

The controller for central heating boilers with air blow

GH10NA



(G-406-P03 SUCCESOR)



APPLICATION

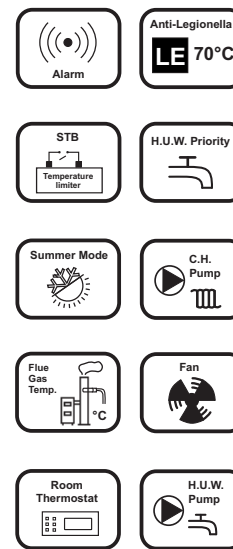
The GH10NA is a controller for central heating boilers with air blow.

The GH10NA supervises the process of preparing hot utility water (HUW cycle), and allows to operate main heating circuit (central heating - CH cycle).

The GH10NA 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

- front panel covered with plexiglas, resistant to external factors and more durable
- modern and functional operation panel by touch sensors
- four-segment LED display
- two-module construction (executive module + control panel)
- cooperation with the HUW pump (Hot Utility Water)
- disinfection of the HUW cycle (Anti-Legionella function)
- HUW priority and Summer mode functions
- possible to measure flue gas temperature (Pt1000 sensor)
- 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.



INSTALLATION ON THE BOILER

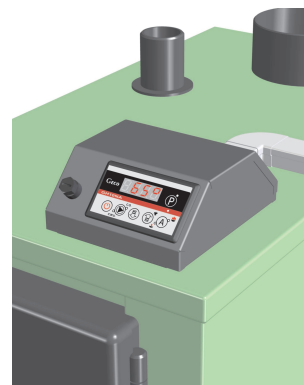
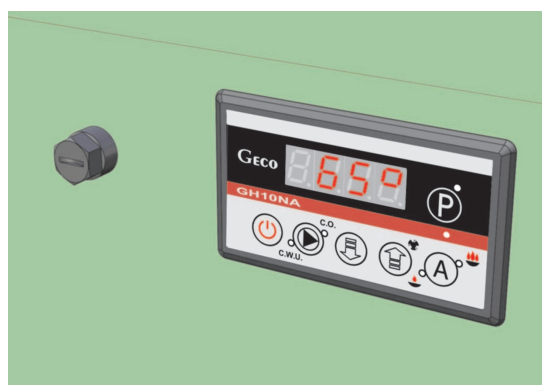
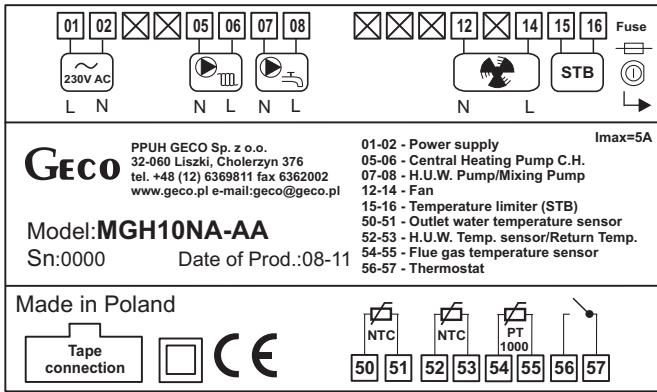
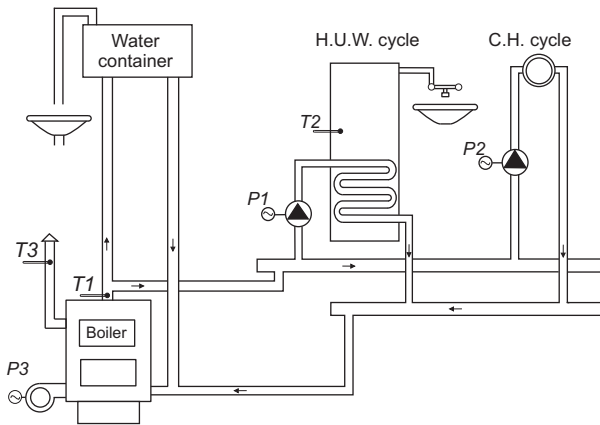


DIAGRAM OF CONNECTIONS

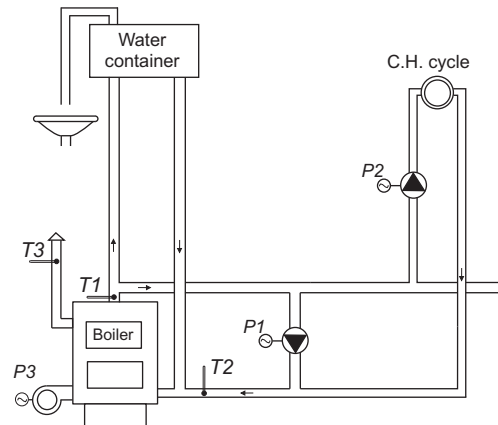


Outputs		Inputs	
01 L	Power AC 230V	50 - 51	Boiler temperature
02 N	Power AC 230V	52 - 53	H.U.W. temperature/ Return temperature
05 N	C.H. pump	54 - 55	Flue gas temperature
06 L	C.H. pump	56 - 57	Thermostat
07 N	H.U.W. pump/Mix pump		
08 L	H.U.W. pump/Mix pump		
09 N	—		
11 L	—		
12 N	Fan		
14 L	Fan		

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	from +5°C to +40°C
Relative humidity	20% ÷ 80% RH
Sensors type	NTC - from 0°C to +100°C PT 1000 - from 0°C to +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. sensor (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	

GH10NA equipment	
Necessary equipment:	
1) boiler temperature sensor	
Optional equipment:	
1) H.U.W. temperature sensor / return temperature sensor	
2) flue gas temperature	
3) thermostat	
Controls:	
1) fan	
2) C.H. pump	
3) H.U.W. pump / mixing pump	