CAMAG®

INSTRUCTION MANUAL
TLC PLATE HEATER 3

Zertifiziertes Managementsystem SQS ISO 9001

TLC Plate Heater III

1 Introduction

The CAMAG TLC Plate Heater III is used to heat a TLC or HPTLC plate to a given temperature after developing, dipping or spraying.
An ultra-flat heating surface and high-precision temperature control allow exceptionally uniform heating of the exposed plate surface.

1.1 Precautions

- Please read this operating manual before starting the installation! This manual contains information, warnings and instructions which the user has to follow to ensure reliable operation of the instrument
- If the instrument is used in a manner not specified in this manual, the safety of the user cannot be guaranteed

- Some interior parts of the instrument are under AC power. Careless and improper use can cause injury. Unauthorized manipulations can cause damage

- The instrument is manufactured and tested in accordance with the respective European safety publications shown on the Declaration of Conformity (DoC). The instrument complies with safety class 1 and has been designed for indoor use only (IP 20). Furthermore, this device has passed the CAMAG Quality Assurance tests and has been delivered in safe operation condition. For detailed instrument data see chapter “Technical Data”
- This sign indicates (on instrument and in this manual) that failure to take note of the accompanying information may result in damage of the instrument
- Attention: For safety reasons the instrument may only be used for the purposes described in the operating manual
- Before first operation, check whether the voltage shown on the instrument matches your local mains voltage. The power cord may only be connected to a grounded, fused (not higher than 16A) outlet. Do not use extension cords without ground contact
- The instrument may be used only by properly trained laboratory staff
- The instrument may not be used in rooms with an explosion risk
- The instrument contains highly sophisticated electronics. It may be operated only in a non-condensing atmosphere in the temperature range outlined in the chapter "Technical Data". Before installation and use, the instrument should be acclimated properly
- Use a damp lint-free cloth for cleaning the instrument surface. Do not employ aggressive detergents
- Protect yourself and the instrument from electrostatic shock which can cause damage to the electronic parts
- Only authorized personnel may open the instrument. Service and repair are only to be performed by trained specialists. Use spare parts and consumables supplied by CAMAG only. The warranty is voided if parts from other sources are used. Check the service manual before you start service to reduce product-specific risks
- The power cord has to be removed before the instrument is opened. It is not permitted to work on an instrument that has been opened and is connected to the power supply
- Use only the original power cord type that was delivered with the instrument
- If the instrument is found to be defective, it must be switched off and steps must be taken to ensure that it cannot be switched on by mistake
- Carry out all safety checks and the preventive maintenance as recommended by the manufacturer in order to assure your personal safety and the full functionality of the instrument. Have an authorized service specialist perform any service not described by this manual

- See original manufacturers' manuals for further safety data on third party equipment supplied with the system
- The safety of any system incorporate with the equipment is the responsibility of the assembler of the system
- The use of the instrument without adequate ventilation to outside air may constitute a health hazard depending on the substances in use
- The open heating plate reaches temperatures up to 200 °C. Improper handling can cause injures and damage.
- While the heating plate is dangerously hot (down to about 60 °C), its temperature is shown on the display panel. Therefore do not remove the power cord before the temperature display has gone out

1.2 Parts supplied

Part no	Description
305.0015	Power cord Switzerland or
305.0016	Power cord Euro or
305.0017	Power cord USA or
305.0031	Power cord GB
B.022.3306E	Instruction manual

2 Unpacking/Installation

Carefully take all components listed in the shipping list as well as accessories out of the packing. Make sure the shipment is complete.

3 Getting started

3.1 Starting an setting the temperature

Check that the power voltage matches that specified on the back of the unit.

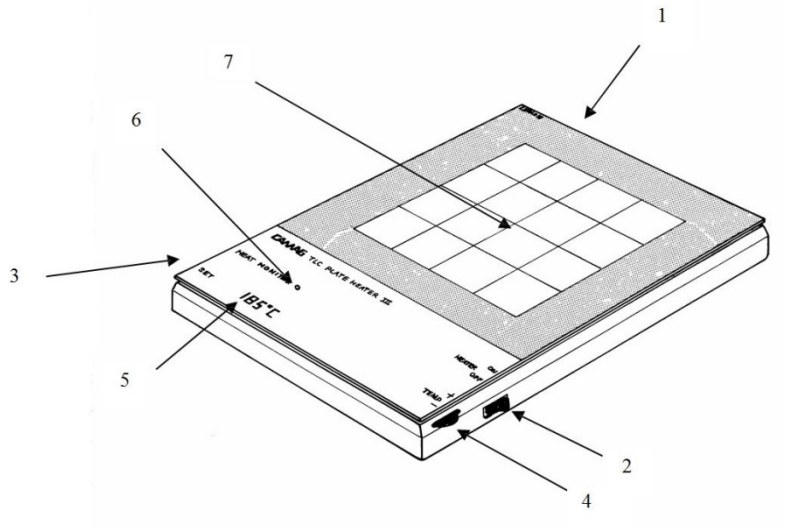

Fig1. Overview of TLC Plate Heater III

- Connect the unit to your power supply (1)
- Set the ON/OFF switch (2) to the ON position. The Plate Heater is now ready for use
- Place the TLC/HPTLC-plate on heating plate (7)
- Press the preselect button (3), at the same time turning temperature regulator (4) in the "+" direction to increase the heating plate temperature or in the "-" direction to lower it until the desired temperature is displayed (5)
- Release the preselect button and the actual temperature of the heating plate is displayed
- The lamp (6) goes on when the plate is being heated, and goes out when the thermostat cuts the heating
- The actual temperature of the heating plate is indicated on the display (5)

3.2 Switching off the instrument

- Remove the TLC/HPTLC plate from the heating plate. Set the ON/OFF switch to the OFF position
- The pilot lamp (6) goes out
- As long as the unit is connected to the power supply and the heating plate temperature is above 60 °C, the temperature is displayed
- A new value can be set even with switch (2) in the OFF position
- After switching back to ON, the device starts heating to the last preselected temperature

3.3 Notes

- To ensure a uniform temperature over the entire heating plate the temperature should be set 15 minutes before use
- Note that temperature and exposure time cannot simply be taken from another type of heating such as a drying cabinet and used for the CAMAG TLC Plate Heater III

4 Maintenance

4.1 Cleaning

- To maintain proper functionality, the instrument should be cleaned regularly. Before cleaning the heating plate disconnect the heater from the power supply and the heating plate must be at room temperature
- Mechanical cleaning: with a scraper

- Wet cleaning: with standard domestic cleaning agents for ceramic cooker tops. Use respective cleaning solvent when dangerous solvents where used.
- Make sure that no liquid ever enters the inside of the device.

4.2 Decontamination

If correctly used, the instrument does not need to be decontaminated. If the instrument is used in a manner not specified in this manual, follow the respective safety regulations/guidelines to decontaminate the instrument if applicable.

5 Technical data

Dimensions (L x W x H)	420x306x34 mm
Heating plate	CERAN-ceramic; heated area with grid, 200x200 mm
Power voltage	115/230 V, +/- 10%; 50/60 Hz
Max. Power consumption	400 W
Temperature control range	25 – 200°C
Fuses	315 mA, 250 V slow blow.

6 Temperature curves

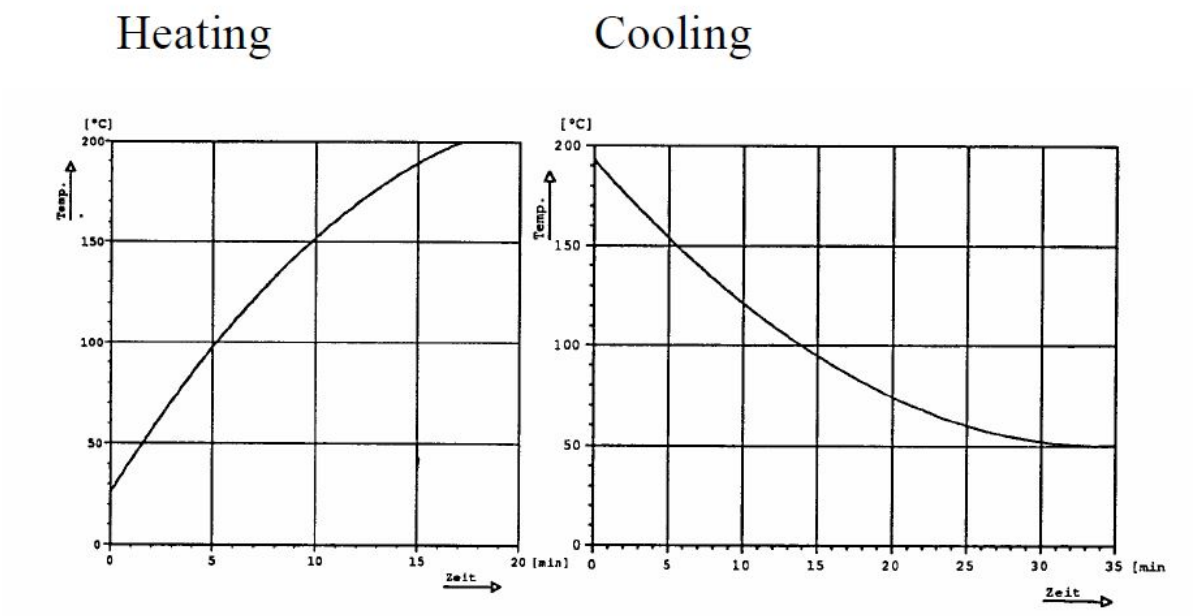

Fig. 2 Temperature curves for heating and cooling

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DECLARATION OF CONFORMITY

EC – Declaration of Conformity

We, CAMAG Chemie-Erzeugnisse und Adsorptionstechnik AG
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declare under our sole responsibility that the product

CAMAG® TLC Plate Heater 3

Product name

022.3306/ 022.3307

Article number(s)

to which this declaration relates is in conformity with the following provisions of directive(s):

- 2006/95/EC
- 2004/108/EC

Following standard(s) or other normative document(s):

- EN61010-1: 2010
- EN61326-1: 2013

Muttenz, 26 March 2015

Walter Rahm, Head of Quality Management

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