

Bravilor Bonamat®

GB

RLX

GENERAL

700.403.329
Bravilor Bonamat®
© 12–2001

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The information contained in this document is based on general data concerning the construction, materials characteristics and working methods known to us at the time of publication and therefore we reserve the right to make changes without notice. For this reason the instructions contained in this document should be treated as a guide to the installation, use and maintenance, of the machine indicated on the front cover.

This document applies to the standard version of this machine. The manufacturer therefore accepts no liability for any damage arising from specifications that deviate from the standard version of the machine as delivered to you.

Every possible care has been taken in the production of this document, but the manufacturer accepts no liability for any errors in this document or for any consequences arising therefrom.

TAKE THE TIME TO CAREFULLY READ THIS DOCUMENT BEFORE USING USING THE MACHINE.

DURING READING KEEP THE FOLD-OUT OPEN.

KEEP THIS DOCUMENT NEAR THE MACHINE AT ALL TIMES.

PREFACE

Using this document

This document is intended to provide instructions for authorized users to install, use and maintain the machine in a safe manner.

The instructions for use comprise a general section and a specific section per module forming a part of your machine.

The words "left", "right", "front" and "back" are used in this document to indicate a particular part of the machine. The point of departure here is the position of the user standing at the operating side.

Icons and symbols

In this **document** the following icons and symbols can be found:



TIP

- Hint, suggestion or advice to carry out certain tasks more easily or neatly.



CAUTION!

- Procedures that can result in damage to the machine, the surrounding area or the environment if they are not carried out with due care.



WARNING

- △ Procedures that can result in serious damage to the machine or in physical injury if they are not carried out with due care.



WARNING

- △ Risk of electric shock.



WARNING

- △ Risk of burns.

Related documents

The following related documents are available:

- | | |
|--|---------------|
| – Specific user instructions coffee and Wide Body module | : 700.703.275 |
| – Specific user instructions hot-water module | : 700.703.276 |
| – Specific user instructions hot-water/steam module | : 700.703.277 |
| – RLX maintenance manual | : 700.703.Pxx |

Document code

Document codes consist of two fields:

- Field 1: document number (if required followed by the revision number)
- Field 2: revision date

Service and technical support

Please contact your dealer for information concerning the specific setting, maintenance or service activities that fall outside the scope of this document. He will always be happy to help you. When doing this, always ensure that you have the following details at hand:

- Model code
- Type number
- Serial number

This data can be found on the identification plate. Write down the data of the identification plate in the intended fields (fig.1).

Guarantee conditions

The guarantee conditions applicable to this machine form part of the terms of delivery.

Identification of the machine

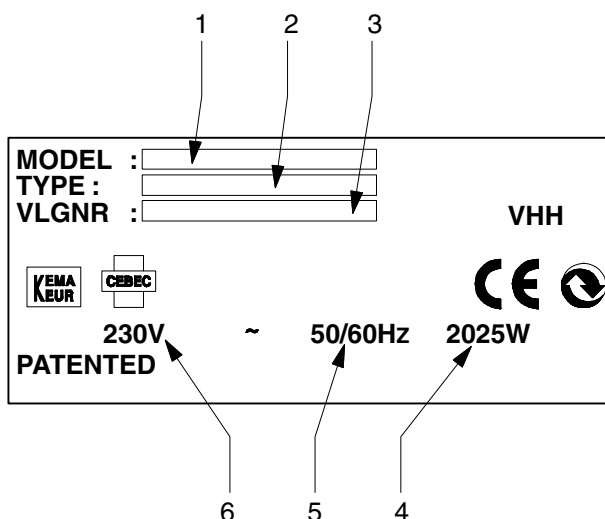


Fig. 1 Identification plate

1. Model code
2. Type number
3. Serial number
4. Output capacity
5. Frequency
6. Supply voltage

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Safety instructions and danger warnings

General

The manufacturer accepts no liability whatsoever for damage or injury resulting from a failure to (strictly) observe the safety instructions contained in this document or resulting from negligence during the installation, use or maintenance of the machine specified on the front covers of these documents or of any related accessories.

Additional safety instructions may be required, depending on the specific working conditions or accessories used. Please contact your dealer if you think there may be any potential danger in using the machine.

Instructions for use

- Each person working with the machine should know the contents of this document and carefully follow the instructions contained. The management must instruct the personnel on the basis of this document and take all the instructions and recommendations into account.
- Always keep this document near the machine.

Icons and instructions on the machine (if present)

- Icons, warnings and instructions attached to the machine form part of the safety provisions. They must not be covered or removed and they must be present and remain legible throughout the life of the machine. Any icon, warning or instruction that becomes illegible must be repaired or replaced immediately.

Users

Technical specifications

The specifications given in this document may not be modified.

Modifications

Modification of (parts of) the machine is not allowed.

Installation

- The maximum acceptable ambient temperature with which a good operation can be guaranteed is 40°C.
- Never install the machine in an environment where the temperature can drop below 0°C.
- Do not turn over the machine, move it upright.
- Never install the machine in places where water is sprayed or sprinkled.
- Never install the machine in front of entrances, exits or passageways intended for emergency services.
- Place the machine on a sufficiently solid, flat surface close to a water connection, water discharge and an earthed electrical power outlet.
- Connect the machine to the electrical supply in such a way that the power can easily be disconnected.
- Machines hard wired into mains electricity supply we advise to use an Earth Leakage Circuit Breaker (ELCB) of the appropriate rating (max. 30 mA).
- Leave sufficient space at the back and front of the machine for maintenance and repair purposes.
- The machine should be connected to the electricity mains in such a way that all phases and the zero can easily be disconnected. The minimum distance between the contacts and the disconnected position should be at least 3 mm.
- Connect the machine to a readily accessible, manually operated water tap, so that the water supply can easily be turned off.
- Always observe local rules and standards when installing this machine.

Use

- Inspect the machine before use and check for damages.
- Protect the machine against water and moisture. Do not wet the machine by spraying and never submerge the machine in water.
- Keep the operating controls free from dirt and grease.
- Note that during use some parts of the machine become very hot.
- Disconnect the electricity grid and the water supply when the machine will not be used for a longer period. Clean the machine following the instructions. Discharge the water.
- Should the internal water ways of the machine become frozen, disconnect from the mains, turn off the water supply and disconnect and place the machine in a warm environment until the water ways have defrosted. Inspect and test machine for water leakage.

Maintenance and repairing failures

- Repair and maintenance activities not included in this document must always be carried out by service mechanics.
- If the mains lead is visibly damaged, it has to be replaced by a qualified service technician.
- Observe the given maintenance intervals. Overdue maintenance can lead to high repair costs and may cause guarantee claims to become invalid.
- Do not carry out any maintenance activities concerning the machine before having it protected against unintentional coming into operation. In such cases disconnect the electricity grid.
- Never leave the machine during maintenance activities.
- For cleaning the machine only use the cleansing agent and descaler recommended by the manufacturer.
- Always wear suitable facial protection and gloves while working with cleansing and descaling materials. Wash your hands after using these materials.
- Prevent damage of the machine caused by spilled descaler solution. Remove spilled solution as quickly as possible and follow the previously mentioned safety instructions.

Safety devices present

The machine is default provided with the following safety devices:

- Using the ON/OFF-switch the machine is switched on or off. After switching off there is still some residual voltage in the electrical system. Remove the plug from the wall outlet in order to take away this residual voltage.
- Drip-tray to prevent trouble caused by spilled drink.
- Overflow protection that prevents the machine from taking in more water than allowed.
- Thermal safety device that interrupts the power when the water temperature in the boiler becomes too high.
- Over-pressure protection, only in *modules 4 and 8*, which prevents the pressure within the boiler from reaching unacceptable levels.

Machines and the environment

Packaging material

The main components of the packaging material for transport and protection of the machine are the following:

- Corrugated board
- Polystyrene elements

Generally, the packaging material can be returned through your dealer after installation of the machine. If this is not be possible, ask your local authority refuse department how you can dispose of the materials.

Disposal of the machine

Machines that you wish to dispose of can usually after consultation be returned to your dealer. If this is not possible, inquire with your local authority about the possibilities for re-use or environmentally-friendly processing of the materials. All plastic parts have been clearly coded for this purpose. The printed-circuit board in the machine and the components connected to this should be consigned to electrical or electronic refuse.

1. GENERAL

1.1 The machine

1.1.1 General description

The machines from the RLX series are designed for making coffee, for supplying hot water and for heating drinks using steam.

One machine is an assembly comprising one or more modules.

In this document, the general information for all modules is discussed.
Please also read the user instructions for the specific modules.

1.1.2 The modules

The figures in the model description indicate the modules comprising your particular machine.

In table 1, the various **standard** modules are shown.

Module	Type	Remark
1	coffee	with glass jug
2	wide body	with hot plate
3	hot water	low model
4	hot water/steam	low model
5	coffee	with container
6	coffee	with airpot
7	hot water	high model
8	hot water/steam	high model

Table 1 The various modules

Example:

The RLX 231 comprises:

- a wide body module (2) on the left,
- a low model hot-water module (3) in the middle, and
- a glass-jug coffee module (1) on the right.



TIP

- See the fold-out for the **standard** models.

1.1.3 Preferred circuit

Depending on the configuration, your machine may be equipped with a preferred circuit. An electronic circuit within the machine will make sure that no two high-powered modules can be switched on at the same time. If your machine is equipped with a preferred circuit, the coffee module will be in the preferred position. This means that the other modules will be switched off or partly switched off by the control system, as soon as the coffee module is switched on. Ask your Bravilor Bonamat® dealer, your service technician, or one of the service agencies about the various options.

1.2 Technical data

1.2.1 Weights and measurements

- See the fold-out.

1.2.2 Electrical system

- See the identification plate for the correct values.

1.2.3 Water system

- Water hardness : min. 5 °DH
- Min. water pressure (supply) : 50 kPa (0,5 bar)
- Max. water pressure (supply) : 1000 kPa (10 bar)
- Flow-rate : 5,5 l/min
- Conductivity : 100 µ Siemens/cm

1.2.4 Recommended cleaning and descaling agents

Cleaning material : CLEANER

Descaler : RENEGITE

- See §1.7.1 for ordering the cleaning and de-scaling materials.

1.3 Installation

1.3.1 Unpacking

1. Check that the machine is complete.
2. Please contact your dealer if any components are missing or damaged.
- The contents of the package, in the case of a **standard** model, consist of:

	RLX													
	3	4	5	31	41	55	75	76	85	131	231	241	575	585
drip-tray	1x	1x	1x	1x	1x	2x	2x	1x	2x	1x	1x	1x	3x	3x
water connecting hose	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
filter paper	–	–	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
filter pan (with spring)	–	–	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
glaas jug	–	–	–	1x	1x	–	–	–	–	2x	2x	2x	–	–
measuring scoop	–	–	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Cleaner	–	–	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
Renegite	1x	–	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
funnel (for descaling)	–	–	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x	1x
gauge glass brush	–	–	1x	–	–	1x	1x	–	1x	–	–	–	1x	1x

Table 2 Contents of the package

1.3.2 First use



WARNING

- △ The power supply voltages may vary from one country to the next. Details of the required supply voltage and frequency can be found on the identification plate.
1. First of all, read the chapter “Safety instructions and danger warnings”.
 2. Place the machine on a firm, smooth underground, which may not be more than 5° off plumb.
 3. Place the machine nearby a water tap, if possible a drain and an earthed wall socket.
 - Leave sufficient space at the back and front of the machine for maintenance and repair purposes.
 4. Connect the machine to the manual tap using the water hose supplied.
 - Make sure that the water supply can easily be turned off using the tap.
 5. Open the tap.
 6. Connect the plug to the wall socket.
 7. The module(s) have to be flushed.
 - For instructions, please read the paragraph concerned in the specific user instructions.

1.4 Use

1.4.1 Controls

The control panel is provided with 2 push buttons, 1 or 2 indicator lights and a display.

On the display, different symbols will appear, showing various values and messages, which are explained in the user instructions of the specific modules.

1.5 Maintenance

1.5.1 Daily

1. Remove the complete drip tray.
2. Wash all components in hot water with a normal washing-up liquid.

1.5.2 Once a week

1. Remove the drip-tray.
2. Dissolve 1 bag of **Cleaner** in 5 l of water (min. 80°C).
3. Immerse the parts to be cleaned in this solution.
4. Leave to steep thoroughly (max. 30 min.).
5. Thoroughly rinse the parts with hot water.
6. Wipe the outside of the machine with a damp cloth. When cleaning, **never** use an abrasive or corrosive cleaning product.
7. Dry the machine with a soft cloth.
8. Replace the drip tray in front of the machine.

1.5.3 Descaling

1.5.3.1 Descaling indicator

During use, a scaling process will take place inside the machine. The coffee, hot-water, and steam modules are provided with a descaling warning system ▼ that indicates when the machine must be descaled.

1.5.3.2 Setting descaling signal

Only for Modules 3, 4, 7 and 8.

The number of litres of water flowing through the module before the descaling warning system is activated, can be adjusted.

- Bear in mind the hardness of the water (see table 3).

Position	Signal after number of liters	Water hardness		
		°DH	°TH	Description
OFF	No signal	-	-	-
1	± 250 liter	18-30	32-55	hard
2	± 500 liter	12-18	22-32	rather hard
3	± 1000 liter	8-12	15-22	average
4	± 1500 liter	4- 8	7-15	soft
5	± 2000 liter	0- 4	0- 7	very soft
4,0	°DH = 0,714 mmol/liter			
5,6	°DH = 1,000 mmol/liter			
8,0	°DH = 1,429 mmol/liter			
12,0	°DH = 2,143 mmol/liter			
18,0	°DH = 3,214 mmol/liter			
30,0	°DH = 5,357 mmol/liter			
10,0	°TH = 1,000 mmol/liter			

Table 3 Water hardness settings

TIP

- Ask your local water company about the hardness of the water they supply.



1.6 Correcting malfunctions

In case of malfunctions first consult the malfunctions tables. If the problem cannot be solved, consult your Bravilor Bonamat® dealer, your service mechanic or one of the service desks.

1.6.1 Malfunctioning analysis general

LIST OF MALFUNCTIONS		
Symptom:	Possible cause:	Actions:
1. The machine does not work and there is nothing on the display.	The plug is not connected to the wall socket.	Connect the plug to the wall socket.
	External fuse has blown.	Reset or replace the external fuse.
	Group is overloaded.	Connect the machine to another group.

1.7 Consumable goods and accessories

1.7.1 Recommended consumable goods

Description	Ordering number	Quantity
Filter paper	7.150.101.101	1000 pieces
Descaler (RENEGITE)	7.190.101.103	48 x 50 gr.
	7.190.103.103	40 x 100 gr.
	7.190.102.101	6 x 1 kg.
Cleaning material (CLEANER)	7.191.101.102	48 x 25 gr.
	7.191.102.101	6 x 1 kg.

1.7.2 Accessories

Tea filter pan : 7.091.102.101