INSTRUCTIONS
OF POLLEN DRYER 4 KG

IMPORTANT!
Before using the machine, read the instructions for use and follow the instructions contained therein.The manufacturer is not responsible for damage caused by improper use of its purpose or inappropriate handling.
Before first use, thoroughly wash and dry dryer according to the instructions in the Maintenance section!

1 . Electrical safety:

1. The device must be plugged into a grounded outlet with a voltage specified on the rating label.
2. Electricity supply must be fitted with residual current device with a rated tripping current in no more than 30mA. Periodically check the operation of the overcurrent protection.
3. Periodically check the condition of the cord. If the supply cord is damaged and needs to be replaced, this function should be performed at the guarantor or by special service or by a qualified person in order to avoid danger. Do not use the device if the power cord is damaged.
4. In case of damage, in order to avoid a hazard, repairs can only perform a special service or a qualified person.

2. Usage safety:

1. This equipment is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless it is done under the supervision or instruction concerning use of equipment, by a person responsible for their safety.Pay attention to the children not to play with that device..
2. It is forbidden to carry out any maintenance during operation.
3. The device can only be run indoors. The device is not suitable for use outdoors
4. The device cannot be switched on and storage in the temperature below 0º C.
5. Pollen dryer should not be switched on when the temperature is below 5º C. Before switching on the Pollen dryer in case when it was moved from the place with lower temperature to the place with higher temperature, wait until the device achieve the temperature of the new place.

UTILIZATION:

The device need to be utilized in the point designed for that purpose. Customers has a right to return the used device to the distribution point of electric devices only if returned device is of proper kind and has the same function as purchased device.

3. Maintenance
Wash dryer with warm water using detergent for cleaning equipment intended for contact with food.
After washing, rinse thoroughly with clean water.
Then dry the entire device.
During washing keep special care to avoid wetting the driver, fans.
Ventilation during storage should be open.

IMPORTANT !
Before starting maintenance, pull the plug !!!

POLLEN DRYER 4 KG (W20410)
(white or black randomly selected)

4. Specifications:

Power supply - 230V
Power consumption : 1kWh/24 h
Capacity : about 4 kg of wet pollen.
Electronic temperature controller with LCD display - temperature control in range 30-75 ° C

External dimensions of dryer:
Width 43 cm + 6.5 cm protruding driver
Depth of 51.5 cm
Height 72.5 cm

Internal dimensions of dryer (usable):
Width 33.5 cm
Depth of 27 cm
Height 61 cm

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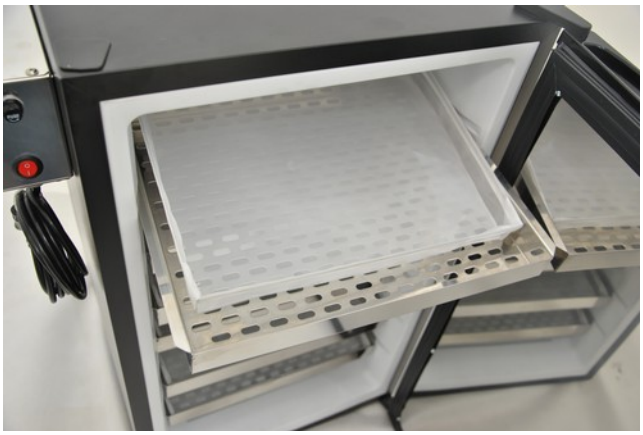
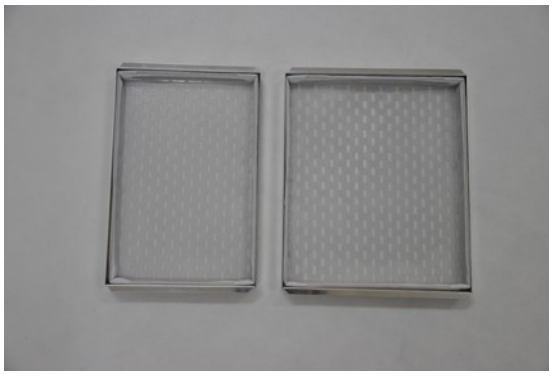


Dryer holds inside 6 drawers made of stainless steel, acid resistant :



Dryer holds inside 6 drawers made of stainless steel, acid resistant :
4 drawers in the shape of a trapezoid, external dimensions:
Depth: 28 cm,
Longer width: 35 cm (including brackets)
Shorter width: 34.5 cm
Container height 3 cm
2 drawers in the shape of a trapezoid, external dimensions:
Depth: 22 cm,
Longer width: 35 cm (including brackets)
Shorter width: 34.5 cm
Container height 3 cm
The drawers are fitted with inserts made of very small mesh.
drobnej siatki.

Drawers must be inserted into the dryer by narrow side.! They have a trapezoidal shape so you should pay special attention when inserting them into the dryer, reverse insertion may damage inner coating of the dryer.

5. Drying of pollen:

Drying of pollen should be carried out at temperature 35 º - 40 º C
(it is important that the pollen is not overheated, because, like honey, it loses its properties at temperatures above 40 º C).
Pollen used for drying should be placed in the drawers.
The thickness should not exceed 1 cm.
After the initial drying, the pollen can dump in a layer 2-3cm.
It is recommended to stir several times during the day layers of pollen, especially in the first phase of drying.
The drying process of pollen takes from 1-3 days, depending on the humidity.
Well-dried pollen forms hard, dry lumps that cannot be crushed in the fingers.
The water content of dried pollen can not exceed 6%.

After drying, the pollen should be stored in an airtight container in a dry, cool place.

Any internal knobs not set.
SETTING THE EXTERNAL CONTROLLER ONLY!

Setting the driver

Photo.1 temperature controller

SETTING THE DRIVER
1. Before switching to a network, make sure that the control is disabled.
Switch (0/1) on the control panel should be set to "0" .
2. After switching to a network switch (0/1) on the control panel switch over position "0" in position "1"
3. The controller must be programmed according to your needs.
4. To enter the programming mode "Prog" during the start of controller simultaneously press the "+" and "- ".

Programming begins with:
T1 The first parameter - that is the drying temperature.The value will reduce by pressing the "-" button and increase by pressing the "+" button. Confirm the choice by pressing "ON/OFF".
Next, set the working hours, the value will reduce by pressing the "-" and increase by pressing the "+", confirm the choice by pressing "ON / OFF"
and minutes of work. The value will reduce by pressing the "-" and increase by pressing the "+", confirm the choice by pressing "ON / OFF".

Go to the parameter T2, T3, and duration of each parameter.
When setting the three parameters, proceed as above.

After an introduction to the memory controller parameters for each of the 3 steps on the screen will be displayed temperature range, and total working time.

The controller will automatically reset and start passing mode.

After pressing the "ON / OFF" the unit will start when you press the "ON / OFF" once again work will be suspended.

Sample set 3 parameters

Etapy	T1	S
ETAP 1	T1 = 38ºC	S = 2 godziny i 15 minut.
ETAP 2	T2 = 39ºC	S = 3 godziny i 15 minut.
ETAP 3	T2 = 40ºC	S = 3godziny i 30 minut.

The controller (after switch on) will launch the selected cycles. First Stage 1 warm up to 38 ° C and maintaining the desired temperature for 2 hours and 15 minutes. Later, the driver switches to Stage 2 and raise the temperature to 39 ºC and will be maintained for the next 3 hours and 15 minutes.
Then, the controller will enter the Stage 3 and again raise the temperature to 40 ° C and will be maintained for the next 3 hours and 30 minutes.
After the end of cycle, controller will turn off.

GENERAL INFORMATION

Microprocessor controller AHC-01 is a two-stage temperature controller executing programmed heating cycle. Each heating cycle consists of 3 steps. For each of the steps defined duration and temperature stabilized value. After the cycle (total time period defined in the cycle), the controller switches to off.

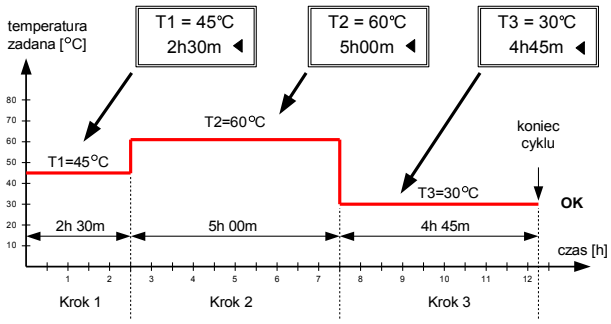


Fig.1 An example of the heating cycle: T1 = 45 ° C, 2h30m -> T2 = 60 ° C, 5h00m -> T3 = 30 ° C, 4h45m.

temperatura zadana = temperature setpoint
czas = time
koniec cyklu = end of cycle
krok 1 = stage 1
krok 2 = stage 2
krok 3 = stage 3

HEATING CYCLE PROGRAMMING MODE

In order to determine (programming) the heating cycle should enter the programming mode of the cycle. Enter programming mode can only be in a position to switched of heating cycle and occurs after simultaneously pressing the "+" and "-".

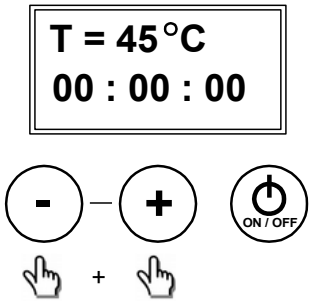


Fig.2 Enter the programming mode of the cycle.

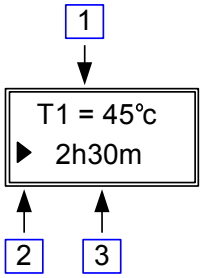


Fig.3 Screen menu programming mode cycle.

Programming (input parameters, the heating cycle) takes place on the screen menu programming mode (Figure 3). Programming cycle for each step, we set the temperature [1] and the duration [3]. The value of the currently selected parameter, modify the "+" and "-". The choice of the parameter to modify the following sequence - by repeatedly pressing the "ON / OFF". Currently, modified parameter is a pointer indicated by [2]. After entering the parameters of the controller's memory each of the 3 steps on the screen will display adjustable temperature range - for example, in Figure 1 will be: (30-60) ° C, and the total duration of the cycle. After a short time the controller will automatically reboot and start passing mode, waiting for inclusion.

WORKING MODE

Mode is the default mode in which the driver starts when you turn on the power. Driver comes down to execution on or off the heating cycle (the P3) and select one of the three screen view mode.

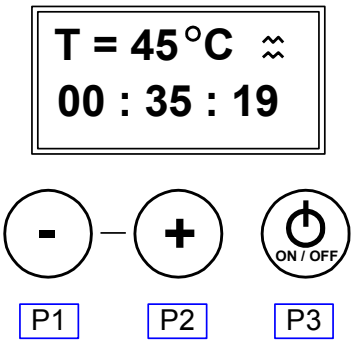


Fig.4 Controls temperature controller.

DESCRIPTION OF THE ITEM	FUNCTION
P1	Changing the view of the currently displayed screen. Once the power controller will start displaying the last selected view.
P2	Changing the view of the currently displayed screen. Once the power controller will start displaying the last selected view.
P3	Enable / disable the heating cycle. Switch state is stored in spite of a power failure. Holding the button while off cycle will reset the cycle time and re-enable it to start a full cycle - pursued charging time from zero and re-checking the achievement of the minimum temperature.

Widok A = View A Widok B = View B Widok C = View C

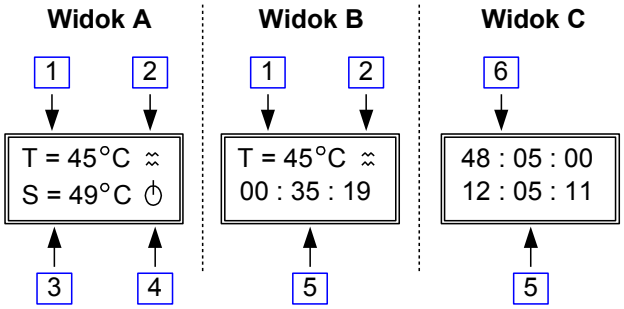


Fig.5 Views screen mode

SCREEN VIEW	DESRIPTION OF VIEW
A	The actual temperature and temperature setpoint.
B	The actual temperature and implemented heating cycle.
C	Specified and implemented heating cycle.

DESRIPTION OF THE ITEM	FUNCTION
1	The actual temperature - measured.
2	Heater control graphics. Heater turn on - graphics display, the heater turned off - no graphics.
3	Set temperature - set during the programming cycle
4	Graphics driver to indicate work. Turned on the cycle - graphic display, cycle off - no graphics.
5	Realized heating cycle.
6	Given the duration of the heating cycle.

TECHNICAL PARAMETERS

Each temperature controller AHC-01 consists of a microprocessor controller (identical for all variants of the controller) and the module power supply and the executive, combined with a special tape driver. Full complement is dedicated, digital temperature sensor.

THE MICROPROCESSOR CONTROLLER	
Measured temperature range:	from 0°C to +85°C
Stabilized temperature setting range:	+30°C to +60°C
Type of control:	Digital (on / off)
Resolution read / temperature settings:	1°C
Hysteresis temperature adjustment :	±1°C
Guaranteed accuracy temperature measurement :	±0.5°C for range from 0°C to 85°C
The number of steps of heating cycle	3
The minimum duration of the step:	1 minute
The maximum duration of step:	32 hours 59 minutes
The maximum total duration of the cycle:	≈ 99 hours (4 days 3 hours)
The default cycle parameters for step 1	+45°C / 6h
The default cycle parameters for step 2	+45°C / 21h
The default cycle parameters for step 3	+45°C / 21h

DIAGNOSTICS – SECURITY AND ERROR CODES

Controller AHC-01 is equipped with extensive diagnostic procedures - increasing the safety and comfort of the device.

Error messages :

- errors displayed on the screen labeled "E-xxx" where xxx corresponds to the number of error with the following table,
- error detection causes the immediate shutdown of heating circuit ,
- driver restart possible after: turn off the power, remove the fault and then powering up the system
- power off of controller erases the memory errors.

RROR CODE	DESRIPTION OF THE ERROR
E - 100	Program memory error
E - 101	Configuration memory error
E - 102	Memory error
E - 200	Down / locked "-" button
E - 201	Down / locked "+" button
E - 202	Down / locked the "ON / OFF"
E - 301	Damage to the sensor
E - 302	Too high temperature of sensor (value out of range)
E - 303	Too low temperature of sensor (value out of range)
E - 304	Too high temperature of heating cycle
E - 305	Too low temperature of heating cycle

E-304 - the error if the inclusion sweep, the measured temperature exceeds the highest preset temperature cycle of 10 ° C.
E-305 - the error when, despite the passage of time series of two steps (step 1 and step 2), the measured temperature has not reached the threshold (the lowest point in the cycle, the temperature minus 5 ° C). The fact achieve the described minimum temperature is indicated by a short impulse sound.

In the dryer can be carried out decrystallization process :
Decrystallization process should be carried out at temperatures up to 40^0C
(Minimum temperature of disappearance of crystals - 40^0C) that honey has not lost its enzyme values.
Heating honey to a temperature of 40 ° C, and maintaining it for a couple of days and nights, causes to go from the state of crystallized honey to liquid.
Recrystallization of liquefied honey depends on temperature and decrystallization time, and usually such honey crystallized unevenly.
Set the temperature controller on 40^0C.
You should know that the temperature of nest of bees near the brood is about 35 ° C, liquid honey does not have to be so overheated.

EC DECLARATION OF CONFORMITY

No. 22/11/CE

in the Directives: 2006/95/WE and 2004/108/WE

Przedsiębiorstwo Pszczelarskie Tomasz Łysoń
Spółka z ograniczoną odpowiedzialnością Spółka Komandytowa
ul. Racławicka 162, 34-125 Sułkowice, Polska.

Beekeeping Company Tomasz Łysoń Limited Liability Company Limited Partnership, declare under our sole responsibility
that pollen dryer **Łysoń brand type SOP model W32620, W326200, W3262000**
to which this declaration relates complies with the provisions of the following directives:
- Low Voltage Directive **2006/95/WE**
- electromagnetic compatibility deirective **2004/108/WE**
and it is compatible with Harmonized Norms:
PN-N60335-:2004+A1:2005+A12:2008+ A2:2008+A13:2009+A14:2010 (EN 60335-1:2002+A11:2004+A1:2004+ A12:2006+A2:2006+A13:2008+A14:2010);
PN-EN 62233:2008 (EN 62233:2008);
PN-EN 55014-1:2007+A1:2010 (EN 55014-1:2006+A1:2009);
PN-EN 61000-3-2:2007+A1:2010+A2:2010 (EN 61000-3-2:2006+A1:2009+A2:2009);
PN-EN 61000-3-3:2011 (EN 61000-3-3:2008);
PN-EN 55014-2:1999+A1:2004+A2:2009 (EN 55014-2:1997+A1:2001+A2:2008)

The last two digits of the year in which the marking

was affixed: CE11

Sułkowice, 10.10.2011 r.

Tomasz Łysoń

Proxy

EC DECLARATION OF CONFORMITY

No. 21/11/CE

in the Directives: 2006/95/WE and 2004/108/WE

Przedsiębiorstwo Pszczelarskie Tomasz Łysoń
Spółka z ograniczoną odpowiedzialnością Spółka Komandytowa
ul. Racławicka 162, 34-125 Sułkowice, Polska.

Beekeeping Company Tomasz Łysoń Limited Liability Company Limited Partnership, declare under our sole responsibility
that pollen dryer Łysoń brand type SOP-MKD model W20410
to which this declaration relates complies with the provisions of the following directives:
- Low Voltage Directive **2006/95/WE**
- electromagnetic compatibility deirective **2004/108/WE**

and it is compatible with Harmonized Norms:
PN-EN 60335-1:2004+A1:2005+A12:2008+A2:2008+A13:2009+A14:2010 (EN 60335-1:2002+A11:2004+A1:2004+A12:2006+A2:2006+A13:2008 +A14:2010);
PN-EN 62233:2008 (EN 62233:2008);
PN-EN 55014-1:2007+A1:2010 (EN 55014-1:2006+A1:2009);
PN-EN 61000-3-2:2007+A1:2010+A2:2010 (EN 61000-3-2:2006+A1:2009+A2:2009);
PN-EN 61000-3-3:2011 (EN 61000-3-3:2008);
PN-EN 55014-2:1999+A1:2004+A2:2009 (EN 55014-2:1997+A1:2001+A2:2008)

The last two digits of the year in which the marking

was affixed: CE11

Sułkowice, 10.10.2011 r.

Tomasz Łysoń

Proxy