

The logo for phasis, featuring the word "phasis" in a dark blue, lowercase sans-serif font. The letter "a" is replaced by a stylized blue wave symbol. A small registered trademark symbol (®) is located at the top right of the "s".

**phasis<sup>®</sup>**

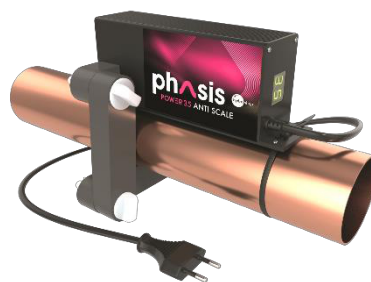
# Manual

**Aktive electronic Water  
conditioner**



## LIME SCALE

Modelle: Power 25,30,35,40,50,80,100



**IMPORTANT:**

Read these instructions carefully before use and keep them in a safe place.  
Instructions for use for future reference.

**Producer**

Hydro-Shop fbw GmbH  
Warnckesweg 1  
22453 Hamburg  
Deutschland  
[www.myphasis.de](http://www.myphasis.de)

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**BUSINESS OFFICE HYDRO-SHOP** fbw GmbH • Warnckesweg 1 • 22453 Hamburg  
**KONTAKT** Tel.: 040-500 1720 • Fax: 040-500 17 272 • E-Mail: [info@hydro-shop.eu](mailto:info@hydro-shop.eu)  
**INTERNET** [www.quellklar.de](http://www.quellklar.de) • [www.myphasis.de](http://www.myphasis.de) • WEEE-Reg.-Nr.: DE78415516

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# 1 Introduction

## Limescale

Limescale build-up caused by temperature changes, such as heating, turbulence and pressure fluctuations in water pipes and water-carrying systems, is prevented and broken down as soon as it is formed by the active high-frequency alternating current field induced (introduced) into the water by the Phasis systems. The Phasis unit is built around the central water pipe or in front of the installations that require special protection.

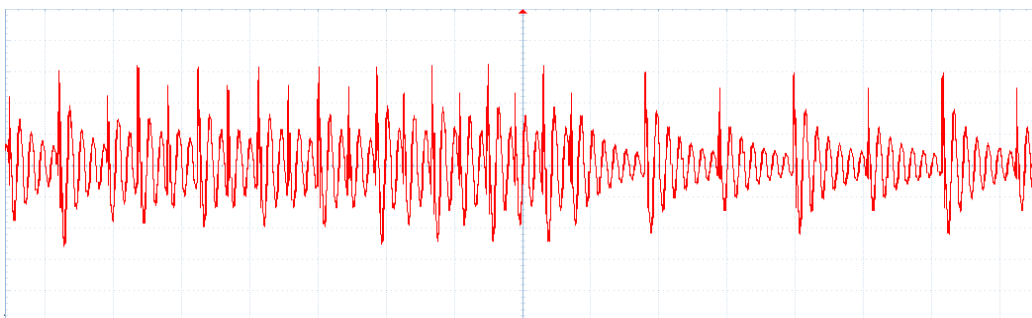
An active, powerful alternating magnetic field is formed in the ferrite ring, which wirelessly transmits its voltage into the water to be treated. This voltage can be measured by means of an oscilloscope.

The active high-frequency alternating current field operates in the frequency range between 120 and 140 kHz, with a closely following signal frequency, which not only prevents the accumulation of limescale, but also softens and breaks down existing limescale deposits.

Hard water conducts electricity better and therefore, depending on the type of device, the high-frequency voltage is transmitted throughout the tap water network.

This voltage can be measured using an oscilloscope.

High frequency means that the frequency of the Phasis devices oscillates about 3,000 times faster than normal alternating current. This rapid, continuous change of impulses causes the calcium and magnesium elements that form limescale deposits to be broken down into tiny microcrystals. microcrystals, which are unable to form hard deposits due to their weak adhesive forces.



## HYGIENE

Numerous tests and practical experience show the additional benefits in the treatment of water contaminated with germs.

The high-frequency alternating positive and negative charging of the microorganisms and organic suspended particles floating in the water causes them to collapse and filter off easily.

This effect is clearly visible in the case of algae growth, which is strongly hindered. Ponds and pools are clearly clearer and cleaner without the need to use chemical treatment agents, as was previously the case. The contamination of humidification systems is drastically reduced - a truly environmentally friendly effect.

## Variants

The Phasis models are characterised by their high voltage, making them superior to many similarly constructed devices.

With increasing voltage, the range of the signal path and thus the effect of the high-frequency field in the water is increased.

It is therefore also possible to insert more ferrites in individual cases with a higher cable diameter.

However, this must always be agreed with the manufacturer, as the frequencies and thus the effect can also change.

Why and how does the Phasis limescale protection technology work?

This new generation of ferrite limescale protection devices are considered the most efficient devices for chemical-free water treatment today.

- The signal is introduced into the water in a pulsating manner and acts there accordingly.
- The device is always active, it works 24 h a day.
- The limescale protection signal is transmitted wirelessly, electronically.
- The frequencies and signal strength vary constantly to cover different types of limescale problem areas caused by different temperature or hardness conditions.
- The signal transmitter periodically releases its energy into the ferrite ring (about 0.5% of the time), during the rest of the time it recharges.

## 2 About this instruction manual

### 2.1 Presentation of indications

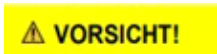
The following symbols warn you of dangers when handling this product or give you useful information.



„GEFAHR“ = DANGER" is used when death or severe damage to health will occur if the relevant safety instruction is not observed..



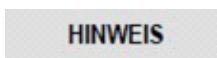
"WARNUNG" = WARNING is used when death or serious damage to health may occur if the relevant safety instruction is not observed..



"VORSICHT" = CAUTION! is used when moderate or slight damage to health may occur if the relevant safety instruction is not observed.



ACHTUNG“ = ATTENTION is used when damage to the product or the environment may occur if the relevant note is not observed.



Application instructions and information useful for using the product. may occur if the relevant instruction is not followed.

## 2.2 Enumeration display

Enumerations are shown as a list with bullet points. Example:

- Point 1
- Point 2

## 2.3 Presentation of calls to action

Calls to action with sequence are shown numbered. Calls to action without sequence are shown with an arrow. The result of the call to action is shown in italics and marked with a tick. Example:

Call to action

1. Activity, e.g. press the "horn on" button.
2. Activity, e.g. press the "horn off" button.

Reaction 2.  e.g. "The signal tone goes out".

## 3 For your safety

The product is built according to state-of-the-art technology and in compliance with all relevant safety regulations. Nevertheless, there are residual dangers in handling the product. To avoid these residual dangers, observe the safety instructions in these instructions for use. The manufacturer accepts no liability for damage caused by failure to observe these instructions for use.

### 3.1 Intended use

- The Phasis Power is an active electronic water conditioner that can be used in domestic and commercial environments. The device is used to remove and prevent limescale deposits in water pipes.
- It is attached to water pipes. Ferrite elements are connected together by the device around the water pipe. Only the ferrite elements supplied with the product are to be used. The water pipe material can be iron, copper, plastic or composite materials.



- Individual components may only be replaced with original spare parts from the manufacturer with the same technical data.
- Before use, all individual parts must be checked for perfect condition.
- The installation instructions in the operating manual must be observed.
- The product may only be operated by persons over 14 years of age with appropriate mental and physical abilities.
- The product must not be modified structurally or in any other way. The manufacturer accepts no liability for modifications to the product.
- All uses not listed are considered improper use and can lead to serious personal injury and damage to property. In that case, the manufacturer assumes no liability.

### 3.2 General safety instructions

To avoid serious personal injury and damage to property, observe the following general safety instructions:

- Do not allow children under the age of 14 to operate the product.
- Never allow children and mentally or physically impaired persons to clean/repair the product or eliminate faults.

 **WARNUNG!**

#### Dangerous electrical voltage

A damaged cable can cause death or serious personal injury from electric shock.

- Do not open the housing.
- Check the cable before each use. If the cable is damaged, contact the manufacturer.
- If the mains connection cable is damaged, it must be replaced by the manufacturer or its customer service or a similarly qualified person in order to avoid hazards.

**⚠️ WARNUNG!****Dangerous electrical voltage**

Live components can cause death or serious personal injury from electric shock or fire during care and maintenance.

- Only clean the appliance when it is switched off.
- Pull the mains plug out of the socket.
- Do not hold the appliance in a jet of water.
- Do not immerse the machine in water.
- Do not use aggressive cleaning agents.

**⚠️ VORSICHT!****Danger of burns due to hot surface**

Skin burns are possible from the hot surface of the Phasis Power.

- Do not load the unit with objects lying on it.
- Use the Phasis unit only for its intended purpose.
- Do not remove any ferrite while the unit is running.
- For line temperatures above 60 °C, thermal insulation must be fitted between the unit and the line. This insulation must be non-conductive, i.e. without metallic foil, so as not to interfere with the correct functioning of the unit.

## 4 Technical data of the different models

Table 1: Technical data Phasis Power 25, 30 and 35

Modell	Phasis Power 25	Phasis Power 30	Phasis Power 35
Insert	Single-family houses with 1 bathroom, as well as smaller installations	Houses with up to 3 residential units and bathrooms, as well as smaller technical installations	Larger Residential units with up to 5 flats
Signal strength in Volt	25 - 30 V	30 - 35 V	35 - 40 V
Frequenzy (kHz)	120 - 160 kHz	120 - 160 kHz	120 - 160 kHz
Water pipe (mm)	Up to 40 mm, 1,5"	Up to 48 mm, 1,8"	Up to 60 mm, 2,3"
Power supply of the unit	110 - 220 V	110 - 220 V	110 - 220 V
Energy supply	2,0 W	2,5 W	3,0 W
Power supply of the unit	Extern 220 Volt AC auf 12 Volt DC	Extern 220 Volt AC auf 24 Volt DC	Built-in 220 Volt
Output signal control	-	+ LED	+ LED
Display	2 Indicator Dioden	Digital display, shows discharge strength and gives general control information	Digital display, shows discharge strength and gives general control information
Unit size in (mm)	102 x 43 x 104 mm	189 x 43 x 68 mm	189 x 43 x 68 mm
Dimensions incl. ferrite ring	102 x 86 x 165 mm	189 x 109 x 145 mm	189 x 123 x 158 mm
Power line length (m)	1,50 m	1,50 m	1,50 m
Outer carton mass	280 x 215 x 105 mm	280 x 215 x 105 mm	280 x 215 x 105 mm

Table 2: Technical data Phasis Power 40, 50, 80 and 100

Modell	Phasis Power 40	Phasis Power 50	Phasis Power 80	Phasis Power 100
Insert	Large apartment buildings up to 10 residential units, hotels up to 20 rooms, individual objects such as boilers or water-carrying machines in the commercial and industrial sector.	Apartment buildings with up to 20 residential units, hotels with up to 30 rooms, individual objects such as boilers or water-conducting machines vmmmercial/ industrial sector.	Houses up to 30 residential units, hotels up to 50 rooms, industry & commerce, agriculture	Large apartment buildings, large hotel complexes, various industrial applications, agricultural use
Signal strength in Volt	45 - 55 V	50 - 60 V	70 -85 V	85 - 100 V
Frequenzy (kHz)	120 - 145 kHz	122 - 135 kHz	122 - 145 kHz	122 - 145 kHz
Water pipe (mm)	48 mm	62 mm	111 mm	132 mm
Power supply of the unit	230 V 50 - 60 Hz	230 V 50 - 60 Hz	230 V 50 - 60 Hz	230 V 50 - 60 Hz
Energy supply	4 W	5 W	15 W	18 W
Dimensions (mm)	205 x 85 x 47 mm	205 x 85 x 47 mm	205 x 85 x 47 mm	205 x 85 x 47 mm
Ferrite number	1 x long 3 x short	4 x long	1 x long 5 x short	6 x long
Weight(kg)	2,6 kg	2,9 kg	3,2 kg	3,7 kg
Protective function	<b>CE</b> conform IP 65	<b>CE</b> conform IP 65	<b>CE</b> conform IP 65	<b>CE</b> conform IP 65
Working temperature at the mounting point	Max. 65°C	Max. 65°C	Max. 65°C	Max. 65°C
Water temperature (°C)	0 - 115°C	0 - 115°C	0 - 115°C	0 - 115°C

## 5 Transport product

➤ Transport the product in its original packaging.

## 6 Unpack the product

1. Remove all packaging.
2. Remove all protective film.
3. Keep the packaging material for later transport or possible returns.
4. Place the individual parts on a firm base to prevent the sensitive ferrites from falling down and breaking..

### ACHTUNG

#### Unsecured product

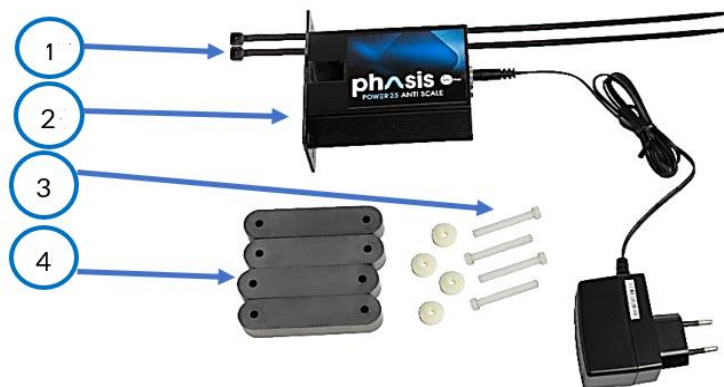
An unsecured product can fall down and cause light to medium property damage.

➤ Choose a non-slip standing surface.

## 7 Check scope of delivery

➤ Check the scope of delivery for completeness. If parts are missing, contact the manufacturer.

Figure 2: Scope of delivery



Pos.	Description
1	Fastening straps
2	Phasis Water-Conditioner
3	Insulating screws made of PE for ferrite mounting including matching nuts
4	Ferrites (The number varies depending on the unit type)

Not shown: Power adapter (type Phasis Power 25, 30), assembly and installation instructions

## Display elements



Figure 3: Display elements

Pos.	Description
1	Display of signal voltage in volts and temperature in degrees Celsius (for models Power 30 and Power 35 only induction amplifier in volts).



Pos.	Description
1	Display Activity Model Power 25

## 8 Installation rule for systems that are heated

The Phasis device does not change the chemical composition of the water as chemical systems do, it only prevents the deposition of lime on the surface of the heating elements and in the pipe system.

In all installations on systems in which the water is heated, the device must be installed on the cold water side, before the heaters. This applies to boilers, water heaters and heat exchangers. In cooling systems, the unit should be installed on the water inlet.

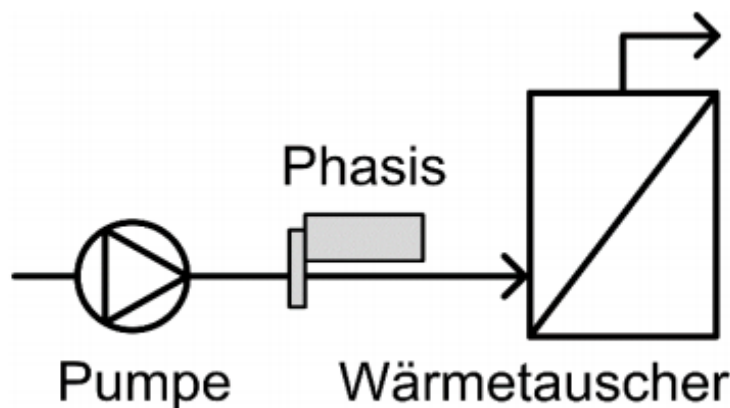


Abbildung 5: Anbringung phasis vor Wärmetauscher

Figure 5: Mounting the phasis unit in front of the heat exchanger

- For circulating systems with a water circulation, install the unit on the circulation pipe, not on the supply pipe. For very hard water, it may be useful to install another unit on the water supply, see no. 2 in the figure below (speak to our technical advisory service).

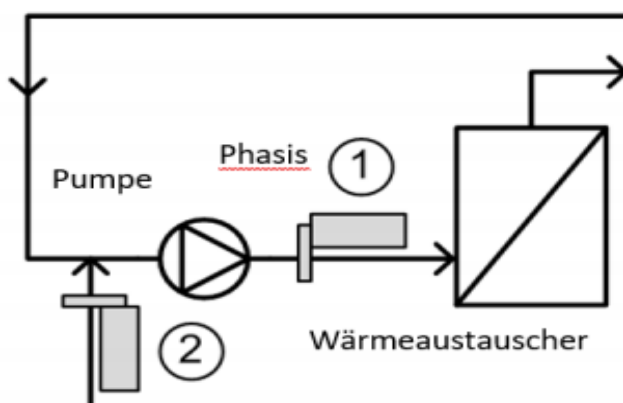


Abbildung 6: Position phasis Gerät Wasserzufuhr im Wärmekreislauf

Figure 6: position phasis device Water supply in the heat circuit

## 9 Installation

### ACHTUNG

#### Product damage

The unit may be overloaded and damaged.

- Do not connect the unit to the power supply without having correctly mounted and closed the ferrite ring.
- Tighten the screws only hand-tight to prevent the ferrites from breaking.

### ACHTUNG

#### Product damage due to vibrations

The unit may be damaged.

- Install the unit at a safe distance of approx. 1 m from the pump.

#### Position

The Phasis water conditioner sends the signal sequence equally in both line directions. The unit can be mounted vertically or horizontally.

- Find an easily accessible position for mounting and observing the display.

#### Vibrations

If the unit is mounted too close to a pump, vibrations may occur.

- Install the unit with a safety distance of approx. 1 m from the pump.

To prevent the ferrite connections from loosening in such cases, the screw connections can be secured with Loctite 243, for example.

#### Number of ferrites

The number and types of ferrites are exactly matched to the Phasis model.

Do not change this without consulting our technical service. Such changes will alter the signal parameters of the unit and the effectiveness will suffer.



## 9.1 Installation Phasis Power 25

For the installation, note the call to action.



1.  
Insert a ferrite through the opening provided in the unit and fasten one ferrite on each side using the screws.

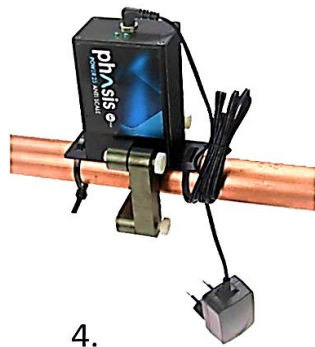
Now the ferrite can no longer slip out.



2.  
Close the ferrite ring with the last screw.  
Caution: Tighten the screws only hand-tight to prevent the ferrites from breaking.



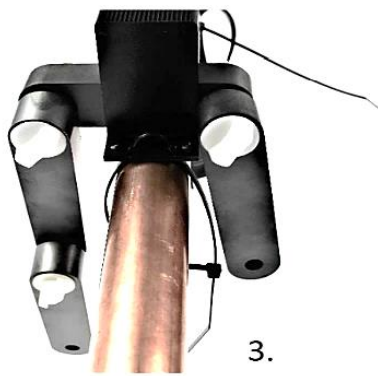
3.  
Close the ferrite ring with the last screw. Caution: Tighten the screws only hand-tight to prevent the ferrites from breaking.



4.  
Plug the adapter connector into the unit and the adapter into the power supply. Both diodes must light **GREEN**.

## 9.2 Installation Phasis Power 30, 35

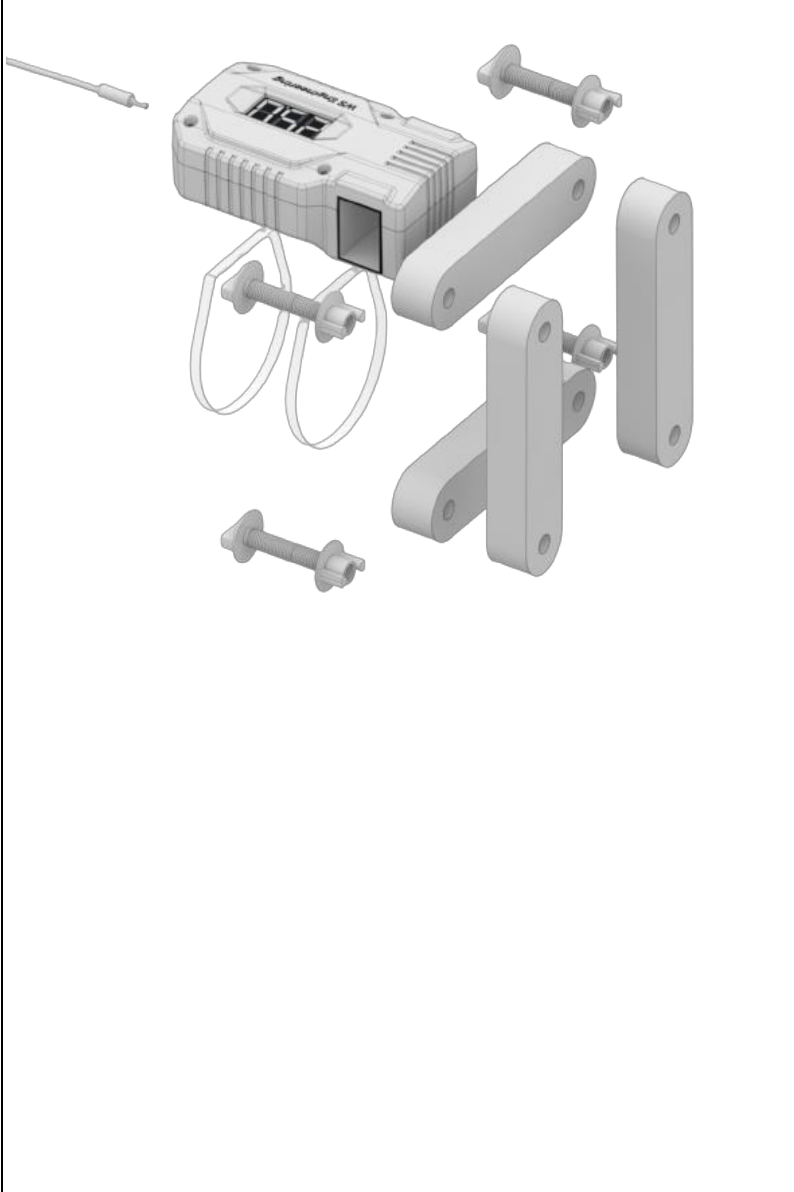
For the installation, note the call to action



1. Insert the ferrites through the opening provided in the unit and fasten one ferrite on each side using the screws.
2. Attach the third ferrite on one side in the same way. Insert a cable tie from above through the longitudinal slots on both sides.
3. Insert one cable tie each through the longitudinal slots on both sides. Place the unit on the water pipe and secure it with the cable ties.
4. Close the ferrite ring with the last screw. Caution: Tighten the screws only hand-tight to prevent the ferrites from breaking
5. Plug the adapter connection into the unit and the adapter into the power supply. Both diodes must light up GREEN

### 9.3 Installation Phasis Power 40, 50, 80, 100

For the installation, note the call to action

	<ol style="list-style-type: none"> <li>1. Pull the mounting cables through the openings on the bottom of the unit.</li> <li>2. Place the unit on the mounting location and tighten the fastening slightly so that you can still move the unit on the line.</li> <li>3. Take the long ferrite first, which is marked with a red dot. take a second ferrite.</li> <li>4. Take a second ferrite and connect both with a bolt and the corresponding nut.</li> <li>5. Tighten the fastening slightly.</li> <li>6. Insert the long (first) ferrite into the corresponding unit opening and attach another ferrite on the other side.</li> <li>7. Lightly tighten the bolt and nut.</li> <li>8. After closing the ring around the water pipe, hand-tighten the bolts, not too hard, because the ferrites are brittle and break easily.</li> </ol>
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A clearance or empty space between the ferrite ring and the wire is of no importance because the induction fills the entire ring evenly.

## 9.4 Connect product

### ⚠️ WARNUNG!

#### Dangerous electrical voltage

A damaged cable can cause death or serious personal injury from electric shock.

- Do not open the housing.
- Check the cable before each use. If the cable is damaged, contact the manufacturer.
- If the mains connection cable is damaged, it must be replaced by the manufacturer or its customer service or a similarly qualified person in order to avoid hazards.

### ⚠️ VORSICHT!

#### Danger of burns due to hot surface

Skin burns are possible from the hot surface of the Phasis Power.

- Do not load the unit with objects lying on it.
- Use the Phasis unit only for its intended purpose.
- Do not remove any ferrite while the unit is running.
- For line temperatures above 60 °C, thermal insulation must be fitted between the unit and the line. This insulation must be non-conductive, i.e. without metallic foil, so as not to interfere with the correct functioning of the unit.

### ACHTUNG

#### Damage to the product

The unit may be damaged.

- Only connect the unit to the power supply with the ferrite ring closed.

#### Elektrischer Anschluss

- Always follow the safety instructions required for electrical connections.
- If the power supply is endangered by strong fluctuations due to overcharging, connect a surge protector.

## 9.5 Connecting the product to the Power 25 and Power 30 models

1. Check whether the socket you want to use matches the voltage of the product. For the voltage of the product, refer to the chapter "Technical data" or the rating plate.
2. For Power 25 and Power 30 models, plug the power adapter into the unit.
3. Plug the adapter of the Power 25 or the Power 30 into the socket. On the Power 25, both diodes must now light up green.
  - At Power 25, both diodes must now light up green.
  - At Power 30, the LED display shows the induced voltage in volts.
  -

## 9.6 Connect product on Power 35, Power 40, Power 50, Power 80 and Power 100 models

1. Check whether the socket you want to use matches the voltage of the product. For the voltage of the product, refer to the chapter "Technical data" or the rating plate.
2. Insert the plug into the nearest power supply.
  - On the Power 35 model, the LED display shows the induced voltage in volts.
  - On the Power 40, Power 50, Power 80 and Power 100 models, you will see the self-test before the final volt signal appears.
  - Let the unit run for a few minutes until it has booted up.

## 10 Final tuning/ self-test for Power 40, Power 50, Power 80 and Power 100 models

### 10.1 Self Testt

- Before connecting the unit to the power supply, please check that all electrical cables are in good condition.
- Also check that the unit is well fastened and that the ferrites are firmly seated.

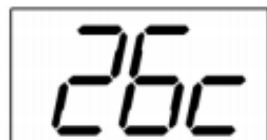
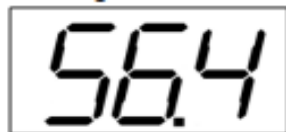
- The Phasis Water Conditioner is equipped with a self-testing system that runs in several stages.
- All sections of the self-test run automatically and then switch off again.



3 blocks appear showing the model no. and the series.

- The unit tests the sound.
- You will hear a short beep signal. The other test steps are:
- Test of the frequency generator
- Test of the micro-controller
- Starting the generator

After a successful self-test, the display shows "on". This means that the self-test has been successfully completed and that the unit is working. Then the signal strength builds up in volts. It increases quickly and reaches the correct value. After approx. 5 seconds, the temperature in the unit is displayed in degrees Celsius.



**Permanent display.**

In operating mode, the unit alternately displays: 3 sec. voltage strength in volts 1 sec. temperature.

**10.2 Final vote**

- Move the unit back and forth on the water pipe. The volt
  - indicator on the LED display changes.
  - By changing the position in this way, you will find the position with the highest signal strength.

This effect is caused by the standing wave, the electromagnetic waves that are fed in the water.

- Fasten all screws including nuts at this position for final continuous operation.
- Should the piping system be rebuilt in the future, it makes sense to repeat this procedure.

**11 Operate product**

The Phasis device works completely automatically, no settings are necessary

**12 Switch off product**

- Pull the mains plug out of the socket.
- The LED display or, in the case of the Power 25 model, the two LEDs go out.

**13 Care and maintenance****13.1 Maintenance**

The Phasis device is basically maintenance-free.

- Check the signal strength every 4 to 6 months.
- Check every 4 to 6 months that the screw connections of the ferrite ring are tight.

Clean product

**⚠ WARNING!**

- Dangerous electrical voltage A short circuit can lead to serious damage or death by electric shock or to fire.
- Only clean the appliance when it is switched off.
- Pull the mains plug out of the socket.
- Do not hold the appliance in a jet of water.
- Do not immerse the machine in water.
- Do not use aggressive cleaning agents.
- Clean the appliance with a damp or dry cloth.

## 14 Disruptions

### 14.1 Warning signals on Power 40, Power 50, Power 80 and Power 100 models

#### The unit emits the following warning signals:

- In the event of a drop in power, the display shows the current power status in flashing mode.
- At the same time, a signal will sound constantly: 2 short - pause - 2 short.
- If the water conditioner is switched on without ferrites, the display shows "FEr" and at the same time a continuous beep sounds.
- If the temperature in the unit exceeds the tolerances, the temperature is displayed flashing and the warning signal is 3 short beeps.

#### Overheating protection

- In case of overheating, the appliance will automatically reduce the energy supply.
- The temperature indicator will flash and display the temperature for 3 seconds.
- A warning signal will sound.
- The low voltage warning will appear.

When the unit returns to normal working condition, the warning signals are automatically switched off. If the unit does not operate in the desired state, return it to the supplier for inspection.



Warning signal during and after the start-up phase on Power 40, Power 50, Power 80 and Power 100 models.

#### HINWEIS

#### Note for the start-up phase of the product

The start-up phase of the unit can be between 2 and max. 5 minutes.

1. If a warning signal sounds immediately when the unit is switched on, please wait a few minutes before taking further steps.
2. If the condition does not change, perform the empty test.

#### Blank test:

Leave the unit attached to the water pipe.

1. Switch off the power supply.
2. Loosen the screws of all ferrites.
3. Remove one bolt.
4. Close the ring above the unit now.
5. Reinsert the bolt and hand-tighten the screws.
6. Switch on the power supply again.

The unit operates without a line passing through the ring.

- - If the display flashes now, there is a device error or the device is equipped with the wrong ferrites.
- - If the signal now builds up normally, then there is an error in the site selection.

In this case, check whether there is an electrical loop in the wiring system. Mount the unit in a different place.

You can also contact our technical service.

## 14.2 Disruptions

The main reasons for incorrect operation of the unit can be incorrect installation or incorrect selection of the mounting location.

- If the fault cannot be rectified or if faults not described occur, contact the manufacturer.

Table 3: Faults and their remedies

Fault	Cause	Correction
Product cannot be switched on.	Mains plug is not connected correctly.	Insert the mains plug correctly into the socket.
Product displays wrong signal voltages	Bypass or electrical loop See item Electrical loop.	See item Suggested solutions electric loop.
Decrease in effectiveness; exceeding of technical device tolerances; failure of technical components in the device.	Self-dissolution of the ferrite compounds.	Ferritverbindungen nachziehen.
Decrease in effectiveness; exceeding of technical device tolerances; failure of technical components in the device.	Incorrect Ferrite compounds	All Use all ferrite connections from the scope of delivery.
Decrease in effectiveness Exceeding the technical device tolerances Failure of technical components in the device	Mounting on a too hot water pipe without thermal insulation.	For higher line temperatures, thermal insulation must be fitted between the unit and the line. This insulation should be non-conductive, i.e. without a metallic foil, so as not to interfere with the correct functioning of the unit.

### 14.3 Electrical Loop

In an electrical loop, the sine-curve signal converges and is short-circuited. This cancels out the effect of the unit. This negative effect is possible with metallic pipes and also with pipe systems attached to metallic suspensions. Plastic pipes are non-conductive and do not show this effect.

This example shows the correct and also the incorrect assembly.

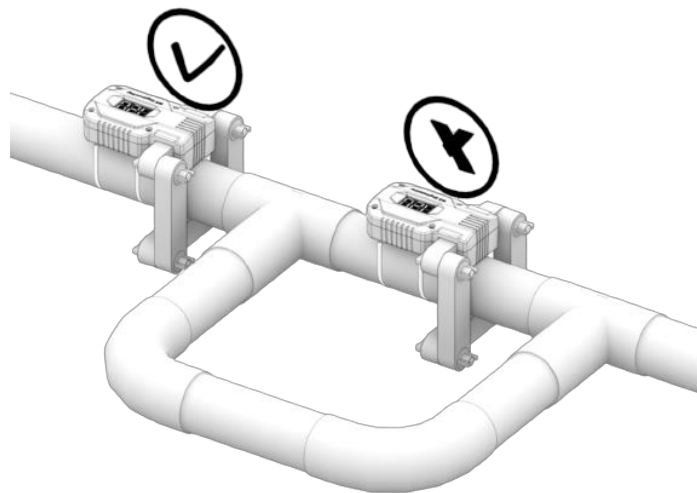


Figure 7: Electric loop

**Left: Correct assembly**

**Right: incorrect assembly**

- An electrical loop can be caused by metallic suspensions that are placed over a metallic floor or by fixings placed in the masonry. If in doubt, ask our service, they will be able to detect and correct this effect via measurement with an oscilloscope.
- Suggested solutions electrical loop
- Change the position of the unit so that it is installed outside the electrical loop.
- If possible, install galvanic isolation in the pipe. This can be a non-conductive gasket with insulated fixing screws.
- Insert a piece of conduit made of non-conductive material (plastic).
- Attach the unit to it.

- Put insulating gaskets between the pipe and the support systems.
- You can see the results by observing the volt strength shown on the display.

- If the signal loss is too strong, the volt strength will decrease. Before installation, it is helpful to check that the ferrite ring is closed.
- 

volt strength and then compare it with the result when the unit is mounted. If the signal loss is too strong, the unit will beep and the display will flash. If you are unsure, contact our technical service.

## 15 Lagerung

- Always store the product in the original packaging.
- Store the product in a dry place.

## 16 Entsorgung

### ACHTUNG

#### Environmental damage due to incorrect disposal

Incorrectly disposed of electrical waste causes environmental damage. Dispose of electrical waste in an environmentally friendly manner.

Separate materials by type and recycle them in accordance with local regulations.



This product is subject to European Directive 2012/19/EU. Electrical appliances must not be disposed of as household waste.

- Dispose of the product in an environmentally friendly manner at your local electrical waste collection point.

The unit contains electronic components such as switching elements, LEDs, transistors, resistors, etc. It is sealed and encapsulated with a protective resin. The ferrites are made of a mixture of iron oxide, manganese oxide and zinc oxide. The cable glands are made of nylon. The cable connectors are standard PE.

## Guarantee

Phasis limescale protection devices are high-quality products "Made in Germany". The functional guarantee is 3 years from the date of invoice.

## 17 Spare Parts

To obtain the correct spare parts, always state the item number when ordering. You will find the item number embossed on the individual components.

- Order the spare parts via the manufacturer's customer service.
- Only use original spare parts

## 18 Customer Service

- In case of malfunctions, questions about the product or if you need spare parts, contact the customer service:

Hydro-Shop fbw GmbH  
Warnckesweg 1  
22453 Hamburg  
Deutschland  
[www.myphasis.de](http://www.myphasis.de)  
+49/ 40-5001720  
info@myphasis.de



**phasis**<sup>®</sup>

**GESCHÄFTSSTELLE** HYDRO-SHOP fbw GmbH • Warnckesweg 1 • 22453 Hamburg  
**KONTAKT** Tel.: 040-500 1720 • Fax: 040-500 17 272 • E-Mail: info@hydro-shop.eu  
**INTERNET** [www.quellklar.de](http://www.quellklar.de) • [www.myphasis.de](http://www.myphasis.de) • WEEE-Reg.-Nr.: DE78415516