

# MASTRO<sup>®</sup> Service



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**Code 252.108.11**

**ELECTRIC BAIN-MARIE**

|      |        |       |        |       |
|------|--------|-------|--------|-------|
| MOD. | 65/40  | BME   | 65/70  | BME   |
|      | 70/40  | BME   | 70/70  | BME   |
|      | 70/40  | BME-T | 70/70  | BME-T |
|      | 90/40  | BME   | 90/80  | BME   |
|      | 90/40  | BMET  | 90/80  | BMET  |
|      | 110/50 | BME   | 110/90 | BME   |

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## INSTALLATION INSTRUCTIONS

### 1. CONFORMITY WITH EEC DIRECTIVES

**REMARK:** The electric bains-marie are made in compliance with the basic requirements envisaged by EEC directives, in accordance with “EEC Directive 73/23 on low voltage”, “EEC Directive 89/336 on electromagnetic compatibility” and are marked “CE” according to the EEC Directive 93/68.

### 1.3

### ELECTRICAL SPECIFICATIONS:

| Model                                | 65/40 BME             | 65/70 BME             | 70/40 BME             | 70/70 BME             |
|--------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <b>Rated voltage</b>                 | 230V -1~              | 400V-3N~              | 230V -1~              | 400V-3N~              |
| <b>Total power kW</b>                | 1,5                   | 3                     | 1,5                   | 3                     |
| <b>Power cable</b>                   | H05RN-F               | H05RN-F               | H05RN-F               | H05RN-F               |
| <b>Power cable<br/>Cross section</b> | 3 x 1 mm <sup>2</sup> | 5 x 1 mm <sup>2</sup> | 3 x 1 mm <sup>2</sup> | 5 x 1 mm <sup>2</sup> |
| <b>Dimensions mm</b>                 |                       |                       |                       |                       |
| <b>Width</b>                         | 400                   | 700                   | 400                   | 700                   |
| <b>Depth</b>                         | 650                   | 650                   | 700                   | 700                   |
| <b>Height</b>                        | 280 (410)             | 280 (410)             | 850 (950)             | 850 (950)             |

The data plate shows all necessary data for installation and can be found on the terminal block cover, inside the compartment, in the models 70/40 BME and 70/70 BME, on the rear of the left-hand side panel in the models 65/40 BME and 65/70.

| Model                                | 70/40 BME-T           | 70/70 BME-T           |
|--------------------------------------|-----------------------|-----------------------|
| <b>Rated voltage</b>                 | 230V -1~              | 400V-3N~              |
| <b>Total power kW</b>                | 1,5                   | 3                     |
| <b>Power cable</b>                   | H05RN-F               | H05RN-F               |
| <b>Power cable<br/>Cross section</b> | 3 x 1 mm <sup>2</sup> | 5 x 1 mm <sup>2</sup> |
| <b>Dimensions mm</b>                 |                       |                       |
| <b>Width</b>                         | 400                   | 700                   |
| <b>Depth</b>                         | 700                   | 700                   |
| <b>Height</b>                        | 280 (430)             | 280 (430)             |

The data plate contains all necessary information with installation and it is located on the left side of the unit, near the terminal block .

|                                      |                       |                       |                       |                       |
|--------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <b>Model</b>                         | 90/40 BME             | 90/80 BME             | 90/40 BMET            | 90/80 BMET            |
| <b>Rated voltage</b>                 | 230V -1~              | 400V-3N~              | 230V -1~              | 400V-3N~              |
| <b>Total power kW</b>                | 2,2                   | 4,4                   | 2,2                   | 4,4                   |
| <b>Power cable</b>                   | H05RN-F               | H05RN-F               | H05RN-F               | H05RN-F               |
| <b>Power cable<br/>Cross section</b> | 3 x 1 mm <sup>2</sup> | 5 x 1 mm <sup>2</sup> | 3 x 1 mm <sup>2</sup> | 5 x 1 mm <sup>2</sup> |
| <b>Dimensions mm</b>                 |                       |                       |                       |                       |
| <b>Width</b>                         | 400                   | 800                   | 400                   | 800                   |
| <b>Depth</b>                         | 900                   | 900                   | 900                   | 900                   |
| <b>Height</b>                        | 850 (1000)            | 850 (1000)            | 300 (450)             | 300 (450)             |

The data plate shows all necessary data for installation and can be found on the terminal block cover, inside the compartment, in the models 90/40 BME and 90/80 BME, on the rear of the left-hand side panel in the models 90/40 BMET and 90/80 BMET.

|                                      |                       |                       |
|--------------------------------------|-----------------------|-----------------------|
| <b>Model</b>                         | 110/50 BME            | 110/90 BME            |
| <b>Rated voltage</b>                 | 230V -1~              | 400V-3N~              |
| <b>Total power kW</b>                | 2,2                   | 4,4                   |
| <b>Power cable</b>                   | H05RN-F               | H05RN-F               |
| <b>Power cable<br/>Cross section</b> | 3 x 1 mm <sup>2</sup> | 5 x 1 mm <sup>2</sup> |
| <b>Dimensions mm</b>                 |                       |                       |
| <b>Width</b>                         | 500                   | 900                   |
| <b>Depth</b>                         | 1100                  | 1100                  |
| <b>Height</b>                        | 850 (1000)            | 850 (1000)            |

The data plate shows all necessary data for installation and can be found on the terminal block cover, inside the compartment.

## **2. PRELIMINARY INSTALLATION INSTRUCTIONS**

The bain-marie must be positioned in a well-aired room, if possible under a hood to remove cooking steam thoroughly.

Before starting the appliance, remove all protective film; thoroughly clean the surfaces with a soft cloth, lukewarm water and detergent, so as to remove all anti-rust products applied during the manufacturing stage, then dry with a clean cloth.

If the appliance is installed near walls, partition walls, kitchen furniture, decorative panelling, etc., these should be constructed with fireproof materials or a space of at least 100 mm should be left free.

Make sure that fire prevention rules are strictly respected.

The appliances can be positioned - according to the models - as top or ground appliances, or linked together with others of the series.

The main switch and the socket must be near the appliance and easily accessible.

Using the levelling feet lay the appliance flat, adjust the height and ensure its stability.

### **2.1 Regulations, technical rules and general specifications**

Comply with the following rules during assembly:

- 1) accident prevention rules;
- 2) rules in force in the country where the appliance is installed;
- 3) carefully read this booklet as it contains important instructions about installation safety, use and maintenance;
- 4) keep this booklet for further reference.

### **2.2 Installation**

Installation, setting up and maintenance must be carried out by qualified personnel only.

Installation must be carried out in accordance with the rules in force in the country where the appliance is installed.

The manufacturer declines all responsibility for incorrect functioning resulting from defective installation, tampering, improper use, bad maintenance, non-observance of the local rules and use by unskilled persons.

## **INSTALLATION INSTRUCTIONS**

APPLIANCE WITH WEIGHT GREATER THAN 40 Kg

BEFORE POSITIONING THE APPLIANCE CONNECT THE POWER CABLE TO THE TERMINAL BLOCK.

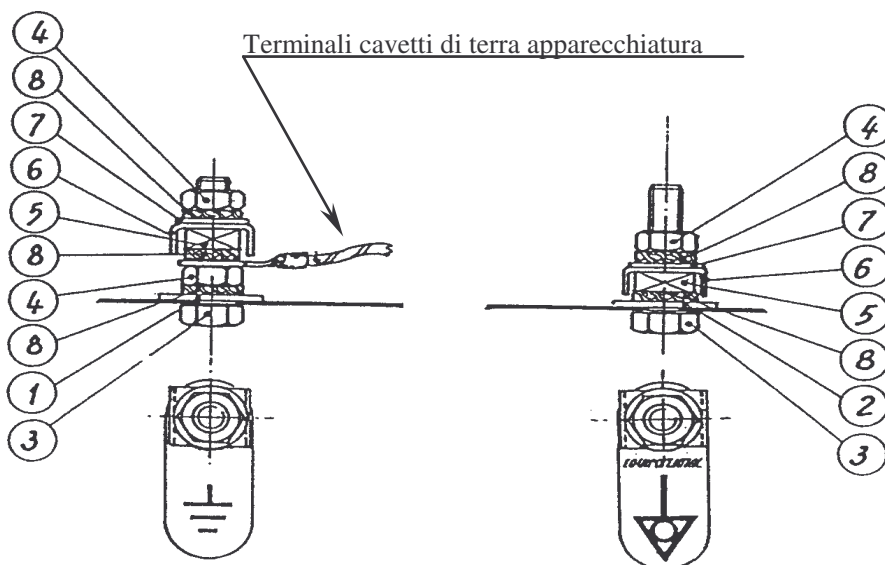
## 2.2.1 Electrical connection

- 1) The electric bains-marie are designed to operate off 400 VAC+3N voltage.
- 2) The connection to the mains must be carried out through a suitably rated trip switch which has at least 3 mm between the contacts. Moreover, the mains voltage - when the appliance is working - must not exceed  $\pm 10\%$  of the voltage value.
- 3) The power cable to connect the appliance to the mains must be at least equal to the H05RN-F rubber insulated type, with cross section suitable to the max. power consumption; therefore, its lowest cross section must comply to the data stated in the electrical specifications table for each type of appliance.
- 4) On top appliances the cable inlet and the terminal block are on the rear side. To carry out the connection, unscrew and remove the protective cover.  
To gain access to the terminal block on ground appliances with a cabinet underneath the protective cover of the terminal block on the inner left-hand side of the cabinet has to be removed; to carry out the connection, insert the cable through the inlet gland and the cable-clamp and connect the wires to the relative binding posts.
- 5) The appliance must be provided with an efficient earth connection.  
For this purpose, near the terminal block there is a binding post marked with the symbol  $\equiv$  to which the earth wire (yellow-green) must be connected.  
The above-mentioned cable must be long enough so that – if the cable clamp loosens - it can be stressed only after the feed wires have been disconnected .  
**NB:** Earthing must be carried out according to the local standards and regulations in force.

### 2.2.1.1 Equipotential connection

When interconnecting multiple appliances together, the electric bain-marie must be included in an equipotential system, whose efficiency has to be checked according to the rules in force. The connection is on the rear panel in top appliances, and on the left-hand side of the bottom frame in ground appliances, marked with “EQUIPOTENTIAL”.

Earth wires for appliances



**NB:** The manufacturer declines all responsibility for damage resulting from non-compliance with accident prevention rules as described above.



### 2.2.2

### WATER CONNECTION FOR MODELS 90/80 BME AND 110/90 BME

To carry out a correct installation the following must be respected:

- 1) The water feed pipes must be connected to the mains using cut off cocks which should always be closed when the bain-marie is not being used or during maintenance interventions.
- 2) A mechanical filter must be installed between the cut off cock and the pipes feeding the bain-marie in order to avoid the build up of ferrous materials that when rusting could damage the stainless steel and lead to the presence of rust spots on the tank . You are therefore advised to drain off a small amount of water before attaching the last length of piping to the bain-marie so washing away any eventual ferrous materials.
- 3) If rust points do form on the tank this will be due to the build up of ferrous materials or the stagnant of iron filings. The stainless steel is not the cause.
- 4) The 1/2" water inlet can be found on the lower right-hand side of the bain-marie. The water load pipe is marked with the symbol



**Note: the manufacturer takes no responsibility and has no guarantee obligations for damage caused by not respecting the laws and standards in force or for a non professional installation.**

## USER OPERATING INSTRUCTIONS

- 1) Bains-marie are appliances designed for heating food containers and should be exclusively used by trained personnel following these operating instructions. Any other use of the appliance is to be considered improper and therefore dangerous.
- 2) Before inserting containers or bowls make sure that the tank and false bottom have been carefully cleaned using hot water and detergent and then rinse well.

### 3 START-UP

**Attention! The appliance must only be used under the operator's surveillance !!!**

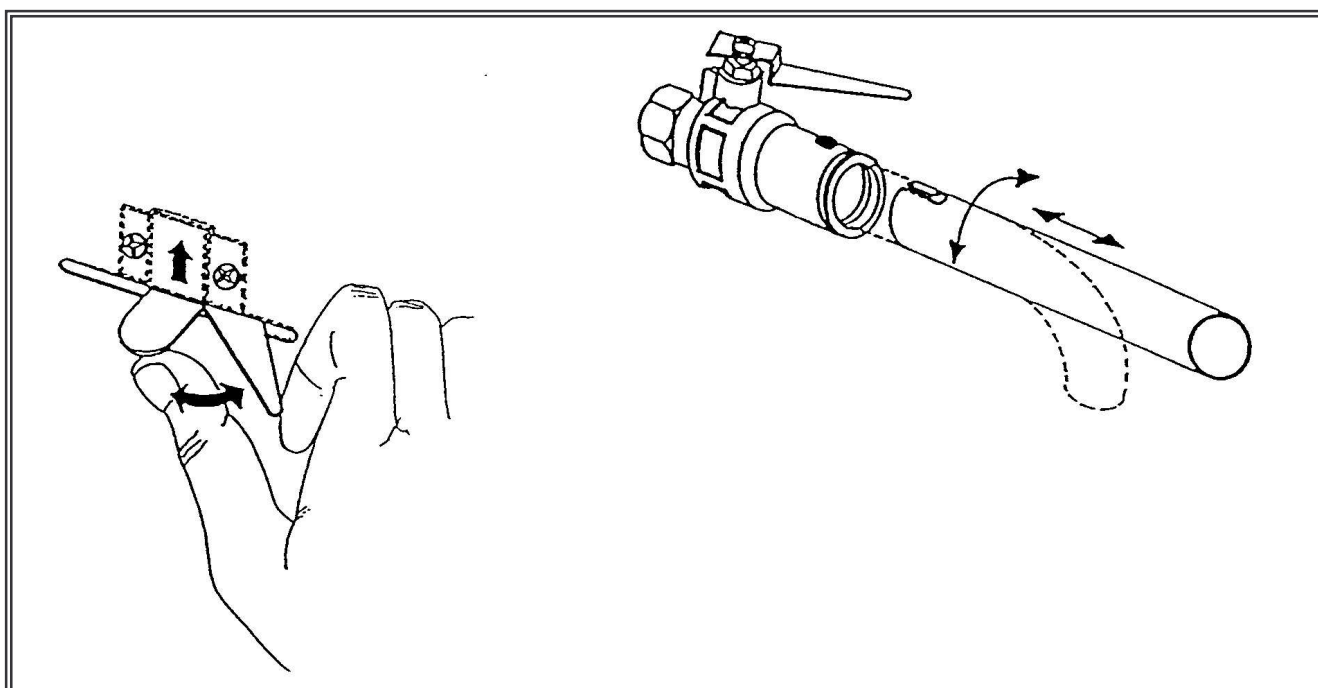
The appliance must never be made to work when the water level has dropped below the tank's minimum level.

#### 3.1 SWITCHING ON AND SWITCHING OFF

Fill the tank with water up to the maximum level and switch on the main switch. Turn the knob to the desired position between 30 °C and 90 °C and both indicator lights will light up. The green light indicates that the appliance is receiving power and the yellow light indicates that the heating elements are working, until they reach the set temperature. To switch off the bain-marie, turn the knob anti-clockwise until the switch clicks at the "0" position.

#### 3.2 EMPTYING THE TANKS

The operator must make sure that there is a suitable container available to collect the drained off water. Insert the drainage tube with bayonet joint as shown in the drawing. To drain off the water turn the lever as shown in the drawing.



## **4 MAINTENANCE, CLEANING AND CARE**

**Before carrying out any cleaning operations disconnect the power at the mains.**

It is recommended that the installation be checked by an authorised technician at least twice a year, a special attention should be given to the efficiency of control and safety devices. .

For the daily cleaning of the appliance, the steel parts must be cleaned using a smooth cloth, water and common detergents. After cleaning rinse well and dry thoroughly.

If the appliance is not to be used for an extended period of time, clean all the stainless steel surfaces well using a cloth soaked in vaseline oil so as to apply a protective veil. Make sure the rooms are aired regularly.

At all costs avoid casual or continuous contact with rusting materials which could cause corrosion spots to appear. Therefore ladles, mixers and spoons etc. must be made of stainless steel.

For the same reason never clean the stainless steel using steel wool, brushes or scrapers, which are made of common steel. Stainless steel wire wool can be used but only rub with the grain.

Never use cooking salt inside the tank.

Once you have emptied the food from the tank, make sure that the tank is well cleaned in order to remove incrustations. Use nylon spatulas where possible.

### **ATTENTION:**

**Do not wash the appliance with direct water jets or with a high-pressure cleaner, as possible infiltration to the electrical parts could jeopardize the regular operation of the appliance and of the safety devices.**