

The controller for central heating blow boilers

GH11MA



APPLICATION

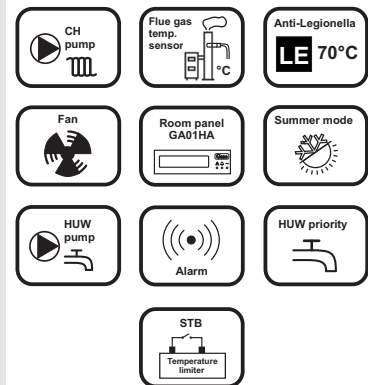
The GH11MA is a controller for central heating blow boilers.

The GH11MA supervises the process of preparing hot utility water (HUW cycle), and allows to operate main heating circuit (central heating - CH cycle).

The GH11MA controller has been fitted for full communication with the GA01HA room panel (manufactured by GECO) which allows to control boiler operation comfortably from user's apartment.

PROPERTIES

- modern and functional visualisation of casing
- four-section display of the LED type
- single-module construction enables comfortable installation on the boiler
- cooperation with the HUW pump (Hot Utility Water)
- disinfection of the HUW cycle (Anti-Legionella function)
- HUW priority function
- cooperation with room panel (control boiler operation from user's apartment.)
- SUMMER mode
- smooth control over fan rotations
- measurement of the flue gases temperature
- build-in temperature limiter STB
- sound signal of the alarms



INSTALLATION ON THE BOILER



DIAGRAM OF CONNECTIONS

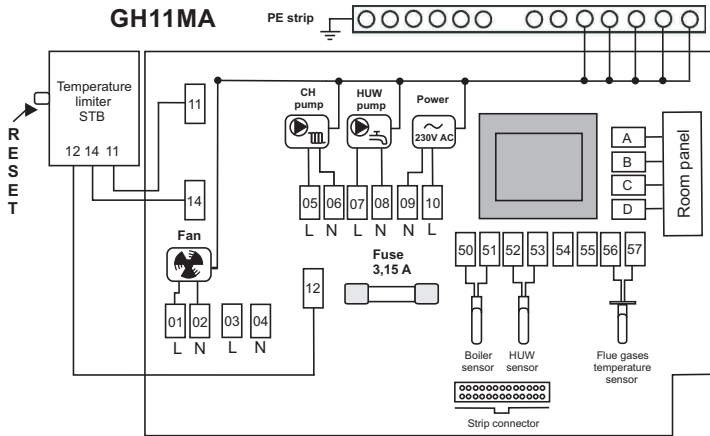
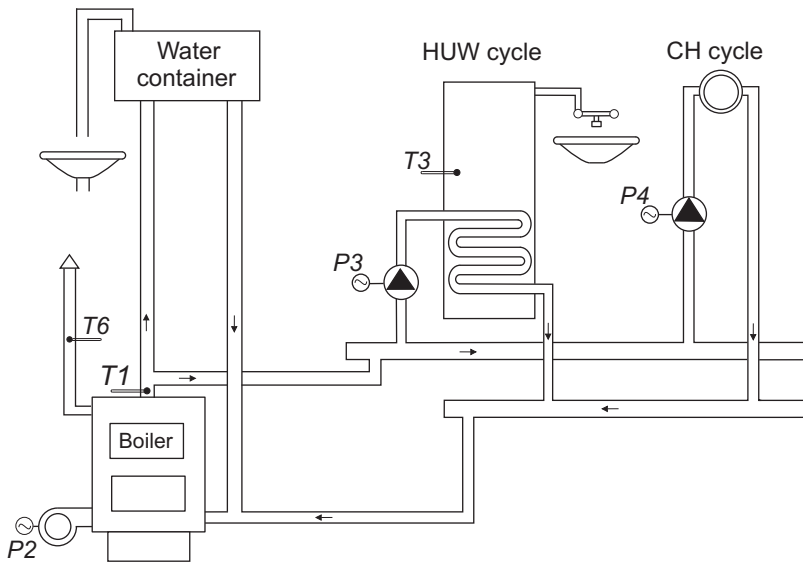


Diagram of electric connections

Outputs		Inputs	
01 L	Fan	50,51	Boiler temperature
02 N	Fan	52,53	HUW temperature
03 L		54,55	
04 N		56,57	Flue gases temp. sensor
05 L	CH pump	D	+12 V DC
06 N	CH pump	C	GND ⊥
07 L	HUW pump	B	RS-A
08 N	HUW pump	A	RS-B
09 N	Power 230V		
10 L	Power 230V		

Room panel GA01HA

THE CONTROL AND HEATING SYSTEM



Controls

P2	Fan
P3	HUW pump
P4	CH pump
Sensors	
T1	Boiler temperature
T3	HUW temperature
T6	Flue gases temp.

TECHNICAL DATA

Power supply voltage	230V AC +10%/ -15%
Fan and feeder protec.	3,15A
Working temperature	from +5°C to +40°C
Relative humidity	20% ÷ 80% RH
Sensors type	NTC - range: 0°C to +100°C PT1000 - range.: 0°C to +750°C

Output	Constant load	
CH pump	1A	200W
HUW pump	1A	200W
Fan	1A	200W

Temp. sensor (NTC) 2,2 kΩ	
°C	kΩ
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	kΩ
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
450	2641,80
500	2809,80
550	2974,90
600	3137,10
650	3296,40
700	3452,80
750	3606,40

GH11MA equipment

Standard equipment:

- 1) boiler temperature sensor
- 2) flue gases temperature sensor

Optional equipment:

- 1) HUW temperature sensor

Controls:

- 1) CH pump
- 2) HUW pump
- 3) fan