

The controller for central heating boilers with pellets burners

GH10PA



(G-406-P11 SUCCESSOR)



APPLICATION

The GH10PA is a controller for central heating boilers with burners prepared to burn wooden pellets. It feeds fuel precisely and controls air flow into the process of burning. With the inclusion of the heater device and flame sensor the controller allows automatic flame ignition in case of a fuel burnout.

The GH10PA provides long and automatic boiler operation by maintaining a constant level of the fuel in the additional container.*

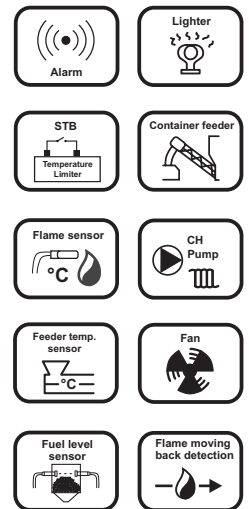
The GH10PA is adapted for TS-35 rail assembly, it has specially designed casing making it possible to install the controller in many different positions on the boiler.

The GH10PA is equipped with automatic firing mode.

*possibility for burners with additional tank.

PROPERTIES

- modern and functional visualisation of casing
- four-segment LED display
- two-module construction (executive module + control panel)
- possible control of the fuel level in the hopper
- control over two screw feeders: the burner feeder and the container feeder
- smooth control over fan rotation
- automatic ignition mode in case of fuel burnout
- possible to use temperature limiter STB for safety reason
- additional protective relay, enabling failover after triac failure
- sound signal for the alarms
- detection of maximum temperature in the burner feeder (flame moving back protection)
- provides storage of all controller settings in case of power failure
- smooth fan start (SOFTSTART)



INSTALLATION ON THE BOILER

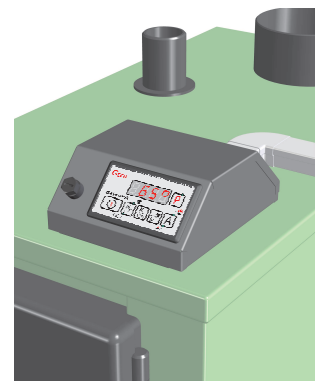
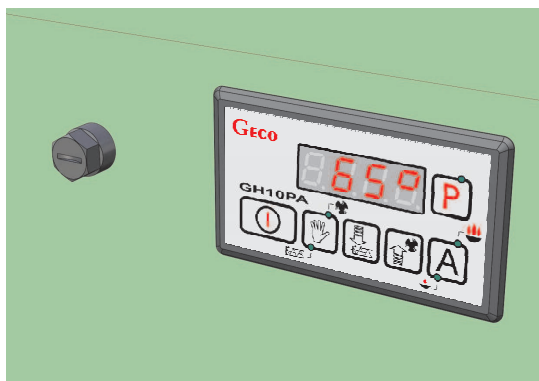


DIAGRAM OF CONNECTIONS

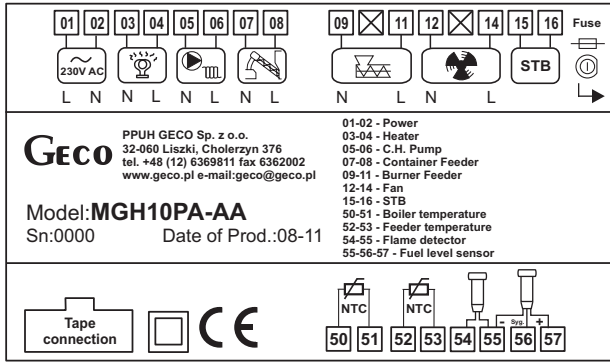
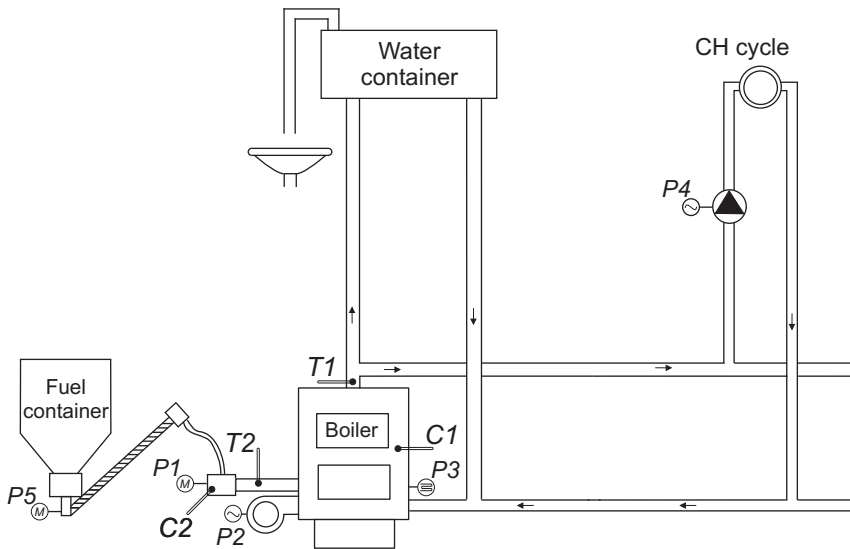


Diagram of electric connections			
Outputs		Inputs	
01	L Power 230V	50 - 51	Boiler temperature
02	N Power 230V	52 - 53	Feeder temperature
03	L Lighter	54 - 55	Flame detector
04	N Lighter	55 - 56 - 57	Fuel level sensor
05	N C.H. pump		
06	L C.H. pump		
07	N Container feeder		
08	L Container feeder		
09	N Burner feeder		
11	L Burner feeder		
12	N Fan		
14	L Fan		

THE CONTROL AND HEATING SYSTEM



Controls	Sensors
P1 Burner feeder	T1 Boiler temperature
P2 Fan	T2 Feeder temperature
P3 Lighter	C1 Flame detector
P4 C.H. pump	C2 Fuel level sensor
P5 Container feeder	

TECHNICAL DATA

Power supply voltage	230V AC +10%/-15%
Fan and feeder protecc.	3,15 A
Working temperature	from +5°C to +40°C
Relative humidity	20% ÷ 80% RH
Sensors type	NTC - range: from 0°C to +100°C

Output	Constant load	
Fan	1A	200W
C.H. pump	1A	200W
Lighter	3A	600W
Burner feeder	2A	400W
Container feeder	2A	400W

Temp. sensors (NTC) 2,2 kΩ	
°C	Ω
0	7174,89
10	4374,83
20	2747,10
30	1774,91
40	1172,09
50	795,08
60	547,95
70	384,62
80	275,86
90	202,37
100	149,16

GH10PA equipment	
Standard equipment:	
1) boiler temperature sensor	
Optional equipment:	
1) burner feeder temperature sensor	
2) fuel level sensor	
3) flame detector	
Controls:	
1) fan	
2) C.H. pump	
3) lighter	
4) burner feeder	
5) container feeder	