The controller for central heating system boilers with feeding screw G-403-P02

APPLICATION

The G-403-P02 is a controller designed for central heating coal boilers with feeding screw. It stabilizes the temperature of water and controls process of combustion in the boiler preventing a fire from burning out.

The G-403-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-403-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 (it is possible to connect additional hot water pump or mixing pump)
- Control over the fan and over the work of the fuel feeder.
- Clutch cotter pin break sensor on the motoreducer (reed relay)
- Feeder temperature sensor (protection against fire back into the feeder).
- Sound signal for the alarm.
- Provides storage of all controller settings while loss of network power.
- This controller is able to cooperate with any other room thermostat.

TECHNICAL DATA

OUTPUT	RELAY	RECOMMENDED CONSTANT CARRYING COPACITY		
P1 - Fuel feeder	30A	4A	1HP	750W
P2 - Utility water pump	16A	4A	1HP	750W
P3 - C.H. Pump	16A	4A	1HP	750W
P4 - 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

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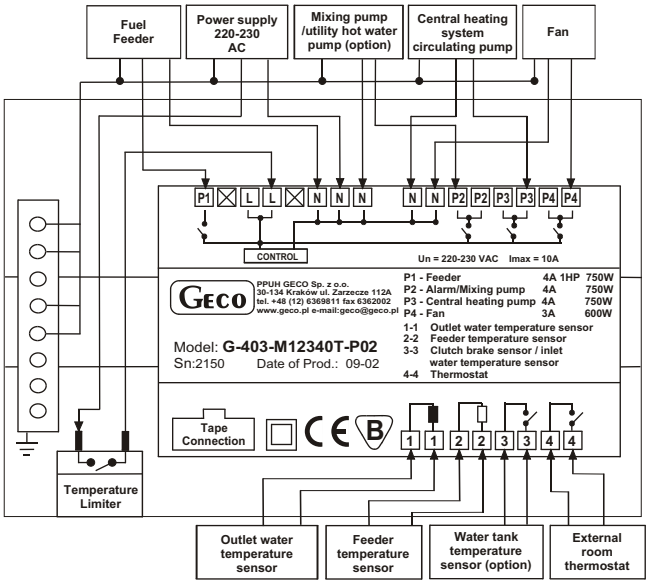
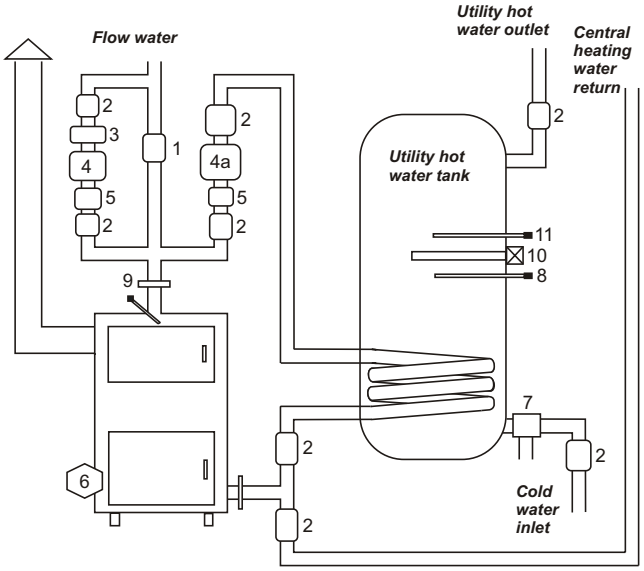
Diagram of connections



Hot Water Installation System



Legend:

1. Residuall valve
2. Ball Cut-off valve
3. Check valve
4. Circulating pump

4a. Utility hot water tank supplying pump

5. Reticular filter
6. Boiler fan
7. Tank safety valve
8. Utility hot water temperature sensor of the G-403-P02 controller
9. Boiler hot water temperature sensor of the G-403-P02 controller
10. Tank electric heater
11. The temperature sensor of the tank electric heater

Controller description

The G-403-P02 controller was designed for central heating coal boilers with feeding screw.

Due to guarantee optimal controller and boiler operation, the G-403-P02 is equipped with two kinds of parameters, first one configured by te user and the second one by the boiler producer.

I User parameters available for users

Para-meter	Description	Range	Producer Settings
U0	Temperature set on the boiler	Producer	45°C
U1	Time of the coal supply into the boiler.	15÷240 s	5
U2	Stop time of the fuel feeder	5÷180 s	5
U3	Time of the standstill.	5÷250min	10
U4	Delay in turning off the fan during a stage of standstill.	5÷250s	5

II Service parameters accessible for boiler manufacturer

Para-meter	Description	Range	Producer Settings
C0	Time of fuel feeder rotation (if 0 than reed relay is not connected)	0÷99 s	0 s
C1	Temperature sensor in the feeder 0 no sensor 1-sensor is available	0÷1	1
C2	Time of operation of the feeder and the fan, when the user-preset backup waiting time is out.	5÷240 s	5 s
C3	Waiting time for water temperature increase, when the controller checks if the boiler furnace has gone out	0÷250 min	90 min
C4	Coefficient by which the time of the fan operation will be multiplied just after the controller goes into the backup state (standstill)	1÷5	5
C5	Time after which the pump will start for 30 s when block by the room thermostat is on	0÷99 min	1 min
C6	Additional pump control: 0 no pump 1 mixing pump 2 hot water pump	0÷2	0
D0	Min .temperature on the boiler	30÷50°C	40°C
D1	Max. temperature on the boiler	55÷90°C	90°C
D2	Central heating pump start temperature	25÷80°C	40°C
D3	Low hysteresis of the temperature	1÷10°C	4°C
D4	Mixing pump or hot water pump start temperature.	35÷55°C	40°C

Set Includes

I. General equipment:
1 Executive module G-403-M12340T-P02
2 Control panel G-403-P02
3 Tape connecting the panel with the module
4 Outlet water temperature sensor CZT-CZ-OD-xxx
5 Measuring drain

II. Additional equipment:
1 Metal case
2 Hot water tank temperature sensor CZT-CZ-OD-xxx
3 Temperature delimiter
4 Measuring drain
5 Supplying wire

Dealer