

The controller for central heating wood boilers, „HOLZGAS” type

GH10HA



(G-406-P02 SUCCESOR)



APPLICATION

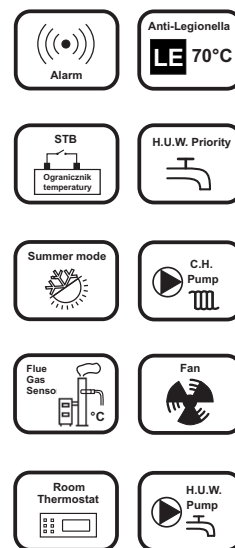
The GH10HA is a controller for central heating wood boilers, „HOLZGAS” type.

The GH10HA supervises the process of preparing hot utility water (HUW cycle), and allows to operate main heating circuit (central heating - CH cycle).

The GH10HA controller 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.

PROPERTIES

- modern and functional visualisation of casing;
- four-segment LED display;
- two-module construction (executive module + control panel);
- cooperation with the HUW pump (Hot Utility Water);
- disinfection of the HUW cycle (Aniti-Legionella function);
- HUW priority and SUMMER mode function;
- possible to measure flugas temperature (PT1000);
- possible to cooperate with any room thermostat;
- controls fan rotation;
- possible to use temperature limiter STB for safety reason;
- additional protective relay on fan output;
- sound signal for the alarms;
- provides storage of all controller settings in case of power failure
- soft start of the fan
- possible to cooperative with door sensor



INSTALLATION ON THE BOILER

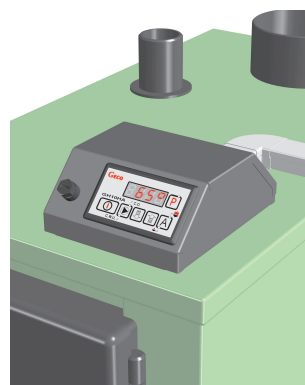
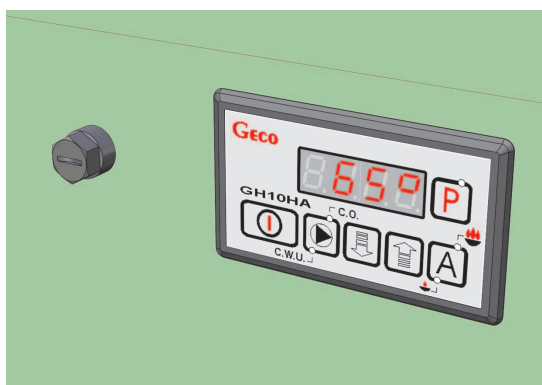
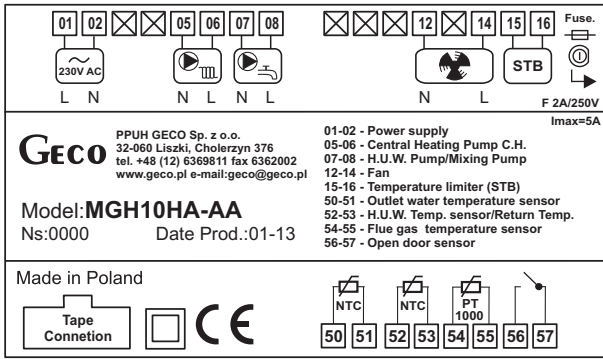
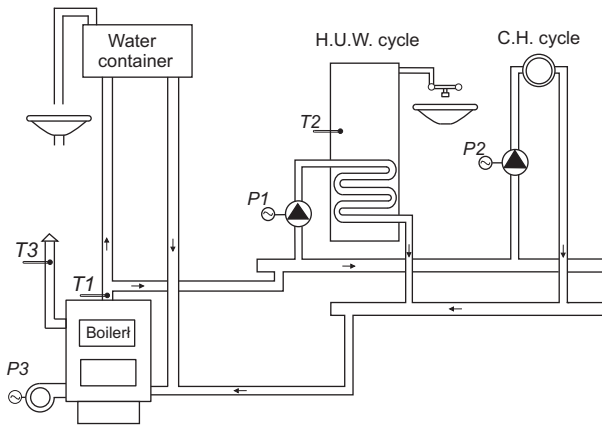


DIAGRAM OF CONNECTIONS

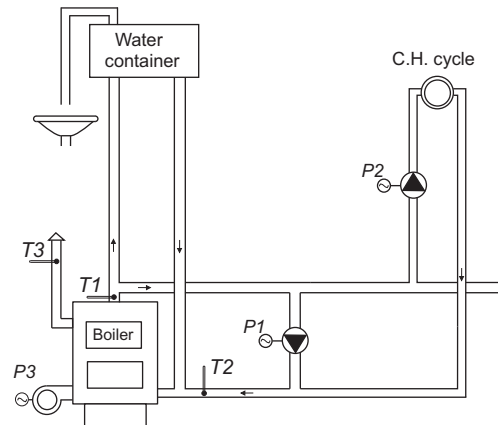


Outputs		Inputs	
01 L	Power AC 230V	50 - 51	Boiler temperature
02 N	Power AC 230V	52 - 53	HUW Temp/Return Temp
05 N	C.H. Pump	54 - 55	Flue gas temperature
06 L	C.H. Pump	56 - 57	Door sensor
07 N	H.U.W. pump/Mix pump		
08 L	H.U.W. pump/Mix pump		
12 N	Fan		
14 L	Fan		

THE CONTROL AND HEATING SYSTEM



Controls		Sensors	
P1	H.U.W. pump.	T1	Boiler temperature
P2	C.H. pump	T2	H.U.W. temperature
P3	Fan	T3	Flue gas temperature



Controls		Sensors	
P1	Mixing pump	T1	Boiler temperature
P2	C.H. pump	T2	Return temperature
P3	Fan	T3	Flue gas temperature

TECHNICAL DATA

Power supply voltage	230V AC +10%/-15%
Fan protection	2 A
Working temperature	od +5°C do +40°C
Relative humidity	20% + 80% RH
Sensor type	NTC - od 0°C do +100°C PT 1000 - od 0°C do +400°C

Output	Constant load	
Fan	1A	200W
C.H. pump	1A	200W
H.U.W. pump	1A	200W

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	

Temp. sensors (PT1000)		
°C	Ω	
0	1000,00	
50	1194,00	
100	1385,10	
150	1573,30	
200	1758,60	
250	1941,00	
300	2120,50	
350	2297,20	
400	2470,90	

GH10HA - Equipment	
Necessary equipment:	
1) boiler temperature sensor	
Optional equipment:	
1) H.U.W. temperature sensor/ return temperature sensor	
2) flue gas temperature	
3) door sensor	
Controls:	
1) fan	
2) C.H. pump	
3) H.U.W. pump/mixing pump	