INSTRUCTION MANUAL OF MACHINE FOR HONEY CREAMING ON HONEY SETTLER WITH AUTOMATIC CONTROL OF THE C – 05 SERIES



Przedsiębiorstwo Pszczelarskie Łysoń

Spółka z o.o.

34-124 Klecza Górna, st.Pszczela 2, Poland www.lyson.eu, e-mail; lyson@lyson.com.pl Tel. +48 33/875-99-40, +48 33/870-64-02

INSTRUCTION MANUAL

OF MACHINE FOR HONEY CREAMING ON HONEY SETTLER WITH AUTOMATIC CONTROL OF THE C = 05 SERIES

Instruction Manual applies to devices with codes:

POWER SUPPLY 230V:

W20088_Z, W20088A_Z, W20080NT_Z, W20080B_Z, W20080C_Z

Instruction manual

- 1. General safety rules of utilisation of machine for honey creaming
- 1.1. Electrical safety
- 1.2. Operational safety
 - 2. Characterization of machine for honey creaming
- 2.1. Honey creaming
- 2.2. The machine for honey creaming scheme (diagram)
- 2.3. Technical parameters of machine for honey creaming
 - 3. OPERATING THE MACHINE FOR HONEY CREAMING
 - CONTROLLER OF MACHINE FOR HONEY CREAMING OF THE C 05 SERIES POWER SUPPLY 230V
- 4.1. Controller configuration
- 4.2. Setting the display contrast
- 4.3. Signalising the errors
- 4.4. Technical specifications
 - 5. Storage of machine for honey creaming
 - 6. Maintenance and cleaning
 - 7. Disposal
 - 8. Warranty

MACHINERY FOR HONEY CREAMING ON HONEY SETTLER WITH AUTOMATIC CONTROL OF THE C – 02 SERIES POWER SUPPLY - 230V

Before using the device, be sure to read the instructions for use and follow the instructions contained therein. The manufacturer is not liable for damages caused by the use of the device contrary to its intended purpose or inappropriate handling.

1. General safety rules of utilisation of machine for honey creaming



1.1. ELECTRICAL SAFETY

- Device (machine) must be connected to a socket with a protective earthing connection with the voltage specified on the nameplate of the product.
- b) Electrical installation powering the device must be equipped with RCD (residual current device) with a rated tripping current In no higher than 30mA. Check the function of the RCBO (residual current operated circuit-breaker with integral overcurrent protection)
 periodically.
- c) Periodically inspect the condition of the power cord. If the non-detachable power cord is damaged and it needs to be replaced. Then this operation should be carried out as guarantor or by a specialised repair facility or a qualified person in order to avoid the risk. Do not use the device when the power cord is damaged.
- d) In the case of damage to the device, in order to avoid the hazard, repair may be carried out only by a qualified repair facility or the qualified person.
- e) It is forbidden to pull the power cord. The power cord must be kept away from heat sources, sharp edges and take care of its satisfactory condition.



1.2. OPERATIONAL SAFETY

- a) This equipment is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge concerning the equipment unless this is done under the supervision or in accordance with the instructions for use of the equipment, handed over by persons responsible for their safety. You should pay attention to the children, to ensure they do not play with the appliance.
- b) The ground on which the appliance stands should be dry!
- c) Before working with the device, make sure that the "emergency stop" button is not pressed (you must turn it so in order to button jumped out it clicks).
- d) Pressing the "emergency stop" button enables immediate stopping the machine for honey creaming operation/ work.
- e) Cover of the machine for honey creaming when working agitator should be closed!

- f) Do not rearrange of the machine for honey creaming during operation.
- g) You must protect the engine and control against moisture; (also during storage)
- h) Do not use the device in the vicinity of flammable materials.
- Do not carry out any maintenance work when the appliance is operating.
- j) All guards when the appliance is operating must be permanently attached to the device.
- k) In the event of any hazard, you should immediately use the safety switch. Restart the machine for honey creaming may occur after the elimination of the hazard.
- These devices are not designed for use outdoors, may be operated only within the premises.



Ban on repairing the device which is in motion

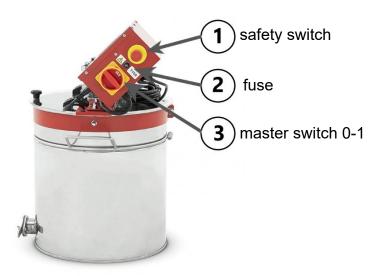


Ban on removing guards when operating the device

Attention!

- Control connector of closing the cover of the machine for honey creaming may not be treated as a safety device.
- It is prohibited to perform any action enabling the contact with the agitator when the power of the controller is ON.
- Described controller C-02 cannot be used as a safety device.
- Always use additional systems for protection of the control circuit of the engine operation, against a controller failure effects or the errors of its software.
- The controller cannot be used with a damaged housing (enclosure).
- The controller cannot be used contrary to its intended purpose, before using the controller, read carefully this instruction manual.
- Before switching on the power, make sure that all wires are connected properly.
- Before performing any work on the electrical installation of the device, disconnect the mains supply of controller.
- Before performing any work on the mechanical systems controlled with circuits of the C-02 controller, disconnect the mains supply.

2. Characterization of machine for honey creaming on honey settler



The machinery for honey creaming with heating jacket is intended to creaming and dissolving of crystallised honey.

Appropriate design of the mixing propeller made of acid proof stainless steel allows accurate creaming honey.

2.1. HONEY CREAMING

Fresh honey is dense and transparent. After a certain time is undergoing the natural crystallisation. The correct temperature of crystallisation is 16-18°C. At higher temperatures, the process of crystallisation is slower and crystals reach larger sizes.

Heating the honey to a temperature of **40°C** and keeping its for a few days, causes a transition of honey from the crystallised state (set honey) to liquid form (strained honey).

The creaming (adding to the strained honey of crystallised honey) is a fast and simple method of production of creamy honey. It consists in adding to the freshly centrifuged, clear, liquid honey (strained honey) of crystallised (set honey) to initiate a controlled, fine-grained (creamy) crystallisation. The process of creaming should be carried out in the repetitive cycles:

work of the agitator /stirrer - 15 minutes; standstill (downtime) of the stirrer/agitator - 1hour.

This process is cyclical aeration of honey and intensive mixing for a few days, until achieving the proper consistency. This honey stored at a constant temperature preserves this consistency for many months.

Stirring (mixing) is carried out several times within 24 hours for a period of about 10-15 minutes.

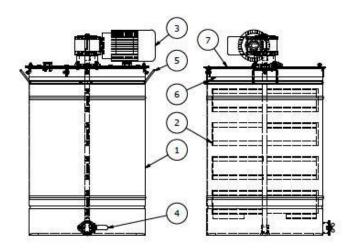
You can, for example, at the beginning of the process add crystallised honey to strained honey.

"Creaming" aims to create many small nuclei of crystallisation and preventing the growth of already existing crystals of honey. This is a mechanical "creaming/grinding crystals" of honey.

Important!

The process should be carried out gradually, ie. do not refill the entire device with honey only gradually add small quantities.

2.2. Scheme (diagram) of the machine for honey creaming on honey settler



Legend

- 1. Tank
- 2. Stirrer (agitator)
- 3. Geared motor (motor with the transmission gear)
- 4. Valve
- 5. Handle/holder
- 6. Band
- 7. Covers

2.3. Technical parameters of machine for honey creaming

- Tank is made of stainless steel, acid resistant steel
- Power supply of gear motor 230 V
- Digital display in the temperature controller
- Rotation speed of the agitator/stirrer

 36 rpm
- Stainless steel valve 5/4", 6/4", 2"

3. OPERATING THE MACHINE FOR HONEY CREAMING

Before switching on the device to mains, make sure that the control is disabled.

Power Switch (0/1) on the control panel should be in a position - ..0".

When you turn on the device to the supply network, a power switch (0/1) on the control panel, one should switch from the "0" position into "1" position.

4. CONTROLLER OF MACHINE FOR HONEY CREAMING OF THE C - 05 SERIES -POWER SUPPLY 230V



After switching the device on, the controller displays information about the model name and the software version. After a few seconds the display shows total working time.



C-05 h:0010.2

4.1. Controller configuration

The controller allows offers an option to program a custom work cycle which consists of parameters like the total creaming time, work intervals, mixing speed, and additionally, it is possible to adjust the display's contrast.



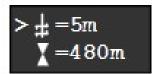




Setting creaming process time intervals

Close the cover of the creamer, press the STOP button and keep it pressed for more than 5 seconds to enter the settings mode, then release the STOP button. The display shows two parameters of work intervals: mixing time (upper row) and standstill time (lower row).





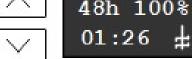


Use the up/down button to select the parameter to be modified, and confirm the selection with the START button, modify the parameter's value with the up/down button. Press the STOP button couple of times to exit the settings mode.

Setting mixing speed

Close the cover of the creaming machine, press the START button, to start the work cycle. Adjust the mixer speed using the up / down buttons.

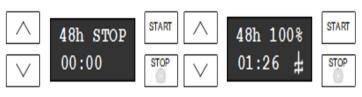






Starting and stopping

Close the cover of the creaming machine, press the START button to start the work cycle, or the STOP button to stop the cycle. Pressing the STOP button again after stopping the creaming cycle will reset the time elapsed since the start of the creaming cycle.



The value of the set total work cycle time is displayed in the upper left section of the display. The elapsed time since the cycle start is displayed in the lower left section of the display.

The value of the mixing speed is displayed alternately with the word STOP, in the upper right section of the display. The mixer symbol in the lower right section of the display indicates the current state of the mixer (active/inactive).

Automatic stop function (creaming process finish or open cover)

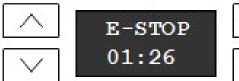
Automatic stopping

When the cycle's preset time has elapsed, the device automatically switches off. The display shows the preset time and the time that elapsed during the execution of the cycle. Both values should be identical, which means that a full cycle has been performed.



Stopping by opening the cover

Opening the cover of the creaming machine interrupts the creaming cycle. If at the moment of opening the cover the mixer of the machine is in motion it gets automatically stopped and the display shows the time elapsed since the creaming cycle start. Closing the lid resumes the creaming cycle.





If the STOP button is pressed after opening the cover open, the creaming cycle gets stopped and reset (in this case the creaming process will not restart automatically after closing the cover back).

The elapsed time value is reset to zero.

4.2. Setting display contrast

In order to adjust the contrast of the controller's display:

- set the creaming time to 1h,
- press and hold the STOP button, and the up or down button.

4.3. Error codes

In the event of detecting any errors or malfunctions of the controller the message "ERR STOP" is displayed along with the error code. The controller can be restarted again only after: switching off the power supply, resolving the error's cause and switching the power supply back on again.



ERROR CODES:

- 1 controller's internal error
- 2 pressed / stuck **DOWN** button
- 3 pressed / stuck **UP** button
- 4 pressed / stuck **START** button
- 5 pressed / stuck **STOP** button
- 6 inverter's error or inverter connection error

4.4. Technical specifications

Mixer's work time adjustment range: 5–15 min
Mixer's standstill time adjustment range: 45–480 min
Total work cycle time adjustment range: 1–99 hrs
Mixer's speed adjustment range:50–100 % (18–36 RPM)
Power supply voltage: 230V

5. Storage of machine for honey creaming

After the completion of the work, the device must be thoroughly cleaned and dried.

Before starting the device, in the case when it has been moved from the room with the lower temperature to spaces of higher temperature, you should wait until it reaches the ambient temperature. Store in dry rooms at a temperature above 0° C.

Before each new season, one should make an additional technical review, and in the event of fault detection, please contact the service centre.

6. Maintenance and cleaning



IMPORTANT!

Before starting maintenance, please pull the mains plug. Before first use of the machine for honey creaming, the device must be thoroughly cleaned and dried. In order to accurately wash, we recommend removal of the beam together with control, engine, gear/transmission and a stirrer.

Unscrew the screws fixing the beam to the tank and pull off mechanism.

The machine for honey creaming wash with hot water with the addition of preparations authorised to contact with equipment used in the food industry.

We wash a device with a soft flannel fabric, bearing in mind the protection of electronic components.

After washing, we flush thoroughly with pure water and dry. After the completion of the process of a honey creaming, one should wash and dry machine.

The machine for honey creaming should be stored in a dry place.

Do not maintain any parts of the device (machine) with chemical agents.

IMPORTANT!!!

Wash the covers using warm 25 [°C] soapy water.

NOTE!!!

Do not use alcohol for cleaning (it may cause surface cracks of the cover)."

7. Disposal

The worn out product shall be subject to disposal as waste only in the selective collection of waste organised by Network of Municipal Collection Points for Waste Electrical and Electronic Equipment. The consumer shall have the right to return used equipment in the electrical equipment distributor network, at least, free of charge and directly if a device that is returned is the proper kind and provides the same functionality as the newly purchased equipment.

8. Warranty

Products purchased in the "Łysoń" company are covered by manufacturer's warranty.

The warranty period is 24 months.

On purchased products shall be issued a receipt or VAT invoice.

Warranty details are available on the website - www.lyson.com.pl