

INSTALLER INSTRUCTIONS

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IMPORTANT

When carrying out commissioning of the boiler, you are highly recommended to perform the following checks:

- Make sure that there are no liquids or inflammable materials in the immediate vicinity of the boiler.
- Make sure that the electrical connections have been made correctly and that the earth wire is connected to a good earthing system.
- Open the gas tap and check the soundness of the connections, including that of the burner.
- Make sure that the boiler is set for operation for the type of gas supplied.
- Check that the flue pipe for the outlet of the products of the combustion is unobstructed and has been properly installed.
- Make sure that any shutoff valves are open.
- Make sure that the system is charged with water and is thoroughly vented.
- Check that the circulating pump is not locked (CAUTION: Remember to release the pump coupled with the control panel, if necessary, to protect the electronic control card).
- Purge the system, bleeding off the air present in the gas pipe by operating the pressure relief valve on the gas valve inlet.

FONDERIE SIME S.p.A. of Via Garbo 27 - Legnago (VR) - Italy declares that its hot water boilers, which bear the CE mark under Gas Directive 90/396/CEE and are fitted with a safety thermostat calibrated to a maximum of 110°C, **are not subject** to application of PED Directive 97/23/CEE as they meet the requirements of article 1 paragraph 3.6 of the Directive.

1 DESCRIPTION OF THE BOILER

1.1 INTRODUCTION

“PLANET AQUAQUICK” is a series of wall-mounted natural gas boilers for C.H. and instantaneous D.H.W. production with the aid of a mini hot water tank.

These boilers are sealed chamber, designed and manufactured in accordance with European directives 90/396/EEC, 89/336/EEC, 73/23/EEC, 92/42/EEC and European standard EN 483. These appliances can be fired by natural

gas (methane) and butane gas (G30) or propane gas (G31).

The instructions given in this manual are provided to ensure proper installation and perfect operation of the appliance.

1.2 DIMENSIONS

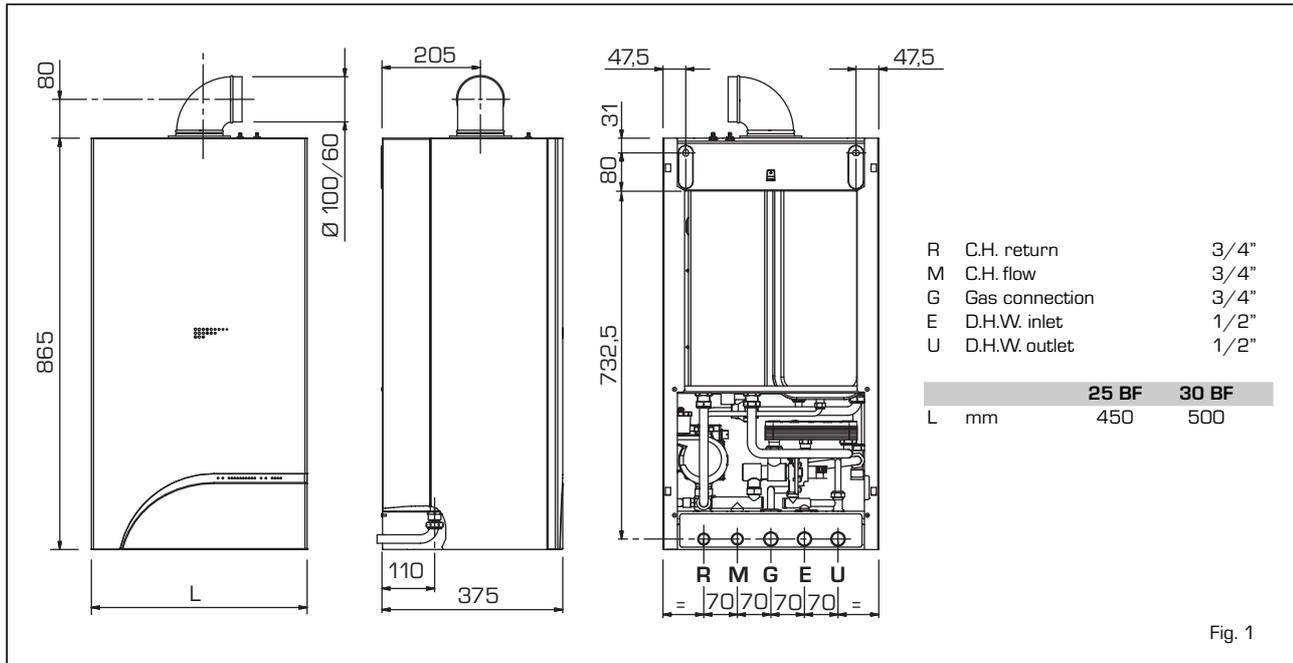


Fig. 1

1.3 TECHNICAL FEATURES

PLANET AQUAQUICK	25 BF	30 BF
Heat output		
Nominal	kW 23,3	29,0
	kcal/h 20.000	24.900
Minimum	kW 9,3	11,5
	kcal/h 8.000	9.900
D.H.W. heat output		
Nominal	kW 23,3	29,0
Heat input		
Nominal	kW 25,8	31,6
Minimum	kW 10,8	13,5
Water content	l 7,7	8,7
Adsorbed power consumption	W 190	200
Electrical protection grade	IP X4D	X4D
Maximum water head	bar 3	3
Maximum temperature	°C 85	85
Expansion vessel		
Water content	l 7	10
Preloading pressure	bar 1	1
C.H. setting range	°C 40÷80	40÷80
D.H.W. setting range	°C 35÷60	35÷60
Smokes temperature	°C 135	150
Smokes flow	gr/s 19,0	20,3
Category	II2H3+	II2H3+
Type	B22	

C12-32-42-52 C12-32-42-52

PLANET AQUAQUICK	25 BF	30 BF
D.H.W. production		
D.H.W. flow rate EN 625 ⁽¹⁾	l/min 10,8	13,1
Continuous D.H.W. flow rate Δt 30°C	l/min 11,1	13,8
Minimum D.H.W. flow rate	l/min 2	2
Minimum D.H.W. pressure	bar 0,5	0,5
Maximum D.H.W. pressure	bar 7	7
Microstorage content	l 4	4
Weight	kg 52	55
Main burner nozzles		
Quantity	n° 13	15
Methane	ø mm 1,30	1,30
G30 - G31	ø mm 0,75	0,76
Gas consumption ⁽²⁾		
Methane	m ³ /h 2,72	3,34
Butane (G30)	kg/h 2,02	2,48
Propane (G31)	kg/h 1,99	2,40
Burner gas pressure		
Methane	mbar 2÷9,6	2,3÷11,1 ⁽³⁾
Butane (G30)	mbar 5÷27	5,5÷26,8 ⁽³⁾
Propane (G31)	mbar 5÷35	6,9÷34,9 ⁽³⁾
Gas supply pressure		
Methane	mbar 20	20
Butane (G30)	mbar 30	30
Propane (G31)	mbar 37	37

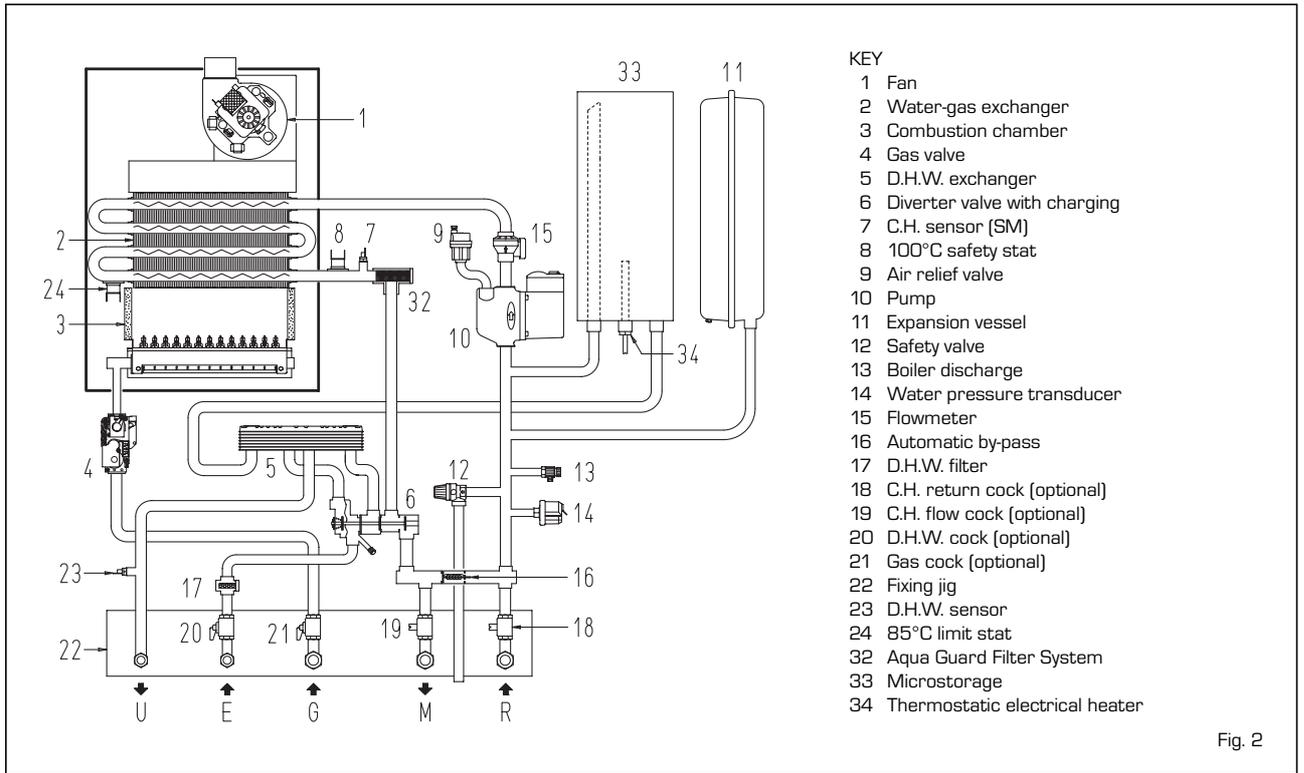
⁽¹⁾ Flow calculated with a fixed temperature on the hot-water service potentiometer of 60°C for a maximum period of 10 minutes

⁽²⁾ Os caudais de gás indicados foram obtidos tendo em conta o poder calorífico em condições normais a 15°C - 1013 mbar

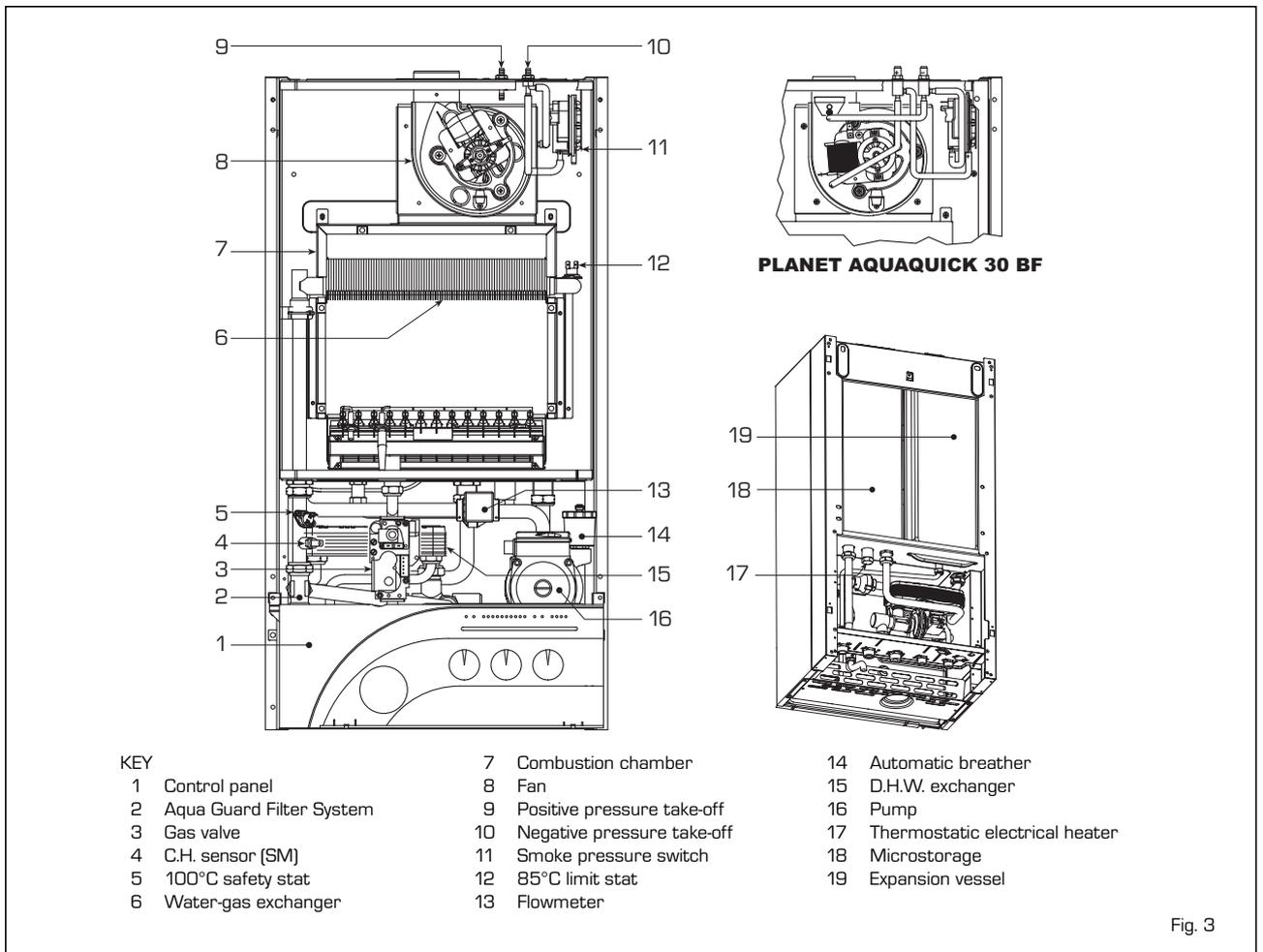
⁽³⁾ Differential measure between the pressure upstream of the gas valve and the depression in the combustion chamber.



1.4 FUNCTIONAL DIAGRAM



1.5 MAIN COMPONENTS



2 INSTALLATION

The boiler must be installed in a fixed location and only by specialized and qualified firms in compliance with all instructions contained in this manual.

Furthermore, the installation must be in accordance with current standards and regulations.

2.1 VENTILATION OF BOILER ROOM

The "PLANET AQUAQUICK" version boilers can instead be installed in any domestic environment without any location restrictions or comburent air requirements.

2.3 ACCESSORIES AVAILABLE UPON REQUEST FOR CONNECTION WITH HEATING SYSTEM

The following optional accessories are available to facilitate water and gas connection of the boiler with the heating system:

- Installation plate, code 8075407
- Curve kit, code 8075423
- Cocks kit, code 8091806
- Replacement wall kit for the other makes, code 8093900.

Detailed instructions for assembly of the unions are provided with the kits.

2.4 CONNECTING UP SYSTEM

To protect the heat system from damaging corrosion, incrustation or deposits, after installation it is extremely important to clean the system using suitable products such as, for example, Sentinel X300 or X400.

Complete instructions are provided with the products but, for further information, you may directly contact GE Betz.

For long-term protection against corrosion and deposits, the use of inhibitors such as Sentinel X100 is recommended after cleaning the system.

It is important to check the concentration of the inhibitor after each system modification and during maintenance following the manufacturer's instructions (specific tests are available at your dealer).

The safety valve drain must be connected to a collection funnel to collect any discharge during interventions. If the heating system is on a higher floor than the boiler, install the on/off taps supplied in kit code 8091806 on the heating system delivery/return pipes.

WARNING:

Failure to clean the heat system or add an adequate inhibitor invalidates the device's warranty.

Gas connections must be made in accordance with current standards and regulations. When dimensioning gas pipes from

the meter to the module, both capacity volume [consumption] in m³/h and gas density must be taken into account.

The sections of the piping making up the system must be such as to guarantee a supply of gas sufficient to cover the maximum demand, limiting pressure loss between the gas meter and any apparatus being used to not greater than:

- 1.0 mbar for family II gases (natural gas);
- 2.0 mbar for family III gases (butane or propane).

An adhesive data plate is stuck inside the front panel; it contains all the technical data identifying the boiler and the type of gas for which the boiler is arranged.

2.4.1 Filter on the gas pipe

The gas valve is supplied ex factory with an inlet filter, which, however, is not adequate to entrap all the impurities in the gas or in gas main pipes.

To prevent malfunctioning of the valve, or in certain cases even to cut out the safety

device with which the valve is equipped, install an adequate filter on the gas pipe.

2.6 SYSTEM FILLING

The boiler and the heating system are using the fill cock on the pressure switch valve (2 fig. 4). The charge pressure, with the system cold, must be **1 bar**.

Filling must be done slowly so as to allow any air bubbles to be bled off through the air valves. Should the pressure have risen well above the limit expected, discharge the over pressure by opening the pressure-relief valve.

Once the filling has been completed, close the filling tap.

2.7 COAXIAL DUCT Ø 60/100

The air inlet-smoke outlet assembly, code 8084813, is included in the standard supply of the appliance complete with mounting instructions.

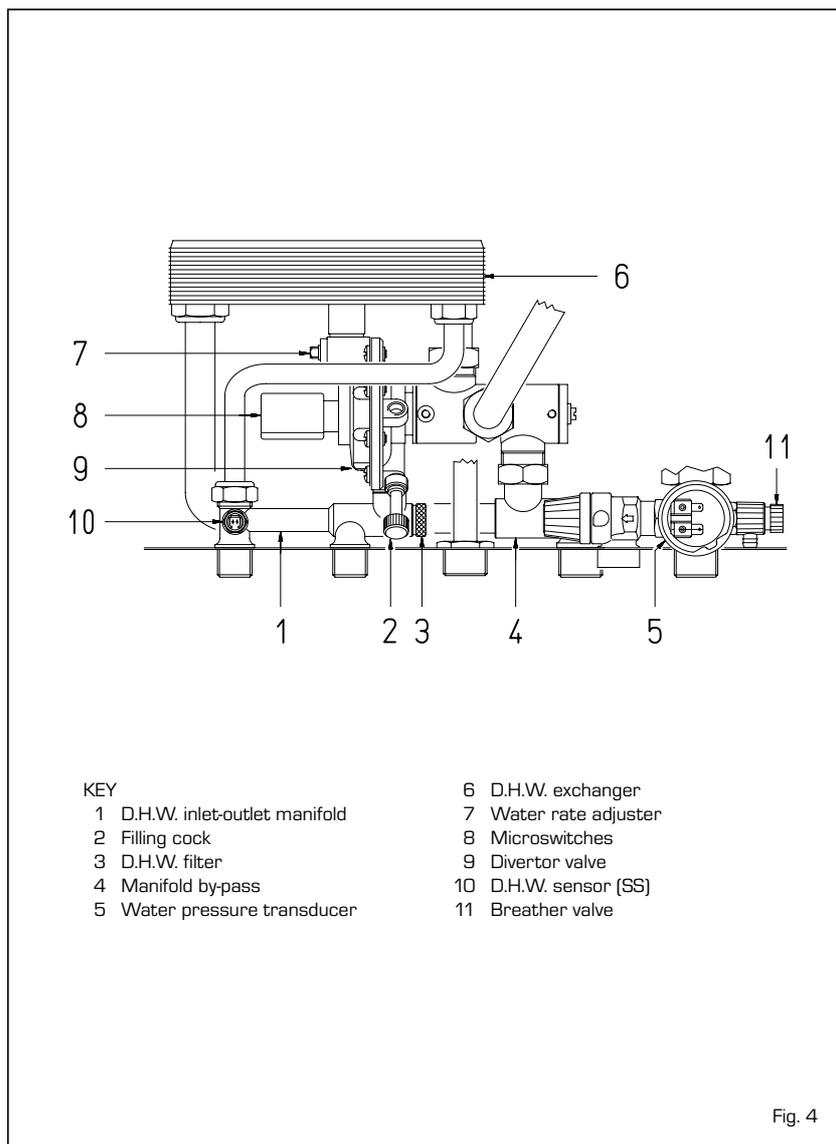


Fig. 4



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2.7.1 Installation of the screen

The screen is normally supplied together with boiler version "30 BF". See fig. 8 for positioning.

ATTENTION: Install the screen only when the length of the $\varnothing 60/100$ coaxial pipe is less than 1 m.

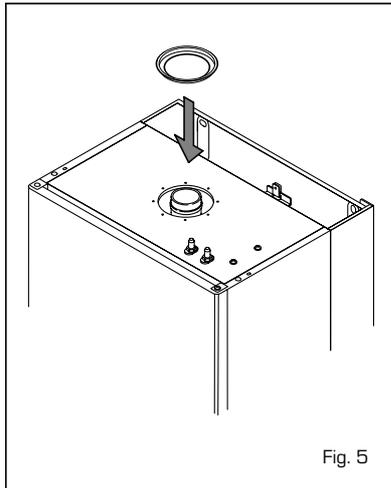


Fig. 5

2.7.2 Coaxial duct accessories

The accessories to be used for this type of installation and some of the connecting systems that may be adopted are illustrated in fig. 6.

With the pipe bend included in the kit, the maximum length of the piping should not exceed 3 meter.

When the vertical extension code 8086908 is used, the terminal part of the pipe must always come out horizontally.

2.7.3 Coaxial duct outlet on the roof

The accessories to be used for this type of installation and some of the connecting systems that may be adopted are illustrated in fig. 7.

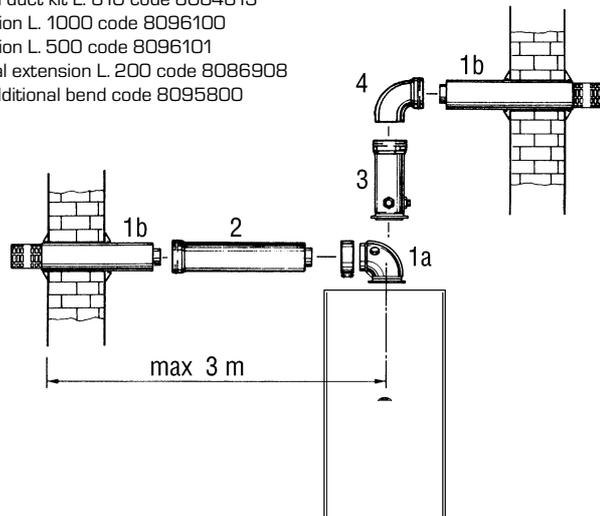
It is possible to insert up to a maximum of three extensions and reach a maximum rectilinear distance of 3.7 meter. Should it be necessary to make two changes of direction in the pipe development, the maximum length of the pipe must not exceed 2 meter.

2.8 SEPARATE PIPES $\varnothing 80$

When installing the pipes, follow closely the requirements of the current standards, as well as the following practical pointers:

KEY

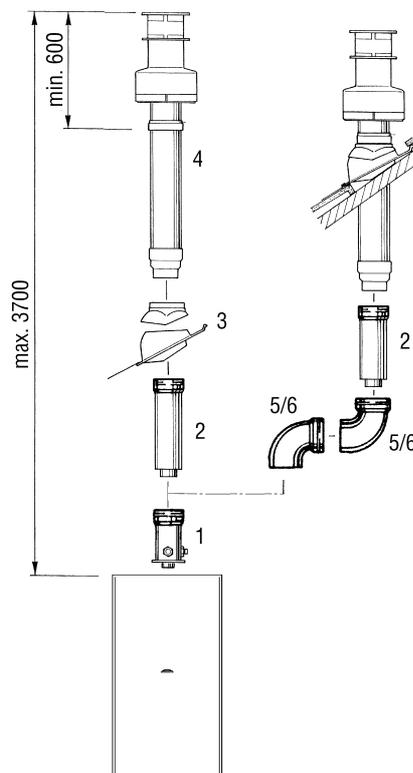
- 1a-b Coaxial duct kit L. 810 code 8084813
- 2a Extension L. 1000 code 8096100
- 2b Extension L. 500 code 8096101
- 3 Vertical extension L. 200 code 8086908
- 4 90° additional bend code 8095800



IMPORTANT:

- Each additional 90° curve installed reduces the available length by 0.90 metres.
- Each additional 45° curve installed reduces the available length by 0.45 metres.

Fig. 6



KEY

- 1 Vertical extension L. 200 code 8086908
- 2a Extension L. 1000 code 8096100
- 2b Extension L. 500 code 8096101
- 3 Tile with articulation joint code 8091300
- 4 Roof outlet terminal L. 1284 code 8091200
- 5 Supplementary 90° elbow code 8095800
- 6 Supplementary 45° elbow code 8095900

Fig. 7

- With direct intake from outside, when the pipe is longer than 1 m, you are recommended to insulate the piping so as to prevent formation of dew on the outside of the piping during particularly hard periods of the year.
- With the outlet pipe outside the building or in cold indoor environments, insulation is necessary to prevent burner failure in starting.
In such cases, provide for a condensate-collector system on the piping.
- If a segment of the flue passes through a flammable wall, this segment must be insulated with a glass wool pipe insulator 30 mm thick, with a density of 50 kg/m³.

The maximum overall length of the intake and exhaust ducts depends on the head losses of the single fittings installed (excluding the doublers) and must not be greater than 7,00 mm H₂O ("25" version) and 11,00 mm H₂O ("30" version).

For head losses in the fittings, refer to Table 2.

2.8.1 Separate pipe accessories

Kit code 8093000 is supplied for this purpose (fig. 8).

The sectored diaphragm is to be used according to the maximum head loss allowed in both pipes, as given in fig. 8/a.

The complete range of accessories necessary for satisfying all installation requirements is reported in fig. 9.

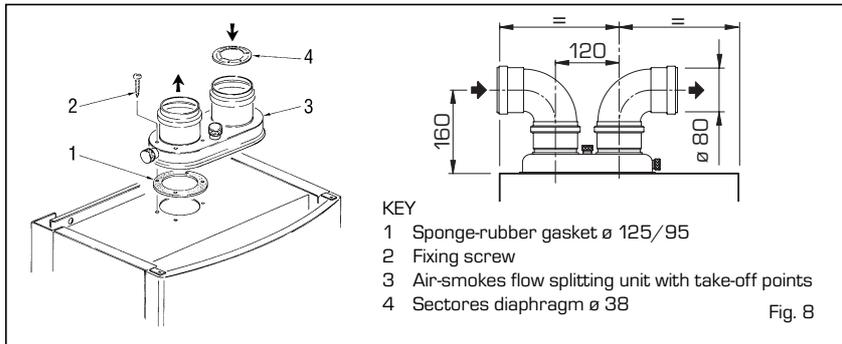
TABLE 2

Accessories ø 80	Head loss (mm H ₂ O)					
	"25 BF" version			"30 BF" version		
	Inlet	Outlet	Roof outlet	Inlet	Outlet	Roof outlet
90° elbow MF	0,30	0,40	-	0,30	0,50	-
45° elbow MF	0,20	0,30	-	0,20	0,40	-
Extension L. 1000 (horizontal)	0,20	0,30	-	0,20	0,40	-
Extension L. 1000 (vertical)	0,30	0,20	-	0,30	0,30	-
Outlet terminal	-	0,30	-	-	0,40	-
Intake terminal	0,10	-	-	0,10	-	-
Doubler fitting	0,20	-	-	0,30	-	-
Roof outlet terminal L.1390	-	-	0,50	-	-	0,60
Tee condensation outlet	-	1,00	-	-	1,10	-

Example of allowable installation calculation ("25 BF" version) in that the sum of the head losses of the single fittings is less than 7,00 mm H₂O:

	Inlet	Outlet
7 m horizontal pipe ø 80 x 0,20	1,40	-
7 m horizontal pipe ø 80 x 0,30	-	2,10
n° 2 90° elbows ø 80 x 0,30	0,60	-
n° 2 90° elbows ø 80 x 0,40	-	0,80
n° 1 terminal ø 80	0,10	0,30
Total head loss	2,10	+ 3,20 = 5,3 mm H₂O

With this total head loss, remove the ø 38 baffle from the intake pipe.



"25 BF" version		
Sectored diaphragm to remove	Total head loss	
	mm H ₂ O	Pa
1	0 ÷ 2	0 ÷ 19,6
2	2 ÷ 3	19,6 ÷ 29,4
4	3 ÷ 4	29,4 ÷ 39,2
6	4 ÷ 5	39,2 ÷ 49,0
Remove diaphragm	5 ÷ 7	49,0 ÷ 68,6

"25 BF" version B22 type		
Sectored diaphragm to remove	Total head loss	
	mm H ₂ O	Pa
1	0 ÷ 1	0 ÷ 9,8
2	1 ÷ 2	9,8 ÷ 19,6
3	2 ÷ 4	19,6 ÷ 39,2
4	4 ÷ 5	39,2 ÷ 49,0
5	5 ÷ 6	49,0 ÷ 58,8
6	6 ÷ 7	58,8 ÷ 68,6
Remove diaphragm	7 ÷ 8	68,6 ÷ 78,4

"30 BF" version		
Sectored diaphragm to remove	Total head loss	
	mm H ₂ O	Pa
1	0 ÷ 2	0 ÷ 19,6
2	2 ÷ 3	19,6 ÷ 29,4
3	3 ÷ 4	29,4 ÷ 39,2
4	4 ÷ 5	39,2 ÷ 49,0
5	5 ÷ 6	49,0 ÷ 58,8
6	6 ÷ 7	58,8 ÷ 68,6
Remove diaphragm	7 ÷ 11	68,6 ÷ 107,8

SECTOR OF DIAPHRAGM

Fig. 8/a

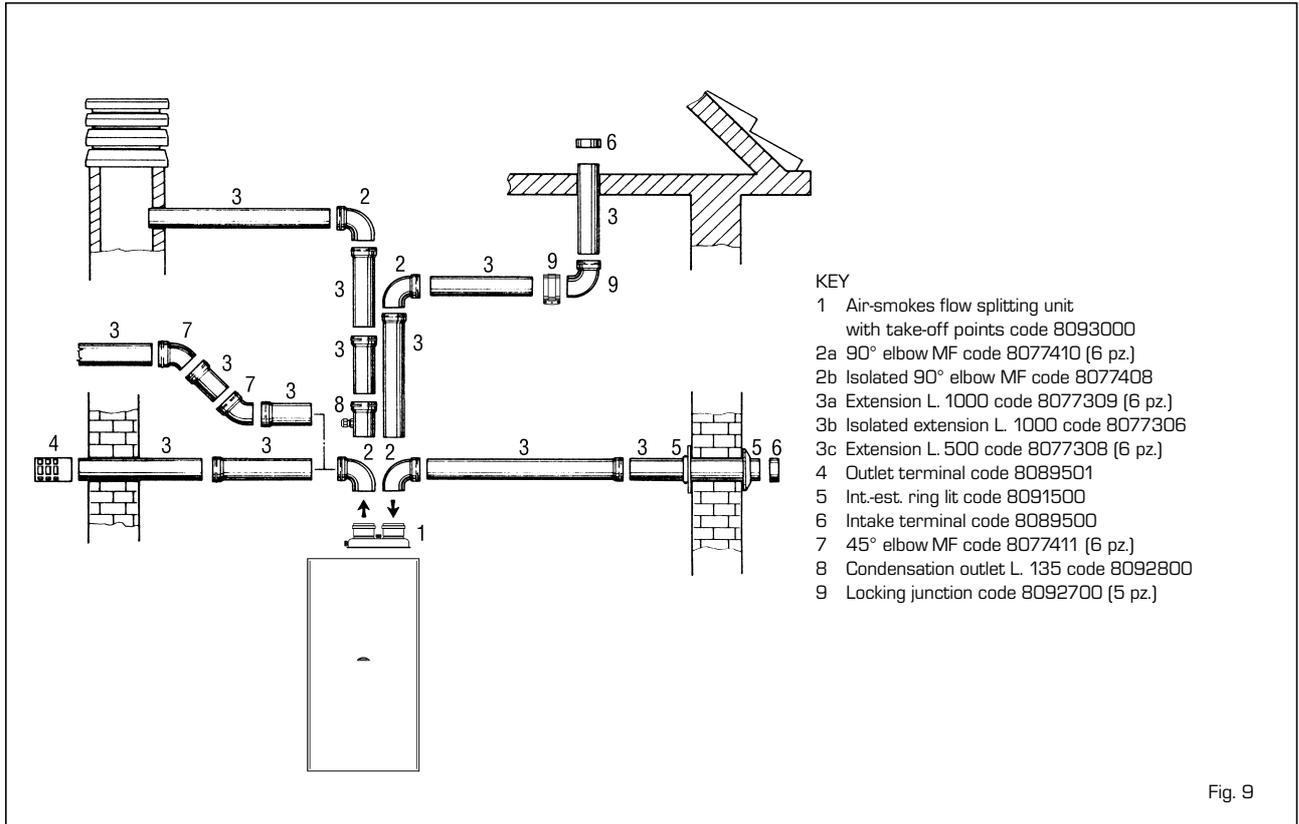


Fig. 9

2.8.2 Separate-pipes roof outlet

The accessories to be used for this type of installation and some of the connecting systems that may be adopted are illustrated in fig. 10.

There is the possibility of doubling the air-intake and smoke-outlet pipes and then bringing them back together again so as to obtain a concentric discharge by using the doubler fitting [7 fig. 10].

For this type of discharge the sum of the maximum rectilinear development allowed for the pipes must not exceed 7,00 mm H₂O ("25" version) and 11,00 mm H₂O ("30" version).

When calculating the lengths of pipe, take into account the parameters given in the **Table 2**.

2.9 FORCED OUTLET (B22 type)

The "PLANET AQUAQUICK 25 BF" version can also be installed as a **B22 type** apparatus by assembling the stub pipe inlet/outlet kit code 8089950.

The kit comes with a sector diaphragm, instruction sheet and a label with the room aeration warnings to be attached to the boiler casing.

The sector diaphragm must be used according to the maximum load loss allowed by the duct, as indicated in fig. 8/a. The complete range of fittings required to carry out the installation is given in fig. 11.

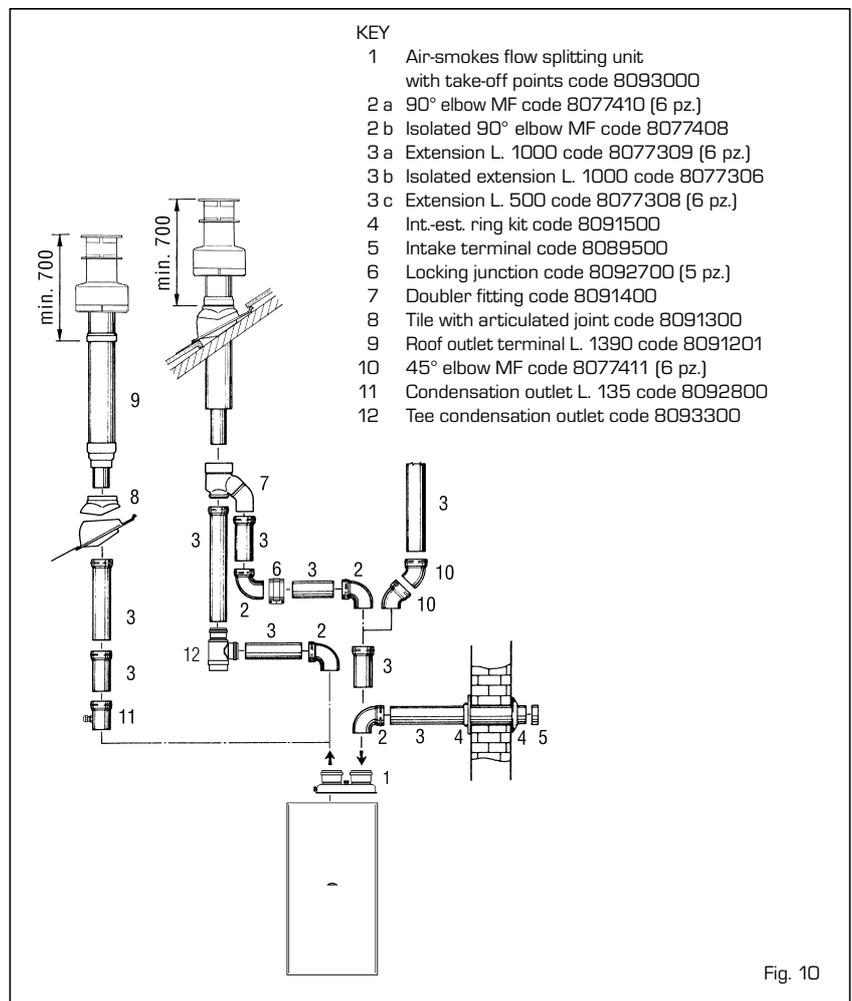
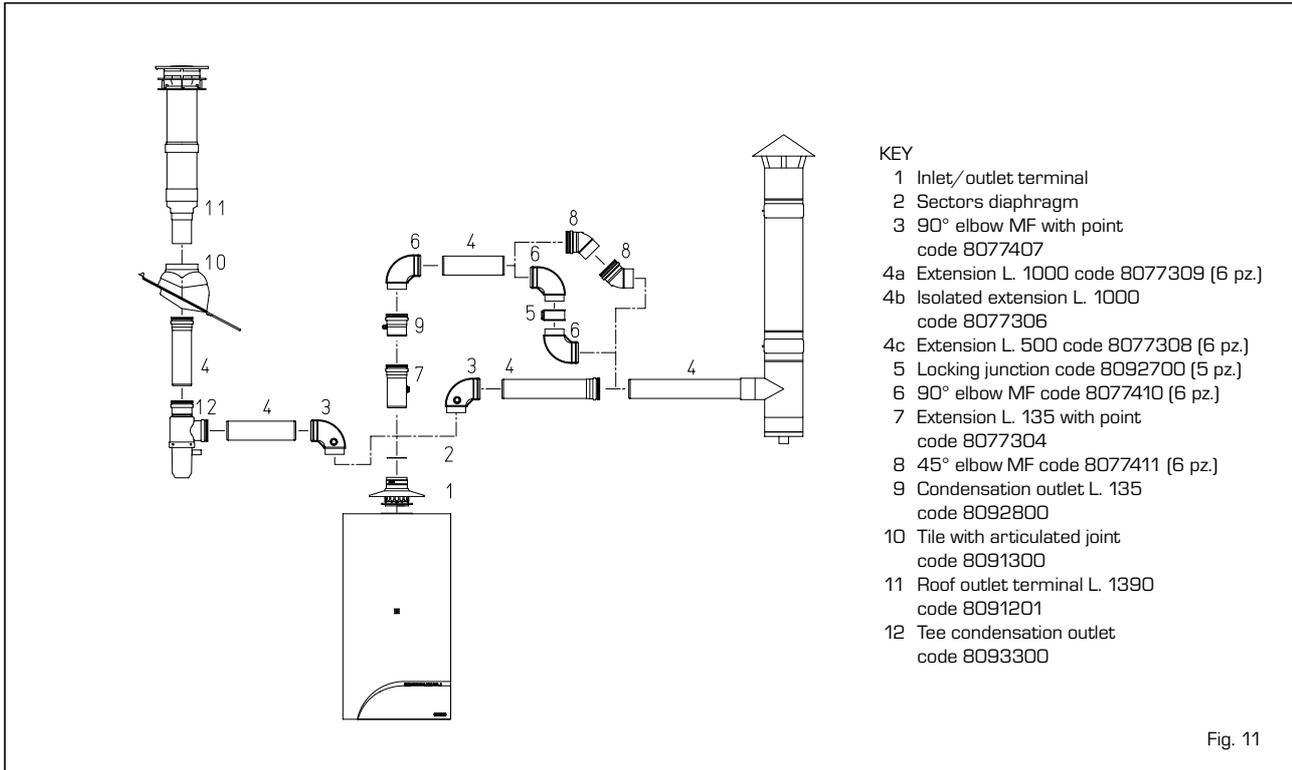


Fig. 10



The maximum length of the duct is determined by the load losses of the single attached fittings (excluding the inlet/outlet stub pipe) and should not be greater than 8.00 mm H₂O.

To calculate the load loss of the individual fittings attached see **Table 2**.

2.10 POSITIONING THE OUTLET TERMINALS

The outlet terminals for forced-draught appliances may be located in the external perimeter walls of the building.

To provide some indications of possible solutions, **Table 1** gives the minimum distances to be observed, with reference to the type of building shown in fig. 12.

TABLE 1

Siting of terminal	Appliances from 7 to 35 kW (distances in mm)
A - below openable window	600
B - below ventilation opening	600
C - below eaves	300
D - below balcony (1)	300
E - from adjacent window	400
F - from adjacent ventilation opening	600
G - from horizontal or vertical soil or drain pipes (2)	300
H - from corner of building	300
I - from recess in building	300
L - from ground level or other treadable surface	2500
M - between two terminals set vertically	1500
N - between two terminals set horizontally	1000
O - from a surface facing without openings or terminals	2000
P - as above but with openings and terminals	3000

- 1) Terminals below a practicable balcony must be located in such a way that the total path of the smoke from its outlet point from the terminal to its outlet point from the external perimeter of the balcony, including the height of possible railings, is not less than 2000 mm.
- 2) When siting terminals, where materials that may be subject to the action of the combustion products are present in the vicinity, e.g., eaves, gutters and downspouts painted or made of plastic material, projecting timberwork, etc., distances of not less than 1500 mm must be adopted, unless adequate shielding is provided to guard these materials.

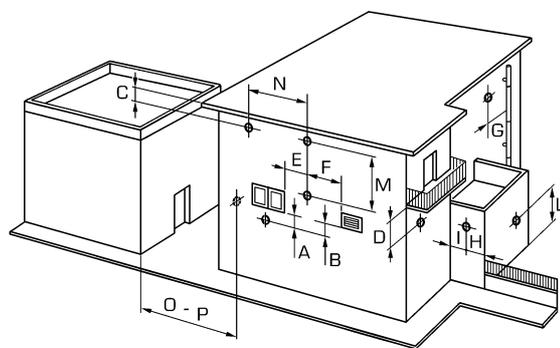


Fig. 12

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2.11 ELECTRICAL CONNECTION

The boiler is supplied with an electric cable. Should this require replacement, it must be purchased exclusively from SIME.

The electric power supply to the boiler must be 230V-50Hz single-phase through a fused main switch, with at least 3 mm spacing between contacts.

Respect the L and N polarities and the earth connection.

NOTE: Device must be connected to an efficient earthing system.. SIME declines all responsibility for injury or damage to persons, animals or things, resulting from the failure to provide for proper earthing of the appliance. Device must be connected to an efficient earthing system.

2.11.1 Timer-thermostat connection (fig. 13 pos. A)

To gain access to the electronic board connector (3), remove the control panel cover

and connect the timer-thermostat to the terminals TA after having removed the jumper. The timer-thermostat, recommended for better room temperature control, must be class II as specified by standard EN 60730.1 (clean contact).

WARNING: Applying mains voltage to the terminals of connector (3) will irreparably damage the control board. Make sure that any connections to be made are not carrying mains voltage.

2.11.2 "Logica Remote Control" connection (fig. 13 pos. B)

The electrical plant must comply with local standards and all cables must comply with low safety voltage requirements of EN 60730. For lengths up to 25 m, use cables of section 0.25 mm², for longer lengths up to 50 m use cables of section 0.5 mm². First of all, assemble and wire the socket (2), then insert the equipment which will start-up as soon as it receives

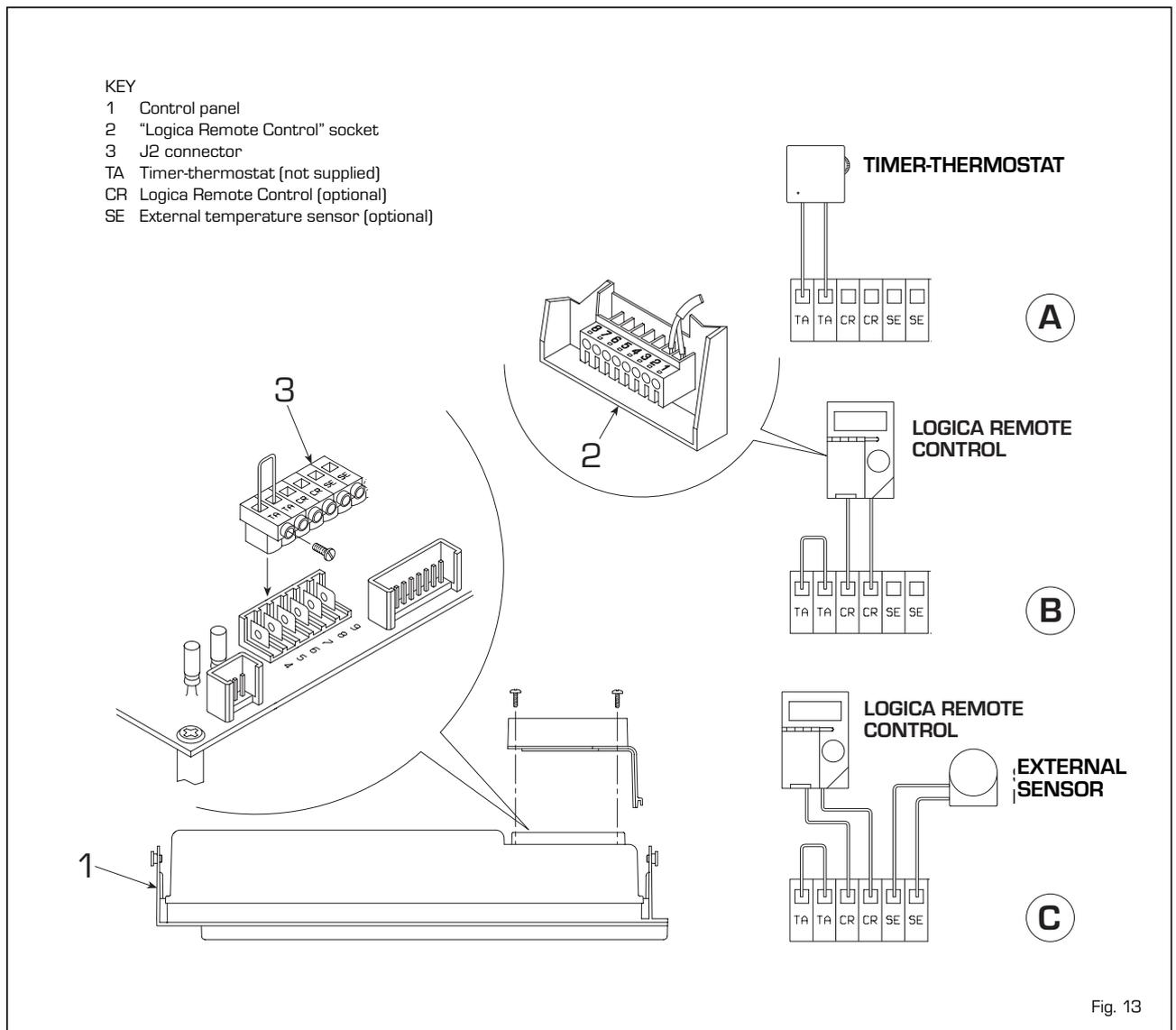
current. To gain access to connector (3) remove the control panel cover and connect the climate regulator to terminals CR (6-7).

WARNING: External voltage must not be connected to terminals 1-2-3-4 of the socket (2). On terminals 3-4 can be connected a telephone remote switch with a zero potential contact or a window contact. Equipment for the checking of civil plants via a telephone line includes the model TEL 30.4 LANDIS & STAFA.

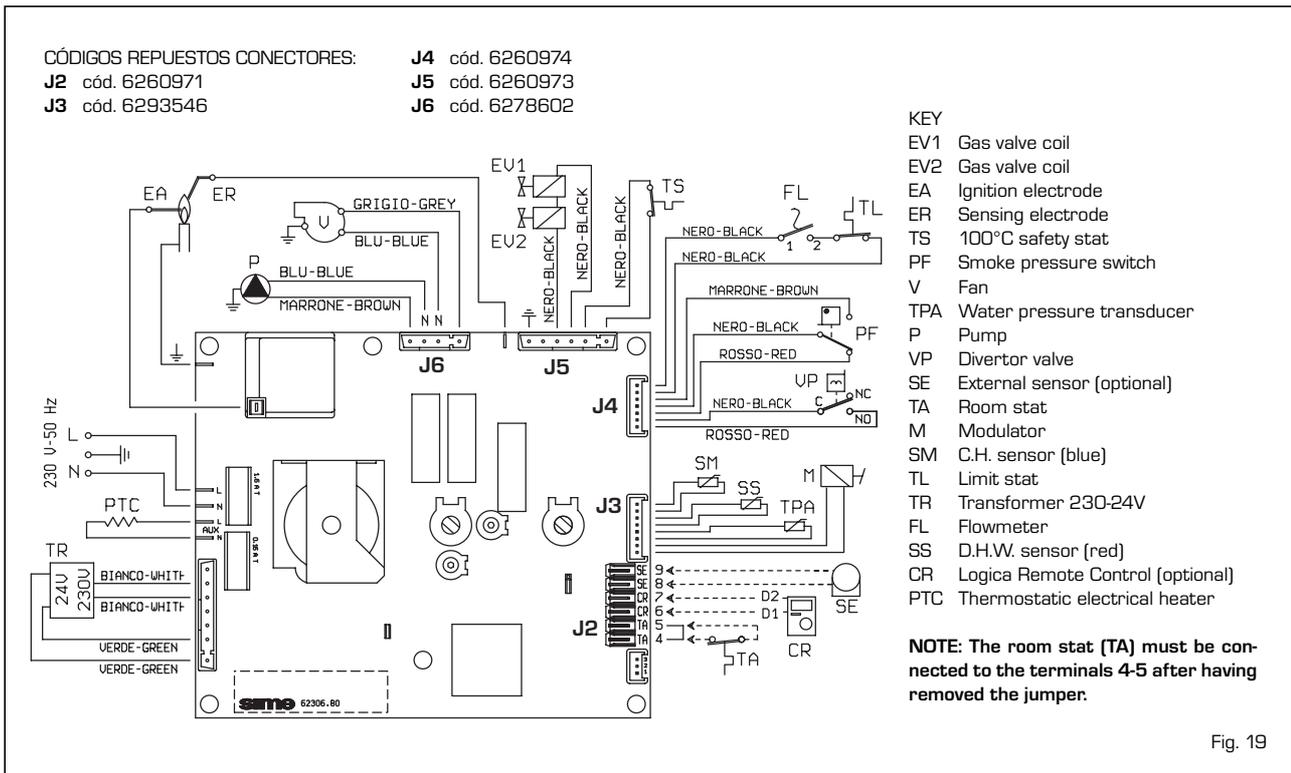
2.11.3 External temperature sensor connection (fig. 13 pos. C)

The cables must comply with low safety voltage requirements of EN 60730.

For lengths up to 25 m, use cables of section 0.25 mm², for longer lengths up to 50 m use cables of section 0.5 mm². To gain access to boiler connector (3) remove the control panel cover and connect the external temperature sensor to terminals SE (8-9).



2.11.4 Wiring diagram



2.12 LOGICA REMOTE CONTROL

All the boiler's functions can be managed by an optional digital multifunctional device code 8092204 for the remote of the boiler itself and for regulating room climatic conditions with an operational reserve of 12 hours. The heating circuit is controlled by the room temperature sensor built-in the equipment or by the atmospheric conditions, with or without environmental inflow, if the boiler is connected to an external sensor.

Characteristics:

- Ergonomic control unit divided according to function (control levels).
- Clear division of basic functions:
 - operating regime, correction of set value and presence button are directly accessible;
 - Different real current values are accessible through the "info" button;
 - other functions can be programmed after the cover has been opened;
 - special service level with protected access;
- Each setting or modification is displayed and confirmed.
- Time setting (special line for changing BST/CET).
- Heating programme with max. 3 heating periods per day, individually selectable.
- Copy function for easy transfer of heating programme to the next or previous day.

- Holiday programme: the programme is interrupted for the holiday period and automatically restarted on returning home.
- Option to return the heating program to default values.
- Programming lock (child safety).

Functions:

- Delivery temperature control guided by the atmospheric conditions, taking into account the dynamics of the building.
- Delivery temperature control guided by atmospheric conditions with influence of ambient temperature.
- Ambient temperature control only.
- Adjustable influence of ambient temperature shift.
- Switch-on and switch-off optimisation.
- Rapid lowering.
- ECO functions (daily heating limiter, automatic summer/winter switch-over).
- Controllable maximum delivery temperature limit (specifically for floor plants).
- Limitation of increase in pre-set delivery temperature.
- Anti-freeze protection for buildings.
- Hourly programming of the tank unit temperature on two levels: comfort and reduced.
- Domestic hot water control with nominal value requirement and enable.
- Connection to room sensor or switching of operating regime through the telephone system with external contact or

- through a window contact.
- Anti-bacterial.

2.12.1 Installation

The unit must be installed in the main living room. For installation, follow the assembly instructions inserted in the package. At this point, with the selector knob on (), the installer can adjust the basic parameters settings according to the individual needs (point 2.10.2).

If there is a thermostatic radiator valve fitted, this must be set to maximum.

2.12.2 Installation settings

The settings for the basic operating parameters for individual needs are reported in the instruction leaflet supplied with the "Logica Remote Control" and in the section reserved for the user in this manual. For further adjustments which can be carried out by the installer, the "Logica Remote Control" offers a level of service and parameterising which can only be accessed through a special combination of buttons. To activate this level of service or parameterising press buttons [▲] and [▼] least 5 seconds. This will activate the parameterising level. Then use the same arrow buttons to select the individual input lines and adjust the values with [−] or [+].

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HEATING CIRCUIT SETTINGS

Antifreeze protection "Pre-set ambient temperature value"	51	Heating takes place up to this pre-set value if the plant is activated in standby (e.g. holidays). In this way, the building antifreeze function is active, preventing an excessive lowering of the ambient.
Summer/Winter switch-over temperature	52	This parameter regulates the temperature of the automatic summer/winter switch-over.
Type of control: 0 = with ambient influence 1 = without ambient influence	53	This parameter de-activates the ambient influence and as a result all the optimisations and adaptations. If a valid external temperature is not transmitted, the controller switches to the pure ambient control guide variable.
Influence of ambient temperature	54	If the ambient controller is used only as a remote control (placed in the reference room and without an external sensor connected), the value must be set at 0 (zero). If the change in ambient temperature from the pre-set value remains high during the entire day, the influence must be increased. If the ambient temperature is around the pre-set value (control oscillation), the influence must be reduced. Note: If the ambient temperature influence constant is set at 0, the adaptation of the heating curve is deactivated. In this case, parameter 57 will have no effect at all.
Maximum limit of delivery temperature	55	The delivery temperature is limited to the maximum set value.
Variation of the maximum speed of the delivery temperature	56	The increase per minute of the prescribed delivery temperature value sent in °C is limited to the imposed value.
Activation of adaptation	57	With the activation of the adaptation, the pre-set value transmitted to the boiler regulator is adapted to the effective heat need. The adaptation functions with both the atmospheric guide with ambient influence and with pure ambient control. If the "Logica Remote Control" is set as a remote control only, the adaptation must be deactivated.
Optimisation of switch-on time	58	If the switch-on time optimisation is active, the "Logica Remote Control" modifies the heating gradient until it finds the optimum heating point 0 = off 1 = on
Heating gradient	59	The "Logica Remote Control" selects the switch-on time such that the set value has more or less been reached at the start of the usage time. The more severe the night-time cooling, the earlier the heating time starts. Example: Current ambient temperature 18.5°C Nominal ambient temperature 20°C Heating gradient 30 min/K Presetting of switch-on time: 1.5 K x 30 min/K = 45 minutes 00 means that the switch-on time has not been pre-set (function disabled).
Presetting switch-off time (00 = off)	60	If the switch-off time optimisation is active (value > 0), the "Logica Remote Control" modifies the pre-set time until it finds the optimum switch-off time..

SETTING THE HOT-WATER SERVICE PARAMETERS

Reduced hot water temperature value	61	The hot water may be set to a reduced temperature value, such as 40°C, which is outside the comfort zone, such as 60°C (daily programme 8).
Hot-water service filling	62	<p>0 = 24 hours/ day - Hot water is always available at the temperature set with user parameter n°3.</p> <p>1 = standard - Hot water according to the daily heating programme. In the comfort areas of heating the temperature of the boiler unit is regulated to the value set with user parameter n° 3. In the reduced areas of heating the temperature of the boiler unit is regulated to the value set with parameter n° 61 of the service level.</p> <p>2 = service disconnected</p> <p>3 = second daily programme (8) - Every day of the week the temperature of the hot water is set according to programme 8. In this case there is a single programming for all the days of the week and three time zones are available. In the time spans set the temperature of the boiler unit is regulated according to that set in parameter n°3. In the remaining hours the boiler unit is controlled to the temperature set with parameter n° 61 the of service level.</p>

SERVICE VALUES

Final user level 2 programming block	63	<p>This block (1) can be activated to display all the parameters without modifying them. Pressing buttons [-] or [+] displays "OFF".</p> <p>WARNING: The activation block can be deactivated temporarily by pressing buttons [▲] and [+] simultaneously; a confirmation sign appears on the display. At this point press simultaneously the buttons [▲] and [▼] for at least 5 seconds. To permanently remove the activation block, set parameter 63 on 0.</p>						
Entrance function terminal 3-4	64	<p>The freely programmable input (terminals 3 and 4 of the socket) allows three different functions to be activated. The parameter has the following significance:</p> <p>1 = If an external sensor is connected, the display will show the temperature of the external sensor (_ _ = no sensor connected, function disabled).</p> <p>2 = With an external contact, it is possible to switch-over to "reduced pre-set value of the ambient temperature".</p> <p>3 = With an external contact, it is possible to switch-over to "reduced pre-set value of the antifreeze ambient temperature" (short circuit 0 0 0 or interruption _ _ _). The display shows the current status of the external contact.</p>						
Operating mode of external contact	65	<p>If the entrance (terminals 3 and 4 of the base) is connected to a zero potential external contact (parameter 64 = 2 or 3), the operating mode of the contact can be determined (remote telephone switch or window contact). The operating mode specifies the status of the contact in which the required function is active.</p> <table border="0" data-bbox="710 1590 1396 1657"> <tr> <td>Display:</td> <td>Operating mode closed (short circuit)</td> <td>0 0 0</td> </tr> <tr> <td></td> <td>Operating mode open (interruption)</td> <td>_ _ _</td> </tr> </table>	Display:	Operating mode closed (short circuit)	0 0 0		Operating mode open (interruption)	_ _ _
Display:	Operating mode closed (short circuit)	0 0 0						
	Operating mode open (interruption)	_ _ _						
External and ambient sensor influence	66	<p>Determines the mix ratio between the internal and external ambient sensor when parameter 64 = 1.</p> <p>0 % = internal sensor only active (0% external - 100% internal) 50 % = mean value of external + internal sensor 100 % = external sensor only active</p> <p>The set mix is used for ambient control and display. If the external sensor is short circuited or interrupted, the operation continues with the internal sensor.</p>						
Anti-bacterial function (with storage capacity boiler unit)	69	<p>This function allows the hot water to be brought to a high temperature once a week in order to eliminate eventual pathogenic agents. It is active every Monday for a maximum duration of 2.5 hours at a delivery temperature of 65°C.</p> <p>0 = not active 1 = active</p>						

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2.12.3 Gradient of the characteristic heating curve

The gradient of the characteristic heating curve is imposed on the current value "15" of Logica.

Increasing the gradient as shown in the drawing of fig. 15, the delivery temperature increases in correspondence to the outside temperature.

EXAMPLE: Choosing a gradient of 15 with an outside temperature of - 10°C we shall have a delivery temperature of 60°C.

2.13 EXTERNAL TEMPERATURE SENSOR

The "Logica Remote Control" can be connected to an external temperature sensor available as an optional extra (code 8094100). This configuration ensures and maintains the required temperature constant in the room. The ambient temperature is, in fact, indicated and evaluated as the calculated mean of the value measured inside and outside the dwelling.

For installation, follow the assembly instructions inserted in the package.

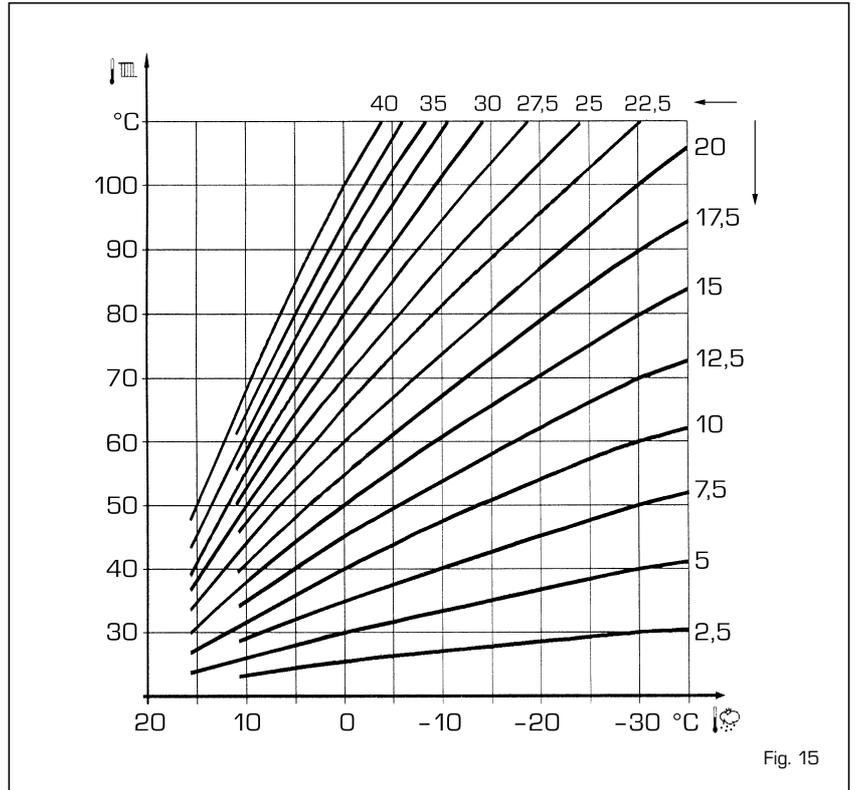


Fig. 15

3 CHARACTERISTICS

3.1 ELECTRONIC BOARD

The electronic boards are manufactured in compliance with the EEC 73/23 low-voltage directives. They are supplied with 230V and, through a built-in transformer, send a voltage of 24V to the following components: gas valve, safety stat, C.H. and D.H.W. sensor, external temperature sensor (optional), modulator, micro divertor valve, flow switch safety valve, water pressure transducer, exhaust gas pressure switch, timer-thermostat or "Logica Remote Control".

An automatic and continuous modulation system enables the boiler to adjust the heat output to the various system requirements or the User's needs. The electronic components are guaranteed against a temperature range of 0 to +60°C.

3.1.1 Fault finding

The indicator leds signalling irregular and/or incorrect operation of the equipment are indicated in fig. 16.

3.1.2 Devices

The electronic board is equipped with the

following devices:

- "POT. RISC." trimmer (10 fig. 17)
Sets the maximum heating power value. To increase the value turn the trimmer clockwise; to reduce the value turn the trimmer anticlockwise.
- "POT. ACC." trimmer (6 fig. 17)
Trimmer to vary the pressure level upon ignition (STEP), of the gas valve. According to the type of gas for which the boiler is equipped, the trimmer must be regulated so as to obtain a pressure of approx. 3 mbar at the burner for methane gas and 7 mbar for butane gas (G30) and propane gas (G31). To increase pressure, turn the trimmer clockwise; to reduce pressure, turn the trimmer counterclockwise. The slow ignition pressure level can be set during the first 3 seconds following burner ignition. **After setting the pressure level upon ignition (STEP) according to the type of gas, check that the pressure for heating is still at the value previously set.**
- "MET-GPL" connector (7 fig. 17)
With the connector switched-off, the boiler is set-up for natural gas; with the connector

switched-on, the boiler is ready for LPG.

- "ANN. RIT." connector (5 fig. 17):
In the heating phase, the electronic board is programmed to include a burner technical delay interval of approx. 90 seconds, which occurs both at system cold starting and at subsequent re-ignitions. The aim is to overcome the problem of repeated ignitions and turning off with very short time intervals between. This could occur in particular in systems presenting high head losses. At each restart after the period of slow ignition, the boiler will set itself for about 1 minute at the minimum modulation pressure, and will then move to the heating pressure value set. When the connecting link is inserted, both the programmed technical pause and the period of operation at minimum pressure in the startup phase will be cancelled. In this case, the times elapsing between turning off and subsequent re-ignition will depend on a temperature difference of 5°C detected by the SM sensor (heating flow sensor).
- Connector Modureg Sel. (14 fig. 17)
With the bridge disconnected the boiler is predisposed to function with the SIT

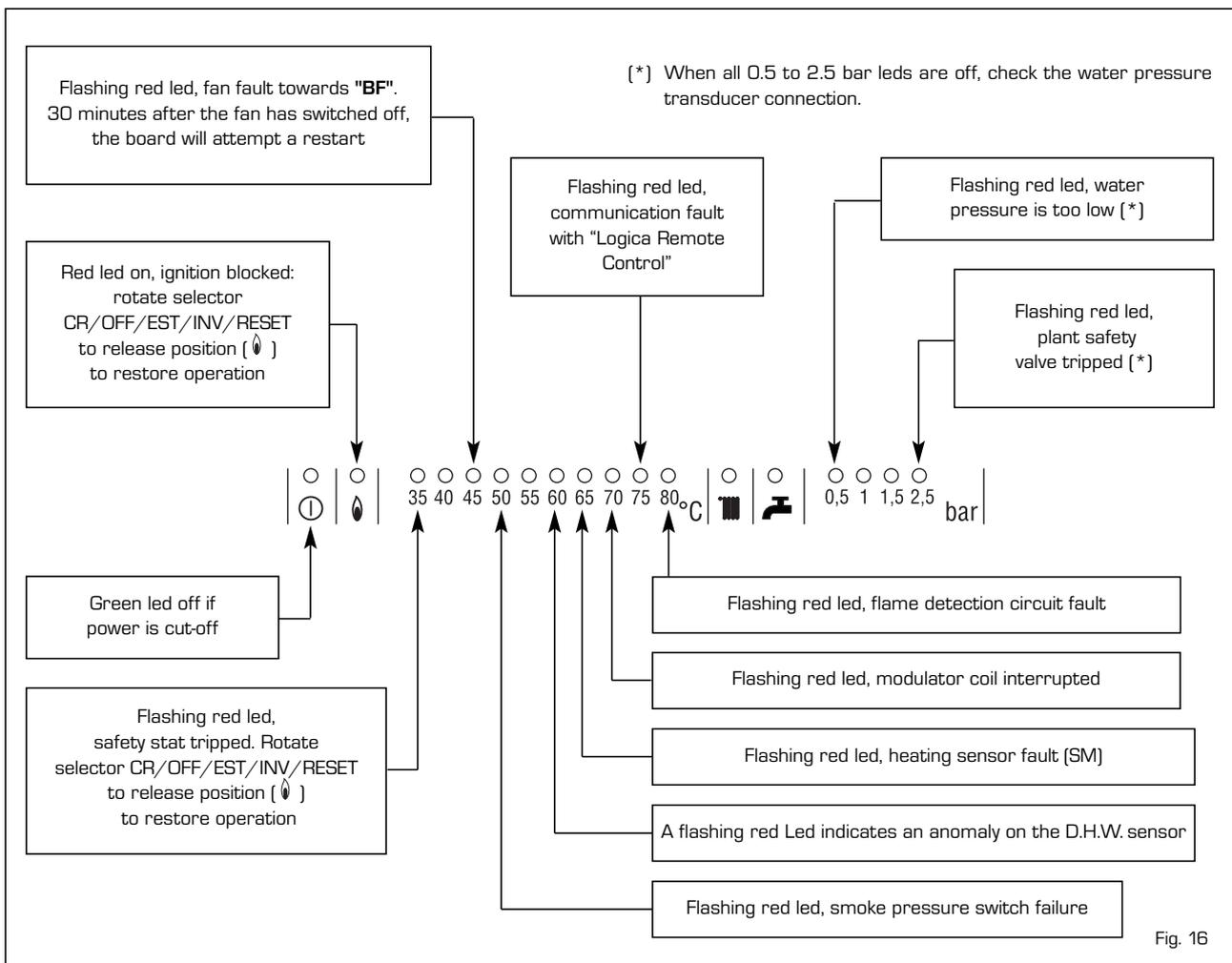
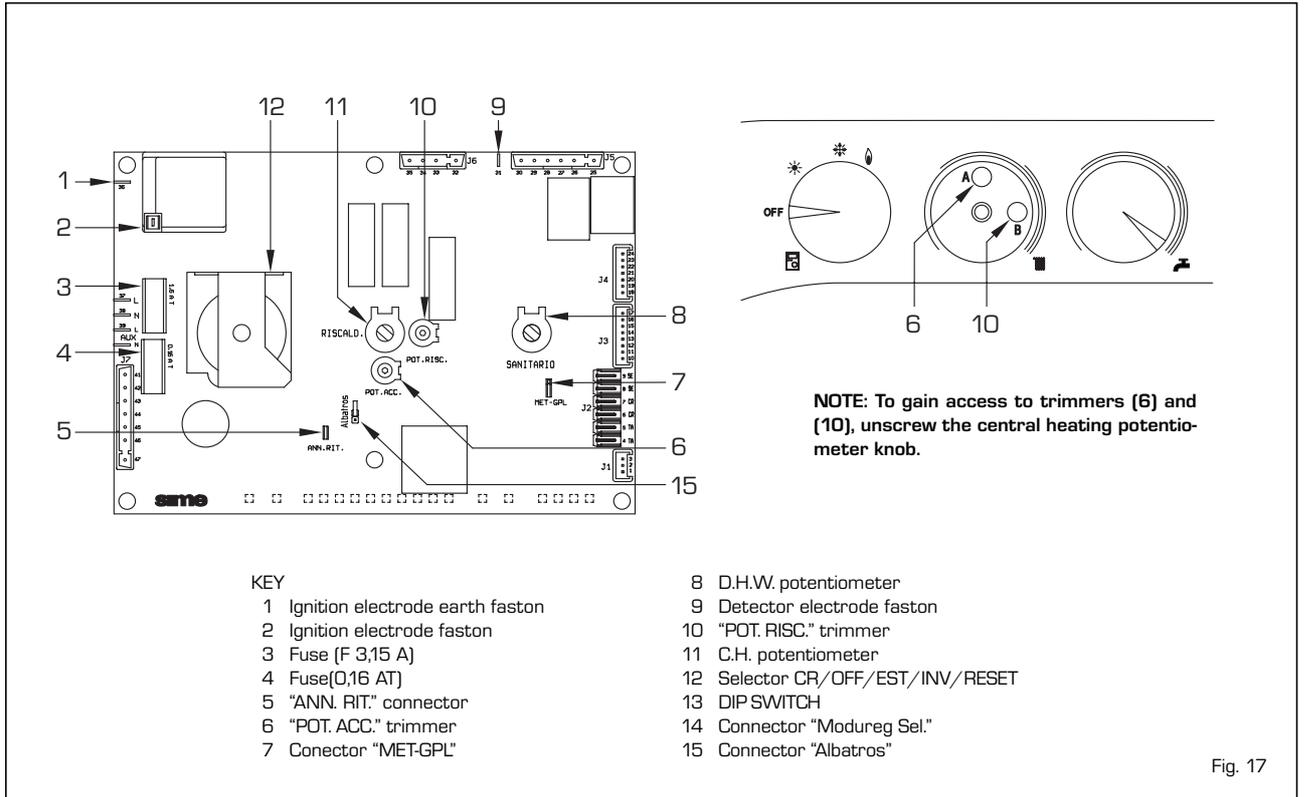


Fig. 16



gas valve, and with the bridge connected it is predisposed to function with the HONEYWELL gas valve.

- Connector "Albatros" (15 fig. 17)
The bridge must always be disconnected. It is connected only when multiple boilers are installed in a sequence/cascade.

ATTENTION: It is essential that the operations described above be carried out by authorized technical staff.

3.2 TEMPERATURE SENSOR AND WATER PRESSURE TRANSDUCER

Anti-freeze system with heating NTC probe active when water temperature drops to 6°C. Tables 3 - 4 show the resistance values (Ω) that are obtained on the sensor as the temperature varies and the transducer values obtained as the pressure varies. **When C.H. sensor (SM) is interrupted, neither of the boiler's heating services will function. With D.H.W. sensor interrupted, the boiler will only work in heating mode.**

TABLE 3 (Sensors)

Temperature (°C)	Resistance (Ω)
20	12.090
30	8.313
40	5.828
50	4.161
60	3.021
70	2.229
80	1.669

TABLA 4 (Transducer)

Pressure (bar)	Resistance (Ω)	
	min	máx
0	297	320
0,5	260	269
1	222	228
1,5	195	200
2	167	173
2,5	137	143
3	108	113
3,5	90	94

3.3 ELECTRONIC IGNITION

Ignition and flame detection is controlled by two electrodes located on the burner. These guarantee maximum safety with intervention times, for accidental switching off or gas failure, of within one second.

3.3.1 Operating cycle

Rotate the selector knob to summer or winter, and verify that green led (Ⓢ) lights up to confirm the presence of voltage. The boiler is now ready to start working upon demand for heating or drawing off of D.H.W.; a discharge current is sent to the ignition electrode through the programmer, and the gas valve opens at the same time. The burner must be ignited within 10 seconds. However, it is possible for ignition failures to occur, with consequent activation of signal indicating that the control box has "locked out".

- Gas failure

The control box runs through the cycle normally sending electric power to the ignition electrode. The electrode continues spark discharge for a maximum of 10 sec. If the burner does not light, the lock-out indicator will light up. This may occur upon first ignition or after long periods of boiler lay-off when there is air in the pipes. It may be caused by the gas cock being closed or by one of the valve coils having a break in the winding, so that the valve cannot open.

- Ignition electrode fails to spark

In the boiler, only the gas to the burner is seen to open. After 10 sec. the warning light indicating equipment "lock-out" lights up. This may be due to a break in the wire of the electrode or to the wire not properly fastened to the electric terminal of the control box;

- No detection of flame

The continuous spark discharge of the electrode is noted starting from ignition even though the burner is lit. After 10 seconds have elapsed, the sparks cease, the burner goes out, and the warning light indicating equipment "lock-out" lights up. There could have a break in the wire of the sensing electrode or the electrode itself is touching earth: the electrode is worn out and needs replacing. The control box is defective.

When there is a sudden voltage failure, the

burner shuts out immediately; when power supply returns, the boiler will start up again automatically.

3.4 MICROSTORAGE FUNCTION

The boiler is equipped with an insulated 4 litre hot water tank installed on its primary circuit. The microstorage adds to the convenience of the system by reducing the amount of time users have to wait for hot water. Hot water is available at the required temperature almost instantly when the tap is turned on. Water in the mini hot water tank is kept at the desired temperature by a thermostatic electrical heating element which absorbs about 30 Watts during normal operation.

3.5 SMOKE PRESSURE SWITCH

The pressure switch is factory set at the optimal values of 4.5-6 mm H₂O ["25 BF" vers.] and 10-13 mm H₂O ["30 BF" vers.]. This enables the boilers operation even with air intake and smoke outlet pipes at the maximum limit of the length allowed. The value of the signal to the pressure switch is measured by means of an instrument connected to the pressure take-off point (8-9 fig. 3).

3.6 FLOW PRESSURE SWITCH SAFETY VALVE

A flow switch safety valve (12 fig. 3) intervenes, blocking the operation of the burner if the boiler is without water due to the formation of an air lock in the heat exchan-

ger or if the circulator is not working, or because the primary water filter "AQUA GUARD" is obstructed with impurities.

NOTE: If replacing the flow switch valve, make sure that the arrow stamped on the valve points in the same direction as the flow of water.

3.7 SYSTEM AVAILABLE HEAD

The head available for the heating plant is

3.8 MAINS ELECTRICITY CONNECTION

Use a separate electricity supply to connect the room stats and relative zone valves.

The micro or relay contact connection is made to (J2) connector of the circuit board after having removed the jumper (fig. 19).

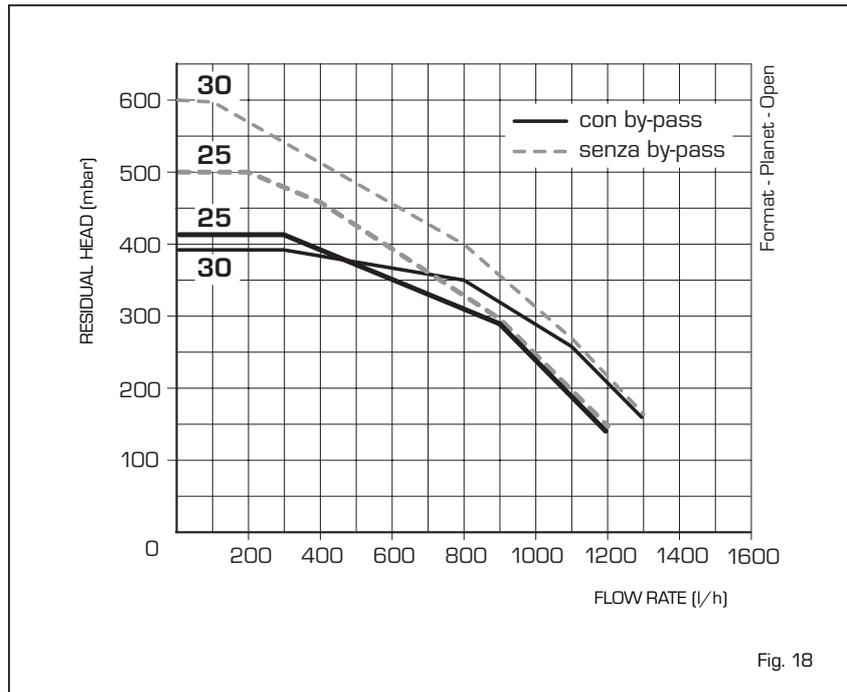


Fig. 18

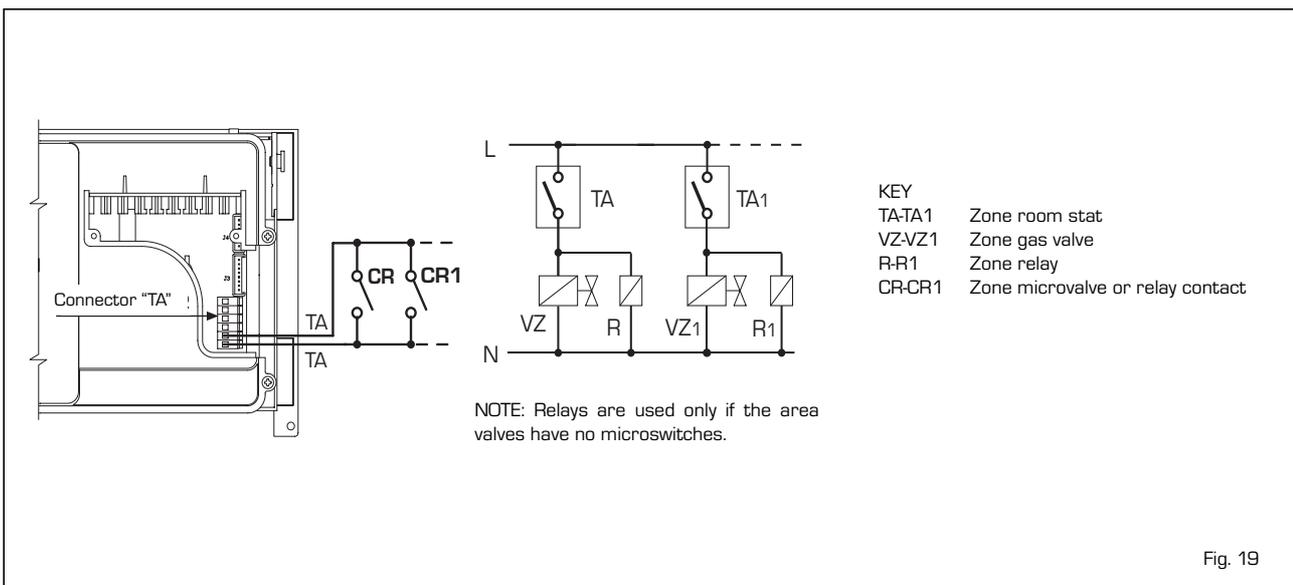


Fig. 19

4 USE AND MAINTENANCE

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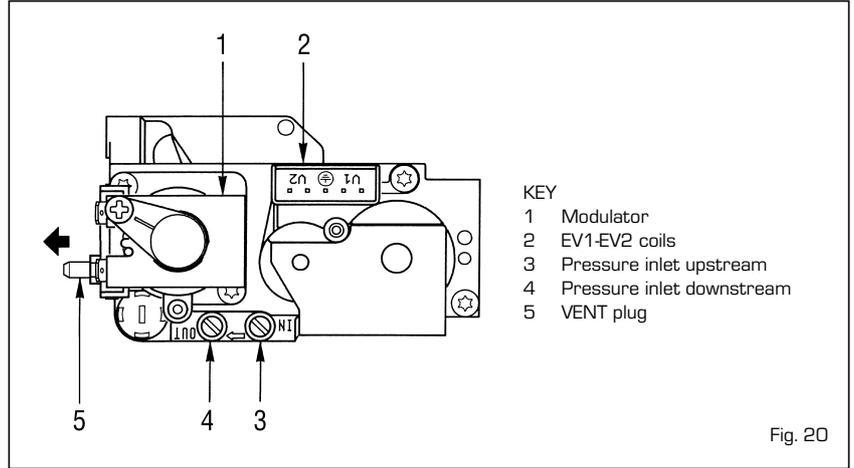
4.1 ADJUSTMENT OF D.H.W. FLOW RATE

To adjust the hot water flow rate, use the flow-rate regulator on the pressure switch valve (7 fig. 4).

Remember that the flow rates and corresponding temperatures of use of hot water, given in section 1.3, have been obtained by positioning the selector of the circulation pump on the maximum value.

Should there be any reduction in the D.H.W. flow rate, the filter installed on the inlet to the pressure switch valve (3 fig. 4) will need cleaning.

This may be accessed only after closing the cold water on/off cock on the fixing jig.



- KEY
- 1 Modulator
 - 2 EV1-EV2 coils
 - 3 Pressure inlet upstream
 - 4 Pressure inlet downstream
 - 5 VENT plug

Fig. 20

4.2 GAS VALVE

The boiler is equipped standard with the HONEYWELL VKB105N gas valve (fig. 20) set at two pressure values: maximum and minimum.

According to the type of gas burnt, these correspond to the values given in **Table 5**. The gas pressures at the maximum and minimum values, are factory set. Consequently they must not be altered.

Only when you switch the appliance from one type of gas supply (methane) to another (butane or propane), it is permitted to alter the operating pressure.

It is essential that this operation is carried out exclusively by authorized technical staff.

When the working pressures have been adjusted, reseal the regulators.

When the gas pressures are to be reset, this must be done following a set order: first the MAXIMUM and then the MINIMUM.

4.2.1 Maximum and minimum pressure adjustment (fig. 21)

To set the minimum pressure, proceed as follows:

- Connect the pressure column or a pressure gauge to the pressure inlet downstream of the gas valve. In the "30 BF"

TABLE 5

Type of gas	Burner max. pressure (mbar)		Modulator current mA	Burner min. pressure (mbar)		Modulator current mA
	25 BF	30 BF		25 BF	30 BF	
Methane - G20	9,6	11,1	130	2	2,3	0
Butane - G30	27	26,8	165	5	5,5	0
Propane - G31	35	34,9	165	5	6,9	0

versions, instead, connect the manometer as shown in fig. 20/a.

- Remove the plastic cap on the modulator (1).
- Set the knob of the D.H.W. potentiometer to the maximum value.
- Ignite the boiler by operating the switch and open the D.H.W. tap at a high flow rate.
- Using a 9 spanner, turn the nut (3) to achieve the maximum pressure value given in **Table 5**: to reduce the pressure, turn the nut counterclockwise; to increase the pressure, turn it clockwise.
- Operate the main switch a number of times, keeping the D.H.W. tap open all the time, and check that the pressure corresponds to the values given in **Table 5**.

modulator:

- With the domestic hot water potentiometer knob on the maximum, the domestic hot water tap open and the burner ignited, using a 7 spanner turn the nut (2) to get the minimum pressure value given in **Table 5**: to reduce the pressure, turn the nut counterclockwise; to increase the pressure, turn it clockwise.
- Operate the main switch a number of times, keeping the D.H.W. tap open all the time, and check that the pressure corresponds to the values given in **Table 5**.
- Connect up the power supply to the modulator again.
- Replace the plastic cap (1).

After having adjusted the maximum pressure, calibrate the minimum pressure as follows:

- Disconnect the electric power of the

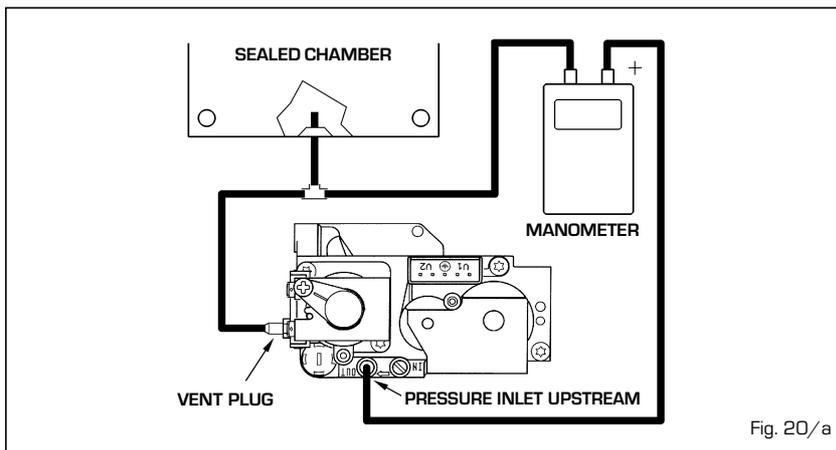
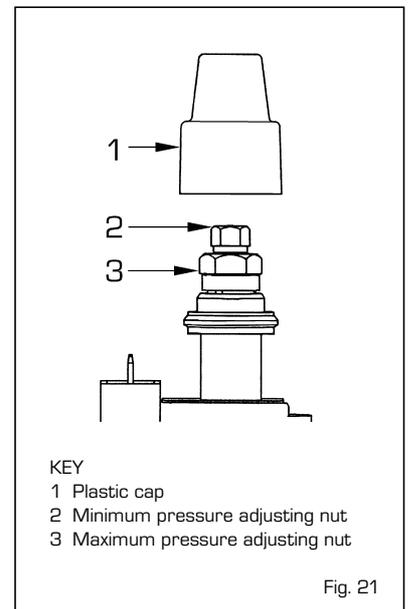
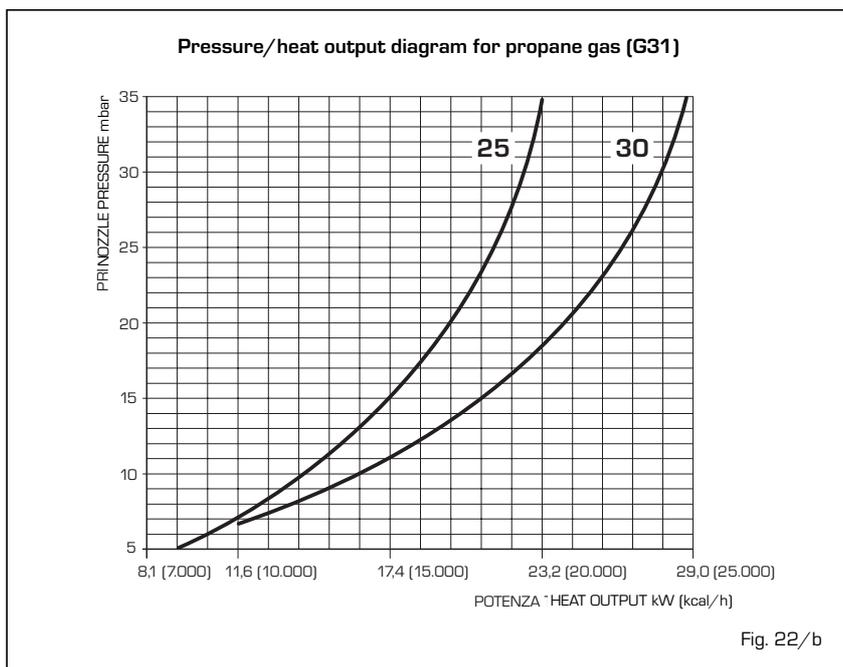
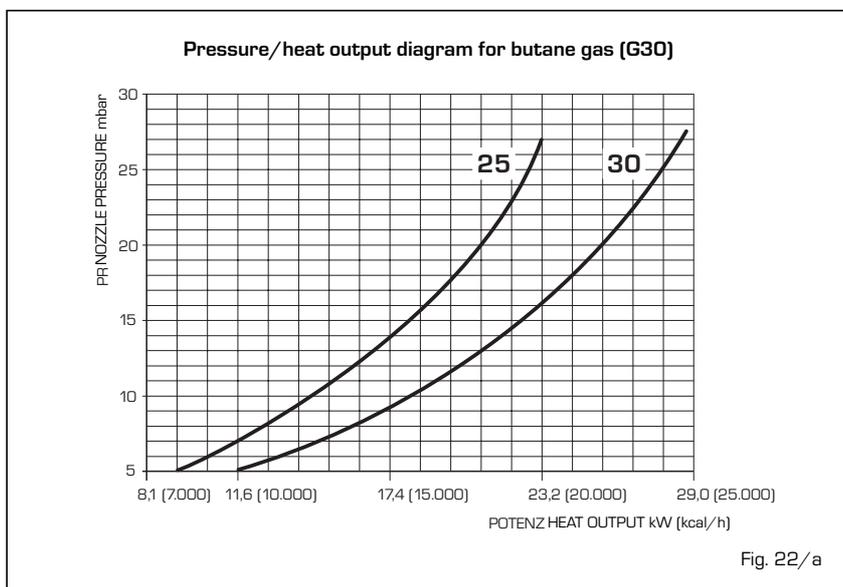
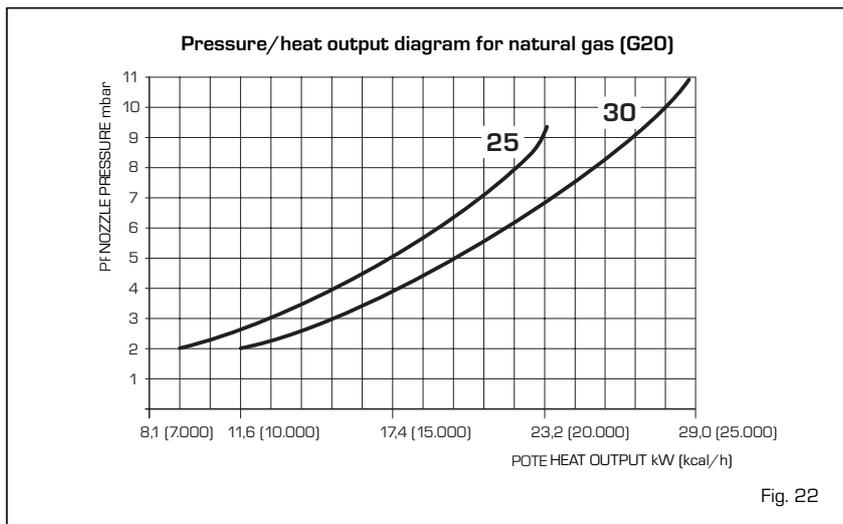


Fig. 20/a



- KEY
- 1 Plastic cap
 - 2 Minimum pressure adjusting nut
 - 3 Maximum pressure adjusting nut

Fig. 21



4.3 ADJUSTMENT OF HEAT OUTPUT FOR HEATING

To adjust boiler heat output for heating purposes, i.e., modifying the setting made at the factory which is approximately 16 kW, use a screwdriver to adjust the heating heat output trimmer (10 fig. 17).

To increase working pressure, turn the trimmer clockwise; to reduce pressure, turn the trimmer counterclockwise.

To facilitate the operations of adjusting heat output, see the pressure/heat output diagrams for natural gas (methane) and butane or propane gas (figg. 22 - 22/a - 22/b).

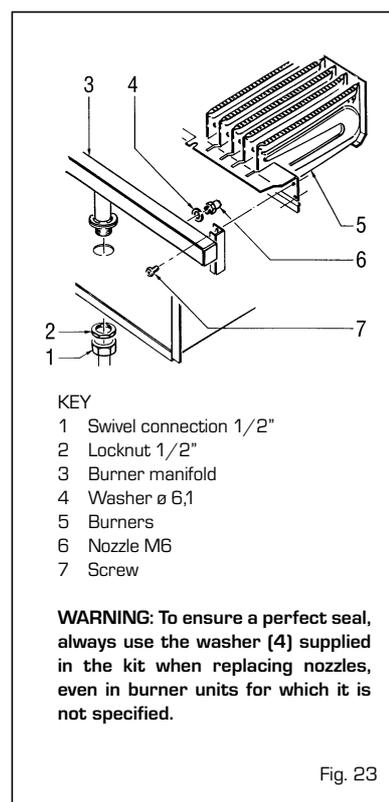
4.4 GAS CONVERSION

A kit is supplied complete with the necessary change-over materials for operation with butane gas (G30) or propane gas (G31). Operate in the following manner for changing over from one gas to another (fig. 23):

- Close the gas cock.
- Slide out the burner unit.
- Replace the main nozzles delivered with the kit (6), inserting the copper washer (4). Use a 7 spanner to perform this operation.
- Insert the "GPLMET" connector link on the card and set it on "GPL" (7 fig. 17).
- To set the values of maximum and minimum gas pressure, follow the instructions given in section 4.2, according to the type of gas valve used.

When the working pressures have been adjusted, reseal the regulators.

- After have ultimated the conversion of



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the boiler, please stick onto the casing panel the plate showing the relevant feeding gas which is included into the conversion kit.

NOTE: After assembling all the gas connections, a test for gas tightness must be carried out using soapy water or special products. Do not use naked flames. The conversion to different gas must be carried out exclusively by authorized technical personnel.

4.5 DISASSEMBLY OF EXPANSION VESSEL

Before desassembly the expansion vessel, empty the boiler of water. After the assembly ensure that the expansion vessel is preloaded at a pressure of 0.8 to 1 bar.

4.6 REMOVAL OF OUTER CASING

It is possible to completely disassemble the shell for an easy maintenance of the boiler following these simple instructions (fig. 24):

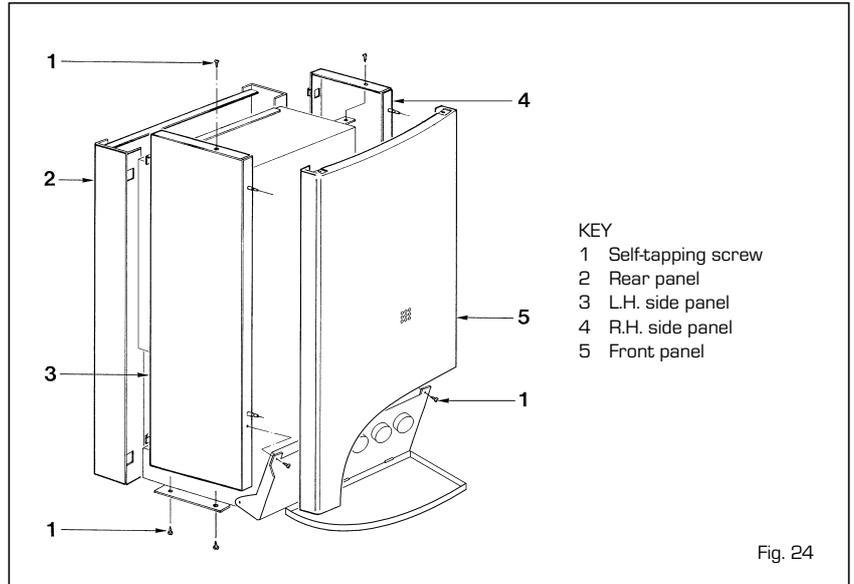
- Remove the two screws locking the front panel to the sides.
- Pull the front panel (5) forwards so as to release it from the slot-in pins located on the sides.
- Unscrew the two screws fixing the instrument panel to the sides.
- Unscrew the four screws fixing the sides to the instrument panel support.
- Push the sides (3) and (4) upwards, sliding them out of their slots.

4.7 CLEANING AND MAINTENANCE

At the end of each heating season, it is essential to have the boiler thoroughly checked and cleaned out.

Proceed as follows:

- Turn the main switch off to stop electric power reaching the boiler and close the gas feed cock.
- Remove the outer casing.
- Remove the gas burner manifold unit (fig. 23).
- To clean the burner, blow in a jet of air, so



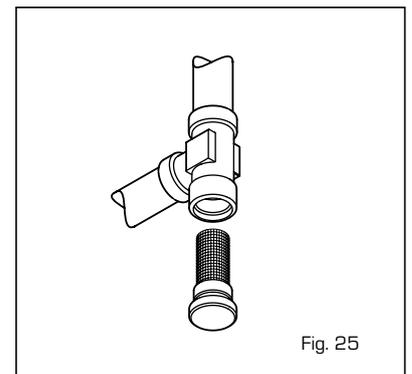
as to remove any dust particles that may have accumulated.

- Clean the heat exchanger, removing any dust or residue from combustion.
- When cleaning the heat exchanger or the burners, chemical products or steel brushes **MUST NOT BE USED**.
- Make sure that the tops of the burners with the holes are free from encrustations.
- During burner disassembly and assembly, be very careful not to exert force on the delicate items, such as the ignition and sensing electrodes.
- Reassemble the items removed from the boiler, making sure to follow the correct sequence.
- Check the chimney to make sure that the flue is clean.
- Check operation of the equipment and the main burner.
- After assembly of all the gas connections, these must be tested for soundness, using soapy water or appropriate products. **DO NOT USE NAKED FLAMES.**

Preventive maintenance and checking of efficient operation of equipment and safety devices must be carried out exclusively by authorized technical personnel.

4.7.1 Cleaning the C.H. water filter "AQUA GUARD" (fig. 25)

To clean the filter, close the delivery/return on/off taps, turn off the power to the control panel, remove the casing and empty the boiler using the drain provided (11 fig. 4) until the hydrometer shows "zero". Place a container for collection underneath the filter; unscrew the cap and proceed to clean the filter, removing impurities and limestone deposits. Check the seal o-ring before reassembling the cap with the filter.



USER INSTRUCTIONS



WARNINGS

- In case of fault and/or incorrect equipment operation, deactivate it, without making any repairs or taking any direct action. Contact the nearest Authorised Technical Service Centre.
- The installation of the boiler and any servicing or maintenance job must be carried out by qualified personnel. Under no circumstances, the devices sealed by the manufacturer can be tampered with.
- It is absolutely prohibited to block the intake grilles and the aeration opening of the room where the equipment is installed.

LIGHTING AND OPERATION

BOILER IGNITION (fig. 1)

Open the gas valve, lower the control panel cover and activate the boiler by rotating the selector knob to the summer position (☀). The lighting-up of the green led (Ⓛ) will indicate that the apparatus is switched-on and ready.

- With the rotary switch in the summer position (☀) the boiler will start-up upon demand for domestic hot water, and run at full power to reach the selected temperature. The gas feeding pressure will then automatically vary to ensure that the required temperature is kept constant.
- With the rotary switch in the winter position (❄) once the boiler has reached the value set on the heating potentiometer, it will start to modulate in automatically in order to supply the required power output to the system. The operation of the boiler will be stopped through the intervention of the timer-thermostat or "Logica Remote Control".

TEMPERATURES ADJUSTMENT (fig. 2)

- The D.H.W. temperature can be adjusted by turning the knob of the D.H.W. potentiometer (⚙). When there is a demand for hot water, the set temperature is displayed on the red led scale from 35÷80°C and the yellow domestic hot water led lights-up at the same time (⚙).
- The C.H. temperature can be adjusted by turning the knob of the C.H. potentiometer (⚙). The set temperature is indicated on the red led scale from 35÷80°C and the yellow heating led lights up at the same time (⚙). To ensure optimal boiler efficiency at all times, we recommend not to drop below a minimum working temperature of 50°C.

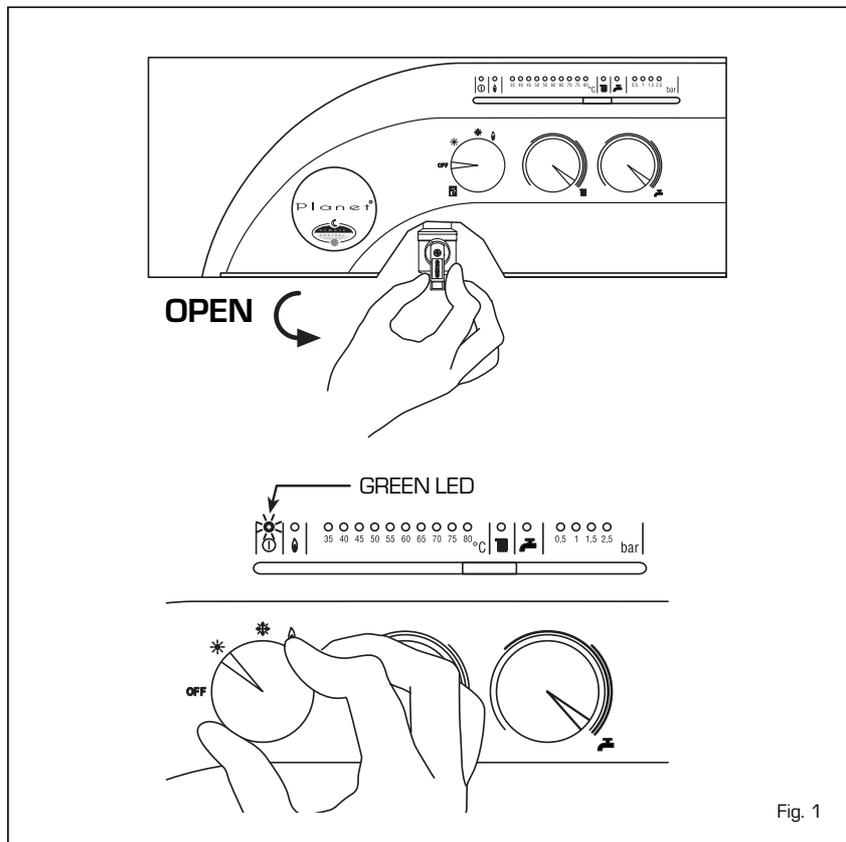


Fig. 1

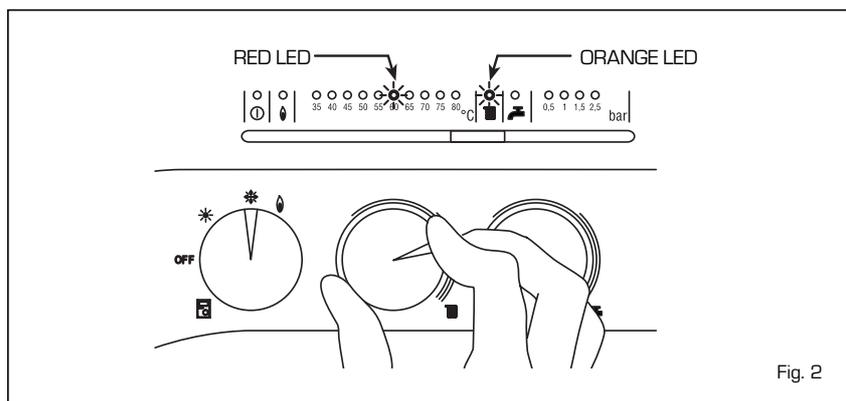


Fig. 2

TURNING THE BOILER OFF (fig. 1)

To turn the boiler off place the selector knob on the **OFF** position.
If the boiler is not going to be used for a lengthy period it is advised to turn off the electricity supply, close the gas tap, and if the temperatures foreseen are low, empty the boiler and the hydraulic system to avoid breakage in the tubes due to the freezing of the water.

FAULT FINDING

- **Ignition lock-out** (fig. 3)
If the burners do not ignite, the red led will light-up ().
To attempt a boiler restart, rotate the selector knob to position () and release it immediately, placing it in the summer () or winter () operation position.
If the boiler lock-out re-occurs, contact an authorised Service Centre.

- **Insufficient water pressure** (fig. 4)
If the red "0.5" bar led starts flashing, the boiler will not function.
To restart operation, rotate the charge valve anticlockwise until the green "1 bar" led lights up.
ONCE FILLED CLOSE THE FILLING TAP.
If all the leds are off, call the local authorised Service Centre for technical assistance

- **Safety stat trip** (fig. 5)
If the safety thermostat trips, the red "35°C" led will start flashing. In order to attempt a boiler restart, rotate the selector knob to position () and release immediately, returning it to the summer () or winter () position.
If the boiler lock-out occurs again, call local authorised Service Centre for technical assistance.

GAS CONVERSION

Should it be necessary to convert the appliance to a different gas from the one for which the boiler has been equipped, approach the technical staff.

CLEANING AND MAINTENANCE

At the end of each heating season, it is essential to have the boiler thoroughly

checked and cleaned out.
Preventive maintenance and checking of the efficient operation of the equipment and safety devices must be carried out exclusively by the authorized technical staff. The boiler is supplied with an electric cable. Should this require replacement, contact exclusively with the authorized technical staff.

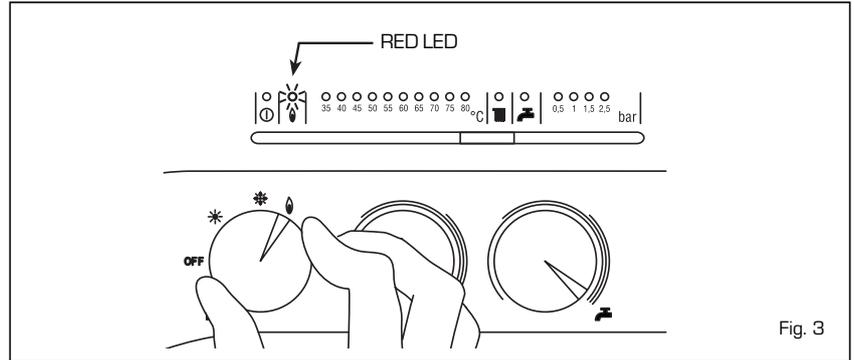


Fig. 3

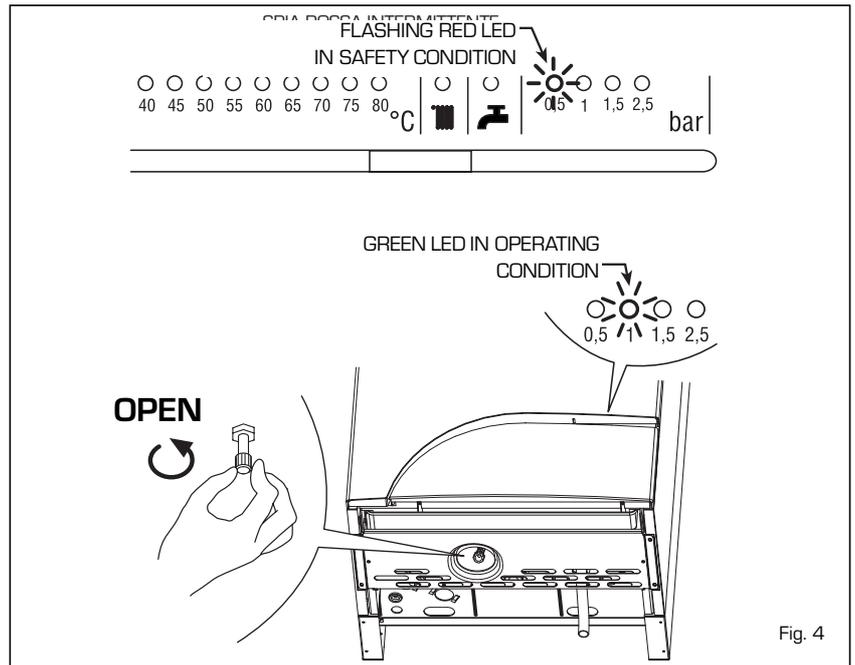
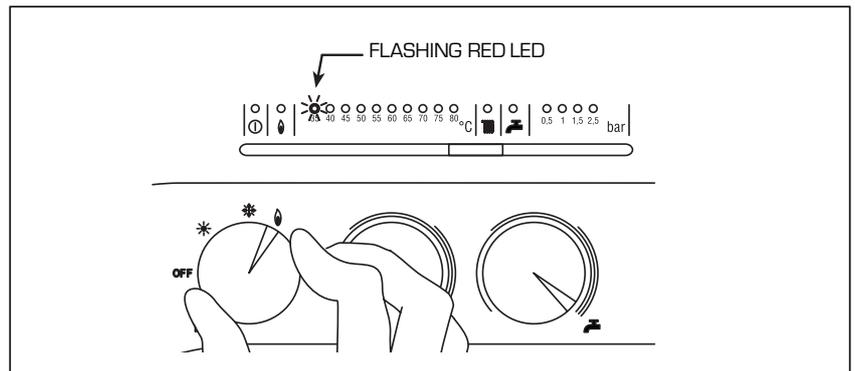


Fig. 4



- Other anomalies (fig. 6)

When one of the red "40÷80°C" leds start flashing, switch-off the boiler and then try to ignite again.

After 2 or 3 unsuccessful attempts, do not try again but call authorised technical staff.

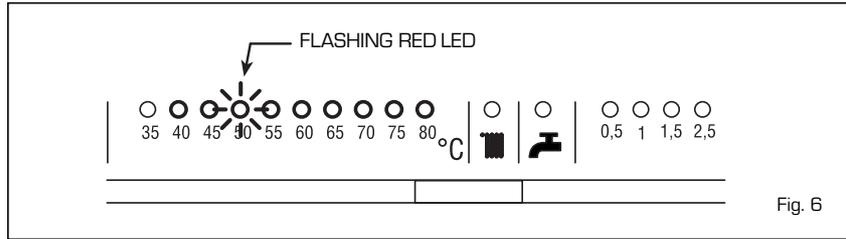


Fig. 6

LOGICA REMOTE CONTROL

When the boiler is connected to the "Logica Remote Control" regulator, the selector CR/OFF/SUM/WIN/UNBLOCK must be placed in the position (OFF); the knobs of the hot-water service heating potentiometers do not have any effect and all of the functions will be managed by the regulator (fig. 7).

If the "Logica Remote Control" breaks

down, the boiler will function by placing the selector on the (SUM or WIN), obviously without consequent control of the room temperature.

The operating instructions are reported inside the cover (fig. 8).

Each setting or modification is displayed (fig. 9).

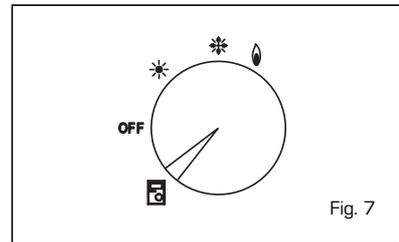


Fig. 7

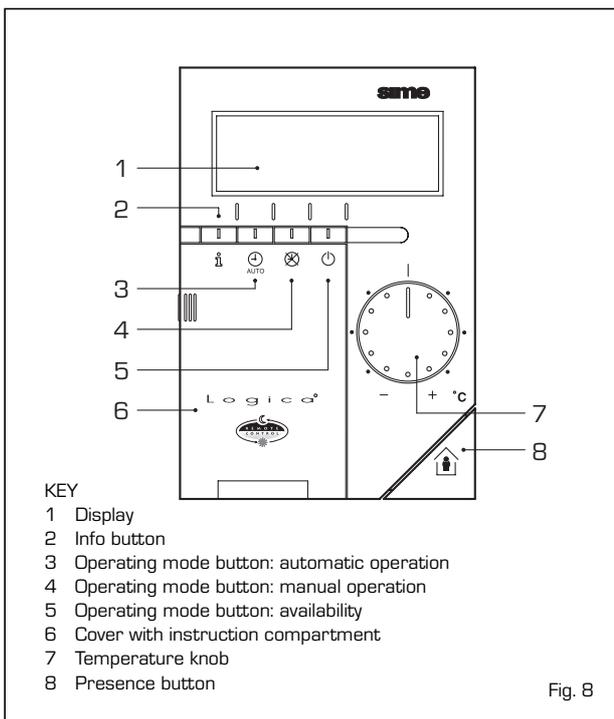
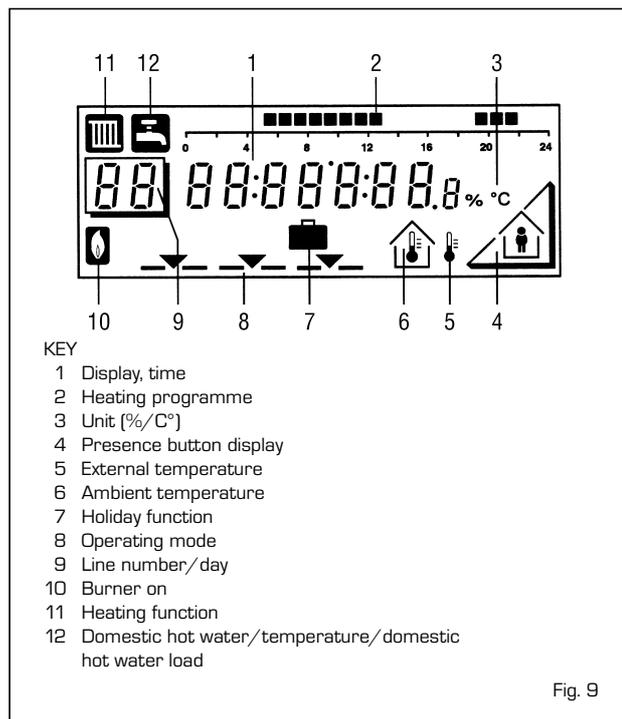


Fig. 8



KEY

- 1 Display, time
- 2 Heating programme
- 3 Unit (%/C°)
- 4 Presence button display
- 5 External temperature
- 6 Ambient temperature
- 7 Holiday function
- 8 Operating mode
- 9 Line number/day
- 10 Burner on
- 11 Heating function
- 12 Domestic hot water/temperature/domestic hot water load

Fig. 9

IT

ES

PT

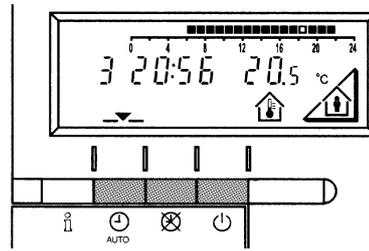
GB

RUS

ACTIVATING

During functioning the lid of the regulator must be closed.

- Selection of the operating mode
(reference keys grey colour)



The operating mode desired is selected by pressing the relative key with the corresponding symbol. The choice is displayed with the symbol



AUTO

Automatic functioning: the heating functions automatically according to the heating programme entered. The programme may be excluded for brief periods with the on-line key.

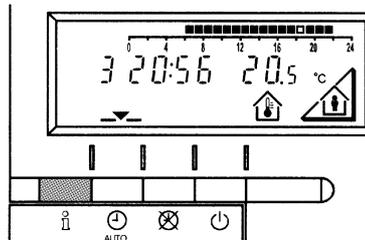


Manual functioning: the heating functions manually according to the choice made with the on-line key.



Availability: the heating is deactivated.

- Info key
(reference key grey colour)



For every operation of the Info key the following list of items, one after the other, are displayed. The thermo-feeler continues to function independently of the display.



Day, hour, room temperature



External temperature*



Hot-water service temperature*

* This data appear only if the relative feeler is connected or if they are transmitted by the regulator of the boiler.

- Adjusting the temperature

Before adjusting the temperature of the regulator, the thermostatic valves, which may be present, have to be regulated to the desired temperature.



If it is too hot or too cold in your apartment, you can easily adjust the fixed temperature with the temperature knob.



If you turn the knob towards the + sign, the fixed temperature is increased by about 1 °C for every notch.

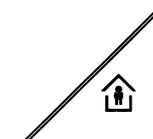


If you turn the knob towards the - sign, the fixed temperature is decreased by about 1 °C for every notch.

Before adjusting it again, however, allow the temperature to stabilise first.

Note: With the temperature knob you can only adjust the fixed temperature, whilst the reduced temperature remains the same.

- On-line key



If the rooms remain unused for a long period of time, the temperature can be reduced with the on-line key, in this way saving energy. When the rooms are occupied again, press the on-line key to re-heat them. The current choice is displayed on the display.



Fixed temperature heating



Reduced temperature heating

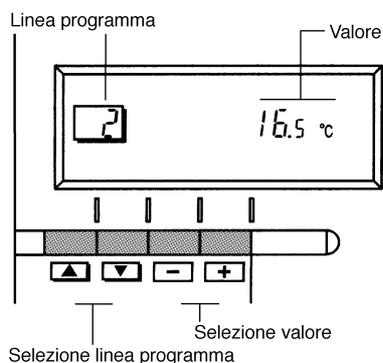
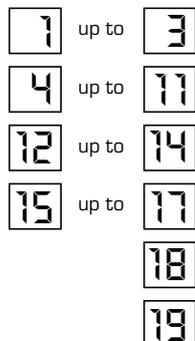
NOTA: The choice made will work in a permanent way when manually , carried out, instead, if automatic it will work up to the next switching according to the heating programme.

PROGRAMMING

For the programming the lid of the regulator must be open.

You can set or display the following values:

- Temperatures
- Heating programme
- Day of the week and hour
- Current values
- Vacation period
- Return to the default values



As soon as the cover is open, the display and the key functions are switched on.

The number in the square represents the programme lines that may be selected with the arrow keys.

- Temperature regulation

Before proceeding with the adjustment in the temperature on the regulator, the thermostatic valves, which may be present, have to be regulated to the desired temperature.

In automatic mode, the apparatus switches from the fixed temperature to the reduced temperature according to the temporal programme. The manual switching of the temperature is done manually with the on-line key.

- | | | |
|-----------|---|--|
| 1 | Fixed temperature:
temperature when the rooms are occupied
(basic setting) | |
| 2 | Reduced temperature:
temperature during periods of absence or night | |
| 3 | Hot-water service temperature:
- desired temperature of hot-water service
- comfort temperature of the hot-water service
(with storage capacity boiler unit). | |
| 61 | Reduced temperature of hot-water service (with storage capacity boiler unit):
temperature desired for hot-water service at reduced level.
To have access to the "reduced hot-water service temperature" parameter, press the and keys at the same time for at least 5 seconds and then go along the entered lines with the key until parameter 61 is reached. Regulate the value with and . | |

- Setting the time

- | | |
|-----------|---|
| 12 | To set the current day of the week
(1 = Monday/7 = Sunday) |
| 13 | To set the current hour |
| 14 | To set the current minute
Once the hour is completed, the setting of the hour changes. |

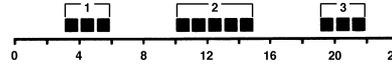
With and keys the current hour is regulated. Pressing these keys together, the regulation is speeded up in an increasing sense.

- Current values

- | | |
|-----------|--|
| 15 | Display and setting of the gradient of the heating characteristics curve.
When the room temperature set is not reached choose the gradient indicated in point 2.12.3. |
| 16 | Display of the current boiler temperature. |
| 17 | Display of the current power of the burner and of the current operating mode
(= heating/ = hot-water service) |

- Heating/hot-water service programme

With the heating programme it is possible to set the switching times of the temperature for a period of a week. The weekly programme consists of 7 daily programmes. One daily programme allows 3 phases of heating. Each phase is defined by a starting time and a finishing time. The n. 8 daily programme is for the hot-water service. If a phase is not required, the same starting and finishing time may be entered.



- 4** Select the days that correspond with the heating phase.
1 = Monday, ... 7 = Sunday/8 = hot-water service programme
- 5** Start of phase 1: heating with fixed modality
- 6** End phase 1: heating with reduced modality
- 7** Start phase 2: heating with fixed modality
- 8** End phase 2: heating with reduced modality
- 9** Start phase 3: heating with fixed modality
- 10** End phase 3: heating with reduced modality
- 11** Copying of the daily programme

+ By pressing this key it is possible to repeat the current heating programme for the **next day**.

- By pressing this key it is possible to repeat the current heating programme for the **previous day**.

As a confirmation the following day is displayed.

- Programme for hot-water service (with storage capacity boiler unit)

With the Logic Remote Control it is possible to manage the temperature of boiler unit on two levels (a comfort level and one at reduced temperature) in accordance with the programme chosen with parameter 62 (load hot-water service). To have access to the parameter press the **▲** and **▼** keys for at least 5 seconds and then go along the entered lines with the **▼** key until parameter 62 is reached. At this point four different programmes may be selected with **[-]** or **[+]** keys, with the following characteristics:

- 0** = 24 hours/ day - Hot water always available at the temperature set in parameter 3.
- 1** = standard - Hot water according to the daily heating programme. In the comfort periods of the heating the temperature of the boiler unit is regulated at the value set via parameter 61.
- 2** = sservice suspended.
- 3** = second daily programme (8) - Everyday of the week the temperature of the hot-water service is set according to programme B. In this case the programming is one for all the days of the week and three periods of time are available. In the periods of time set, the temperature of the boiler unit is controlled via the temperature setting of parameter 61.



- 5** Start phase 1: preparation of the boiler unit to the comfort temperature
- 6** End phase 1: Temperature of boiler unit maintained at the reduced value
- 7** Start phase 2: Preparation of boiler unit to the comfort temperature
- 8** End phase 2: Temperature of boiler unit maintained at the reduced value
- 9** Start phase 3: preparation of boiler unit to the comfort temperature
- 10** End phase 3: Temperature of boiler unit maintained at the reduced value

- Vacation function

18

To enter the number of days of absence.

In the display the vacation symbol will be shown (), on the left the day of activation (1 = Monday/7 = Sunday) and on the right the number of vacation days.

NOTE:

(I)

During the vacation the regulator will be on the availability mode.


AUTO

When the set days have elapsed, the regulator will go on to the automatic function.

The vacation period may be cancelled by pressing a key of the operating mode.

- Default values

19

To take the setting to the default values, press the  and  keys at the same time for at least 3 seconds. As confirmation a sign will appear on the display.

ATTENTION

The values of the following line numbers previously entered will be lost.

• Temperature and time programme

1

to

10

• Vacation period

18

- Error display

Er 0

Ignition lock-out

Rotate selector CR/OFF/EST/INV/RESET on the "PLANET AQUAQUICK" control panel to the release position () to reset operation.

If the lock-out re-occurs, call an authorised Service Centre.

Er 1

Safety thermostat trip

Rotate selector CR/OFF/EST/INV/RESET on the "PLANET AQUAQUICK" control panel to the release position () to reset operation.

If the lock-out re-occurs, call an authorised Service Centre.

Er 16

Exhaust gas pressure switch failure

Call an authorised Service Centre.

Er 64

Cannot recognise boiler type (Seal/Open)

Call an authorised Service Centre

Er 66

The exhaust gas pressure switch does not return to the reset position

Call an authorised Service Centre.

Er 67

Domestic hot water sensor fault

Call an authorised Service Centre.

Er 68

Heating sensor fault (SM)

Call an authorised Service Centre.

Er 69

Insufficient water pressure

Reset operation using the boiler charge valve.

Er 70

Plant overpressure

Call an authorised Service Centre.

Er 192

Safety thermostat trips

Call an authorised Service Centre.

Er 193

The exhaust gas pressure switch trips

Call an authorised Service Centre.

Er 194

Modulator coil interrupted

Call an authorised Service Centre.

Er 195

No communication between the "Logica Remote Control" and the boiler.

Call an authorised Service Centre.