ATLANTIC BOILERS

HIGH EFFICIENCY CONDENSING BOILER-PLANT

G Series
USER'S MANUAL

FOR MODULATING BOILER WITH GAS BURNER EQUIPPED FOR NATURAL GAS

Type : B23
Category I2H

Equipment complying with European Community Directives:
- Low voltage (73/23/CEE)
- Electromagnetic compatibility (89/336/CEE)
- Efficiency (92/42/CEE)
- as appliancez (90/396/CEE)

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CONTENTS

1 Technical Characteristics.

This G Series boiler has been adjusted in the works for **group H natural gas (type G20), gas supply pressure 20 mbar or 300 mbar (see data plate).**

Any interference with sealed parts will invalidate the warranty

Rated, minimum and maximum gas pressures.

	Type H gas (Lacq) (G20)		Type L gas (Groningue) (G25)	
Model	20 mbar	300 mbar	25 mbar	300 mbar
Rated pressure (mbar)	20	300	25	300
Minimum pressure (mbar)	17	270	20	270
Maximum pressure (mbar)	25	330	30	330

Combustion characteristics at 15℃ and 1013 mbar.

OPTIMAGAZ

Model – G Series		**Unit**	**G116**	**G145**	**G174**	**G232**	**G291**	**G348**	**G407**	**G465**
Combustion at 15℃ and 1013 mbar										
Rated pressure P		kW	114	144	173	230	288	345	403	423
Heat output	Max	kW	121,3	151,5	185.0	248.0	306.0	368.0	435,0	455,0
	Min	kW	30,0	37,5	47.0	61.5	77.0	93.0	109,0	112,0
Gas flow (G20)	Max	m^3/h	12,8	16,0	19.6	26.2	32.4	38.9	46,0	48,1
	Min	m^3/h	3,2	4,0	5.0	6.5	8.2	9.8	11,5	11,9
CO_2 content (G20)	Max	%	8.5 – 8.7				8.7 – 8.9		8,9 – 9,0	
	Min	%	8.0 – 8.2							
Flue gas flow	Max	g/s	57	71	87	118	142	171	199	208
	Min	g/s	15	19	24	31	39	47	55	56
Flue gas temperature (60/80 ℃ operating mode	Max	℃	134	136	138	139	138	146	145	142
	Min	℃	63	64	65	67	66	67	69	72
Intake air flow at 1013 mbar and 15℃	Max	m^3/h	160,4	200,3	244.6	331.4	400.3	481.4	557,4	583,1
	Min	m^3/h	42,4	53,0	67.1	86.8	108.7	131.3	153,9	158,2
Average weighted annual emission of NOx accoring to EN656		mg/kWh	35	45	50	45	55	55	50	50
Hydraulic characteristics										
Safe temperature limit		℃	106							
Outlet water temperature adjustment range		℃	65 – 90							
Minimum return water temperature		℃	45							
Water pressure	Max	bar	4							
	Min	bar	1 (cold)							
Water capacity		L	116	144	153	256	285	315	342	371
Rated water flow rate through boiler		m^3/h	P/20 (max = P/15)							
Hydraulic pressure loss in boiler at P/20		mCE	1,22	1,43	1.0	1.27	1.17	0.71	0,87	1,17
Sundry										
Weight empty		kg	370	405	440	550	600	660	725	780

CONDENSAGAZ

Model – G Series…		Unité	G116	G145	G174	G232	G291	G348	G407	G465
Combustion at 15℃ and 1013 mbar										
Rated pressure P		kW	116	145	174	232	290	348	407	443
Heat output	Maxi	kW	119,7	148,7	181.0	241.0	297.0	359.0	423,5	462,0
	Mini	kW	30,0	37,0	45.0	60.0	74.5	90.0	106,0	115,0
Gas flow (G20)	Maxi	m^3/h	12,7	15,7	19.2	25.5	31.4	38.0	44,8	48,9
	Mini	m^3/h	3,2	3,9	4.8	6.4	7.9	9.5	11,2	12,2
CO_2 content (G20)	Maxi	%	8.5 – 8.7				8.7 – 8.9		8,9 – 9,0	
	Mini	%	8.0 – 8.2							
Flue gas flow	Maxi	g/s	56	70	85	114	138	167	194	202
	Mini	g/s	15	19	23	30	36	45	53	58
Flue gas temperature (60/80 ℃ operating mode	Maxi	℃	75		78	77	75	76	79	78
	Mini	℃	57		59	58	59	56	59	60
Intake air flow at 1013 mbar and 15℃	Maxi	m^3/h	158,2	196,6	239.3	322.0	388.5	469.6	542,7	592,0
	Mini	m^3/h	42,4	52,2	64.3	85.7	105.2	127.1	149,7	162,4
Average weighted annual emission of NOx accoring to EN656		mg/kWh	40		45	45	50	55	55	55
Hydraulic characteristics										
Safe temperature limit		℃	106							
Outlet water temperature adjustment range		℃	65 – 90							
Minimum return water temperature		℃	45							
Water pressure	Maxi	bar	4							
	Mini	bar	1							
Water capacity		L	140	175	185	296	328	359	391	424
Rated water flow rate through boiler		m^3/h	P/20 (Max: P/15)							
Rated water flow rate through condensation heat exchanger	Maxi	m^3/h	P/15							
	Mini	m^3/h	P/45							
Hydraulic pressure loss in boiler at P/20		mCE	1,22	1,4	1.0	1.27	1.17	0.71	0,87	1,17
Hydraulic pressure loss in condensation heat exchanger at P/20		mCE	0,22	0,18	0.25	0.15	0.22	0.25	0,31	0,38
Sundry										
Weight empty		kg	425	450	485	600	650	725	805	880

Characteristics of electrical connections.

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Model –G Series…	G116	G145	G174	G232	G291	G348	G407	G465
Electric power consumption (boiler without accessories) (W)	180	250	260	270	390	360	550	620
Electric power supply (V)	230 V AC +10 % -15 % 50 Hz							
Rated current without accessories (A)	1,3	1,2	1.15	1.2	1.7	1.6	2,8	3,0
Peak current without accessories (A)	2.5						3,0	
Main fuse rating (excluding GUILLOT items) (A)	12,5							
Max length of probe cables	DHW probes: 10 m External probe: 30 m				Ambient thermostat: 30 m Ambient probe: 30 m			
Power terminal outputs	230 V AC +10 % -15 % 5 mA to 2 A							

2 Installation.

The equipment must be installed and maintained by a qualified professional according to all current regulations and best professional practices applicable in the country where the boiler is installed.

The boiler must be installed in premises provided with ventilation openings in compliance with applicable regulations (see installation and maintenance manual).

3 Start-up.

Before shipping, all boilers undergo a works test with group H natural gas (type G20) during which all necessary adjustments are made. First start-up must be carried out by our **Service Centre 0161 621 5960**

For temporary start-up, proceed as follows:

1. Switch on the power (main on/off switch)
2. Create a heat demand in comfort mode by way of the client interface (see "Interface presentation" section)
3. After the burner has started up, check for leaks in the gas line using a foam-producing product. Check that combustion is safe and complete.
4. Adjust the clock. (See summary table of client parameters at the end of the manual).

Any interference with sealed parts will invalidate the warranty.

4 Shut-down.

To shut down the boiler, proceed as follows:
1. Switch off the main ON/OFF switch.
2. In the event of a prolonged shut-down close the isolating valve of the gas supply.

5 Maintenance.

Boiler maintenance must be carried out once a year (see Installation and Maintenance Manual).

Call on the services of a qualified professional for all maintenance operations (see Installation Manual).

6 Frost protection.

The guarantee remains valid only if the heating network is treated with anti-freeze when there is a risk of frost.
If it is decided nevertheless to drain the system, the user is responsible for ensuring that no water remains in the boiler.

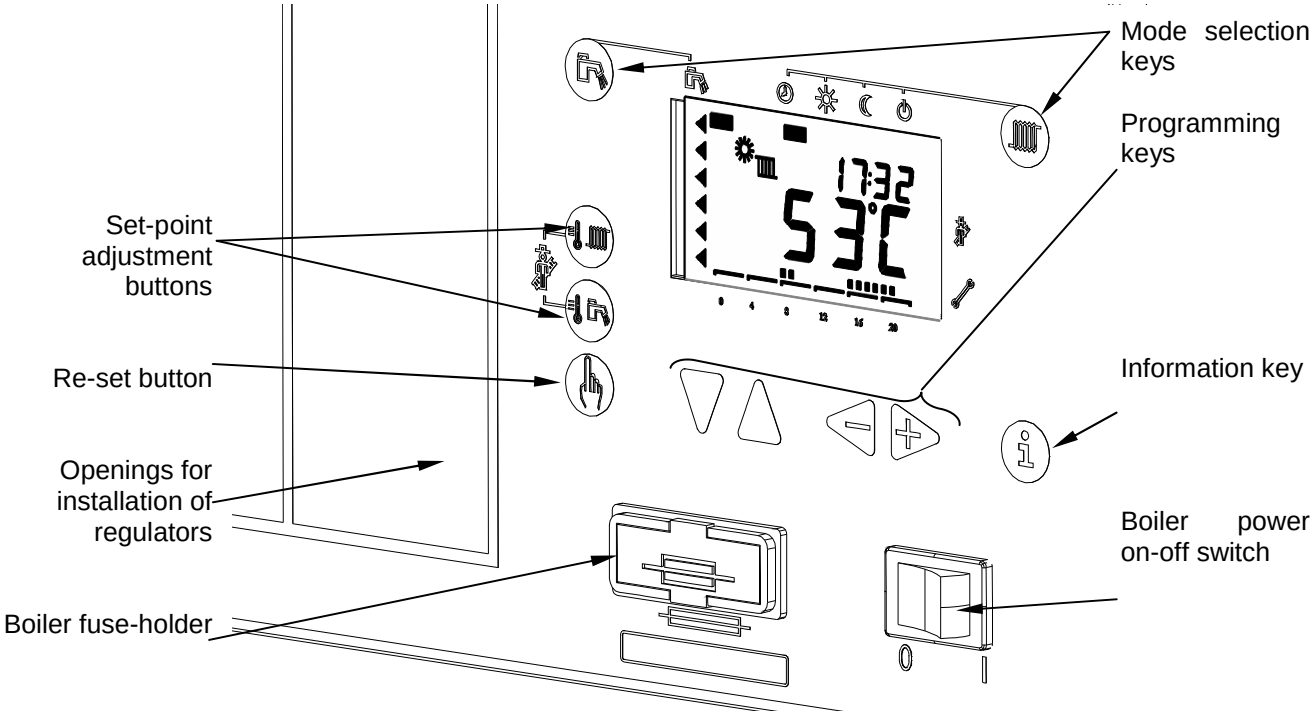
- Switch off the main ON/OFF switch.
- Close the gas supply isolating valve.
- Close the outlet and return stop-cocks.
- Open the safety valve to create an air inlet on the upper part of the boiler tubes; open the cock of the boiler drain tube.

7 User interface and boiler management.

7.1 Presentation of the interface

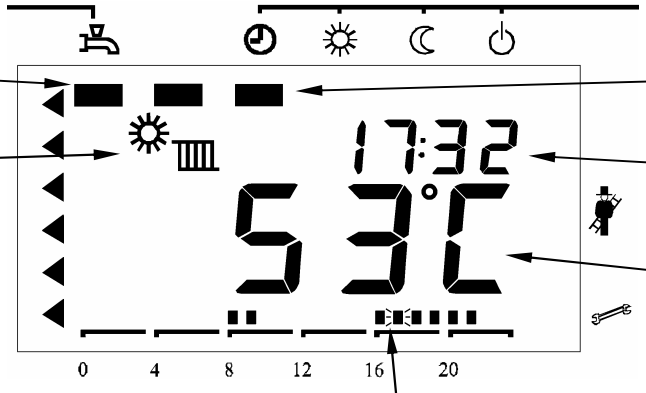
The boiler's client interface comprises an on/off switch, a drawer-type fuse-holder, an electronic board with a backlit LCD screen (2 lines of 4 figures + pictograms) and 10 keys, and an opening for insertion of 2 96 x 96 regulators or 1 144 x 96 regulator.

All client settings and possible parameter adjustments are performed through this interface. It also allows the operator to consult information concerning boiler operation.



7.2 LCD display

The standard display presents the state of the boiler (operating mode, time, time programming, boiler temperature, flame presence, possible faults).

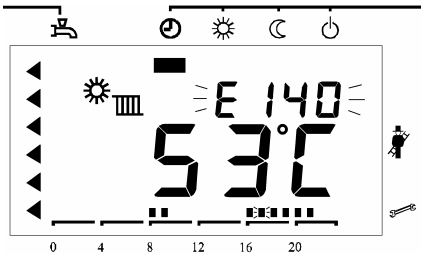


Pictograms :

- DHW preparation under way or DHW t° display
- Heating activated or display of boiler or environment set-point
- Comfort mode
- Reduced-power mode
- Outdoor t° display
- Flame presence
- Alarm

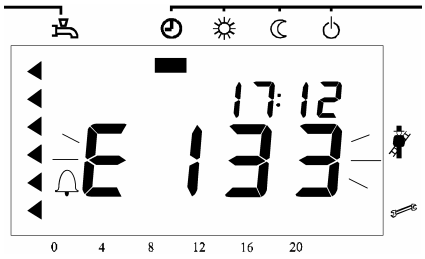
Summary of time programming:
Each square represents a period of heating in comfort mode (by 1-hour time intervals). The flashing square indicates the current hour.

If a non-blocking fault occurs, the time display alternates with display of the fault code.
This type of defect does not lead to a shut-down.



When a fault leads to boiler shut-down, a flashing display of the fault code replaces the boiler temperature display. An alarm bell is displayed in the bottom left corner of the display window.

Refer to the “Error message” section for information on the fault codes.



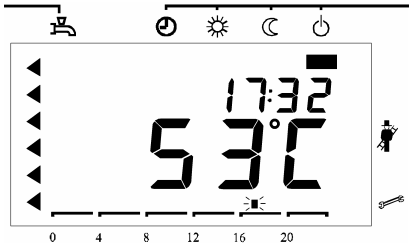
In both cases a brief pressure on the Information key (i) makes it possible to display only the fault code. Press keys ▽ and △ simultaneously for display of the extended fault code (*Press* (i), *then* (🚿) *or* (▥) *to return to standard display)*.

7.3 Operating modes

Heating mode key (▥)

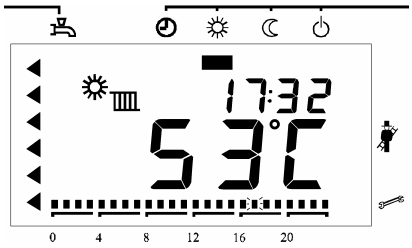
For selection of heating mode among the Stop, Auto, Comfort and Eco modes

Stop



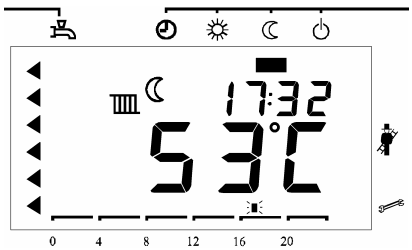
No heating demand has been received. The frost protection function is activated.

Comfort



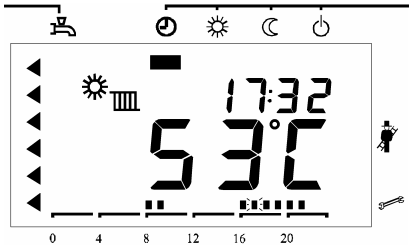
Permanent comfort mode.
Burner power is adjusted to maintain the heating set-point (▥).

Eco



Permanent reduced-power mode.
Burner power is adjusted to maintain the reduced heating set-point. (Parameter n°5, see paragraph 7.6).

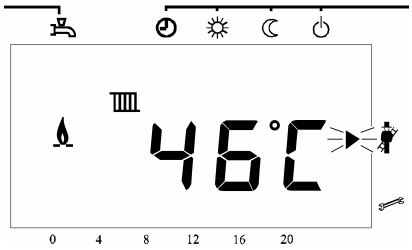
Auto



The regulator alternates Comfort and Eco modes, according to the time programming.

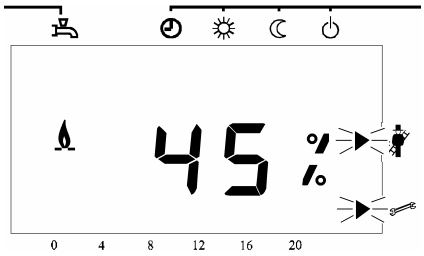
Two further “service” modes are available. They make it possible to carry out measurements on the boiler.

Flue cleaning



This mode allows the burner to operate at full load.
Press 1 and 5 simultaneously for approximately 3 seconds
The burner starts up (if it was not already in operation) and power increases to provide maximum heat output.
The burner shuts down when the temperature limiting themostat is triggered (88°C). This is a safety fea ture independent of the maximum operating temperature which cannot exceed 85°C.
While this function is activated, a forcing[1] signal is generated to evacuate heat.

Regulator off



This mode allows burner heat output to be fixed manually
Press 1 and 5 simultaneously for approximately 6 seconds when in a standard mode or for 3 seconds when in the flue cleaning mode.
The relative[2] power set-point of the burner is displayed on the screen.
The − and + keys can be used to adjust the set-point value by 1 % steps. Keys ▽ and △ can be used to go directly to the min. or max. power set-point (0 % or 100 %)

To exit one of these two modes and return to standard operation, press 1 and 5 simultaneously for 1 second.

[1] Forcing signal: triggers pump start-up and/or opening of the 3-way valve of the connected heating circuits so as to evacuate heat. This signal is triggered by:
- Electronic temperature limiter.
- Safety thermostat.
- Flue cleaning mode
- Regulator off mode.
- Boiler frost protection.

[2] Relative power: this is the actual power output of the burner with respect to its modulation range. 0 % corresponds to minimum power and 100 % to maximum power of the boiler.

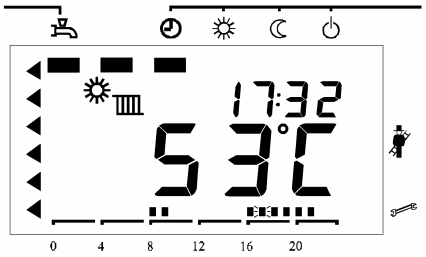
To convert this to a percentage of heat output (or load factor), the following formula can be used:

$$\%Q_{cal} = \frac{Power_{relative} \cdot (100 - \%Q_{\min})}{100} + \%Q_{\min} = 0.75 \cdot P_{rel} + 25$$

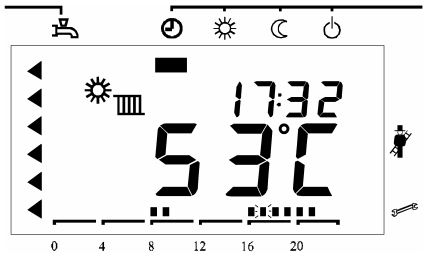
Displayed percentage	100	90	80	70	60	50	40	30	20	10	0
Load factor (%)	100	92.5	85	77.5	70	62.5	55	47.5	40	32.5	25

DHW Mode key

Activates / disactivates the production of domestic hot water



DHW production activated



DHW production disactivated

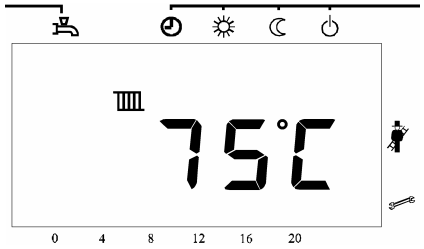
7.4 Set-point adjustment

Adjustment of the heating set-point

According to the mode of regulation chosen, the set-point temperature can have different meanings:

- ✓ In constant temperature mode, the set point is a boiler outlet water temperature.
- ✓ In regulated mode, depending on outside temperature or ambient temperature, or both, the set point is an ambient temperature.

Press the heating set-point key. The current set-point is displayed.
Use the − or + key to adjust the heating set point temperature.
To exit the set point adjustment screen press the heating mode, DHW mode, or heating set point key.

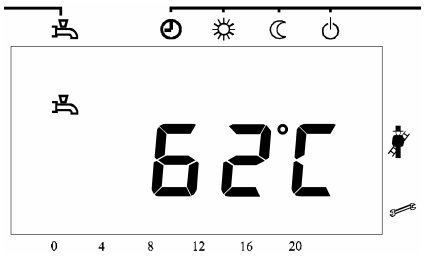


If no key is pressed the interface returns to the standard display after about 8 minutes.

Adjustment of DHW set point

This function is available only if DHW production is connected to the boiler.

Press the domestic hot water set point key. The current value of the set point is displayed.
Use the − or + key to adjust the DHW set point temperature.
To exit the set point adjustment screen press the heating mode, DHW mode, or DHW set point key.

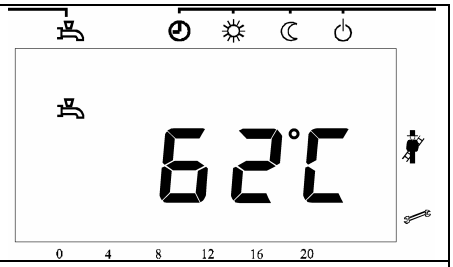
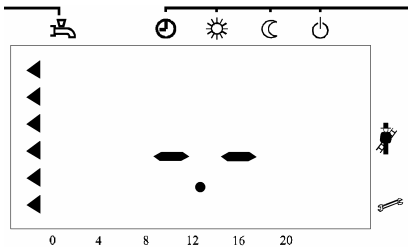
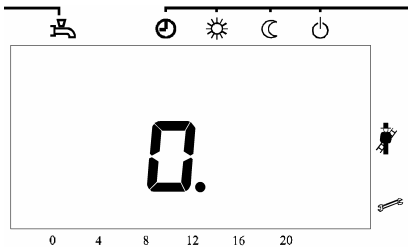
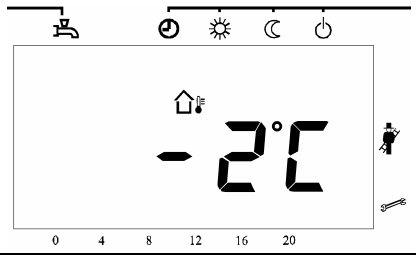
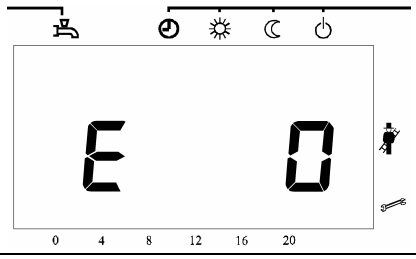
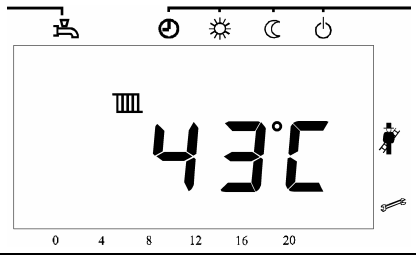


If no key is pressed the interface returns to the standard display after about 8 minutes.

7.5 Information on boiler status

Info key (i)

At any moment basic information on the boiler can be obtained by pressing the Info key (i). Each pressure on (i) moves the display to the following variable.

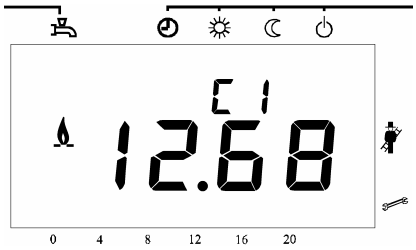
1	DHW temperature	
2	Not used	
3	Burner operation phase code (see section on "*Burner phase codes*")	
4	Outside temperature	
5	Albatros[3] error code (see section on "*Error messages"*)	
6	Boiler temperature	

To return to standard display, press the (heating) or (DHW) key.

[3] Albatros: name given by SIEMENS to the fault codes.

Table of additional information

From the Info mode (one pressure on the Info key ⓘ), it is possible to obtain additional data concerning boiler operation. For this, press ▽ and △ simultaneously for about 3 seconds. The time display is replaced by an address composed of a letter (b, C, d) and a figure (from 0 to 7). Use keys ▽ and △ to modify the letter. Use keys ⊖ or ⊕ to modify the figure.
Press key ⓘ to return to Info mode or ⏻ or ⏻ to return to the default display.



Address	***Information***
b0	Extended fault code
b1	Return probe temperature
b2	-
b3	Flue gas temperature
b4	External temperature probe
b5	Composite outside temperature
b6	Attenuated outside temperature
b7	3-way valve kit oulet temperature probe
C1	Ionisation current (µA)
C2	Measured fan speed
C3	Measured fan PWM Signal
C4	Relative power (see [2] page 9)
C5	-
C6	Actual difference set point / measured value
d1	Set point for boiler temperature (including DHW and other heating circuits)
d2	Heating temperature set point
d3	Ambient temperature set point
d4	DHW temperature set point
d5	Level of modulation of max. fan speed in heating mode
d6	Max. speed in heating mode

Error messages

In the event of a fault leading to shut-down, the alarm signal is permanently displayed and the fault code flashes. To reset the system, correct the fault and then press the reset button for at least 2 seconds.

Albatros number	***Interpretation***
0	No input in Albatros code – no defect
10	External probe fault
20	Boiler probe fault
28	Flue gas probe fault
32	Clip-in probe fault
40	Return probe fault
50	DHW probe fault
61	Ambient temperature regulation: Failure
62	Ambient temperature regulation: error or radion clock error
81	Short-circuit on LPB bus or bus power supply failure
82	Address collision on LPB bus (several identical addresses)
91	Data loss in EEPROM
92	Equipment fault in electronic part
100	Two master clocks in system
105	Maintenance alert
110	Safety thermostat triggered (electronic or mechanical)
111	Triggering of limiting thermostat
113	Excess over authorized flue gas temperature
128	Flame failure during operation
129	Poor air supply
130	Power limitation due to excessive flue gas temperature
132	Response of gas pressure switch
133	No flame formation after expiry of safety period
140	Segment number or LPB equipment number inadmissible
148	LPB and LMU communication interfaces not compatible
151	Internal LMU fault
152	LMU parameter error
153	Eqipment in locked position
154	Inconsistency in Flow or Return or Ambient or ECS temperatures
160	Fan threshold speed not reached
161	Maximum fan speed exceeded
162	Air pressure switch not closed
164	Response of flow controller / low water level contact
166	Air pressure switch not open
180	Flue cleaning function activated
181	Regulator off function activated
183	Equipment in parameter setting mode

Burner phase codes

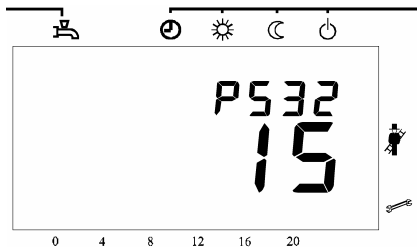
To consult the burner phase codes, press the Info key (i) 3 times, as indicated in the “Info key” section

Phase code	***Interpretation***
0	Stand-by (no heat demand)
1	Start-up blocked
2	Fan ramping up to speed
3	Preventilation
4	Waiting time
5	Pre-ignition time
6	Safety period
10	Heating mode
11	DHW mode
12	Parallel heating and DHW operation
20	Post-ventilation
22	Return to initial position
99	Failure position (display of current fault code)

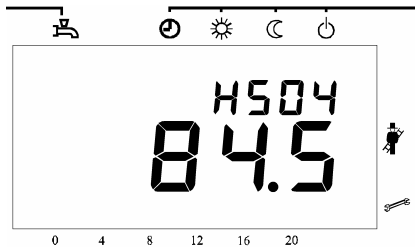
7.6 Parameter setting

To optimize boiler configuration, the final user or the installer can modify a certain number of parameters. To ensure security of the boiler configuration, not all parameters are accessible to the final user. They are therefore grouped according to level of access.

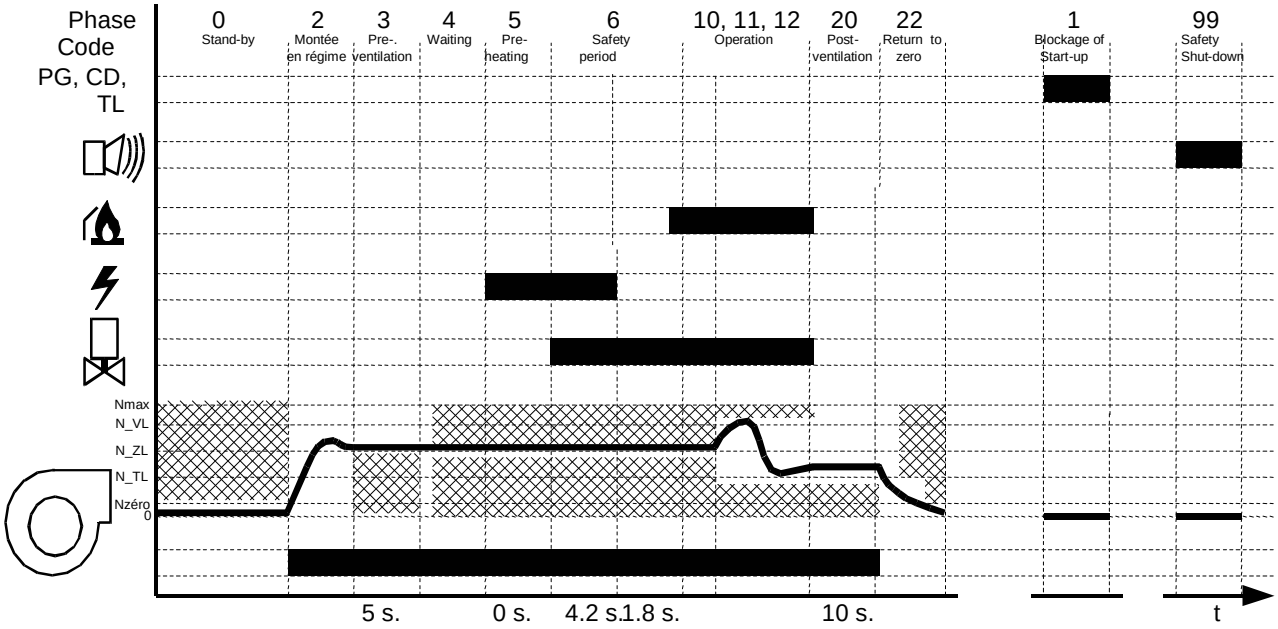
From the standard display, access the parameter setting mode – final user level – by pressing the ▽ or △ key. The screen then displays a P followed by a 3-figure parameter number. With the ▽ and △ keys it is possible to scroll through the list of parameter numbers. When the desired parameter is displayed, adjust its value with the − and + keys. The new value is validated as soon as you select the previous or next parameter or when you exit the mode by pressing the (i) key. Beware, if you exit the programming mode by means of the or key the modification of the current parameter will not be validated.
Consult the client parameter summary table at the end of this manual.



Parameters accessible at installer level
From the parameter setting mode, final user level, access the installer level by pressing the ▽ and △ keys simultaneously for 3 seconds. The letter P is then replaced by an H.
Consult the client parameter summary table at the end of this manual.



8 Operation of control cabinet.



Legend:

PG = Gas pressure switch
CD = Flow controller
TL = Limiting thermostat

= Alarm

= Flame detection

= Ignition electrode

= Gas valve

= Fan

Nmax = Maximum speed authorized
N_VL = Maximum speed authorized during modulation.
N_ZL = Ignition speed
N_TL = Minimum speed authorized during modulation.
Nzero = Speed less than 200 rpm so considered as nil

} Fan speed

9 List of parameters

Summary table of client parameters

Boiler: ..... site : .....
Serial number: ....

Please note all modifications to parameters in this document !

Adjustment line	Function	Adjustment range	Default value	Client setting
	Clock adjustment			
P 1	Time (current)	00:00… 23:59	---	
P 2	Day (current)	1: Monday- 7: Sunday	---	
P 5	Low outlet set point / Low ambient set point (according to mode)	20…80 / 10…26 ℃	40 / 15	
	Time programming of direct heating circuit			
P 10	Preselection of day(s) to be programmed: 1-7 Complete week 1-5 Monday to Friday 1…7 Day od the week 6-7 Saturday and Sunday		1-7	
P 11	Start 1st period	0:00… 24:00	06:00	
P 12	End 1st period	0:00… 24:00	22:00	
P 13	Start 2nd period	0:00… 24:00	--:--	
P 14	End 2nd period	0:00… 24:00	--:--	
P 15	Start 3rd period	0:00… 24:00	--:--	
P 16	End 3rd period	0:00… 24:00	--:--	
P 20 à 26	Not used			
	Time programming of domestic hot water (DHW) *(activated depending on configuration)*			
P 30	Preselection of day(s) to be programmed: 1-7 Complete week 1-5 Monday to Friday 1…7 Day od the week 6-7 Saturday and Sunday		1-7	
P 31	Start 1st period	0:00… 24:00	06:00	
P 32	End 1st period	0:00… 24:00	22:00	
P 33	Start 2nd period	0:00… 24:00	--:--	
P 34	End 2nd period	0:00… 24:00	--:--	
P 35	Start 3rd period	0:00… 24:00	--:--	
P 36	End 3rd period	0:00… 24:00	--:--	
P 45	Return to standard time programming for heating and DHW. (press – and + keys simultaneously for 3 seconds)		0	
H 90	Low set point for DHW temperature	50…65 ℃	65	
H 91	Liberation of DHW production: 0 DHW time programming 1 24h/24		0	
H 93 à 94	Not used		0	
	Settings for heating circuits			
H 505	Maximum heating set point temperature	65…90 ℃	87.0	
H 510	Over-rise in the instruction of starting temperature for the head of hot water medical	0…30 K	15	
P 532	Slope of direct circuit heating characteristics	1 … 40	22	
H 534	Correction of ambient set point for direct heating circuit	-31 … 31 K	0.0	
	Boiler configuration			
H 536	Maximum fan speed in heating mode	0 … 9950 rpm	See below	

G116		G145		G174		G232		G291		G348		G407		G465	
OPTI	CON.	OPTI	CON.	OPTI	CON.	OPTI	CON.	OPTI	CON.	OPTI	CON.	OPTI	CON.	OPTI	CON.
7050	7000	5850	5850	5950	5750	5500	5400	6200	6200	6000	5850	5300	5200	5550	5550

H 542	Minimum boiler power output	0 … 9999 kW	acc. to model
H 543	Maximum boiler power output	0 … 9999 kW	acc. to model
H 544	Time delay to shut-down of pump Q1 or to closure of isolating valve Y1, max. 218 min. (255 = permanent operation of Q1 or permanent opening of Y1)	0 … 255 min	5
H 545	Minimum burner pause time	0 … 3600 sec	300.0

Adjustment line	Function	Adjustment range	Default value	Client setting
H 552	Installation configuration setting: 66 Stand-alone boiler 80 Boiler in cascade installation		66	
H 553	Influence of ambient temperature probe on heating circuit (only with ambient control unit) : Units: influence on direct ciruit (DC) Tens: not usedi 0 Direct circuit not influenced by ambient temperature probe 1 Direct circuit controlled by ambient temperature probe 2 Inactive *ex : 01 corresponds to a direct circuit controlled by the ambient temperature probe*		0	
H 555.b0	Not used		0	
H 555.b1	Type of DHW priority: 0 Absolute priority 1 No priority		0	
H 555.b2 à b3	Not used		0	
H 555.b4	Frost protection of installation : 0 out of use 1 In use		1	
H 555.b5 - b7	Not used		0	
H 558.b0	Not used		0	
H 558.b1	Type of construction : 0 Lightweight 1 Heavyweight		0	
H 558.b2	Type of DHW control device: 0 Probe 1 Thermostat		0	
H 558.b3 - b7	Not used		0	
	Communication by LPB bus			
H 604.b0 H 604.b1	Synchronisation of local / system clock: b1 b0 0 0 Independent clock 0 1 System time without adjustment 1 0 System Master Clock		0 0	
H 604.b2	Setting of bus supply: 0 Centralized supply 1 Automatic supply by regulators		1	
H 604.b3	Display of bus supply : 0 OFF 1 ON		0	
H 604.b4	Not used		1	
H 604.b5 H 604.b6	Allocation of DHW to consumers: b6 b5 0 0 Local consumers only, 0 1 Consumers of same segment, 1 0 All consumers of system		0 0	
H 604.b7	Priority of LPB bus over power demand via 0 … 10 V input: 0 priority to external power demand 1 priority to LPB bus		0	
H 605	Device address I	0 … 16	1	
H 606	Segment address: 0 generator segment 1 … 14 consumer segments	0 … 14	0	
H 615	Function of programmable output K2 of LMU : 0 Inactive 7 Signal for hot air curtain function active 2 External alarm 8 Downstream pump for balancing vessel 3 Burner operating 9 Pump Q8 6 Pump of DHW network 12 0-10 V input active			
	Input / Output relay-operated Clip-ins (AGU2.51x)			
H 618	Function of programmable input of clip-in : 0 Inactive 3 Hot air curtain 1 Modem 4 Prescribed set point 2 Modem reverser 5 Prescribed power		0	
H 619	Function of the Ist programmable output of clip-in : 0 Inactive 7 Signal for hot air curtain function active 2 External alarm 8 Downstream pump for balancing vessel 3 Burner operating 12 0-10 V input active 6 Pump of DHW network		3	
H 620	Function of the 2nd programmable output of clip-in : 0 Inactive 7 Signal for hot air curtain function active 2 External alarm 8 Downstream pump for balancing vessel 3 Burner operating 12 0-10 V input active 6 Pump of DHW network		12	
H 622	Temperature set point for an input signal equal to 10 V, in prescribed set point mode (H618 = 4).	5 … 130 °C	100	
H 623	Threshold of 0 … 10V (x10) signal to authorize burner operation at minimum power, in prescribed power mode (H618 = 5)	5 … 95	25	
	Maintenance alerts			
P 629	Temporary acknowledgement of maintenance alert: 1 Acknowledgement		0	

Adjustment line	Function	Adjustment range	Default value	Client setting
H 630.b0	Activation / disactivation of maintenance alert: 0 Alert disactivated 1 Alert active		0	
H 630.b1 à b5	Not used		0	
H 630.b6	General acknowledgement of maintenance alert: 1 Acknowledgement		0	
H 630.b7	Not used		0	
H 632.b0	Pump Q8 active for LPB heat demand : 0 No 1 Yes		0	
H 632.b1	Not used		0	
H 632.b2	Pump Q8 active for a direct heating circuit heat demand: 0 No 1 Yes		0	
H 632.b3	Pump Q8 active for a DHW heat demand: 0 No 1 Yes		0	
H 632.b4 à b7	Not used		0	
H 634	Burner operating time in hours since last maintenance		0	
H 635	Number of burner start-ups since last maintenance		0	
H 636	Boiler operating time in months since last maintenance		0	
	Fault / Counter log			
H 700	*Counter of repetitions of logged fault n°1*			
H 701	*Burner phase during logged fault n°1 * (see below)*			
H 702	*Extended code of logged fault n°1*			
H 703	*Counter of repetitions of logged fault n°2*			
H 704	*Burner phase during logged fault n°2 * (see below)*			
H 705	*Extended code of logged fault n°2*			
H 706	*Counter of repetitions of logged fault n°3*			
H 707	*Burner phase during logged fault n°3 * (see below)*			
H 708	*Extended code of logged fault n°3*			
H 709	*Counter of repetitions of logged fault n°4*			
H 710	*Burner phase during logged fault n°4 * (see below)*			
H 711	*Extended code of logged fault n°4*			
H 712	*Counter of repetitions of logged fault n°5*			
H 713	*Burner phase during logged fault n°5 * (see below)*			
H 714	*Extended code of logged fault n°5*			
H 715	*Counter of repetitions of current fault*			
H 716	*Burner phase during current fault * (see below)*			
H 717	*Extended code of current fault*			
H 718	*Burner operating time*	*0 … 131070 h*	*0*	
H 719	*Operating time in heating mode*	*0 … 131070 h*	*0*	
H 720	*Operating time in DHW mode*	*0 … 131070 h*	*0*	
H 721	*Operating time in zone regulation mode*	*0 … 131070 h*	*0*	
H 722	*Start-up counter*	*0 … 327675*	*0*	
H 728	*Albatros Code of logged fault n°1*			
H 729	*Albatros Code of logged fault n°2*			
H 730	*Albatros Code of logged fault n°3*			
H 731	*Albatros Code of logged fault n°4*			
H 732	*Albatros Code of logged fault n°5*			
H 733	*Albatros Code of current fault*			

In italics: read-only parameters

** : Correspondance of burner phase codes:*

0, 1, 2	*Return to stand-by position*	*11*	*Pre-ignition (heating of ignition electrode)*
3	*Stand-by*	*12, 13, 14, 15*	*Safety period*
4	*Blockage of start-up*	*16*	*Post-ignition (maintenance of ignition rate)*
5, 6	*Fan ramping up to speed*	*17*	*Burner modulation*
7	*Preventilation*	*18, 19, 20, 21*	*Post-ventilation*
8, 9, 10	*Waiting position*	*22*	*Safety shut-down*