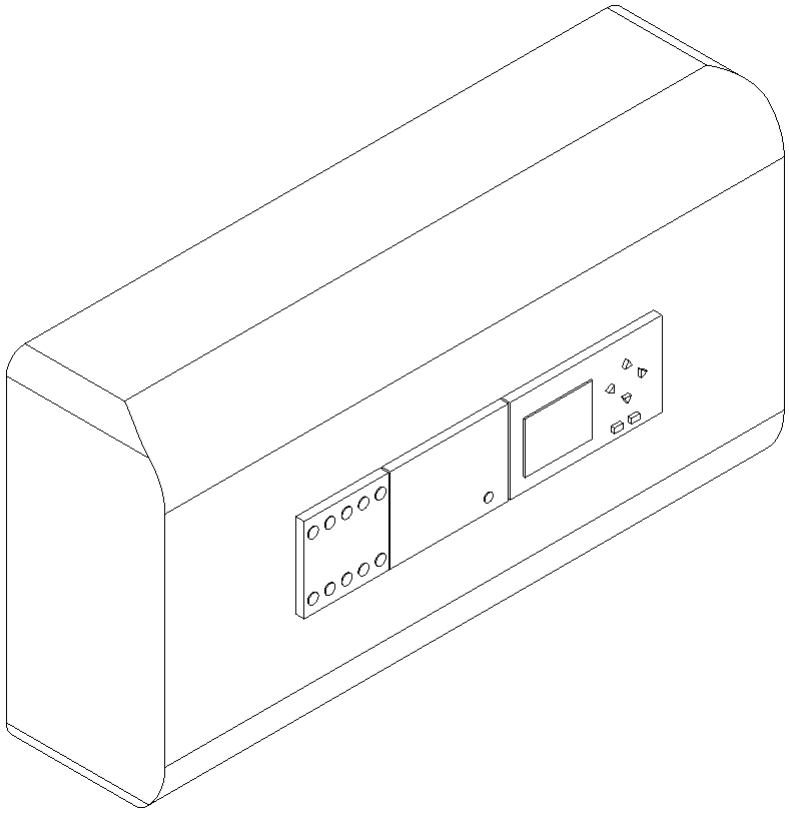
USER MANUAL



ADDITIONAL FUEL STORAGE CONTROLLER

MP-01

estyma electronics

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1 General information

Thank you for choosing our product and congratulations on a good decision. We will be grateful for comments concerning the unit's performance.

ESTYMA electronics
Team

1.1 Introduction

Additional fuel storage controller is applicable in any case where we have a installation powered by solid fuels. The only requirement is to have additional fuel storage.

Controller MP-01 switches additional storage tray with fuel only when the fuel level of the boiler drops below the minimum level. This eliminates needs to check the fuel level and supplement it becomes the past.

1.2 Contents

1. MP-01 controller
2. Capacitive sensor PCPD-15ZN SELS - 2szt

1.3 Safety precautions

Warning – risk of electric shock!

- Read this operation manual carefully and thoroughly before using the unit.
- Keep this operation manual and refer to it whenever you work with this unit in the future.
- Apply all the rules and heed all the warnings included in the unit operation manual.
- Make sure that the unit is not damaged. In case of any doubts, do not use the unit and contact the supplier.
- In case of any doubts concerning the safe operation of the unit, contact the supplier.
- Pay special attention to all warning signs on the unit casing and its package.
- Use the unit as intended.
- The unit is not a toy. Do not allow children to play with it.
- Under no circumstances children should be allowed to play with any parts of the package of the unit.
- Access to small parts such as clamping screws or bolts should be secured against children. Such elements may be delivered with the unit and may result in choking when swallowed by a child.
- Do not make any mechanical or electrical changes to the unit. Such changes may cause the unit to malfunction and fail to meet the relevant standards, leading to an adverse impact on the performance of the unit.
- Do not insert any objects into the unit through openings (e.g. ventilation grills), as this may cause short circuiting, electric shock, fire or damage to the unit.
- Do not allow water, humidity or dust to enter the unit, as this may cause short circuiting, electric shock, fire or damage to the unit.
- Provide adequate ventilation of the unit, do not cover or block the ventilation grills, and ensure that there is free flow of air around the unit.
- The unit should be installed indoors unless it is adapted for outdoor operation.
- Do not expose the unit to mechanical impacts and vibrations.
- When connecting the unit to power supply, make sure that the parameters of the supply network are within the unit’s operating range.
- All electrical connections must be as shown in the electrical assembly drawings and must comply with national and/or local regulations concerning electrical connections.

1 General information

- This unit contains no parts that may be replaced by the user. All maintenance work except for cleaning, fuse replacement (when the unit is de-energized), and function setting, should be performed by an authorized service provider.
- Before doing any maintenance work, you must cut off the power supply to the unit.
- Do not clean the casing of the unit with petrol, solvents or any other chemicals that may damage the casing of the unit. Using a soft cloth is recommended.

1.4 Disposal of old equipment

This electronic equipment is made of materials which are partly recyclable. Therefore, when the equipment has reached the end of its service life, take it to an electrical and electronic equipment recycling centre or to the manufacturer. The equipment must not be disposed of with other household waste.

2 Connecting to the system

2.1 General requirements

Read this operation manual carefully and thoroughly before you start using the unit.
The person installing the unit should have sufficient technical experience.
Copper wire connections should be designed to work in temperatures of up to +75ºC .

All connections made must be as shown in the electrical wiring assembly drawings and must be compliant with national and/or local regulations concerning electrical connections.

2.2 Location

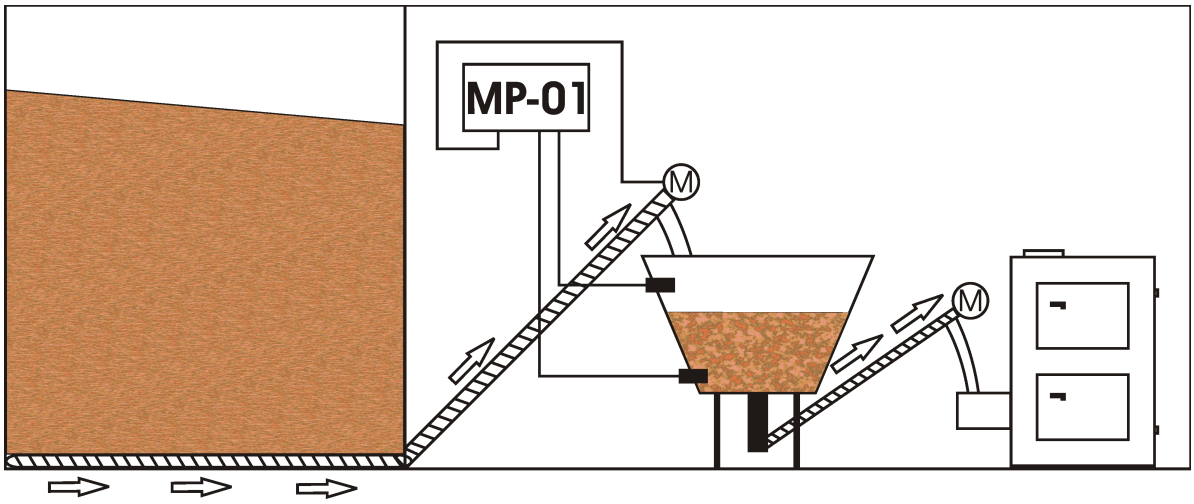
The unit is intended for indoor installation only. After selecting the location, make sure that it meets the following requirements:

1. The location must be free from excessive humidity and flammable or corrosive vapours.
2. The unit must not be installed near high power electrical equipment, electrical machines or welding equipment.
3. The temperature in the location must not exceed 60ºC and should not be lower than 0ºC. Humidity should be within the range from 5% to 95%, with no vapour condensation.

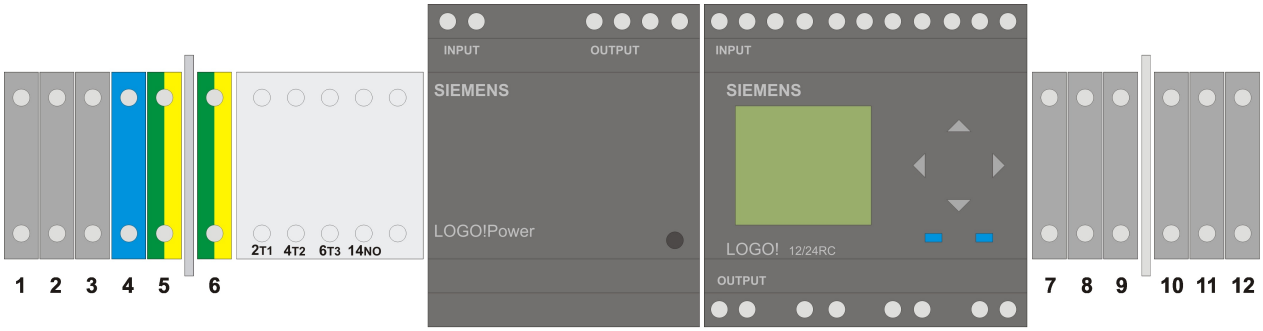
2 Connecting to the system

2.3 Assembly

Installation of set consists placing capacitive sensors in the tank, connecting motor and controller power line.



The sensors must be placed inside the tank boiler according to the descriptions. Bottom sensor must be mounted at the bottom of the tank, the upper sensor at the top.
The motor and controller power supply must be connected the steps listed in the following figure descriptions.



POWER

1 - L1
2 - L2
3 - L3
4 - N
5 - PE

MOTOR

6 - PE
2T1 - L1
4T2 - L2
6T3 - L3
14NO - N

BOTTOM SENSOR

7-brown
8-blue
9-black

UPPER SENSOR

10-brown
11-blue
12-black

3 Configuration and usage

Managing the work of the controller is limited to a few configuration steps. After the configuration, operation of the controller is maintenance-free, everything happens automatically according to your settings.

To configure the driver settings, follow these tips.
The selection function and the parameter is done by using the arrow keys, accept settings by pressing **OK**.
ESC key is used to cancel the selection and return to the main screen.
On the menu find the option "**set param**", then click **OK** button.
Now we can choose a specific option, preview and change its parameter.

3.1 Automatic mode

"**T max**" – maximum time of fuel feeding in automatic mode.

If for any reason, the tray will not end refuelling, it will be stopped after a preset time. In the event of sensor failure, prevents the boiler filled up the fuel and damage of equipment.

"**Weektime 1-3**" – schedules that determine when the engine fuel feed can work.

Every time when is expected a mode change schedule that prevents motor work, the controller performs the fuel supplement whatever amount is currently located in the tank.

After completing the refill motor is switched to inactive.

"**Weektime 4**" – option "**pulse**" must be set parameter to "**OFF**". This is necessary for proper operation of the automatic mode.

3 Configuration and usage

3.2 Manual work

"**T manual**" – sets the time of manual motor start.

Activation of manual feeding follows from the main screen while pressing the **ESC + right arrow**.
Disabling manual feeding within set time will take place after simultaneously pressing the buttons **ESC + left arrow**.

3.3 Parameters for reading

"Start cn 1" – total number of starts the motor, read-only parameter.

"**Total 1**" – total motor running time, read-only parameter.

4 Specification

Technical data	
Power	~230V/50Hz ±10%
Controller power consumption	2,5W
Motor output load	6A
Type of motor contactor	TeSys LC1-K - 3-pole - AC-3 440V 6 A - coil 230 V AC
Sensors	PCPD-15ZN SELS
Permissible ambient temperature	0-60°C
Operation humidity	5-95% no condensation

CE

Manufactured by:

Estyma electronics
al. Lipowa 4
11-500 Giżycko
POLAND

tel. +48 87 429 86 75
fax +48 87 429 86 75
biuro@estyma.pl

www.estyma.pl