

Controller for central heating wood boilers, the "HOLZGAS" type

G-406-P02



APPLICATION

The G-406-P02 is the controller designed for central heating boilers for wood and wooden types of fuels. Operation of the controller is connected with the rules of wood distillation pyrolysis (wooden gases created from wood).

The G-406-P02 is adapted for TS-35 rail assembly, it has specially designed casing making it possible to install the controller in many different positions on the boiler.

The G-406-P02 makes possible connection of the additional pump that controls heating in the hot water tank.

PROPERTIES

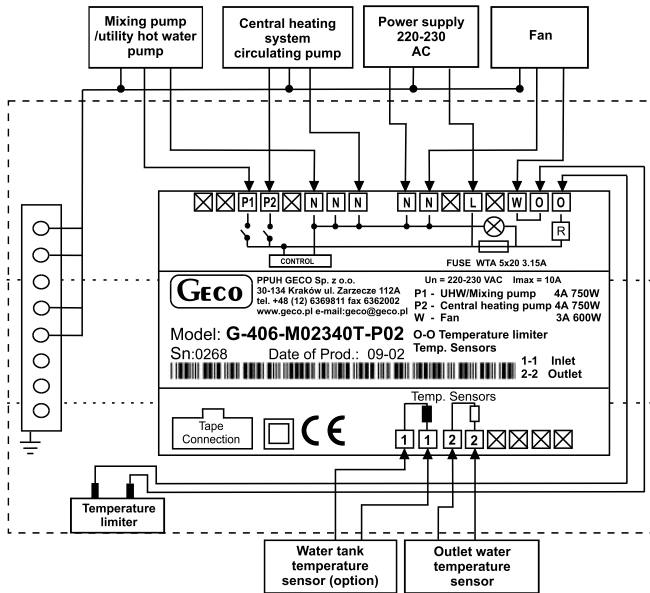
- Modern visualization of casing.
- Simple and user-friendly method of programming and service.
- Two-piece construction (executive module + keyboard)
- Possibility for direct connection of the equipment working under 230V voltage.
- Control over the hot water preparation system
- Minimum temperature on the boiler control
- Cleaning function: "Chimney-sweep"
- Smooth control over the fan rotations.
- The temperature sensor of the outlet water from the boiler
- Sound signal for the alarm.
- Provides storage of all controller settings while loss of network power.

TECHNICAL DATA

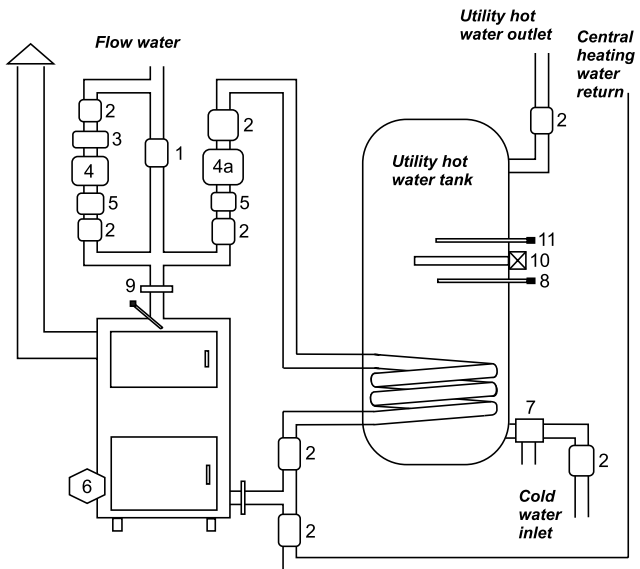
OUTPUT	TRIAC/RELAY	RECOMMENDED CONSTANT CARRYING CAPACITY		
		4A	1HP	750W
P1 - UHW/Mixing Pump	16A	4A	1HP	750W
P2 - Central Heating Pump	16A	4A	1HP	750W
W - Fan	16A	3A	-	600W

Operating voltage	230V
Environment temperature	From +5°C to + 40°C
Relative humidity	20% ÷ 80% RH
Protection degree	IP65 from the front side of the control panel
Sensors type	NTC - range: from -40°C to +100°C

Diagram of connections



Hot Water Installation System



Legend:

- | | |
|---|--|
| 1. Residual valve | 7. Tank safety valve |
| 2. Ball Cut-off valve | 8. Utility hot water temperature sensor of the G-406-P02 |
| 3. Check valve | 9. Boiler hot water temperature sensor of the G-406-P02 |
| 4. Circulating pump | 10. Tank electric heater |
| 4a. Utility hot water tank supplying pump | 11. The temperature sensor of the tank electric heater |
| 5. Reticular filter | |
| 6. Boiler fan | |

Set includes

I. General equipment:

- Executive module G-406-M123400-P02
- Control panel G-406-P02
- Tape connecting the panel with the module
- Outlet water temperature sensor CZT-CZ-OD-xxx
- Measuring drain

II. Additional equipment:

- Metal case
- Hot water tank temperature sensor CZT-CZ-OD-xxx
- Temperature limiter
- Measuring drain
- Supplying wire

Controller description

The G-406-P02 controller was designed for central heating boilers where wood is a main fuel. It controls combustion process inside the boiler based on the process of wood pyrolysis.

Due to guarantee optimal controller and boiler operation, the G-406-P02 is equipped with two kinds of parameters, first one configured by the user and the second one by the boiler producer.

I User parameters available for users

Parameter	Description	Range	Producer Settings
U0	Temperature set on the boiler	Producer	45°C
U1	Work run of the fan	1+5	5

II Service parameters accessible for the boiler manufacturer

Parameter	Description	Range	Producer Settings
C0	Blow through time	1+120 s	15 s
C1	Time of the fan stop, between blow through in the standstill mode.	1+30 min	30 min
C2	Time after which the controller recognizes burning out of the furnace (0 - inactivated)	0+90 min	20 min
C3	Additional pump control: 0 no pump 1 mixing pump 2 utility hot water pump	0+1	0
C4	Fan minimum rotation	50+99	80
C5	Fan maximum rotation	100+225	180
D0	Min. temperature on the boiler accessible for the user	50+60°C	60°C
D1	Max. Temperature on the boiler accessible for the user	70+90°C	85°C
D2	Temperatures difference for the intermit turning on of the central heating pump	2+50°C	10°C
D3	Central heating pump start temperature	55+80°C	60°C
D4	Start temperature of the mixing pump (when d3=0) or the control of the utility hot water temperature (when d3=1) when the pump is connected.	40+57°C	57°C
D5	Mixing pump stop temperature	58+65°C	60°C

Dealer

