# **PHASIS - CUSTOM MADE**

### Active electronic water conditioner - fully automatic, chemical-free limescale protection

| CUSTOM 6" 167 mm    | CUSTOM 10" , 221 mm | CUSTOM 12", 274 mm  |
|---------------------|---------------------|---------------------|
| Single ferrite ring | Double ferrite ring | Double ferrite ring |



#### Intended use:

**Phasis CUSTOM made** - High-frequency induction technology successfully protects against limescale deposits and removes existing limescale crusts from the entire water pipe system and the water-bearing

#### areas of application:

Large hotel facilities, large commercial and industrial applications, agricultural use, waste water treatment

#### Mode of action:

Phasis is mounted around the central supply line or directly in front of the water-carrying installation. A strong alternating current electric field of up to 130 volts is established in the ferrite ring, which transmits the voltage concentrated there wirelessly to the water network. Because water is conductive, this high-frequency voltage is transmitted to all areas of the water network to be treated. This can be checked with a physical measuring device (oscilloscope).

High frequency means that the current frequency of the Phasis devices oscillates almost 50,000 times faster than our normal alternating current. The constant rapid succession of these impulses causes the lime-forming elements magnesium and calcium to split into tiny microcrystals and, due to their

surface structure, can no longer build up to form calcifications.

#### Why electronic limescale protection devices work:

- They have a pulsating effect throughout the entire pipeline network.
- They are always working, 24 hours a day.
- The limescale protection signal is distributed electrically.
- The limescale protection signal varies, it covers the different problem zones - such as differences in limescale content and temperature.

#### **Result**

The high voltage changes the lime structure dissolved in the water, micro-crystallisation is stimulated, the lime in this form is not deposited but rinsed out with the water consumption. Lime

deposits are dissolved. By using Phasis Power 100, the operating costs and maintenance costs of the water-bearing systems are reduced. Phasis works energy efficient.

#### **Control function**

#### LED display.

The voltage reached in the ferrite ring is indicated in the LED alternating with the temperature





#### **Technical data:**

| Model                  | CUSTOM made 6           | CUSTOM made 10          | CUSTOM made12           |
|------------------------|-------------------------|-------------------------|-------------------------|
| Cable diameter         | 167 mm                  | 221 mm                  | 274 mm                  |
| Voltage                | 95 - 115 Volt           | 110 - 125 Volt          | 115 - 130 Volt          |
| Dimensions(L, B, H     | 300 X 98 X 50 mm        | 300 X 98 X 50 mm        | 300 X 98 X 50 mm        |
| Weight                 | 5000 g                  | 6950 g                  | 8000 g                  |
| Ferrite Quantity       | 1 long, 7 short         | Double ring             | Double ring             |
|                        |                         | 1 long, 18 short        | 1 long, 22 short        |
| Power input            | 110 - 230 Volt          | 110 - 230 Volt, 50 - 60 | 110 - 230 Volt, 50 - 60 |
|                        | 50 - 60 Hz              | Hz                      | Hz                      |
| Automatic controls     | Signal strength +       | Signal strength +       | Signal strength +       |
|                        | temperature             | temperature             | temperature             |
| Frequency              | 130 - 150 KHz           | 130 - 150 KHz           | 130 - 150 KHz           |
| Power consumption      | 12 watts                | 15 watts                | 17 watts                |
| Protection - Functions | <b>C</b> €compliant, IP | <b>C</b> €compliant, IP | <b>C</b> €compliant, IP |
|                        | 65                      | 65                      | 65                      |
| Water temperature      | 0 – 115 °C              | 0 – 115 °C              | 0 – 115 °C              |
| Audible alarm          | In case of overheating, | In case of overheating, | In case of overheating, |
|                        | too low signal          | too low signal          | too low signal          |

#### **Housing material**

The housing is made of highly impact-resistant and temperature-resistant polyurethane (200°C).

#### **Product Safety**

The unit contains an internal overheating protection. At high temperatures the voltage is automatically reduced. The high alternating current frequency prevents transmission in the form of electric shock

#### **Installation instructions**

The Phasis unit is installed without cutting the water pipe. It can be used on all pipe materials. Extensive installation instructions are supplied with the units. Phasis works fully automatically, maintenance-free and without additives (chemical-free). The Phasis units are characterised by their very low power consumption.

#### functional guarantee:

Phasis Power devices are high quality products. The functional guarantee is 3 years

# Phasis units are Made in Germany by Hydro-Shop fbw GmbH

## **Technical advice and contact:**

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