

No Cartridge Replacement - Worldwide Unique

BIOSTAT-COMBIMAT

Lime-scale Protection- and Hygiene-Unit

Lime-scale in water causes damage to the lifelines in the house. During heating it will obstinately form deposits on the internal tube walls - layer by layer, day by day. Already after a short time, it can lead to a lime-infarct in the water pipe and in the hot-water heater as well as to clogged pipelines, calcified heater rods and energy loss.

If your installation remains unprotected, costly damages can occur.

The BIOSTAT-COMBIMAT from JUDO establishes the basis for hygiene inside the drinking water installation. Made to match the needs of one-family to a multi-family house.

The advantages:

- ◆ one device, two functions
- ◆ stops limescale deposits according to a patented method - DIN-DVGW-tested
- ◆ fights germs by means of activated oxygen
- ◆ blocking free function unit
- ◆ continuous water supply
- ◆ a fully automatic operating
- ◆ small current consumption
- ◆ space-saving shape
- ◆ time-saving mounting
- ◆ Made in Germany



for protection
against limescale





The Problems:

- ◆ Lime-scale deposits in water pipes, hot-water heaters and domestic appliances ...
- ◆ Micro-organisms populating the surfaces inside pipings and in domestic appliances (biofilm)
- ◆ Restricted water flow-through, culminating a piping breakdown
- ◆ Expensive repair of appliances
- ◆ Reduced thermal transfer in the hot-water heater, and therefore elevated energy costs (every mm of lime will cost approximately ten percent more energy)

The Problem-Solution

Our solution to lime-scale and germs problems is the BIOSTAT-COMBIMAT. The compact unit offers anti-lime-scale protection and hygiene according to the singular four-stage method.

Stage One:

The BIOSTAT-COMBIMAT creates “seed-crystals” out of the water.

These small calcium crystals are held in suspense and flow with the water into the piping system. There surplus calcium settles preferably on these crystals, and not on the surface of heating coils or the internal pipe surfaces. In the course of this no substances are added to the water, nor any substances are withdrawn from it.

Stage Two:

Optimisation through Selection

The seed crystals are selected. Thus, only the “best ones” leave the treatment chamber at the optimum size.

Stage Three:

Fully automatic Cleaning

During the cleaning, employing a patented cathode, the abundant lime-scale particles are collected in the treatment chamber, and flushed out automatically.

Stage Four:

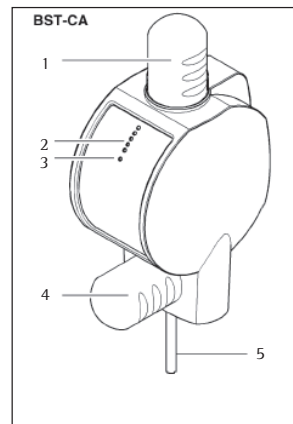
Hygiene by means of Active-Oxygen

In parallel to the anti-lime-scale protection the BIOSTAT-COMBIMAT fights also germs (applied for a patent).

We carry JUDO-products in stock

No house building without JUDO

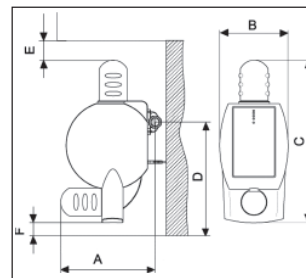
JUDO has been offering for more than 70 years an all-around protection of the pipe installations, the best possible water quality, energy saving and safety to your entire house. Have your domestic installation checked and updated to an appropriate and economical state.



- 1 Cleaning motor
- 2 Control lights
- 3 Manual button
- 4 Flushing motor
- 5 Flushing valve

Technical specifications

Model BST-CA	Type 15	Type 25
Pipe connection	3/4"	1"
Nominal water flow rate in m ³ /h	1,5	2,5
Pressure loss at nominal flow rate bar/psi	0,2/3	0,4/5,8
Incoming water max. °C/°F	30/86	30/86
Power-Connection V/Hz	230/50	230/50
Maximal power consumption (Watts)	20	25
Installation length (mm)	220	220
Order no.	8210411	8210412



- A = 320 mm/12,6" (front to pipe centre)
- B = 230 mm/9,0" (width)
- C = 550 mm/21,7" (height)
- D = 475 mm/18,7" (minimum height to pipe centre)
- E = 150 mm/5,9" (minimum distance above)
- F = 150 mm/5,9" (minimum distance below)

Quick-mounting

The patented JUDO QUICKSET-E (included in the scope of supply), facilitates the installation of the unit to trained personnel.



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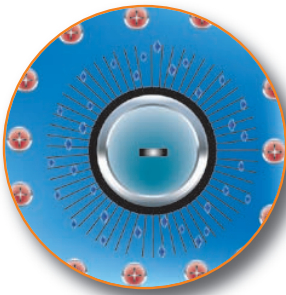
A Worlds First! Full limescale protection with no cartridge change!



for anti-lime-protection
DVGW-W510



Only the patented BIOSTAT-COMBIMAT has the unique Four-stage System



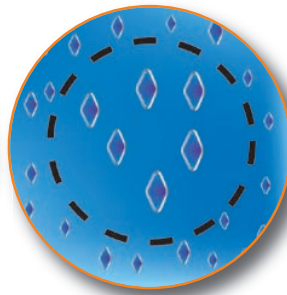
stage one:

DVGW certified Lime Treatment

The BIOSTAT-COMBIMAT creates seed-crystals from water. These microscopically small calcium carbonate crystals are held in suspension and flow with the water into the domestic installations.

There surplus calcium carbonate settles preferably on these crystals, and not on the surface of heating coils or in the pipes.

The control of the lime treatment happens completely automatically. A micro-processor with water meter considers the water quality and the water flow. This ensures a constantly effective water treatment.



stage two:

Optimization through Selection

During stage two of the four-stage system the seed-crystals are selected.

This selection operation ensures that only the "best ones" can leave the treatment chamber, to achieve thus an optimum effect.



stage three:

Fully-automatic Cleaning

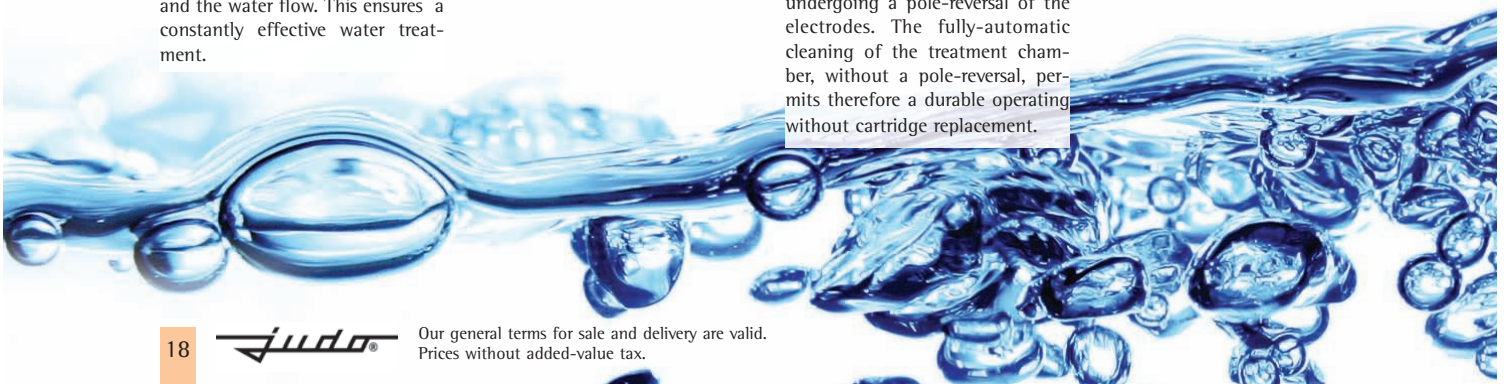
During Stage three a patented cathode is employed. Wipers relieve it, from time to time, fully-automatically, from adherent lime scale. These lime particles are collected in the treatment chamber and, are also, after that, automatically flushed out into the discharge line. Contrary to the customary methods, by means of the patented JUDO-system, the treatment chamber can be protected durably, against calcification and blocking. Furthermore the used material is treated carefully by not undergoing a pole-reversal of the electrodes. The fully-automatic cleaning of the treatment chamber, without a pole-reversal, permits therefore a durable operating without cartridge replacement.



stage four:

Hygiene by means of Active Oxygen

In parallel to the lime protection the BIOSTAT-COMBIMAT fights germs and herewith the danger of the germ proliferation [applied for a patent]. The centrepiece of the hygiene unit are the special hygiene anode and the intelligent control unit. As soon as water flows active oxygen is produced at this anode without addition of chemicals.



JUDO BIostat-COMBIMAT

The New Generation

Requirement for Hygiene:
Clean pipe lines:

All the important hygiene-guidelines require clean and smooth inside surfaces of the tubes, because their condition is of importance for the colonisation with micro-organisms.

Lime scale in piping installations reduces their cross-section and at the same time, with their rugged surface, they form an ideal breeding-ground for germs.

The new BIostat-COMBIMAT is true to its name. Due to its innovative method, it forms the basis for hygiene in the drinking water installation.

Only the market leader can offer these advantages:

- ◆ Lime protection, DVGW tested and certified
- ◆ Stops lime scale in accordance with a patented method
- ◆ Fights germs by means of active oxygen
- ◆ No hygiene critical cartridge replacement
- ◆ Blocking-free effect unit
- ◆ Continuous water supply
- ◆ Fully-automatic operating
- ◆ Time-saving installation with aid of the patented JUDO QUICKSET-E by the specialist plumber
- ◆ High-class silver design



Type BST-CA

JUDO Limescale protection- and Hygiene Unit BIostat-COMBIMAT

Type BST-CA 15 - 25
for water up to 30 °C

Scope of supply: beautifully shaped and stable housing, PN 10, integrated water meter, electrochemically working and patented seed-crystal generator, with microprocessor-regulated current. Power supply unit, tested in accordance with VDE, hygiene unit with lime protection- and hygiene-anode against the

bacterium Legionella, with two variable-speed motors for the automatic cleaning of the cathode and the derivation of the surplus lime into the discharge line. Service- and functions-indication by means of light-emitting diodes, built-in rotary flange with patented bayonet-connector with screw connection and mounting lid, power supply unit [230 V/50 Hz].

Type	BST-CA type 15	BST-CA type 25
Pipe connection	3/4"	1"
Nominal flow rate m ³ /h	1,5	2,5
Max. quantity of accommodation units	1	2
Pressure loss at nominal flow rate bar	0,2	0,4
Nominal pressure PN 10 bar	10	10
Max. temperature of the water °C	30	30
Power supply V/Hz	230/50	230/50
Max. power consumption watts **	20	25
Width mm	330	330
Height mm	855	855
Depth to pipe centre mm	240	243
Depth to pipe centre with JQX mm	305	308
Order - Number	8210411	8210412

* Valid for anti-lime protection in accordance with DVGW W510
*** Only during water removal