

DIGITAL CONTROLLERS DESIGN & PRODUCTION



The controller for central heating system boilers with piston feeder (or drawer) G-403-P07





APPLICATION

The G-403-P07 is the controller designed for central heating coal boilers with piston or drawer feeder. It stabilizes the temperature of water and controls process of combustion in the boiler preventing a fire from burning out.

The G-403-P07 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-P07 makes possible connection of the additional pump that controls heating in the hot water tank.

PROPERTIES

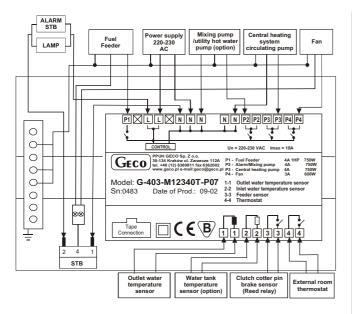
- Modern visualization of casing.
- Simple and user-friendly method of programming and service.
- Two-piece construction (executive module + keyboard)
- Possibility for direct connection of the equipment working under 230V voltage.
- Control over the hot water preparation system (it is possible to connect 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)
- 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

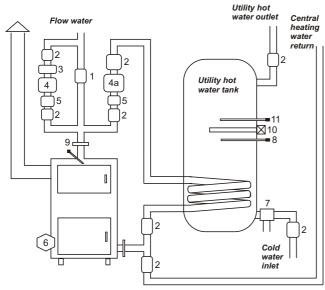
OUTPUT	RELAY	RECOMMENDED CONSTANT CARRYING COPACITY		
P1 - Central Heating Pump	16A	4A	1HP	750W
P2 - Hot Water Pump	16A	4A	1HP	750W
P3 - Fuel Feeder	30A	4A	1HP	750W
P4 - Fan	16A	3A	-	600W

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

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-P07 controller
- 9. Boiler hot water temperature sensor of the G-403-P07 controller
- 10. Tank electric heater
- 11. The temperature sensor of the tank electric heater

Controller description

The G-403-P07 controller was designed for central heating coal boilers with piston or drawer feeder.

Due to guarantee optimal controller and boiler operation, the G-403-P07 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

Para- meter	Description	Range	Producer Settings
U0	Temperature set on the boiler	Producer	45°C
U1	Time of the coal feeder standstill	5÷250 s	5 s

Il Service parameters accessible for the boiler manufacturer

Para- meter	Description	Range	Produce Settings
C0	Time after which the controller turns from standstill mode into automatic work, due to prevent furnace from burning out	10÷250 min	10 min
C1	Time of switching on the feeder during an automatic work.	1÷50	50 (=5s
C2	Time after which the pump switches on for 30 s when interlock by the room thermostat is on.	0÷60 min	0 min
C3	Time on which the controller turns into automatic operation, after suspended time in the backup state is finished	5÷240 s	5 s
C4	Waiting time for water temperature increase, when the controller checks if the boiler furnace has gone out.	0÷255 min	5 min
C5	Half of the rotation time of the fuel feeder driving wheel.	1÷100	10 (=1s)
C6	Additional pump control: 0 no pump 1 mixing pump 2 utility 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	80°C
D2	Central heating pump start temperature	25÷80°C	40°C
D3	Hysteresis of the temperature	1÷10°C	1°C
D4	The start temperature of the mixing pump or the utility hot water pump.	35÷55°C	40°C
D5	The multiplier of the step of the feeder time of operation. 0 -> 0,1 sec step; 1 -> 1 sec step.	0÷1	0

Set includes

I. General equipment:

- 1.Executive module G-403-M12340T-P07
- 2.Control panel G-403-P07
- 3. Tape connecting the control panel with the executive module
- 4.Outlet water temperature sensor CZT-CZ-OD-xxx
- 5. Cotter pin break sensor /reed relay/
- 6.Measuring drain

II. Additional equipment:

- 1.Metal case
- 2.Hot water tank temperature sensor CZT-CZ-OD-xxx
- 3.Temperature limiter
- 4.Measuring drain
- 5. Supplying wire

Dealer

