNTING INSTRUCTIONS

### 5. Technical data

		GPI-6 / GPI-6 O
Model		pressure-resistant (encapsulated)
Power rating	kW	6.0
Supply voltage	V	1/N/PE AC 220V
Fuse	A	32
Frequency	Hz	50
Protection class		I
Protective system		IP 24 (splashproof)
Operating mode		continuous operation
Electric mains		fixed connection
Dimensions	mm	246 x 144 x 100
Tap connection		pipe thread: 1/2" Distance from the wall 40 mm, distance of the pipes 100 mm
Weight	kg	1.8
minimum flow pressure	bar	1.0
max. flow pressure	bar	10.0

### Terms of guarantee

The terms of guarantee issued by the manufacturer's agent in the country of purchase apply to this device. Upon request and at any time the dealer who sold the device to you will inform you about the content of the terms. To be able to use guarantee services it is absolutely necessary to present a receipt showing the date of purchase and bearing the dealer's stamp and signature.