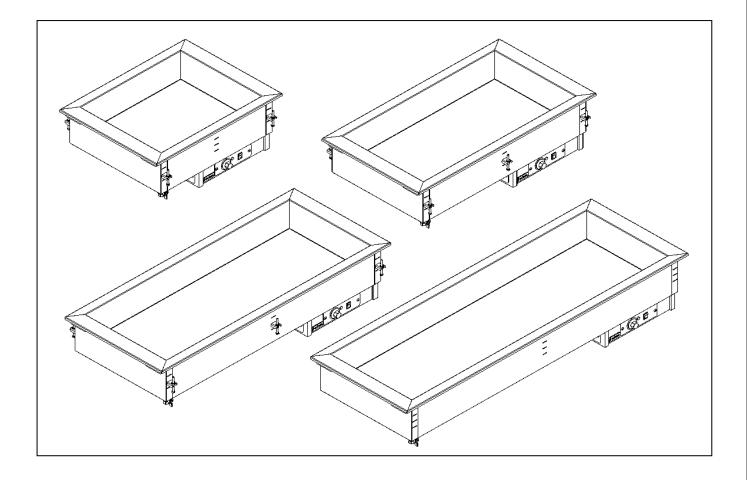


WET BAIN MARIE WELLS

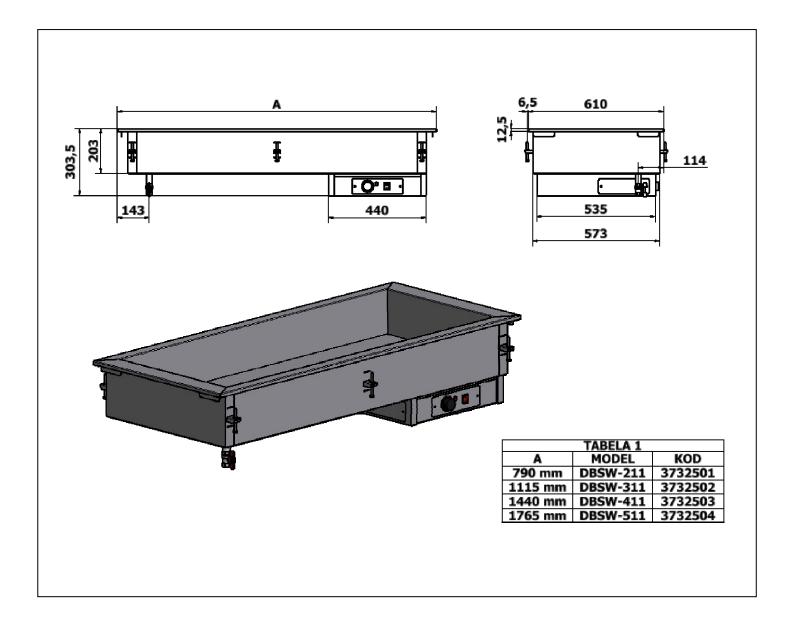
DBSW-211 – DBSW-311 – DBSW-411 – DBSW-511 OF THE SERIES



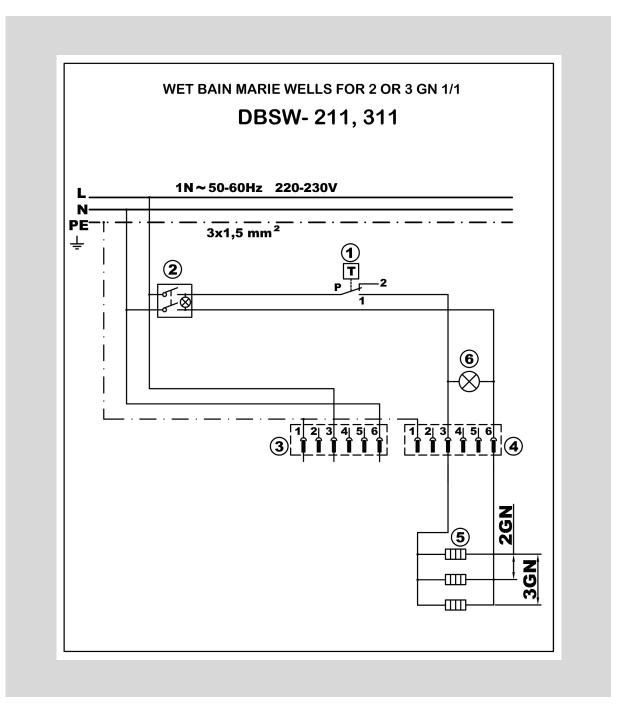
Manual instructions
Installation and Operation

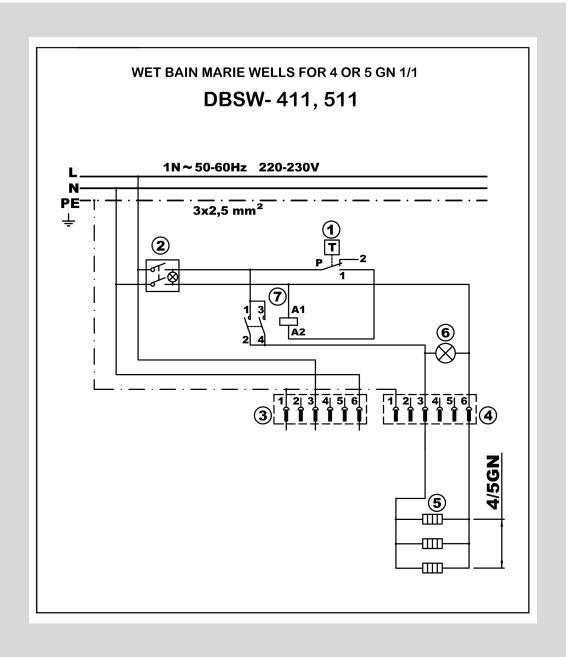
Instrukcja obsługi Obsługa i konserwacja

DRAWING OF THE DEVICE.



WIRING DIAGRAM.



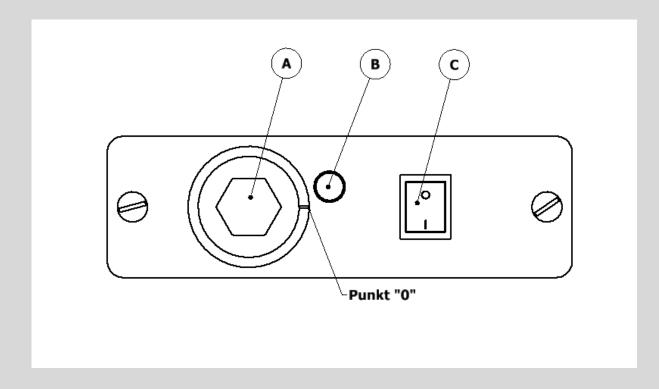


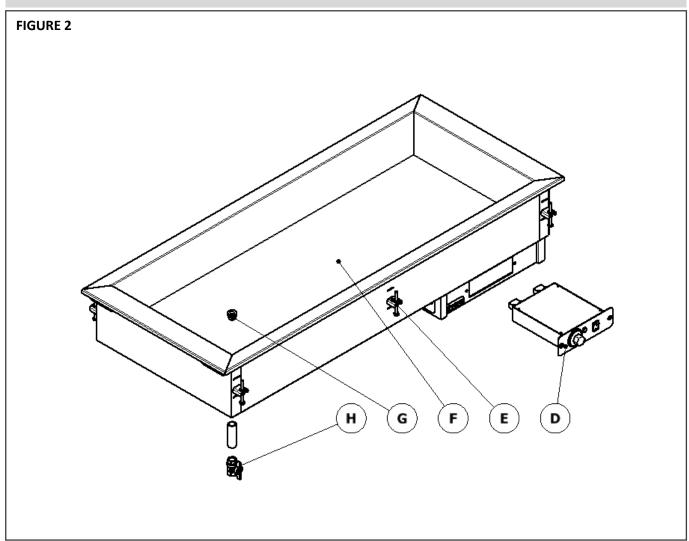
LEGEND FOR ELECTRIC DIAGRAM

- 1 Thermostat,
- 2 Power switch,
- 3 Connector cover A,
- 4 Connector cover B,
- (5) Silicone heaters,
- 6 Control light,
- 7 Contactor.

iii

FIGURE 1





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1. INTRODUCTION

- 1.1 Description of the device and its specific models
- 1.2 Important safety guidelines
- 1.3 Technical parameters

1.1 DESCRIPTION OF THE DEVICE AND ITS SPECIFIC MODELS.

The structure of the water bain-marie is based on one water chamber (Figure 2, 'F'). Depending on the model, chambers may differ in size. Also, the number of the GN containers may vary: DBSW-211 can hold two GN 1/1 containers, 311 three GN 1/1 containers, 411 four GN 1/1 containers, and 511 five GN 1/1 containers. Below the water chamber, on the right-hand side is a control panel (Figure 2, 'D') (Figure 1 – switch 'C', thermostat 'A', control 'B'). Under the chamber, on the left-hand side a $\frac{3}{4}$ " drain valve is located (Figure 2, 'H').

1.2 IMPORTANT SAFETY GUIDELINES.



The water bain-marie is powered by electricity. It may be operated only by personnel trained to use professional gastronomic equipment.

Only personnel skilled in servicing of professional gastronomic equipment may maintain the bain-marie.

While using the water bain-marie, you must strictly follow the safety instructions below:

- be careful when carrying or using a hot container of the bain-marie (its maximum operating temperature can be as high as 90° C);
- before cleaning the device, make sure the thermostat control is set to zero and the power supply is disconnected from the device;
- in case of a fault, disconnect the device form power supply and contact service personnel;
- the device may be connected to power supply only after the fault is removed.

The following is strictly forbidden:

- cleaning and repairing when the bain-marie is operating;
- leaving the device unsupervised when it is operating;
- keeping up the maximum power and temperature of the device for a long time without filling it with water beforehand;
- using the device when it is not earthed;



- operating without protective clothing;
- carrying or transporting the device without a pallet or a suitable platform.

The manufacturer shall not be held liable for any damage attributable to the failure to follow the instructions contained in this manual, hence it is recommended that you carefully read all information herein.

Keep the manual for later use.

Warning!!!

Do not use the device if it is faulty.

1.3 TECHNICAL PARAMETERS.

MODEL	EXTERNAL DIMENSIONS (mm)		CAPACITY GN 1/1	DIMENSIONS	VOLTAGE (V/Hz)	POWER (W)	WEIGHT (kg)		
	length	width	high		length	width			
DBSW-211	790	610	304	2 x GN1/1	770	585	230/50	1600	
DBSW-311	1115	610	304	3 x GN1/1	1095	585	230/50	2400	
DBSW-411	1440	610	304	4 x GN1/1	1420	585	230/50	3000	
DBSW-511	1765	610	304	5 x GN1/1	1745	585	230/50	3000	37

2. INSTALLATION

- 2.1 General information.
- 2.2 Transport, lifting, unpacking, storage.
- 2.3 Intended use and limitations.
- 2.4 Layout and description of the manufacturer's rating label.
- 2.5 Installation and assembly.
- 2.6 Connections (electricity, gas, and water).

2.1 GENERAL INFORMATION.

The water bain-marie should be unpacked, installed and tested by qualified service personnel. After being brought into the room where it is going to be installed, the device should be left for approximately 6 hours so that it can achieve the ambient temperature. Then it can be connected to power supply.

The conductors diameter of the power cable should not be smaller than the values given in the table below.

Model	Designation of the power cable		
Model	(type, number of conductors, cross-section area of conductors)		
DBSW-211, 311	PCG 3 x 1.5 mm ²		
DBSW-411, 511	PCG 3 x 2.5 mm ²		



The power switch should be connected directly to the power terminal (electric cabinet), while making it possible to safely and reliably disconnect all phases powering the device. When the circuit is broken, the gap between the jumpers of the switch should not be smaller than 3*mm*.

After installation, the device must be checked for leakage conductance. The value of leakage conductance per 1kW of the power of the device should be lower than 1mA.

Warning!!!

If an equipotential bonding bar is required, its connections must be checked.

2.2 TRANSPORT, LIFTING, UNPACKING, STORAGE.

Correct and safe transport:

- use equipment appropriate for the weight and structure of the devices;
- cover corners and sharp edges;

Before carrying:

- secure the area against unauthorised personnel;
- make sure that the load is properly secured;
- check all loose components lest they should fall when being lifted;
- try to lift the load as vertically as possible so as not to make any dents in it;
- while carrying the load, make sure that it is as near the ground as possible.

2.3 INTENDED USE AND LIMITATIONS.

Featuring the GN containers, the water bain-marie is used to keep and display hot meals that have been prepared beforehand, allowing them to be served later.

Before using the water bain-marie, its electrical system needs to be checked for efficiency and reliability.

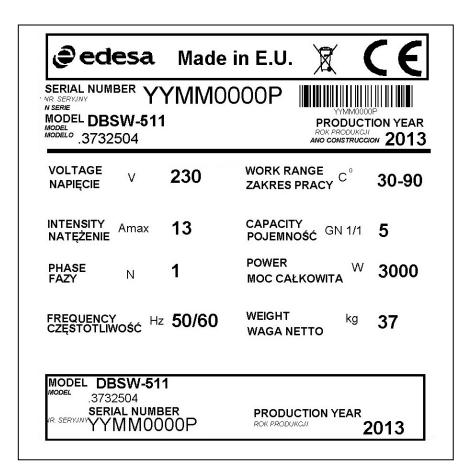
After work, switch off the device by setting the control on the panel to 0 (Figure 1, 'C'), and then disconnect the power cable of the water bain-marie.

WARNING!!!

Before the bain-marie is first put into operation, it is necessary to remove the protective film and the protective substance from the surfaces of the device by wiping it with soapy water, concentrating on the inner surfaces of the chamber.



2.4 LAYOUT AND DESCRIPTION OF THE MANUFACTURER'S RATING LABEL.



The label of the device should contain the following information:

- 1. Manufacturer's logo.
- 2. Country of origin.
- 3. Year of production.
- 4. Serial number.
- 5. Model.
- 6. Operating voltage.
- 7. Current frequency.
- 8. Rated power.
- 9. CE marking.
- 10. Disposal symbol.

2.5 INSTALLATION AND ASSEMBLY.

The water bain-marie should installed in the following order:

remove the protective film from all metal surfaces; the bain-marie must be installed in a well ventilated room, under a ventilation hood, if possible; it can be located on a free-standing base or as part of a row consisting of other kitchen devices as well;



- power supply should be connected to the water bain-marie in compliance with applicable regulations;
- install and connect the bain-marie in such a way that live wires cannot be accessed without tools; the fuses of the power system of the bain-marie should be designed for 25A current;
- > put the bain-marie in the place intended for installation; fix the bain-marie to the worktop, using mounting holders (figure 2, E) on the outer vertical walls of the device; the height and the levelling of the device should be adjusted before it is installed on the base;
- > connect the earth system of the device to the earth bar in such a way that it cannot be disconnected inadvertently or unexpectedly; the power cable should contain a protective conductor;
- to connect the bain-marie, use a cable of an appropriate length, so that it can hang freely from the device (on no account may it be tight) when firmly and permanently attached to the terminals of the connection block and the terminals of the power plug,

The conductor diameter of the power cable should not be smaller than the values given in the table below.

Model	Designation of the power cable		
Model	(type, number of conductors, cross-section area of conductors)		
DBSW-211, 311	PCG 3 x 1.5 mm ²		
DBSW-411, 511	PCG 3 x 2.5 mm ²		

2.6 CONNECTIONS (ELECTRICITY, GAS, AND WATER).

The power cable used with the device should have 3 cords, the diameters of which may not be smaller than suggested in the manual.

Designed to be powered by 230V, 50-60Hz mains power, the device's power cable is equipped with a PE protective conductor.

The electrical connection is located near the base, on the back of the device.

The bain-marie has an in-built system to drain the water bath. The drain features a ¾"ball valve (Figure 2 'H'). During device installation the valve must be connected to the sewage system.

WARNING!!!

Prior to first use, it is necessary to remove the protective film and the protective substance from the surfaces of the bain-marie chambers, to check that the drain valve is closed, and to add water to the tank (to at least 2 cm from the bottom).



3. OPERATION

- 3.1 General information.
- 3.2 Description of the control panel.
- 3.3 Operation modes and configuration of the device.

3.1 GENERAL INFORMATION.

Follow the instructions below to make work and operation safe, as well as to ensure the durability and fault-free operation of the device:

- provide training for the personnel who is to use the device in the operation of professional electrical gastronomic equipment;
- the device may be repaired only by an authorised person;
- damaged components or subassemblies should be replaced with the same items or ones with similar durability, features and technical parameters.

The following must always be observed:

- b do not connect the device to the mains via a socket that is NOT provided with an earthing pin;
- do not connect the device to an electrical system that has not been checked for fire safety;
- do not clean or have the device maintained when connected to the power supply.

WARNING!!!

DO NOT wash the bain-marie using a water jet.

WARNING!!!

The manufacturer shall not be held liable if the device is used without the observation of this manual or outside of its intended use.

3.2 DESCRIPTION OF THE CONTROL PANEL.

The control panel (Figure 2, 'D') is located on the right-hand side of the device, under the water chamber. It comprises (see Figure 1) a thermostat control (A), control lamp (B), and a power switch (C). The thermostat control is used to adjust the temperature of water. It is steplessly variable within the range of 30°C to 90°C. Whether the water has reached the desired temperature is shown by the lamp (B). The power switch is used to turn on and off the device by setting it to 1 or 0 respectively.



3.3 OPERATION MODES AND CONFIGURATION OF THE DEVICE.

A thermostat control is used to adjust the temperature of the bain-marie chamber (Figure 1, 'A'). It is steplessly variable within a range of $30^{\circ}C$ to $90^{\circ}C$. The control lamp (Figure 1, 'B') for the heating elements switches on each time the temperature of water/in the bain-marie chamber falls a few degrees.

The water heating-up time depends on a number of factors. The most important one is the depth of the GN containers used, which is directly related to the amount of water in the chamber. Less important factors include the level to which the GN containers are filled and the tightness of the cover of the water chamber.

In order to avoid the overheating of the heating mats, a thermal safety switch is provided. This cuts off power from the mats when they have exceeded $120^{\circ}C$.

4. MAINTENANCE

- 4.1 General safety requirements.
- 4.2 Cleaning and general maintenance.
- 4.3 Disposal of the device.

4.1 GENERAL SAFETY REQUIREMENTS.

All outer steel surfaces and all inner surfaces of the bain-marie chamber must be cleaned daily using a small amount of detergent and lukewarm water. After being cleaned, the surfaces should be rinsed with cold water and dried.

Do not clean acid-resistant steel surfaces with scrapers or wire cleansers, since they can scratch the surfaces.

If the device is not going to be used for a long time, cover its surfaces, particularly the inner surfaces of the bain-marie chamber, with a thin coat of Vaseline or a preservative that may come into contact with food.

IMPORTANT!!!

Do not the wash the bain-marie using a water jet, since this may damage the electrical or electronic components important for the proper operation of the device.

The device may be maintained only by trained and specialized personnel using suitable protective clothing (shoes, gloves, goggles, etc), tools, instruments, and accessories.

Before using or repairing the device, read the instruction manual containing proper procedures and safety information.



4.2 CLEANING AND GENERAL MAINTENANCE.

All outer steel surfaces and all inner surfaces of the bain-marie chamber must be cleaned daily using a small amount of detergent and lukewarm water. After cleaning, the surfaces must be rinsed with cold water and dried, with special attention paid to the lower inner surface of the bain-marie chamber, being exposed to the limescale precipitating from water.

Do not clean acid-resistant steel surfaces with scrapers or wire cleansers, since they can scratch the surfaces.

If the device is not going to be used for a long time, cover its surfaces, particularly the inner surfaces of the bain-marie chamber, with a thin coat of Vaseline or a preservative that may come into contact with food.

IMPORTANT!!!

Do not the wash the bain-marie using a water jet, since this may damage the electrical or electronic components important for the proper operation of the device.

Before starting a cleaning or maintenance procedure, disconnect the device from the mains. After cleaning, leave the device open to dry.

When the device is being serviced, the power cable and the plug should be in sight and on hand so that the person working can easily access them.

4.3 DISPOSAL OF THE DEVICE.

When its lifetime comes to an end, the device must be carried to an electronic and electronic waste disposal facility.

This is indicated by a symbol on the product, in the instruction manual, and on the on the packaging.

In order to prepare the electrical bain-marie to be disposed of, it is necessary to sort the elements of the device according to the materials they are made of.

Depending on the material these element are made of (see the symbols on the components), they can be recycled. Having electric waste and electronic equipment recycled means an active contribution to the protection of the environment.

Contact local authorities to obtain more information on the nearest electrical waste collection facility.



To protect the environment, deliver waste equipment to a suitable facility in compliance with applicable regulations.

Make sure that the electrical equipment is delivered to a facility in which it will be disposed of properly.

Some of the materials used may be stored temporarily, and some must be delivered immediately to a suitable facility. In each case the environmental protection regulations must be observed.

Before disposing of the device, check its technical condition.
In particular, check the construction elements which may cause leakage when disposed of. Different parts of the device are disposed differently, depending on their features (e.g. metals, oils, lubricants, plastic, rubber, etc.).

5. TROUBLE-SHOOTING

5.1 Trouble-shooting information.

5.1 TROUBLE-SHOOTING INFORMATION.

IMPORTANT!!!

Electrical subassemblies may be replaced only by an authorised service technician.

It must be made a principle to disconnect the power cable from the power supply before electrical components are replaced.

It must be made a principle to disconnect the power cable from the power supply before electrical components are replaced.

FAULT	POSSIBLE CAUSE	REMEDY
The chamber of the bain-marie does not heat up; the switches and the thermoregulator are on; the control lamp does not work.	 Power supply failure. The terminals of the conductors loosened on the power strip. The thermoregulator or the thermal switch is damaged. The switches are damaged. 	Connect to power supply. Appropriately fix the conductors to the power strip. Replace the damaged components.
The water in the bain-marie is insufficiently heated.	Some heating elements are disconnected.Heating elements are damaged.	Check that the heating elements are properly connected. Replace the damaged components.
The control lamp of the heating elements does not switch on, though these elements heat up.	- Control lamp burnt out The electrical circuit of the control lamp is open.	Replace the control lamp. Repair the wires of the control lamp.



The guarantee does not cover the following:

Bulbs, rubber elements, heating elements damaged by boiler scale, panes, any mechanical damage or any damage caused by improper use of the device in violation of the instructions.

In case of a fault, remove the food kept in the device to prevent it from going bad. EDESA is not responsible for any commodities wasted as a result of a fault.





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