INSTALLER INSTRUCTIONS

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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.

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 cock 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/or 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 air present in the gas pipe by operating the pressure relief valve on the gas valve inlet.

1 DESCRIPTION OF THE BOILER

1.1 INTRODUCTION

The "PLANET 25/60 BF - 30/60 BF" wall hung boilers with D.H.W. storage tank allow a variety of requests to be met thanks to the abundance of water which the capacious tank unit makes available and thanks also to an electronic management and control system via a microprocessor. They are designed and built in compliance with European directives 90/396//EEC, 89/336/EEC, 73/23/EEC, 92/42/EEC and the European norms EN 483 - EN 625. They may be fuelled by natural gas (methane) and butane gas (G30) or propane (G31). Follow the instructions given in this manual

for the correct installation and perfect functioning of the apparatus.

1.2 DIMENSIONS



1.3 TECHNICAL FEATURES

		25/60 BF	30/60 BF
Heat output			
Nominal	kW	9,3÷25,0	11,6÷29,5
	kcal/h	8.000÷21.500	10.000÷25.400
Minimum	kW	9,3	11,6
	kcal/h	8.000	10.000
D.H.W. heat output			
Nominal	kW	25,0	29,5
Heat input			
Nominal	kW	10,8÷26,7	13,5÷31,6
Minimum	kW	10,8	13,5
Water content	I	4	5
Expansion vessel			
Capacity	I	8	8
Preloading pressure	bar	1	1
C.H. setting range	°C	40÷80	40÷80
D.H.W. setting range	°C	10÷60	10÷60
D.H.W. production			
Tank unit capacity	1	60	60
D.H.W. flow rate EN 625*	l/min	13,3	15,7
Contin. D.H.W. flow rate ($\Delta t \ 30^\circ C$)	l/h	715	845
D.H.W. expansion vessel	1	2,5	2,5
Tank unit maximum water head	bar	7	7
Recovery time from 25 to 55°C	min	4'30"	4'30"
Absorbed power consumption	W	165	180

		25/60 BF	30/60 BF
Electrical protection grade		IP X4D	IP X4D
Maximum water head	bar	3	З
Maximum temperature	°C	85	85
Smokes temperature	°C	123	123
Smokes flow	gr/s	17,0	20,0
Category		II2H3+	II2H3+
Туре		C12-32-42-52	C12-32-42-52
Weight	kg	82	82
Main gas nozzles			
Quantity	n°	13	15
G20	ø mm	1,30	1,30
G30 - G31	ø mm	0,76	0,76
Gas flow * *			
Methane (G2O)	m³st∕h	2,83	3,34
Butane (G30)	kg∕h	2,06	2,44
Propane (G31)	kg∕h	2,03	2,40
Burner gas pressure * * *			
Methane (G20)	mbar	1,9÷10,8	1,7 <i>÷</i> 11,3
Butane (G30)	mbar	4,7÷28,4	4,7÷28,1
Propane (G31)	mbar	4,7÷35,3	4,7÷35,9
Gas supply pressure			
Methane (G20)	mbar	20	20
Butane (G30)	mbar	30	30
Propane (G31)	mbar	37	37

* Flow calculated with a fixed temperature on the D.H.W. potentiometer of 60 °C for a maximum period of 10 minutes.

** The gas flow refers to the inferior calorific value in standard conditions of 15°C - 1013 mbar

*** Differential measure between the pressure upstream of the gas valve and the depression in sealed 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 BOILER ROOM AND VENTILATION

The "**PLANET**" series may be installed, without problems of location or combustible air, in any domestic environment.

2.2 BOILER SUPPORT BRACKET

For the mounting of the support bracket of the boiler, which is supplied, observe the following instructions (fig. 4):

- Fix the bracket to the wall with appropriate dowels.
- Check with a spirit level that it is perfectly in horizontal plane.

2.2.1 Installation plate (optional)

The installation plate code 8081209 is supplied with an instruction sheet for the fixing.

2.2.2 Fitting the pipe elbows (optional)

To fit the conneting elbows supplied in kit code 8075419, follow the instructions in fig. 5. The D.H.W. cock and the relative stub pipe are supplied with the boiler.

2.2.3 Fitting the isolating valves (optional)

To fit the isolating valves supplied in kit code 8091807, follow the instructions in fig. 6. The D.H.W. cock and the relative stub pipe are supplied with the boiler.

2.3 CONNECTING UP SYSTEM

Before proceeding to connect up the boiler, you are recommended to make the air circulating in the piping in order to eliminate any foreign bodies that might be detrimental to the operating efficiency of the appliance. When making the hydraulic connections, make sure that the dimensions indicated in fig. 1 are respected.

The discharge pipe of the safety valve must be connected to a collector funnel for channelling away any discharge if the safety valve goes into action.

The gas connection must be made using seamless steel pipe (Mannesmann type), galvanized and with threaded joints provided with gaskets, excluding three-piece connections, except for initial and end connections. Where the piping has to pass through walls, a suitable insulating sleeve must be provided. When sizing gas piping, from the







meter to the boiler, take into account both the volume flow rates (consumption) in m^3/h and the relative density of the gas in question. 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 sticked inside the front panel; it contains all the technical data identifying the boiler and the type of gas for which the boiler is arranged.

2.3.1 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.

2.4 CHARACTERISTICS OF FEEDWATER

To prevent lime scale and damage to the tap water exchanger, the water supplied

should have a hardness of no more than 20°F. In all cases the water used should be tested and adequate treatment devices should be installed. To prevent lime scale or deposits on the primary exchanger, the water used to supply the heating circuit should must be treated in accordance with UNI-CTI 8065 standards. It is absolutely essential that the water is to be treated in the following cases:

- very extensive system (with high contents of feedwater);
- frequent addition of makeup water into the system;
- should it be necessary to empty the system either partially or totally.

2.5 SYSTEM FILLING

The filling of the boiler and the system is done by the filling cock located on the bottom of the boiler (fig. 7).

The filling pressure of the system cold must be 1 bar. Once the filling has been completed, close the filling cock.



2.6 FLOW REGULATOR

At the inlet of the hot water a flow regulator is installed, from 10 l/min (yellow) for the "25/60" version and from 12 l/ min (brown) for the "30/60" version.



2.7 COAXIAL DUCT

The air inlet-smoke outlet assembly ø 60/100 is supplied in kit code 8084805 and comes with an instruction sheet for the assembly.

2.7.1 Diaphragm installation

The diaphragm is supplied together with the "30/60 BF" boiler. See figure 8 for the positioning.

ATTENTION: Install the diaphragm only when the length of the ø 60/100 coaxial duct is less than 1 m.

2.7.2 Coaxial duct accessories

The accessories necessary for the realisation of this type of installation and some of the connecting systems that can be used are shown in fig. 9. With the elbow supplied in the kit the maximum length of the duct should not be greater than 3 metres. If the extra elbow cod. 8085601 is used the duct could reach the maximum length of



1.6 metres. With the use of the vertical extension cod. 8086902 the end of the duct must always have an horizontal outlet.

2.7.3 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. 9.





TABLE 1

Sitin	g of terminal	Appliances from 7 to 35 kW
		(distances in mm)
Α-	below openable window	600
В-	below ventilation opening	600
С-	below eaves	300
D -	below balcony (1)	300
Ε-	from adjacent window	400
F -	from adjacent ventilation opening	600
G -	from horizontal or vertical soil or drain pipes (2)	300
Н-	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
0 -	from a surface facing without openings or terminals	2000
Ρ-	as above but with openings and terminals	3000

 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.

2.7.4 Roof outlet coaxial duct

The roof outlet terminal L1284 cannot be shortened and the positioning of the tile distances must be no less than 600 mm from the discharge terminal outlet (fig. 11). The accessories required for this type of installation and some of the connecting systems that can be used are shown in fig. 12. Up to a maximum of three extensions can be added to reach a rectilinear length of 3.7 metres.





2.8 SEPARATE DUCTS

In the installation it is best to observe the directions requested by the Norms and a few practical considerations:

- With direct external suction, when the duct is greater than 1 m in length, insulation is recommended in order to avoid, in particularly cold periods, the formation of dew on the outside of the tubing.
- With discharge duct positioned on the outside of the building, or in cold environments, insulation is necessary to avoid starting failures of the burner. In such cases, a system for the collection of condensation must organised.
- 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 total length obtained by summing up the lengths of the suction and discharge tubing is determined by the load losses of the single fittings attached (excluding the splitter) and must not be greater than 8.00 mm H20 (vers. "25/60") and 9.00 mm H20 (vers. "30/60").

For the load losses of the fittings refer to **Table 2**.

2.8.1 Separate ducts accessories

For the realisation of this type of discharge is supplied a kit cod. 8093000 (fig. 13). The sector diaphragm in the kit, must be used according to the maximum load loss allowed in both ducts, as indicated in fig.

TABLE 2

Accessories ø 80	Load loss (mm H ₂ O)						
	"25/60" version			,	" 30/60" 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	-	
Inlet 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 allowed installation calculation for **"25/60"** version: the sum of the load losses in each inserted fitting is less than 8.00 mm H2O:

	Inlet		Outlet		
7 metres horizontal tube ø 80 x 0.20	1.40		-		
7 metres horizontal tube 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 load loss	2.10	+	3.20	=	5.3 mm H2O

With this total load loss the ø 38 diaphragm from the intake pipe must be removed.

13/a. The complete range of accessories necessary for each type of installation are given in fig. 14.

2.8.2 Roof outlet separate ducts

The roof outlet terminal L. 1390 cannot be shortened and in the positioning of the tile the distance from the discharge outlet of the terminal must not be less than 700 mm (fig. 15).

The accessories necessary for this type of discharge and some of the other type of systems that it is possible to use are shown in fig. 16.

By utilising the doubler fitting (7 fig. 16) it is possible to have a concentric discharge. In these cases, during assembly, it is necessary to get the washer in silicon used on the reduction of the terminal (5 fig. 17) to be substituted with the doubler and place it in the housing of the doubler.

For this type of discharge the sum of the maximum development allowed of the ducts must not be greater than 8.00 mm H2O (vers. "25/60") 9.00 mm H2O (vers. "30/60").

To calculate the load losses of the single fittings attached refer to **Table 2**.



	"25/60" version		
	Sections of diaphragm	Total	oad loss
	to removed	mm H ₂ O	Pa
	0	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 "30/60" version	5÷8	49,0÷78,4
	Sections of diaphragm	Total	oad loss
	to removed	mm H ₂ O	Pa
SECTOR OF DIAPHRAGM	4	0÷4	0÷39,2
L	5	4÷5	39,2÷49,0
	6	5÷6	49,0÷58,8
	Remove diaphragm	6÷9	58,8÷88,2

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Fig. 16

2.9 ELECTRICAL CONNECTION

The boiler is supplied with an electric supply cable, which in case of replacement must be requested from SIME. The supply must be carried out with a monophase voltage of 230V - 50 Hz via a general switch protected by fuses, with a distance between contacts of at least 3 mm. Observe the L-N polarities and the earth connection.

NOTE: Device must be connected to an efficient earthing system. SIME declines any responsibility for damages to persons or objects due to failing to earth the boiler. Always turn off the power supply before doing any work on the electrical panel.

2.9.1 Room stat connection (fig. 17 pos. A)

In order to have access to the connector of the electronic panel (3), remove the cover of the control panel and electrically connect the room stat to the TA terminals (5-6) after having removed the existing bridge. The thermostat or chronothermostat to be used, whose installation allows a better regulation of the temperature and comfort of the environment, must be class II in compliance with norm EN 60730.1 (clean electrical contact).

ATTENTION: The introduction of grid electricity to the connector (3) irreversibly damages the regulation panel. Before connection ensure that there is no grid electricity.

2.9.2 Connection "Logica Remote Control " (fig. 17 pos. B)

The electrical plants must be in compliance with local norms and cables must be laid observing the safety low voltage specifications EN 60730. For lengths up to 25 m use cables with sections of 0.25 square mm and for lengths greater than 50 m use cables with sections of 0.5 square mm. First of all assemble and cable the socket (2) and then insert the apparatus that will start as soon as it receives electricity. To have access to the connector (3) remove the cover of the control panel and electrically connect the climate regulator to the terminals CR (6-7) .

ATTENTION: External electricity cannot be connected to terminals 1-2-3-4 of the socket. The telereducer of the telephone with a contact of zero potential or a window contact can be connected to terminals 3-4. A type of electronic apparatus for the control of civil plants via a telephone line that can be pointed out is the model TEL 30.4 LANDIS & STAEFA.

2.9.3 Connection external temperature sensor (fig. 17 pos. C)

The cables must be laid observing the safety low voltage specifications EN 60730. For lengths up to 25 m use cables with sections of 0.25 square mm and for lengths greater than 50 m use cables with sections of 0.5 square mm. To have access to the connector of the boiler (3) remove the cover of the control panel and electrically connect the external temperature sensor to the terminals SE (8-9).





2.10 LOGICA REMOTE CONTROL

All the boiler's functions can be managed by a 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.

- Tome 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 C.H. flow temperature limit (specifically for floor plants).
- Limitation of increase in pre-set C.H. flow 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.

2.10.1 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 ($\boxed{\Box}$), the installer can adjust the basic parameters set-

tings according to the individual needs (point 2.10.2). If there is a thermostatic radiator valve fitted, this must be set to maximum.

2.10.2 Installation settings

The settings for the basic operating para-

meters 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 para-

meterising which can only be accessed

through a special combination of buttons. To activate this level of service or parame-

terising 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 +.

SETTINGS THE HEATING CIRCUIT PARAMETERS

Antifreeze protection "Pre-set ambient temperature value"	52	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/win- ter switch-over.			
Type of control: O = 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 with have no effect at all.			
Maximum limit of C.H. flow temperature	55	The C.H. flow temperature is limited to the maximum set value.			
Variation of the maximum speed of the C.H. flow temperature	56	The increase per minute of the prescribed C.H. flow temperature value sent in $^\circ\mathrm{C}$ 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 is 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 O = OFF 1 = ON			
Heating gradient	59	The "Logica Remote Control" selects the switch-on time such that the 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 stateExample:Current ambient temperature18.5°CNominal ambient temperature20°CHeating gradient30 min/KPresetting of switch-on time:1.5 K x 30 min/K=45 minutes			
Presetting switch-off time (00 = off)	68	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 D.H.W. PARAMETERS

Reduced D.H.W. 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).
D.H.W. filling	62	 0 = 24 hours/ day - Hot water is always available at the temperature set with user parameter n°3. 1 = standard - Hot water according to the daily heating programme. In the comfort areas of heating the temperature of the D.H.W. tank is regulated to the value set with user parameter n° 3. In the reduced areas of heating the temperature of the D.H.W. tank is regulated to the value set with parameter n° 61 of the service level. 2 = service disconnected 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 D.H.W. tank is regulated according to that set in parameter n°3. In the remaining hours the D.H.W. tank is controlled to the temperature set with parameter n° 61 the of service level.
SERVICE VALUES		
Final user level 2 programming block	63	This block (1) can be activated to display all the parameters without modif- ying them. Pressing buttons ☐ or
Entrance function terminal 3-4	64	 The freely programmable input (terminals 3 and 4 of the socket) allows three different functions to be activated. The parameter has the following significance: 1 = If an external sensor is connected, the display will show the temperature of the external sensor (= no sensor connected, function disabled). 2 = With an external contact, it is possible to switch-over to "reduced preset value of the ambient temperature". 3 = With an external contact, it is possible to switch-over to "reduced preset value of the antifreeze ambient temperature" (short circuit 0 0 0 or interruption). The display shows the current status of the external contact.
Operating mode of external contact	65	If the entrance (terminals 3 and 4 of the socket) 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. Display: Operating mode closed (short circuit) 0 0 0 Operating mode open (interruption)
External and ambient sensor influence	66	Determines the mix ratio between the internal and external ambient sensor when parameter 64 = 1. 0 % = internal sensor only active (0% external - 100% internal) 50 % = mean value of external + internal sensor 100 % = external sensor only active 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.
Anti-bacterial function	69	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. D = not active 1 = active

2.10.3 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. 19, the C.H. flow 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 C.H. flow temperature of 60°C.

2.11 EXTERNAL TEMPERATURE SENSOR

The "Logica Remote Control" can be connected to an external temperature sensor available an optional extra (code 8094100). This configuration ensures and maintains the required temperature constant in the room. The ambient temperature is, in fact, indicted 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.

3 CHARACTERISTICS

3.1 ELECTRONIC PANEL

Made in accordance with the Low Voltage EEC directive 73/23, supplied with 230 Volt; via a transformer it sends 24 Volt to the following components: gas valve, safety stat, C.H. and D.H.W. sensors, external temperature sensor (optional), modulator, water pressure transducer, smoke stat, room stat or "Logica Remote Control".

An automatic and continuous modulating system allows the boiler to adjust the power to the various plant or user demands. The electronic components are guaranteed to work in a temperature range between 0 and +60 °C.

3.1.1 Functioning faults

The leds that show an irregular and/or incorrect functioning of the apparatus are shown in fig. 20.

3.1.2 Devices

The electronic panel has the following devices:

Trimmer "POT. RISC." (10 fig. 21)
 It regulates the maximum value of heating power. To increase the value turn the trimmer in a clockwise direction and to decrease it turn the trimmer in an anti-clockwise direction.



- Trimmer "POT. ACC." (6 fig. 21)

Trimmer for the changing of the ignition pressure level (STEP) of the gas valve. According to the type of gas for which the boiler is predisposed, the trimmer must be regulated so as to provide the burner with a pressure of around 3 mbar for methane gas or 7 mbar for butane gas (G30) and propane gas (G31). To increase the pressure turn the trimmer in a clockwise direction, to decrease it turn the trimmer in an anticlockwise direction. The level of pressure of slow ignition is able to be set during the first 5 seconds from the starting of the burner. After having established the level of pressure at ignition (STEP) according to the type of gas, check that the heating gas pressure is still on the value set beforehand.

- Connector "MET-GPL" (7 fig. 21)
 With the connector disconnected, the boiler is ready to function with METHANE; with the connector connected with GPL.
- Connector "ANN. RIT." (5 fig. 21)
 The electronic panel is programmed, in heating phase, with a technical pause by the burner of around 90 seconds, both at the beginning when the plant is cold and in the subsequent startings. This is so to avoid ignitions and switching off with very short intervals, that may in particular be found in plants with high losses. At every restarting, following the period

of slow ignition, the boiler will position itself for around 1 minute to the minimum modulating pressure to then return to the set value of heating pressure. With the insertion of the bridge both the technical pause programmed and the period of functioning at minimum pressure in the ignition phase will be eliminated. In such a case, the time that runs between the switching off and the next ignition will be in function of a variance of 5° C, as shown by the C.H. sensor (SM).

- DIP SWITCH (13 fig. 21)

Ensure that the riders are inserted in the position shown in order for the boiler to work:



- Connector "Modureg Sel." (14 fig. 21)
 With the bridge disconnected the boiler is predisposed to function with the SIT gas valve, and with the bridge connected it is predisposed to function with the HONEYWELL gas valve.
- Connector "Albatros" (15 fig. 21)
 The bridge must always be disconnected.
 It is connected only when multiple boilers are installed in a sequence/cascade.

ATTENTION: All of the operations described above must be carried out by authorised personnel.





NOTE: In order to have access to the regulating trimmer, (6) and (10), take out the C.H. potentiometer knob.



3.2 TEMPERATURE SENSORS AND WATER PRESSURE TRANSDUCER

Tables 3 - 3/a show the resistance values $\{\Omega\}$ that are obtained on the sensors as the temperature varies and the transducer when the pressure varies.

With the C.H. sensor (SM) interrupted the boiler will not function with both services.

With the D.H.W. sensor (SB) interrupted

the boiler functions only with heating.

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

TABLE 3/a (Transducer)

Pressure	Resistance (Ω)		
(bar)	min	max	
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

The ignition and flame sensing are controlled by two electrodes that guarantee the maximum safety, with a time of intervention of one second for accidental switching off or lack of gas.

3.3.1 Functioning cycle

Turn the selector knob to summer or winter and note, from the lighting up of the green led (\bigcirc) , whether electricity is present. The starting up of the burner should take place within a maximum of 10 seconds. We can summarise the manifestations of a failure to start, with consequent activation of the failure signal as follows:

- Gas failure

The ignition electrode continues to spark for a maximum of 10 seconds, the pilot burner does not start, the blockage indicator lights up.

This may occur at the first ignition attempt or after long periods of inactivity with the presence of air in the tubing. May be due to the gas cock being closed or a break in the valve coil, which do not allow opening.

The ignition electrode does not give a jump spark

In the boiler only the gas opening to the burner is noted, after 10 seconds the block signal lights up.

May be due to the fact that the cable of the electrode is interrupted or is not well fixed to the terminal of the ignition transformer.

- The flame is not detected

From the time of the ignition a continuous



jump spark from the electrode is noted despite the burner being lit. After 10 seconds the sparking stops, the burner goes off and the block signal lights up. The cable of the detector electrode is interrupted or the electrode itself is earthed: the electrode is very worn and

needs to be replaced. The control board

Due to a sudden fall in electricity the burner is immediately arrested, once the electricity is restored, the boiler will automatically restart.

3.4 SMOKE PRESSURE SWITCH

is faulty.

The switch with a fixed setting 6.0-7.5 mm H_2O (vers. "25/60") and 3.5-4.5 mm H_2O (vers. "30/60"), is able to guarantee the functioning of the boiler with inlet and outlet pipes at the maximum limit length allowed.

The value of the smoke pressure switch signal is measured with a special instrument connected to the positive and negative pressure plugs on the upper part of the sealed chamber.

3.5 SYSTEM AVAILABLE HEAD

The residual head for the heating plant is represented, in function of the C.H. flow, by the graph in fig. 22.

3.6 MAINS ELECTRICITY CONNECTION

Use a separate electric line to link up the room stats and relative zone valves or pumps. The connection of the micros or the relay contacts is carried out on the connector of control board (J2) after having removed the existing bridge (fig. 23).



4 USE AND MAINTENANCE

4.1 D.H.W. PRODUCTION

The preparation of hot water is guaranteed by the glass enamelled tank unit with magnesium anode for the protection of the tank and inspection flange for its control and cleaning.

The magnesium anode must be checked annually and substituted when it is worn. If the boiler does not produce hot water, make sure that the air has been released by pressing on the manual vents after having switched off the main switch.

4.2 GAS VALVE

The boiler is produced with SIT 845 SIGMA gas valve (fig. 24) and HONEYWELL VK 8105N gas valve (fig. 24/a).

NOTE: In case of replacement of the SIT gas valve to HONEYWELL or vice-versa, press on the "Modureg" connector of electronic panel (14 fig. 21). With the bridge disconnected the boiler is predisposed to function with the SIT gas valve, and with the bridge connected it is predisposed to function with the HONEYWELL gas valve.

The gas valve is set at two pressure values: maximum and minimum, that correspond, according to the type of gas, to the values indicated in **Table 4**.

The setting of the gas pressure at minimum and maximum values is carried out by SIME: variations are discouraged.

Only in the passing from one type of gas supply (methane) to another (butane or propane) is a change in the working pressure allowed.

It is essential that this operation is carried out by authorised personnel. Once the change in working pressure has

been carried out, seal the regulators. When proceeding with the setting of the pressure, it is necessary to follow a pre-

established order, first the MAXIMUM and then the MINIMUM.

4.2.1 Maximum and minimum pressure adjustment SIT 845 SIGMA

In order to carry out the setting of the maximum pressure proceed in the following way (fig. 25):

- Connect the differential manometer as shown in fig. 24/b.
- Remove the plastic cap of the modulator (1).
- Place the D.H.W. potentiometer knob on the maximum value.
- Start the boiler by pressing the rotary switch and open the hot water cock.
- Using a 10 wrench turn the nut (3) to find the maximum pressure as shown in Table 4: to reduce the pressure turn the nut anti-clockwise, to increase the pressure turn the nut clockwise.







TABLE 4

	Burner max.	Modulator	Burner min.	Modulator
Gas type	pressure	current	pressure	current
	mbar	mA	mbar	mA
Methane (G2O)	10,8 - 11,3	130	1,9 - 1,7	0
Butane (G30)	28,4 - 28,1	165	4,7	0
Propane (G31)	35,3 - 35,9	165	4,7	0



 Turn off and turn on the boiler a few times whilst keeping the hot water cock constantly open to verify that the pressure corresponds to the values given in Table 4.

After having regulated the maximum pressure, proceed with the setting of the minimum pressure (fig. 25):

- Disconnect the electric supply of the modulator.
- With the D.H.W. potentiometer knob on the maximum value, the hot water cock open and the burner alight, holding the nut (3) blocked, turn the screw (2) to find the minimum pressure value as shown in Table 4: to decrease the pressure turn the nut anti-clockwise and to increase the pressure turn the nut clockwise.
- Turn on and turn off the boiler a few times whilst keeping the hot water cock constantly open and verify that the pressure corresponds to the values fixed.
- Reconnect the electrical supply of the modulator.
- Replace the plastic cap (1).

4.2.2 Maximum and minimum pressure adjustment HONEYWELL VK 8105N

For the setting of the minimum pressure proceed in the following way (fig. 25/a):

- Connect the differential manometer as shown in fig. 24/b.
- Remove the plastic cap of the modulator (1).
- Place the D.H.W. potentiometer knob on the maximum value.
- Start the boiler and open the hot water cock.
- Using a 9 wrench turn the nut (3) to find the maximum pressure as shown in Table 4: to reduce the pressure turn the nut anti-clockwise, to increase the pressure turn the nut clockwise.
- Turn off and turn on the boiler a few times whilst keeping the hot water cock constantly open to verify that the pressure corresponds to the values given in Table 4.

After having set the maximum pressure, for the setting of the minimum pressure proceed in the following way (fig. 25/a):

- Disconnect the electricity of the modulator.
- With the D.H.W. potentiometer knob on the maximum value, the hot water cock open and the burner alight, using a 7 wrench turn the nut (2) to find the minimum pressure value as shown in Table 4: to decrease the pressure turn the nut anti-clockwise and to increase the pressure turn the nut clockwise.
- Turn on and turn off the burner a few times whilst keeping the hot water cock constantly open and verify that the pressure corresponds to the values of Table 4.
- Reconnect the electric supply of the modulator.
- Replace the plastic cap (1).

4.3 REGULATION OF HEATING POWER

To regulate the heating power, modifying



the factory settings whose power value is around 16 kW, it is necessary to work with a screwdriver on the trimmer of the heating power (10, fig. 21).

To increase the operating pressure turn the trimmer in a clockwise direction, to decrease the pressure turn the trimmer in an anti-clockwise direction.

To facilitate the search for the adjusting of the heat output see the pressure/heat output diagrams for natural gas (methane) and butane or propane gas are available (fig. 26).









4.4 CONVERSION TO ANOTHER GAS

For the functioning with butane (G30) or propane (G31) gas, a kit with that needed for the conversion is supplied. To convert from one gas to another carry

out the following operations (fig. 27):

- Close the gas cock.
- Undo the burner group
- Replace the main nozzles (5) supplied in kit, and placing the copper washer (4); to carry out this operation use a ø 7 wrench.
- Insert the bridge of the "GPL-MET" connector of the electronic panel onto the "GPL" position (11 fig. 21).
- For the setting of the values of the maximum gas pressure and the minimum follow the indications as specified in point 4.2. Once the operating pressure changes have been carried out seal the regulators.
- The supply pressure must never be greater than 50 mbar.
- Once the operations have been finished cover, with the label supplied, the gas pre-setting data on the data tag.

NOTE: After assembly the sealing capacity of all the gas connections must be tested, using soapy water and special products, and avoiding the use of naked flames. The conversion must be carried out only by authorised personnel.

4.5 DISASSEMBLY OF EXPANSION VESSEL

For disassemble the expansion vessel proceed in the following way:

- Make sure that the boiler has been emptied of water
- Unscrew the union that connects the expansion vessel and the screw that release it from its bracket.

Before beginning to fill the system, make sure that the expansion vessel is pre-filled to a pressure of $0.8 \div 1$ bar.

4.6 REMOVAL OF OUTER CASING

For easy maintenance of the boiler it is possible to completely dismantle the casing following these simple instructions (fig. 28):

- Pull the front panel (5) fixed with pin clutches forward.
- Unscrew the two screws that fix the control panel to the casing.
- Remove the side panel (6) by unscrewing the two screws that fix it to the upper bracket (7) and to the support of the control panel. Push upwards to free it from the notches in the right side.
- Unscrew the four lower screws that fix the sides to the support of the control panel and the two screws that fix it to the upper bracket (7). Push the sides (3)



and (4) upwards freeing them from the notches in the frame (2).

4.7 CLEANING AND MAINTENANCE

Carry out the cleaning of the generator in the following way:

- Remove the electricity supply to the boiler and close the gas supply cock.
- Dismantle the casing as described in point 4.6.
- Dismantle the burner gas manifold group (fig. 27).
- To clean direct a stream of air towards the inner part of the burner to blow out any dust that has accumulated.
- Then clean the heat exchanger removing dust and combustion deposits.
- In cleaning the heat exchanger and that of the burner, chemical products or steel brushes must never be used.
- Make sure that the top perforated part of the burners is free of encrustations.
- During the assembly and disassembly of the burner it is recommended that attention be paid to the ignition and

detection electrodes.

- Reassemble the parts removed from the boiler, observing the succession of the phases.
- Check the functioning of the main burner.
- After the assembly all the gas connections must be checked for the seal, using soapy water or specific products, avoiding the use of naked flames.

The programmed maintenance of the generator is carried out annually.

4.7.1 Chimney sweep function

To carry out the verification of combustion in the boiler, turn the selector and stop on the position ($\hat{\mathbf{0}}$) until the yellow led (**iiii**) starts to flash intermittently (fig. 29).

From that moment the boiler will start functioning in heating mode at the maximum power (20,000 - 25,000 kcal/ h), with switching off at 80° C and restarting at 70° C.

Before activating the chimney sweep function make sure that the radiator valves or eventual zone valves are open.

The test may be carried out also during hot water functioning.

To do so it is enough, after having activated the chimney sweep function, to take some hot water from one or more cocks; after a few minutes the request of the D.H.W. sensor is activated and it automatically switches on the led (\checkmark).

Even in this condition the boiler functions at the maximum temperature always with the primary controlled between 80° C and 70° C. During the entire duration of the testing the hot water cocks must remain open.

After verifying the combustion the boiler should be switched off by placing the selector on the **OFF** position; then return the selector to the desired function.

ATTENTION:

After about 15 minutes the chimney sweep function automatically deactivates.



ATTENTION

- In case of the break down and/or improper functioning of the apparatus, deactivate it, refraining from any attempts to repair it or directly intervene. Call exclusively the authorised technical staff.
- The installation of the boiler and any other assistance or maintenance must be carried out by qualified personnel. It is absolutely prohibited to tamper with the sealed devices.
- It is absolutely prohibited to obstruct the airflow grilles and the aeration opening of the room where the apparatus is installed.

LIGHTING AND OPERATION

BOILER IGNITION (fig. 1)

Open the gas cock, lower the cover of the control and activate the boiler by turning the selector knob to the summer (\bigstar). position.

When the green led () lights up, electricity is present in the boiler.

- With the selector knob on the summer
 (*) position, the boiler works to take the temperature of the hot water to the fixed value.
- With the selector knob on the winter position (
 the boiler, once it has reached the temperature set on the heating potentiometer, will begin to modulate auto-



matically in order to supply the system with the effective power requested.

The boiler will stop functioning if the room stat or "Logica Remote Control" intercede.

TEMPERATURES ADJUSTMENT (fig. 2)

The panel of the red leds is graduated from $40 \div 80$ °C and shows the temperature in the D.H.W. tank when the two service leds (iii) \checkmark) are off; it shows the temperature of the primary circuit when one of the two leds is lit up.

- Regulation of the D.H.W. temperature is carried out by acting on the hot-water service knob (♣). The set temperature is displayed on the scale of the red leds from 40 ÷80 °C.
- Regulation of the C.H. temperature is carried out by acting on the heating knob (IIII). The set temperature is shown on the scale of the red leds from 40÷80 °C. To guarantee an always optimal output from the generator it is advised not to go below a minimum operating temperature of 50 °C.

TURNING OFF BOILER (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 COCK, AND IF LOW TEM-PERATURES ARE FORESEEN, EMPTY THE BOILER AND THE HYDRAULIC SYSTEM TO AVOID BREAKAGE IN THE TUBES DUE TO THE FREEZING OF THE WATER.

GAS CONVERSION

If gas conversion proves to be necessary, refer exclusively to an authorised SIME technician.

CLEANING AND MAINTENANCE

The programmed maintenance of the generator is carried out annually. It must be request from the authorised technical staff.

The boiler is supplied with an electric cable which, in case of replacement, must be requested only from SIME.



FAULTS FINDING

- Ignition failure (fig. 3) If the burner fails to start the red led will

light up ($\hat{\mathbf{0}}$). To attempt starting it again, the selector knob must be turned to the position ($\hat{\mathbf{0}}$) and released soon after, returning to the summer ($\hat{\mathbf{*}}$) or winter ($\hat{\mathbf{*}}$) position.

If the failure should occur again, call the authorised technical staff for assistance.



- Insufficient water

pressure (fig. 4)
If the red led "0.5 bar" intermittently
lights up, the boiler is not functioning.
To restore functioning act on the filling
cock until the green led "1 bar" lights up.
Once filled close the filling tap.
If all the leds are off, call the authorised

technical staff.



- Safety stat interception (fig. 5)

If the safety stat intercedes the red led **"35°C"** intermittently lights up. To start the boiler again, turn the selector knob in the position ($\hat{\mathbf{W}}$) and then release immediately, returning it to the winter ($\hat{\mathbf{K}}$) or summer ($\hat{\mathbf{K}}$) function.

If the failure should occur again, call the authorised technical staff for assistance.

- Other faults (fig. 6)

When one of the leds is flashing from "40÷ 80°C", deactivate the boiler and try to start it again. The operation may be repeated 2 or 3 times, and if there is no success call the authorised technical staff for assistance.





LOGICA REMOTE CONTROL

When **"PLANET"** is connected to the "Logica Remote Control" regulator, the selector CR/OFF/EST/INV/UNBLOCK must be placed in the position (); the knobs of the D.H.W. and C.H. 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 (* or *), position, obviously without consequent control of the room temperature.

The functioning instructions are inside the lid (fig. 8).

Every setting or modification is displayed and confirmed on the display (fig. 9).







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 ____



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.



(reference key grey colour)



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



Day, hour, room temperature



* This data appear only if the relative sensor 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.



 (\cdot)

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 \bigotimes , carried out, instead, if automatic \bigoplus 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



Linea programma Valore

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 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.



Fixed temperature: temperature when the rooms are occupied (basic setting)



Reduced temperature: temperature during periods of absence or night



Comfort D.H.W. temperature:

desired temperature of domestic hot water





Reduced temperature of domestic hot water: temperature desired for domestic hot water at reduced level.

To have access to the "reduced D.H.W. temperature" parameter, press the \blacktriangle and \bigtriangledown keys at the same time for at least 5 seconds and then go along the entered lines with the key \bigcirc until parameter 61 is reached. Regulate the value with $_$ and +.

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- Heating 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 ignition time and a finishing time. The n° 8 daily programme is for the domestic hotwater service. If a phase is not required, the same ignition and finishing time may be entered.



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.

- D.H.W. programme

With the Logica Remote Control it is possible to manage the temperature of D.H.W. tank on two levels (a comfort level and one at reduced temperature) in accordance with the programme chosen with parameter 62 (load domestic hot water). To have access to the parameter press the \blacksquare and \bigcirc keys for at least 5 seconds and then go along the entered lines with the \bigcirc key until parameter 62 is reached. At this point four different programmes may be selected with \boxdot of + keys, with the following characteristics:

- **0** = 24 hours/ day Hot water is always available at the temperature set with user parameter n°3.
- 2 = service disconnected

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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 D.H.W. tank is regulated according to that set in parameter n°3. In the remaining hours the D.H.W. tank is controlled to the temperature set with parameter n° 61 the of service level.



Start phase 1: preparation of the D.H.W. tank to the comfort temperature $% \left({{{\rm{D}}_{{\rm{D}}}}_{{\rm{D}}}} \right)$
End phase 1: Temperature of D.H.W. tank maintained at the reduced value
Start phase 2: Preparation of D.H.W. tank to the comfort temperature
End phase 2: Temperature of D.H.W. tank maintained at the reduced value
Start phase 3: preparation of D.H.W. tank to the comfort temperature
End phase 3: Temperature of D.H.W. tank maintained at the reduced value

- Setting the time

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To set the current day of the week (1 = Monday/7 = Sunday)



To set the current hour



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

- Vacation function

- Default values

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 2.10.3 Display of the current boiler temperature.



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Display of the current power of the burner and of the current operating mode ($\overline{\mathbb{III}}$ = heating/ $\overline{\mathbb{III}}$ = D.H.W. service)



To enter the number of days of absence.

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

NOTE:



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



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



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



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
- to |

- Display of the functioning faults on the display



Ignition failure

• Vacation period

Turn the selector CR/OFF/EST/INV/UNBLOCK on the "**PLANET**" control panel to the unblock position ($\hat{\bullet}$) to restore functioning. If the failure should occur again, call the authorised technical staff for assistance.

Safety stat interception

Turn the selector CR/OFF/EST/INV/UNBLOCK of the "**PLANET**" control panel to the unblock position ($\hat{\mathbf{V}}$) to restore functioning. If the failure should occur again, call the authorised technical staff for assistance.

Smoke pressure switch failure

Call the authorised technical staff for assistance.

Er	66
Er	67
Er	68
Er	69
Er	10
Er	192
Er	193
Er	194
Er	195

Smoke pressure switch does not return to rest position Call the authorised technical staff for assistance.

D.H.W. sensor fault (SB) Call the authorised technical staff for assistance.

C.H. sensor fault (SM) Call the authorised technical staff for assistance.

Insufficient water pressure Restore functioning by acting on the filling cock of the boiler.

System overpressure Call the authorised technical staff for assistance.

Safety stat interception Call the authorised technical staff for assistance.

Smoke pressure switch interception Call the authorised technical staff for assistance.

Failure of the modulating coil Call the authorised technical staff for assistance.

Communication failure between the Logica Remote Control and the boiler Call the authorised technical staff for assistance.