Instructions Manual

Wax melter with water jacket

LYSON

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The manual covers following devices (codes):

W7053; W7053_230V

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*The pictures are for reference only and may occasionally differ from the actual appearance of the device.

1. General safety instructions

Before first use read the manual carefully and follow the instructions contained therein. The manufacturer is not liable for damage caused by equipment used inappropriately or by incorrect handling.

1.1. Intended use

1. The device is designed for melting and cleaning wax.
2. before first use, wash thoroughly with hot water and a small amount of detergent approved for washing equipment intended for food contact.

1.2. Electrical safety

1. The electrical supply system must be fitted with a residual-current circuit breaker with rated tripping current not higher than 30mA. Performance of the circuit breaker should be checked periodically.
2. Periodically check the condition of the power cord. Replace the power cord if damaged. Replacing the power cord can only be performed by the manufacturer or by qualified personnel.
Do not use the device if the power cord is damaged!
3. Make sure that the main switch is in „0" position before plugging the unit in.
4. Connect the device to a socket with voltage specified on the rating plate of the product.
5. Carefully connect the plug into the mains socket. Make sure your hands and the floor surface in the room are dry!
6. The cover must be closed during operation! Do not open the cover during operation.
7. Do not move the device during operation.
8. Do not pull the power cord.
Keep the power cord away from heat sources and sharp edges to ensure its good condition.

1.3. Operation safety

1. The device is not intended for use by persons (including children) with limited physical, sensory or mental abilities, or by inexperienced users, unless under supervision or with instructions given by an accountable party.
This device is not a toy, and shouldn't be used as one. Children should not to play with it.
2. n the event of damage to the device, to avoid any health and safety risks, repairs should be carried out only by qualified personnel.
3. Never carry out any maintenance or repairs during operation or if the device is plugged in!
4. All covers must be firmly attached to the device during operation
5. Do not use or store the device at the ambient temperature below freezing. If the device has been moved from a cold room to a room with a higher temperature, before switching on wait until it reaches room temperature.

WARNING!!!

The device heats up to 95°C

(cover)

Do not remove covers during operation

2. Instructions for use

2.1. General rules – preparation for use

Position the device in a place designated for the purpose, kept clean, adequately illuminated and with a sufficient distance around it.

2.2. Obsługa urządzenia

1. The device is designed for melting and cleaning wax.
2. The device has to be cleaned before the first use and after finishing work according to the instructions in the "Cleaning and Maintenance" section.
3. Before start:
   - fill the melting tank with water up to the height of valve 9
   - in a melting tank with cold water, place the wax to be melted. It is recommended to crush the wax pieces to speed up the melting process
   - switch on the appliance using the main switch 6
   - set the temperature controller as required, following the instructions in point. 2.3.1 (recommended maximum melting temperature is 90°C)
   - activate the temperature controller
   - control the melting process, while ensuring that the temperature is reduced to a minimum of 90 °C during the final stage of melting
   - when melting is complete, switch off the device and wait for the residue to settle at the bottom of the melter
   - use valve 10 to drain water until wax starts to flow out, close the valve
   - use valve 9 to drain the purified wax
   - after the remaining water has cooled down, remove the perforated insert 2 with the dirt and pour out the water
   - start another melting process according to the above steps

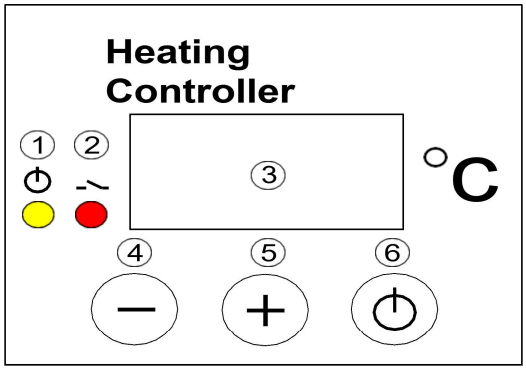
WARNING !!!

When melting and controlling the process, be careful with the hot wax to avoid burning !!!

2.3. Controller

The unit is fitted with a temperature controller

MHC-01



1. Ensure that the controller switched off before plugging the power cord in.
2. The main switch on the control panel should be in position "0"
3. When the unit is plugged on Switch (0/1) on the control panel is switched from position "0" to position "1"
4. Set up the controller to suit your specific requirements
5. To enter the "Prog" programming mode, press and hold the "ON/OFF" button during the controller start-up.

2.3.1. Buttons and functions

1 – state indicator

If the indicator light is on – the temperature regulator is active. If the indicator light is off – the temperature regulator is inactive (the controller works as a thermometer). If the indicator blinking – the temperature regulator is on and the pre-heating process is in progress

2 – heating relay status

If the indicator light is on – the relay is engaged (heating on), if the indicator is not lit – the relay is disengaged (heating off)

3 – display

Operation mode – default mode, automatically selected when the controller is powered on. The display indicates the measured temperature. The indications are given in °C.

Setting mode – selected by pressing the + or – button. The display indicates the set temperature. The value is displayed in °C. The value displayed flashes and after a while returns to the measured temperature display mode.

Run time setting mode (Pro.) - activated by pressing the "ON/OFF" button. The display indicates the operating time, counting from the moment of switching on, after which the thermostat will automatically switch off. The indication is given in hours.
Display brightness setting mode (d.br.) - activated by holding down the "ON/OFF" button. The display, with all segments lit, shows the currently set brightness. Reaching the setting limit is signalled by flashing.

The following modes are available after entering the appropriate code.sygnalizowane jest migotaniem.

Calibration mode (CAL.) code L-1 – activated by holding down the "ON/OFF" button. The display shows the calibrated temperature (temperature measured taking calibration into account). The indication is given in °C.
Pre-heating time setting mode (P.tI.) code L-2 – activated by holding down the "ON/OFF" button. The display indicates the operating time, counting from the moment of switching on, for which the controller performs the preheating, maintaining the preheating temperature programmed by the manufacturer. The message "OFF" indicates that the preheating function is deactivated. The indication is given in minutes. If preheating is activated, the controller will display "HC2" at start-up.
Preheat temperature setting mode (P.tE.) code L-3 – activated by holding down the "ON/OFF". The display shows the preheating set temperature value. P... indicated in °C.
Preset temperature limit setting mode (L.t.h.)code L-4 – activated by holding down the "ON/OFF" button. The display shows the maximum value of the preset temperature that can be set. The L... indication is given in °C.

4 – button "-" decrease value
Operating mode – Pressing the button will decrease the set temperature value. During pre-heating the possibility of changing the set temperature is blocked.
Run time setting mode – pressing the button will decrease the time after which the thermostat automatically switches off.
Display brightness setting mode – pressing the button will decrease the brightness of the display.
Calibration mode – pressing the button will decrease the value of the indicated temperature, and thus calibrating the measurement.
Pre-heating time setting mode – pressing the button will decrease the time after which the thermostat automatically switches from the preheating phase to the heating phase.
Preheat temperature setting mode – pressing the button will decrease the value of the desired temperature to be maintained during preheating.
Preset temperature limit setting mode – pressing the button will decrease the value of the maximum preset temperature value that can be set.

5 - button- "+" increase value
Operating mode – Pressing the button will increase the set temperature value. During pre-heating the possibility of changing the set temperature is blocked.
Run time setting mode – pressing the button will increase the time after which the thermostat will automatically switch off.
Display brightness setting mode – pressing the button will increase the brightness of the display.
Calibration mode – pressing the button will increase the value of the indicated temperature and thus calibrating the measurement.
Pre-heating time setting mode – pressing the button will increase the time after which the thermostat automatically switches from the preheating phase to the heating phase.
Preheat temperature setting mode – pressing the button will increase the preset temperature to be maintained during preheating.
Preset temperature limit setting mode – pressing the button will increase the value of the maximum preset temperature value that can be set

6 – "ON/OFF" button
Briefly pressing the button alternately turns the regulator on (ON) and off (OFF). In the OFF state, the regulator acts as a thermometer. In the ON state, the controller will turn the heater control output on and off to maintain the temperature set by the user.
Longer pressing and holding the button will activate the run time setting mode, indicated by the displayed message (Pro.). In this mode, using the "+" and "-" buttons, the user can define the time after which the controller will automatically switch off, i.e. go into the OFF state. Exiting this mode and confirming the settings is done by short pressing the "ON/OFF" button.
Longer pressing and holding the button starts the display brightness setting mode – indicated by the message (d.br.). In this mode, using the "+" and "-" buttons, the user can set the brightness of the display segments. Exiting this mode and confirming the settings is done by short pressing the "ON/OFF" button.
Longer pressing and holding the button activates the calibration mode which is indicated by a displayed message (CAL.). In this mode, using the "+" and "- " buttons, the user can adjust the temperature readings to the actual temperature value. Exiting this mode and confirming the calibration settings is done by short pressing the "ON/OFF" button.
Note – the controllers supplied are already calibrated.
Longer pressing and holding the button will activate the mode of preheating time setting indicated by the displayed message (P.tI.). In this mode, using the "+" and "- " buttons, the user can define the time after which the controller will automatically switch from the preheating phase to the actual heating phase. Switching off the preheating is indicated with "OFF" message. To leave this mode and confirm the settings press the "ON/OFF" button.
Longer pressing and holding the button will start the mode of setting the preheating temperature indicated by the displayed message (P.tE.). In this mode, using the "+" and "- " buttons, the user can define the desired temperature to be maintained during pre-heating. To exit this mode and confirm the settings press the "ON/OFF" button.
Longer pressing and holding the button will activate the mode of setting the preset temperature limit, signalled by the displayed message (L.t.h.). In this mode, using the "+" and "- " buttons, the user can set the upper limit of the desired temperature setting. To exit this mode and confirm the settings press the "ON/OFF" button.

Note – all settings and operating status (on or off) of the controller are stored in the controller's memory.

2.3.2. Error codes

The MHC-01 controller features advanced error detection algorithms. The detection of any error triggers an emergency stop action and brings up the error report screen. The error report screen is displayed continuously. It is therefore necessary to turn off the power, remove the source of the error and turn the controller back on.

Code	Description
(E-0) CPU STATUS	Internal controller fault
(E-3) T < Tmin	T1 measured temperature too low
(E-4) T > Tmax	T1 measured temperature too high.
(E-5) Przycisk -	pressed/faulty „-„ button
(E-6) Przycisk +	pressed/faulty „+„ button
(E-7) Przycisk ON/OFF	pressed/faulty „ON/OFF" button

Controller specifications

Technical parameters	
Temperature read-out resolution:	0,1°C
Measurement accuracy:	± 1,5 °C
Minimum set temperature value:	30°C
Maximum set temperature value:	Range: 45°C to 95°C
Run time setting range:	1 … 96 hours
Preheating temperature range:	30°C to 40°C
Preheating time range:	0 … 60 minutes
Type of adjustment:	Two state

Environmental parameters	
Controller's work temperature:	0°C…55°C
Controller's storage temperature:	0°C…60°C
Humidity parameters (work):	Max 65% at 25 °C

3. Product description

3.1. Design

Elements

1- tank cover
2- perforated insert
3- melting tank
4- control unit
5- temperature regulator
6- main switch
7- heater
8- fuse
9- drain valve 1"
10- drain valve 1"

3.2. Technical specifications

W7053

- made of stainless steel, grade 1.4301 (AISI 304)
- maximum capacity 100L
- nominal capacity 70L.
- tank jacket insulated with mineral wool
- MHC temperature controller in the range 30-95°C
- water drain valve 1"
- wax drain valve 1"
- power output 3,5kW
- power supply 3x400V/16A

W7053_230V

- made of stainless steel, grade 1.4301(AISI 304)
- maximum capacity 100L
- nominal capacity 70L.
- tank jacket insulated with mineral wool
- MHC temperature controller in the range 30-95°C
- 1" water drain valve
- 1" wax drain valve
- Power output 2.8kW
- 230V power supply

4. Storage

Clean and dry the unit thoroughly after use.
If the device has been moved from a cold room to a room with a higher temperature, before switching on wait until it reaches the ambient temperature and all condensation water evaporates.
Store the device in a dry and frost-free room.
Do not use the device when the ambient temperature is below 5ºC

5. Cleaning and maintenance

Unplug the device before commencing any maintenance or cleaning procedures!

Before first use and after finishing work the equipment must be thoroughly cleaned and dried.

While cleaning ensure the safety of all electrical components like motors and controller panels (for the time of washing cover them with waterproof fabric or plastic film).
Rinse and dry the unit thoroughly after washing.
An additional technical check should be carried out before the start of the pollen harvesting season, and if any defects are found, please contact the manufacturer.

6. Waste disposal and environmental protection

The used product must be disposed in accordance with the local regulations. Return the device to a collection point from where it can be submitted for environmentally compatible recycling.
The consumer has the right to return used equipment directly to the manufacturer's distribution network, free of charge, while replacing it with a new unit as long as the used device is of the same kind and same application as the newly purchased device.

7. Warranty

The product purchased from the Lyson Company is covered by a manufacturer's warranty. The warranty period is 24 months from the date of purchase.

All purchased products come with receipts or VAT invoices.
Warranty details at:

www.lyson.com.pl