bg edelstahl und kunststofftechnik
für krankenhaus, industrie und wasserwirtschaft gmbh

Bedpan cleaning and disinfection unit

With **euroMAT.**pro
controller, operating manual
and technical information

euroMAT.pro

Operating and maintenance manual euro**MAT.**_pro_

Bedpan cleaning and disinfection unit

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1. Introduction

This operating and maintenance manual is intended to ensure that the following automatic cleaning and disinfection units are used properly and to give you the opportunity to carry out minor maintenance work yourself. You must carefully read through the operating and maintenance manual to avoid operating errors and unit failures. Please keep this manual in a place where it is accessible to all users.

2. Safety information

⚠ **The product must be used in accordance with this safety information. If there are any points that you are unsure about, please contact the manufacturer.**

- Prior to each use, check that the bedpan cleaning unit is ready for operation.
- Avoid flushing in larger quantities of pulp, as otherwise there is a risk of drain blockage and a worse cleaning result should be expected.
- Only use reusable, thermostable dishes that are suitable for their intended use as a medical device (holding bodily excretions) and carry the CE mark as a medical device.
- Check that all the accessible cables and hoses are undamaged on a regular basis. If defective parts are discovered, immediately press the emergency stop switch and do not use the unit any more. Then notify the Service department.
- If excessive steam or water escapes during rinsing, the unit must be disconnected from the mains immediately and the manufacturer's Service department must be informed. Never put toilet cleaner or other unauthorised chemicals in the rinsing chamber.
- The mains plug must be unplugged prior to opening the control cabinet. The unit may only be opened by the manufacturer or trained specialist personnel.
- The bedpan cleaning unit must not be used for disinfecting other medical devices.
- Do not use the unit in the event of an epidemic.
- The unit must not be cleaned from the outside with a hose or high-pressure cleaner.

Please note: The bottom unit cover must be properly closed again after it has been opened. The key must then be removed from the profile cylinder and stored separately and securely.

3. General information

Congratulations on purchasing your euroMAT pro bedpan cleaning unit. Below, you will be guided through your unit's functions and how to care for it. Read the manual carefully before and also after being briefed about the unit and always keep the operating manual in a dry place near the unit. The operating manual also contains the maintenance and installation logs that must be made available to the service technician.

3.1 Overview of functions / intended purpose

The euroMAT pro bedpan cleaning unit is used for cleaning and disinfecting urine bottles, bedpans and commode buckets. Three programs for different types and degrees of soiling are available to the user. In each program, the dishes are pre-rinsed, cleaned, disinfected and then cooled by means of a further rinse, so they can be removed immediately after the program has ended and are then ready for use again.

Warning: When using the decentralised, thermal disinfection process with an A0 value of 600 to 3000, not all existing pathogens (e.g. spores) can be eliminated. In the course of maximised risk management, some infections (e.g. patients with Clostridium difficile) require that their reusable dishes (bedpan, urine bottle) be ADDITIONALLY subjected to a downstream chemical treatment, depending on the pathogen, following cleaning / thermal disinfection in the bedpan cleaning unit.

To be able to use the unit with all degrees of water hardness in the long term, the decalcifying agent euroMATIC pH neutral or euroMATIC pH acid is automatically added to the cleaning water. The storage tank, which needs to be replaced on a regular basis once a notification to this effect has appeared in the text display, is located in the cabinet under the rinsing chamber.

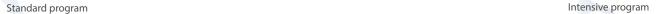⚠ **Adjust the decalcifying liquid to the relevant local water hardness. In the event of failure to comply with this instruction, disinfection cannot be guaranteed under certain circumstances, and the warranty claim shall be rendered void!**

3.2 Requirements for the functional area (unclean working area / faecal area)

The design of the functional areas (particularly the unclean working area) is subject to the relevant federal state's or country's state building regulations. In addition, the operator of a bedpan cleaning unit is required to design the environment in such a way that contamination of the cleaned and disinfected dishes is prevented. This means, for example, that bedpans or other reusable dishes containing human waste must not be stored openly in an unclean working area. In particular, the air being contaminated with germs due to possible wind / draught air must be taken into account in this respect. The operator must ensure that they have sufficient bedpan cleaning units available to guarantee rapid cleaning and disinfection of the dishes. Furthermore, no dirty laundry of any kind may be stored in this room. Cleaning utensils such as buckets, floor cloths or mops must not be stored or dried in this room. The hygienist or the appointed specialist is responsible for maintaining a clean environment. Their instructions must be followed according to the manual and hygiene plan to avoid cross-infections.

4. The control panel

Below, you will be provided with a detailed guide to the steps to be taken to achieve an optimum cleaning and disinfection result. Please read through each of the steps described carefully and follow the advice and instructions for use.

4.1 Commissioning

Prior to each cleaning cycle, you should routinely check some things. The check only takes a few seconds, but saves you the bother of annoying and time-consuming troubleshooting later on.

- Check the cleaning chamber, rinsing nozzles and the rotary rinsing arm for paper residue, dirt and such like.
- Check the rotary rinsing arm for ease of movement. It must be possible to rotate the rinsing arm by hand without any difficulty.
- Check the drain for paper residue, dirt or blockages and remove / rectify them.

Use the text display to check whether the unit is ready for operation

- Check whether the rinsing chamber door is easy to open and close..

If any of the above points are not met and you are unable to correct the deviation yourself, please notify the manufacturer and do not use the unit until the issue has been rectified.

4.2 Loading

Now that you have briefly checked that the unit is ready for operation, you can begin the cleaning process. For this purpose, the dishes with contents are inserted into the holder located on the inside of the cleaning chamber door.

- Avoid flushing in larger quantities of pulp, as otherwise there is a risk of drain blockage!
- Only use thermostable dishes that are suitable for their intended use as a medical device (holding bodily excretions)!

If, for any reason, the dishes do not fit properly into the holder, do not load the rinsing chamber with the dishes in question. Urine bottles are pushed (with the opening to the front) through the retaining ring on the left-hand side as far as the stop. **Bedpans and commode buckets** are pushed into the holder with the opening facing upwards. The lid of the bedpan can also be inserted into the holder (the lid handle points towards the cleaning chamber door). The dishes are emptied automatically when the door is closed. Select the desired program on the control element once the chamber door has been closed.

3 urine bottles

1urine bottle + 1 bedpan

1 urine bottle + 1 commode bucket

5. The programs

The door is locked throughout the entire cleaning process and cannot be opened until cleaning, disinfection and cooling are all complete. The selected program is indicated by an LED in the relevant keyboard icon. The door remains locked if an error occurs.

Attention!
The door gets slightly warmer during the disinfection stage. However, there is no risk of burns in the event of contact. The door handle remains at approximately room temperature even when in continuous use.

24-hour interval
When not in use, euroMAT units are rinsed automatically 24 hours after the last rinse. No additional rinsing is activated when the units are used regularly. This function improves hygiene (the lines are rinsed and the units are always ready for immediate use). The 24-hour interval can also be deactivated at the customer's request.

5.1 The short program

If you only wish to clean and disinfect urine bottles, bedpans or commode buckets with liquid contents, you can use the short program. It has a shortened rinsing time with the same disinfection performance.

The following parameters are programmed as standard:

Disinfection temperature	87°C
A0 value	600
Hot water consumption	Approx. 9 litres
Cold water consumption	Approx. 9 litres
Power consumption	Approx. 0.300 kWh
Dosing pump running time	5 seconds

The authorised specialist reserves the right to change these parameters. However, they can be changed on request. The manufacturer offers training (for a fee) in this respect. The effectiveness of the modified process' hygienic performance must be validated by the operator.

5.2 The standard program

Please use the standard program for cleaning and disinfecting bedpans or commode buckets with normal levels of soiling. It has an average rinsing time with the same disinfection performance.

The following parameters are programmed as standard:

Disinfection temperature	87 °C
A0 value	600
Hot water consumption	Approx. 15 litres
Cold water consumption	Approx. 15 litres
Power consumption	Approx. 0.300 kWh
Dosing pump running time	5 seconds

The authorised specialist reserves the right to change these parameters. However, they can be changed on request. The manufacturer offers training (for a fee) in this respect. The effectiveness of the modified process' hygienic performance must be validated by the operator.

5.3 The intensive program

Please use the intensive program for cleaning and disinfecting bedpans or commode buckets with significant levels of soiling. The program has an extended rinsing time compared to the standard program with the same disinfection performance.

The following parameters are programmed as standard:

Disinfection temperature	87°C
A0 value	600
Hot water consumption	Approx. 15 litres
Cold water consumption	Approx. 24 litres
Power consumption	Approx. 0.300 kWh
Dosing pump running time	5 seconds

The authorised specialist reserves the right to change these parameters. However, they can be changed on request. The manufacturer offers training (for a fee) in this respect. The effectiveness of the modified process' hygienic performance must be validated by the operator.

Note:
If the program selection buttons are pressed and held for longer (5 sec.), the pending rinsing is automatically set to an A0 value of 3000.

5.4 The spout program

If the machine is equipped with a spout, spout ring rinsing can be activated using the control panel.

Cold water consumption Approx. 5 litres

6. Notifications on the display

6.1 Operating notifications

In error-free operation, the individual stages of the selected program can be followed in the text display.

Here is a list of the possible messages and what they mean:

1

Before program start in the case of general readiness for operation.

2

Short program selected. Tank is being filled.

3

Erste Spülung. Gleiches folgt mit Warm- und Mischwasser.

4

First rinse. The same follows with hot and mixed water.

5

Evaporator starts to heat.

6

65°C exceeded. Disinfection begins.

7

Filling for recooling and disinfection.

8

UV irradiation of the recooling water.

9

Dishes' drainage time.

10

Rinsing process finished.

6.2 Error messages

The following notifications may appear if an error occurs or if there is an impending shortage of equipment (euroMATIC / Steckuron):

Cause: Blockage in the siphon or drain; the water level in the chamber is rising too high during rinsing **Remedy:** Clean the drain

Cause: Leaky tank or siphon; water spilled in front of the machine **Remedy:** Check and seal the leak; mop up the water; dry the sensor

Cause: The door contact's switch is generating invalid signal combinations; switch or cable defective
Remedy: Check the switch and cable and replace them if necessary (Service)

Cause: The set temperature is not reached. A temperature fuse may have tripped; the activation may be defective; the mains voltage may be too low; steam may be escaping **Remedy:** Check the temperature fuse on the heating element; check the activation (Service)

Cause: Temperature or time-out set too low
Remedy: Increase the target temperature or time-out

Cause: The lamp's current sensor is not detecting current flow
Remedy: Check / replace the lamp. The control unit may be defective (Service)

Achtung
Ursache:
Temperatursensor defekt
Lösung:

Cause: Different temperatures > +-3°C between processor and co-processor; or co-processor is not responding
Remedy: Check the sensor and cable; replace the controller (Service)

Achtung
Ursache:
Fehler Türriegel
Lösung:

Cause: The door cannot be locked; the magnet or tappet is blocked
Remedy: Close the door correctly; adjust the mechanics if necessary

Achtung
Ursache:
Wassersensor Abfluss defekt
Lösung:

Cause: Cable to the water sensor in the siphon broken
Remedy: Check the cable (Service)

Achtung
Ursache:
Wassersensor Boden defekt
Lösung:

Cause: Cable to the water sensor at the base broken
Remedy: Check the cable (Service)

Achtung
Ursache:
Tür sofort schließen
Lösung:

Cause: The tank is filled higher than the setpoint (inlet valve defective) or automatic 24 h disinfection is on
Remedy: Close the door

Achtung
Ursache:
Klarspüler leer
Lösung:

Cause: The canister is empty
Remedy: Replace the canister once the program has ended

Achtung
Ursache:
Entkalker leer
Lösung:

Cause: The canister is empty
Remedy: Replace the canister once the program has ended
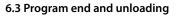
Achtung
Ursache:
Desinfektionsmittel leer
Lösung:

Cause: The canister is empty
Remedy: Replace the canister once the program has ended

Achtung
Ursache:
Wasser Einlassventil defekt
Lösung:

Cause: The tank is filled higher than the setpoint (inlet valve or activation defective) **Remedy:** Turn off the water tap; check the valve or activation (Service)

Achtung
Ursache:
Fehler SD Karte
Lösung:

Cause: The SD card is not writable or not present
Behebung: Check the SD card (Service)

Achtung
Ursache:
Interner Softwarefehler
Lösung:

Cause: The check of the processor's internal ROM or RAM has failed
Remedy: Reprogram; replace the controller

Achtung
Ursache:
3x Eingabe falscher Code
Lösung:

Cause: An incorrect code was entered three times in the PRO for the Service menu
Remedy: Inform the manufacturer

Achtung
Ursache:
Automatische 24h Reinigung
Lösung:

Cause: Automatic 24 h cleaning is currently in progress
Remedy: Wait until the cycle is complete

Achtung
Ursache:
Uhrenbatterie leer
Lösung:

Cause: The battery on the controller board is running flat; the time could be lost
Remedy: Replace the battery (Service)

6.3 Program end and unloading

If none of the above error messages are visible in the text display after the entire cycle, the cleaning program has been completed successfully. The door is locked throughout the entire cleaning process and cannot be opened until cleaning, disinfection and cooling are all complete. The dishes then have a temperature of 40°C. They can be removed and used immediately. The dishes should then be visually inspected to check the cleaning performance. After the inspection, the dishes should be stored properly to avoid recontamination.

Otherwise, if faults occurred, the door lock is not released and a new program is started. This is the case, for example, when the power fails during the cleaning cycle. If there is a serious error that prevents a process from being repeated, the door remains locked and the manufacturer must be notified.

6.4 Mechanical unlocking during a power failure

Open the top revision door. Pull the tappet upwards slightly (figure).

⚠️ **Attention! Since it cannot be guaranteed that the care equipment has been sufficiently disinfected, clean and disinfect it again.**

7. Warranty / guarantee

Unless agreed otherwise, the warranty / guarantee (which covers the design, material and manufacture) corresponds to the manufacturer's General Terms and Conditions. The warranty claim shall become void in the event of improper use, failure to observe the care and maintenance instructions, unit failure caused by contamination in the inlet and outlet pipework due to improper use, or external influences. Only a non-foaming agent, which you can also purchase from the manufacturer, may be used as a lime binder. The manufacturer recommends euroMATIC in the variants pH neutral or pH acid. The warranty claim shall become void if unsuitable agents are used.

8. Maintenance and care

8.1 Maintenance work

• The surface of the euroMAT pro bedpan cleaning unit should be treated with the manufacturer's stainless steel care oil. It can be applied as required.

• Before and after the cleaning process, the chamber must be checked for the presence of foreign matter and dirt.

• Attention! No toilet cleaner or other unauthorised chemicals may be put in the rinsing chamber.

• Check the rotary rinsing arm for ease of movement on a regular basis. It must be possible to rotate the rinsing arm by hand without any difficulty.

• Check the rinsing nozzles and the steam outlet for foreign matter or blockages on a regular basis.

• The UV pipes in the tank must be checked and cleaned on a monthly basis.

8.2 Servicing work

Servicing work may only be carried out by trained medical device service technicians who have received training on the units and who comply with the safety regulations.

8.2.1 Calibration

To maintain the assured hygiene process, with A0 value, the annual verification or calibration of the temperature display must be checked in addition to performing a logger check.

Required equipment
• Unit tester (e.g. from Benning)
• Programming unit
• External temperature measuring device (DAkkS calibrated)
• Data logger (recommendation: from ebro)

1. Attach the external temperature measuring device (sensor) to the bedpan cleaning unit's existing temperature sensor at the same height.

2. Let the cleaning unit rinse twice before the measurement to heat up the unit. To do this, please use the short rinsing program.

3. Start the short rinsing program.

4. If the temperature displayed on the control panel is 85°C – 87°C, the value on the external measuring device must be noted simultaneously (within one second), otherwise the result is falsified.

5. Wait for the rinse cycle to end.

6. Now, the programming unit is connected to the 'pro' D-Sub port.

7. Switch on the unit and select the 'Calibration' item in the menu.

8. Now enter the noted value from the control panel's display under the 'Displayed temperature' item (control panel) using the keyboard that appears on the touch panel and confirm with 'OK'.

9. Then enter the noted value from the external measuring device under the 'Measured temperature' item (external measuring device) using the keyboard that appears on the touch panel and confirm with 'OK'.

10. Finally, press the 'Save button' on the programming unit.

11. Now go back to the main menu with the arrow key.

12. Calibration is now complete; the data has now been transferred. Switch off the programming unit, disconnect it from the controller box and restore the original state.

13. Finally, perform a test rinse. Please run a temperature logger (A0 value) for checking during this process.

14. At the end of the test rinse, the A0 value on the cleaning unit and the A0 value on the logger must be almost identical, taking a small tolerance (+ 10%) into account.

15. If this is not the case, the process must be repeated until the A0 values are almost identical.

8.3 Scope of maintenance

To ensure that the bedpan cleaning unit works faultlessly, the law stipulates that regular maintenance must be carried out at least once a year. During the warranty period, your bedpan cleaning unit must be maintained in accordance with the manufacturer's specifications after every 5,000 rinsing cycles or 12 months after commissioning. Once the warranty period has elapsed, in addition to performing annual maintenance the bedpan cleaning unit must be inspected every six months. The maintenance schedule and the proof of maintenance for logging maintenance work form part of this operating manual and can be found on subsequent pages.

8.4 Maintenance schedule

The following parts must be inspected, cleaned and (if necessary) replaced during annual maintenance.
Abbreviations: I = Inspect C = Clean R = Replace V = Verification CA = Calibrate

Part \ Year of operation	1	2	3	4	5	6	7	8	9	10
CW supply hoses	I	I	I	I	**R**	I	I	I	I	**R**
HW supply hoses	I	I	I	I	**R**	I	I	I	I	**R**
Existing dirt strainers	C	C	C	C	C	C	C	C	C	C
Solenoid valves	I	I	I	I	**R**	I	I	I	I	**R**
Rinsing chamber	C	C	C	C	C	C	C	C	C	C
Rinsing impeller / rotary nozzle	I	I	I	I	I	I	I	I	I	I
Clip-on device	I	I	I	I	I	I	I	I	I	I
Door spring / bearing	I	I	I	I	I	I	I	I	I	I
Rinsing chamber door monitoring device	I	I	I	I	I	I	I	I	I	I
Door lock	I	I	I	I	I	I	I	I	I	I
Door seals	I	I	I	**R**	I	I	I	**R**	I	I
Water storage tank	I/C	C	I/C	C	I/C	C	I/C	C	I/C	C
Steam generator	I	I	I	I	I	I	I	I	I	I
Flex hose	**R**	**R**	**R**	**R**	**R**	**R**	**R**	**R**	**R**	**R**
Dosing pump	I	I	I	I	I	I	I	I	I	I
Descaling agent according to the manufacturer's dosing instructions [1]	I	I	I	I	I	I	I	I	I	I
Suction lance	I	I	I	I	I	I	I	I	I	I
Suction hose [2]	I	**R**	I	**R**	I	**R**	I	**R**	I	**R**
Tank level sensor	I/C	I/C	I/C	I/C	I/C	I/C	I/C	I/C	I/C	I/C
Capacitor	–	–	–	**R**	–	–	–	**R**	–	–
Booster pump	I	I	I	I	I	I	I	I	I	I
Cleaning nozzles	I/C	I/C	I/C	I/C	I/C	I/C	I/C	I/C	I/C	I/C
Siphon / monitoring device	I	I	I	I	I	I	I	I	I	I
Controller	I	I	I	I	I	I	I	I	I	I
Control panel	I	I	I	I	I	I	I	I	I	I
UV lamp [3]	I/C	I/C	I/C	**R**	I/C	I/C	I/C	**R**	I/C	I/C
Reducing rubbers for UV lamp and steam vent	I/C	I/C	I/C	**R**	I/C	I/C	I/C	**R**	I/C	I/C
Temperature sensor	CA	CA	CA	CA	CA	CA	CA	CA	CA	CA
Spring-loaded pressure piece	**R**	**R**	**R**	**R**	**R**	**R**	**R**	**R**	**R**	**R**
Disinfection A0 = 600 / 3000	I	I	I	I	I	I	I	I	I	I
DGUV V3	I	I	I	I	I	I	I	I	I	I
Unit function	I	I	I	I	I	I	I	I	I	I

1. Adjust the dosage of the suitable coating inhibitor to the water hardness according to the unit manufacturer's and agent manufacturer's specifications. Check the descaling agent's shelf life. **2.** When checking the suction hose, ensure that you use a neutral coating inhibitor in accordance with the manufacturer's specifications in this manual. The hose must be replaced if there is any noticeable hardening. **3.** Every 4 years after initial commissioning, or every 20,000 rinsing cycles.

8.5 Proof of maintenance

The following tasks were carried out during maintenance work. Abbreviations: I = Inspect C = Clean R = Replace V = Verification CA = Calibrate

Year of operation / Part	1	2	3	4	5	6	7	8	9	10
CW supply hoses										
HW supply hoses										
Existing dirt strainers										
Solenoid valves										
Rinsing chamber										
Rinsing impeller / rotary nozzle										
Clip-on device										
Door spring / bearing										
Rinsing chamber door monitoring device										
Door lock										
Door seals										
Water storage tank										
Steam generator										
Flex hose										
Dosing pump										
Descaling agent according to the manufacturer's dosing instructions										
Suction lance										
Suction hose										
Tank level sensor										
Capacitor										
Booster pump										
Cleaning nozzles										
Siphon / monitoring device										
Controller										
Control panel										
UV lamp										
Reducing rubbers for UV lamp and steam vent										
Temperature sensor										
Spring-loaded pressure piece										
Disinfection A0 = 600 / 3000										
DGUV V3										
Unit function										
Date										
Signature										

8.6 Tools

The following tools may be required to carry out maintenance work:

- Multifunction measuring device, calibrated
- Insulated screwdrivers, Philips and slotted
- Side cutter
- Stripping tool
- Pipe wrench
- Open-end spanner, WAF 7 – WAF 20
- Torch
- Unit tester (e.g. from Benning, electrical safety VDE 0751), calibrated
- Temperature logger, DAkkS calibrated; recommendation: temperature measuring device from ebro.
- bg test plug, 87°C

9. Spare parts

9.1 Electrical parts

Controller box (power unit incl. controller)	Item no.: 0001314
Cable set (floor-standing unit)	Item no.: 0001316
Floor sensor	Item no.: 0001317
Emergency stop button	Item no.: 0001012
Module contacts for emergency stop	Item no.: 0000689
Descaler suction lance	Item no.: 0001008
Touchscreen control panel	Item no.: 0001242
Tank level sensor	Item no.: 0001313
Evaporator unit, SS 3, CW, complete	Item no.: 0000871
Evaporator unit, SS 4, CW, complete	Item no.: 0000873
Flex hose pump	Item no.: 0000847
Flex hose cartridge	Item no.: 0000534
Booster pump	Item no.: 0000067
Motor capacitor	Item no.: 0000033
Temperature sensor	Item no.: 0001258
Door lock	Item no.: 0001201
Rinsing chamber door monitoring device	Item no.: 0001329
24 V DC double solenoid valve	Item no.: 0000080
1", 24 V DC stainless steel solenoid valve	Item no.: 0000017
Unit plug for 1" stainless steel solenoid valve	Item no.: 0000846
UV Lamp	Item no.: 0000169
Siphon / monitoring device, complete	Item no.: 0000172
4 GB SD card	Item no.: 0001333
9-pin D-Sub cable	Item no.: 0001262

9.2 Installation materials

Rinsing impeller	Item no.: 0000091
Urine bottle nozzle, full jet, stainless steel	Item no.: 0000083
Ceiling nozzle, full cone, stainless steel	Item no.: 0000084
Cold or hot water supply hoses	Item no.: 0000085
Ceiling nozzle distributor	Item no.: 0000086
DN 100 siphon	Item no.: 0000089
DN 100 siphon sleeve	Item no.: 0000090
Rinsing pipe made of stainless steel	Item no.: 0000109
Corrugated pipe steam line	Item no.: 0000045
SS steam pipe kit	Item no.: 0000119
30 / 50 reducing rubber	Item no.: 0000551
Check valve for descaler suction lance	Item no.: 0000475
Stainless steel steam nozzle	Item no.: 0000173

9.3 Mechanische Teile

Door spring	Item no.: 0000073
Door mounting plate for repair	Item no.: 0000074
Spring-loaded pressure piece	Item no.: 0000072
Labyrinth door seal	Item no.: 0000001
Bottom door seal	Item no.: 0000150

Spare parts can only be ordered from the manufacturer or one of its sales partners by stating the item number. Only original spare parts may be used, otherwise safety and hygienic success cannot be guaranteed

10. Technical data

euroMAT pro is monitored – compliant – inspected in accordance with:

- Medical Devices Directive
- DIN EN ISO 15883 Parts 1 and 3
- System separation in accordance with DIN EN 1717
- Hygiene certificates based on DIN EN ISO 15883

10.1 Disinfection

The euroMAT pro units are exclusively equipped with decentralised, thermal disinfection. The dishes and the entire rinsing chamber are disinfected once cleaning is complete.

10.2 Chemical consumption

The unit only requires a lime binder. It is tailored to the euroMATIC product, which can be purchased from the manufacturer or one of its sales partners. Alternatively, euroMATIC pH acid can be used depending on the °dH (water hardness).

Please note: An agent with an acidic pH must be used from a water hardness of 12°dH.

If other agents that are not approved by the manufacturer are used, the warranty shall become void and even hygienic success cannot be guaranteed.

10.3 Electrical data

Electrical connection: 230 V, 50 Hz, equipotential bonding cable (mandatory). Optional: Approx. 4.1 kW heating, 400 V, 50 Hz potential equalisation line (mandatory).

Protection class:	1
Unit protection type:	IPX1
Controller protection type:	IP21
Power consumption:	Approx. 3.0 kW / optional: Approx. 4.1 kW
Energy consumption:	Standby approx. 0.002 kWh Edge rinsing approx. 0.010 kWh
Rinsing:	Short program approx. 0.275 kWh Standard program approx. 0.300 kWh Intensive program approx. 0.325 kWh

10.4 Noise emission

The workplace level is 45.3 dB (A)
The accuracy class 2 measurement was conducted in accordance with
ISO 11203:1195 and ISO 3744:2010.

10.5 Water

Connections as per the	½ " cold water
German Drinking Water	½ " warm water, 70°C inflow
Ordinance:	DN 100 outflow
Flow pressure:	Minimum 100 kPa
	Maximum 1000 kPa
Water consumption:	Edge rinsing 4.2 l cold water

Rinsing:

Short program	9L cold water	9L hot water
Standard program	15L cold water	15L hot water
Intensive program	24L cold water	15L hot water

The water consumption may fluctuate slightly; the tolerances are
± 3%. The dead spaces are 190 ml in the water supply line, 3000 ml in the
drain line, and 400 ml in the rinsing system respectively.

10.6 Dimensions / weight

W x H x D: 496 x 1305 x 500 mm, Weight: 65 kg

11. Installation

11.1 Tools

- Pipe wrench / open-end wrench for ½" union nut
- Spirit level
- Metal plates to compensate for uneven floors

11.2 Installation instructions

- Check that the indoor installation is dimensionally accurate using the
  connection dimensions on the drawing.
- The prepared indoor installation must be handed over by the opera-
  tor in a hygienic manner.
- Check the cold and hot water lines several times for safety reasons.
- Move the unit into its target position and align it. Regulate floor un-
  evenness with the adjustable foot and, if necessary, also compensate
  for the uneven floor using metal plates.
- Fix the unit to the wall or floor.
- Fit a seal onto the cold water hose with the blue mark and mount it
  on the cold water connection.
- Fit a seal onto the hot water hose with the red mark and mount it on
  the hot water connection.
- Equip the drain pipe with sealing rubber and insert it into the prepa-
  red floor / wall connection piece.
- Connect the lime binder, test the water hardness and adjust it on
  the unit. Select and dose the agent that corresponds to the water
  hardness (euroMATIC pH neutral or pH acid) (a dosage table can be
  obtained from the manufacturer on request).
- Plug the safety plug into the socket with earthing contact.

- Start the short program (urine bottle) and check that all the connec-
  tions are tight.
- Check that the hot and cold water are connected correctly. The hot
  water hose must heat up. The cold water hose must remain cold
- Start all the programs one after the other; check the programmed
  disinfection temperature and holding time and check the tightness
  again.
- Check and record the temperature that is reached

11.3 Commissioning / validating the unit

The unit must be validated using a thermo-logger system (e.g. from
Xylem Analytics, EBI 12-T690 4-channel logger system or equivalent) on
a test body (4 measuring points) specified by the manufacturer.

11.4 Warehousing / storing a bedpan cleaning unit

The operator / client is responsible for properly warehousing / storing a
bedpan cleaning unit.
With regard to storing a euroMAT bedpan cleaning unit, ensure that
the room temperature is 20°C and the humidity is less than 2% to
avoid oxidation and diffusion on electronic components (this applies
explicitly to units that are not in operation).

A sample solution would be to use a moisture protection bag with an
appropriately sized bag of dessicant. There should be a vacuum with
a residual pressure of 6 mbar in the moisture protection bag. This bag
is then flooded with nitrogen so that oxidising agents or electrolytes
are no longer present. The unit must be stored in a dust-free, dry and
upright state.

It is also imperative to ensure that the unit is secured so that it cannot
topple over. Prior to recommissioning, a comprehensive functional
test must be carried out in accordance with qualified commissioning
as per the manufacturer's specifications and statutory requirements.
When used in an unclean working area, the bedpan cleaning unit
should ideally be stored at a room temperature of 21°C with the lowest
possible relative humidity

11.5 Uninstalling / disposal

Please proceed as follows to uninstall the bedpan cleaning unit:

- Unplug the mains plug.
- Switch off the water supply (indoor installation).
- Empty the rinsing chamber if necessary.
- Loosen the unit fastening.
- Loosen the drain pipe. Pay attention to residual water in the drai-
  nage channel.
- Disconnect the water supply hoses from the building connection.
- Empty any residual water!
- The bedpan cleaning unit can now be removed.
- Electronic components, plastics and metals must be disposed of
  separately – please observe the regional disposal regulations in this
  respect!

Installation and commissioning log

Postal address:

Name of the company: _____ Contact: _____

Street / no.: _____ Postcode / Town/city: _____

Serial number: _____ Unit location: _____

Unit type / designation: _____

Installation:	**Yes**	**No**
Unit installed Housing	☐	☐
not defective	☐	☐
Hot and cold water connected Drainage	☐	☐
pipework connected Schuko plug	☐	☐
plugged into socket	☐	☐
Equipotential bonding cable connected to housing Water	☐	☐
hardness checked	☐	☐

Water hardness (degrees in dH) _____

Dosage time (descaler) _____

Used descaler agent (please indicate the manufacturer) _____

Functional test:		
Water inlet checked for leaks	☐	☐
Cold water pipework checked for leaks	☐	☐
Drainage pipework checked for leaks	☐	☐
Functional test of short program	☐	☐
Functional test of standard program	☐	☐
Functional test of intensive program	☐	☐
Functional test of edge rinsing (if present)	☐	☐

A0 value reached	Short	____A0____	Temp/sec.
	Standard	____A0____	Temp/sec.
	Intensive	____A0____	Temp/sec.

Installation company: _____ **Name of the installer:** _____

Date of installation: _____ **Signature / stamp:** _____

⚠ **The measurement logs (DGUV V3 electrical test / hygiene test / temperature test) must be attached to this log.** ⚠

12. Personal notes

Personal notes

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Personal notes

Personal notes

13. Medical devices book

Unit master data

Nature and type	
Serial number	
Year of acquisition	
Initial commissioning (MM/YYYY)	
Manufacturer	
Supplier	
Company ID number	
Location and operational assignment	
Deadlines for safety checks (see sticker on the product)	

Functional test and briefing

Inventory no. _____

Functional test
On: _____

By: _____

Briefings
Person responsible: _____

Time	Manufacturer / supplier	Name of the person respon- sible for the briefing	Signature

Functional test and briefing

Inventory no. _____

Functional test
On: _____

By: _____

Briefings
Person responsible: _____

Time	Person providing the briefing	Name of the person briefed	Signature

Briefing staff

Time	Person providing the briefing	Name of the person briefed	Signature

Malfunctions or repeated similar operating errors

Inventory no. _____

Time	Description of nature and consequences

Malfunctions or repeated similar operating errors

Inventory no. _____

Time	Description of the reported incident

15. Important addresses

Inventory no. _____

Instructions for use stored with:

_____

Notify the person responsible for operating the unit if faults occur:

Name: _____

Phone: _____

Technical Service:

Name: _____

Phone: _____

Emergency call:

Name: bg edelstahl und kunststofftechnik für krankenhaus, industrie und wasserwirtschaft gmbh

Phone: +49 (0) 23 68 - 699 36 - 0

If accidents involving personal injury occur:

Notify: _____

Phone: _____

Fax: _____

Notify:

Name: bg edelstahl und kunststofftechnik für krankenhaus, industrie und wasserwirtschaft gmbh

Phone   +49 (0) 23 68 - 699 36 - 0

Fax: +49 (0) 23 68 - 699 36 - 33

Manufacturer and person responsible as per § 5 of the German Medical Devices Act:

bg edelstahl und kunststofftechnik für krankenhaus, industrie und wasserwirtschaft gmbh

Karlstraße 18
45739 Oer - Erkenschwick

Phone: +49 (0) 23 68 - 699 36 - 0
Fax: +49 (0) 23 68 - 699 36 - 33

E-Mail: service@bg-edelstahl.de

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