

User's manual Pellet loader



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TECH




Declaration of Conformity No. 73/2012


Hereby, we declare under sole responsibility that the **ST-670** 230V 50Hz thermoregulator manufactured by TECH, headquartered in Wieprz 1047A, 34-122 Wieprz, is compliant with the Regulation by the Ministry of Economy. (Journal of Laws Dz.U. 155 Item 1089) of July 21, 2007 implementing provisions of the Low Voltage Directive **(LVD) 2006/95/EC** of January 16, 2007.

The **ST-670** controller has been tested for electromagnetic compatibility (EMC) with optimal loads applied.

For compliance assessment, harmonized standards were used:

PN-EN 60730-2-9:2011, PN-EN 60730-1:2012.


PAWEŁ JURA


JANUSZ MASTER

WŁAŚCICIELE TECH SP.J.



**THE DEVICE MAY BE DAMAGED
IF STRUCK BY A LIGHTNING.
MAKE SURE IT IS UNPLUGGED
DURING STORMS**



DISPOSITIF ÉLECTRIQUE SOUS TENSION!

High voltage!

**Make sure the regulator is disconnected
from the mains before working
on the power supply**

(cable connections, device installation, etc.)!

**All connection works must only be carried
out by qualified electricians.**

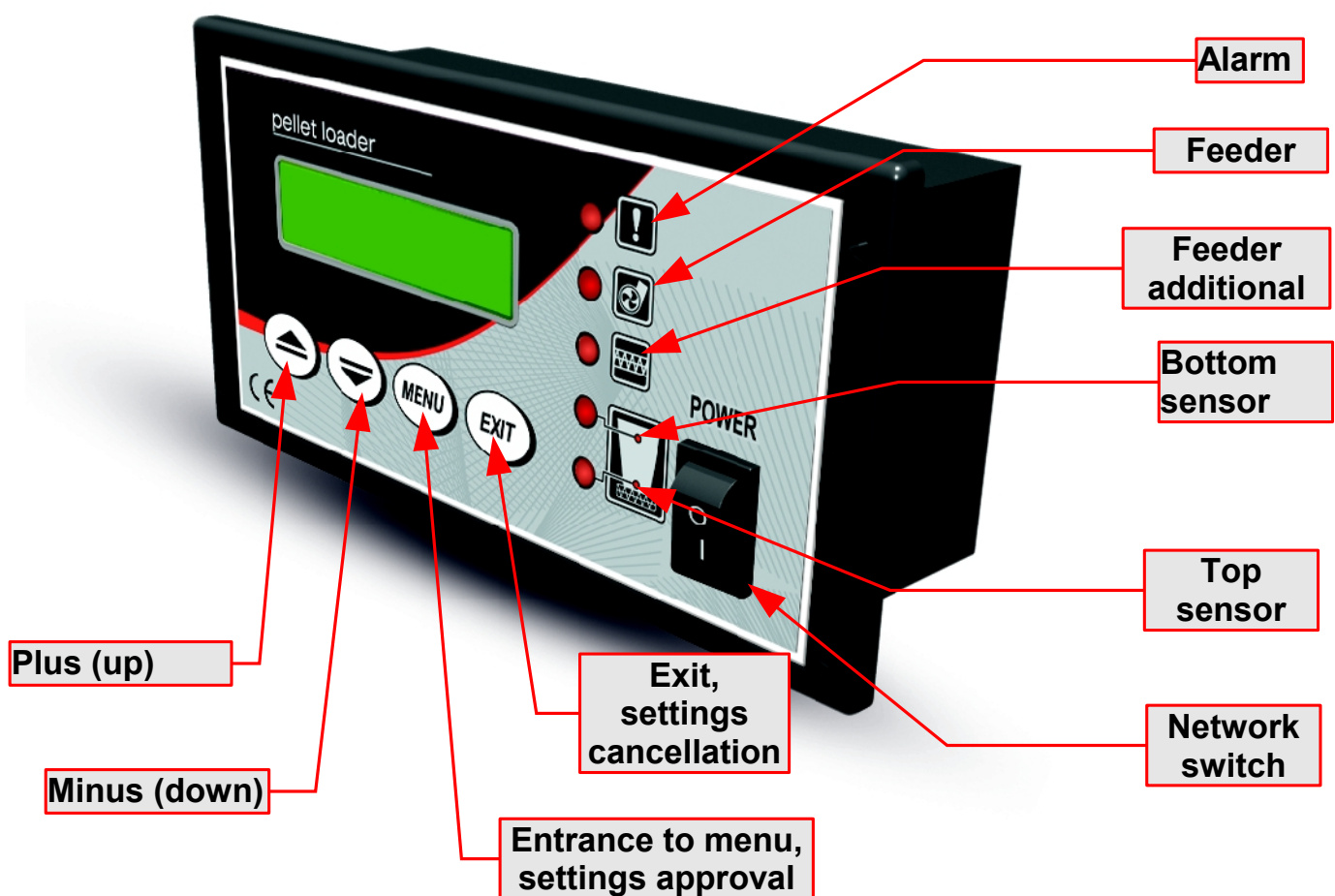
**Before activating the controller,
measure the motor resetting efficiency
and inspect wire insulation.**

I. OpisDescription

Pellet loader controller is intended for maintenance of a proper biofuel (pellet) level in pellet boiler hoppers with maximum measuring sensors of 3.5 m.

Controller operation involves a control of the biofuel level in the hopper. The fuel level is determined by properly spaced capacitive sensors. If the biofuel level drops below the bottom sensor, the controller will start the main feeder supplying biofuel to the auxiliary hopper. Once the auxiliary hopper is full, the main feeder is deactivated and fuel is poured into the main hopper. After the auxiliary hopper is emptied, the feeder is reactivated and the cycle is repeated until the fuel in the main hopper reaches the top sensor level.

Additionally, half an hour before the night time the controller starts the main hopper filling process irrespective of the current biofuel level.



II. Controller functions

This chapter describes the controller functions, methods for changing the settings and navigation through the menu.

II.a) Main page

The *main page* is shown in the LCD display during normal operation with the following data displayed on it:

- current time
- feeder current
- icon „ („ (if the night mode is active)

By pressing the **OPTION** button the sub-menu is entered or the selected option is activated. Press the **EXIT** button to exit the menu or cancel the setting.

II.b) Manual operation

The controller is equipped with the *Manual Operation* module for user's convenience. When using that function, each unit is turned on/off independently from the others.

By pressing the **OPTION** button a motor of the selected unit (feeder, additional feeder or alarm) is activated and stays on until the **OPTION** button is pressed again.

II.c) Clock

The user may define the current time by setting the clock. Clock setting is necessary for proper operation.

II.d) Day from...

This function is used to define the time when the controller will switch to the day mode.

II.e) Night from...

This function is used to define the time when the controller will switch to the night mode. The controller will start the main hopper filling process half an hour before switching to the night mode.

II.f) Language

This function is used to select the language version of the controller menu.

III. Protections

To ensure safe and failure-free operation, the controller is equipped with a number of protections. When an alarm occurs the buzzer goes off and a corresponding message appears in the display.

Feeder protection

Where the auxiliary hopper is not filled for a longer time (e.g. due to lack of fuel) the controller will turn the feeder off and an alarm will be activated.

Fuse

The controller is equipped with a WT 10A pipe fuse link to protect the controller.

CAUTION: Do not use a fuse with a higher rating as this may cause damage to the controller.

IV. Maintenance

The **Pellet loader** controller must be checked for the technical condition of its wires before and during the heating season. You should also check the mounting of the controller, clean it of dust and other contamination.

TECHNICAL DATA

	Specification	Unit.	
1	Power supply	V	230V/50Hz +/-10%
2	Power consumption	W	7
3	Ambient temperature	°C	5÷50
4	Feeder output load	A	7
5	Feeder additional output load	A	1
6	Fuse insert	A	10

IV.a) Assembly

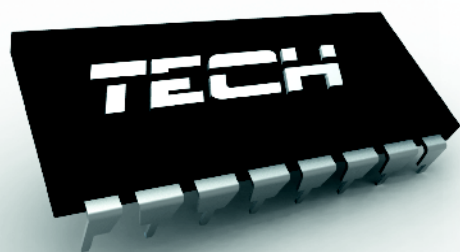
NOTE: Installation should be performed by a properly qualified technician! **Do not** install the unit with the power on (make sure that the plug is disconnected from the mains)!

NOTE: Incorrect wiring may damage the controller!

The controller cannot be operated in a closed central heating system. The installation must include safety valves, pressure valves and an equalizing tank to protect the boiler from water boiling in the central heating system.



We are committed to protecting the environment. Manufacturing electronic devices imposes an obligation of providing for environmentally safe disposal of used electronic components and devices. Hence, we have been entered into a register kept by the Inspection For Environmental Protection. The crossed-out bin symbol on a product means that the product may not be disposed of to household waste containers. Recycling of wastes helps to protect the environment. The user is obliged to transfer their used equipment to a collection point where all electric and electronic components will be recycled.



All faults should be reported to:

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Monday - Friday

7:00 - 16:00

Saturday

9:00 - 12:00