INSTALLER INSTRUCTIONS

CONTENTS

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.
- 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.

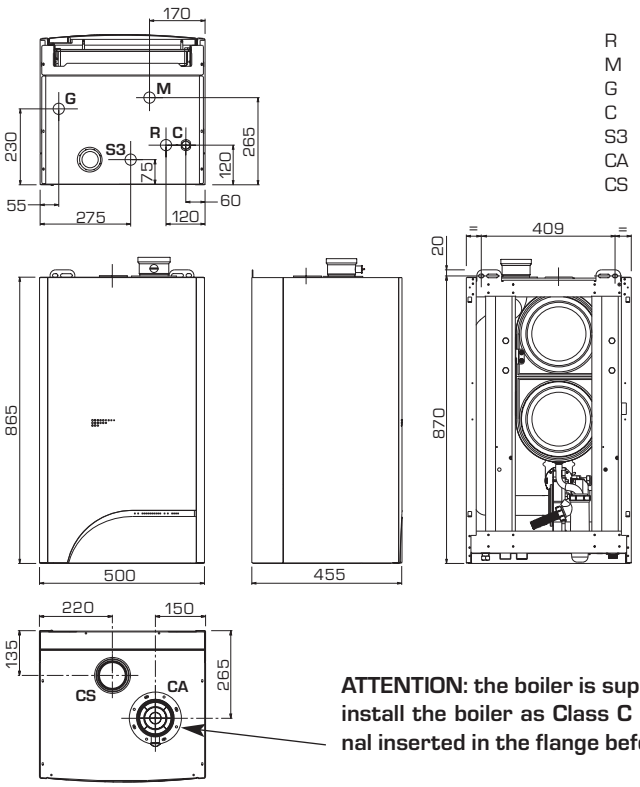
1 DESCRIPTION OF THE BOILER

1.1 INTRODUCTION

"PLANET DEWY 60 BFR" boilers (supplied as Class B devices) are pre-mixed condensation heating modules intended only for heating, designed to work singularly or in sequence/cascade autonomously.
They are designed and constructed to meet European directives 90/396/CEE, 89/336/CEE, 73/23/CEE, 92/42/CEE and European regulation EN 483.

Upon request, a control unit for a maximum of four boilers can be supplied for sequence/cascade installation.

1.2 DIMENSIONS

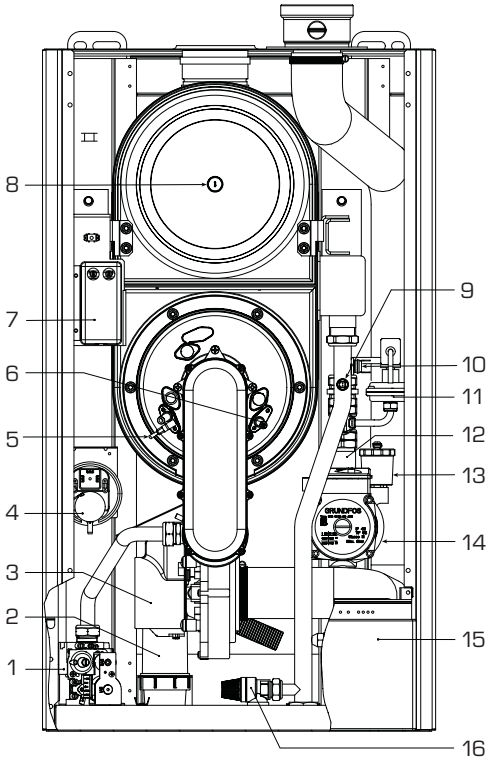


R	C.H. return	G 1 (UNI-ISO 228/1)
M	C.H. flow	G 1 (UNI-ISO 228/1)
G	Gas connection	G 3/4" (UNI-ISO 228/1)
C	Filling system	G 1/2" (UNI-ISO 228/1)
S3	Condensation outlet	ø 25
CA	Inlet	ø 80
CS	Outlet	ø 80

ATTENTION: the boiler is supplied as Class B device. To install the boiler as Class C device, remove the terminal inserted in the flange before connecting the intake.

Fig. 1

1.3 MAIN COMPONENTS



KEY
1 Gas valve
2 Condensation drain siphon
3 Fan
4 Air pressure switch
5 Ignition electrode
6 Detection electrode
7 Ignition transformer
8 Exhaust thermostat
9 Heating probe (SM)
10 Safety thermostat 100°C
11 Differential pressure switch
12 Single-acting valve
13 Automatic escape
14 Pump
15 Control panel
16 Safety valve 4 BAR

Fig. 2

1.4 TECHNICAL FEATURES

		PLANET DEWY 60 BFR
Heat output nominal (80-60°C)	kW (kcal/h)	56,6 (48.600)
Heat output nominal (50-30°C)	kW (kcal/h)	62,1 (53.400)
Heat output minimum G20 (80-60°C)	kW (kcal/h)	17,0 (14.600)
Heat output minimum G20 (50-30°C)	kW (kcal/h)	19,0 (16.300)
Heat output minimum G31 (80-60°C)	kW (kcal/h)	22,6 (19.500)
Heat output minimum G31 (50-30°C)	kW (kcal/h)	25,4 (21.800)
Nominal heat output	kW (kcal/h)	58 (49.900)
Minimum heat output G20	kW (kcal/h)	17,4 (15.000)
Minimum heat output G31	kW (kcal/h)	23,2 (19.900)
Efficiency minimum/nominal output (80-60°C)	%	97,5 - 97,6
Efficiency minimum/nominal output (50-30°C)	%	107,0 - 109,3
30% yield (50-30°C)	%	109,8
Termal efficiency (CEE 92/42 directive)		★★★★
Class NOx		5
Smokes temperature maximum (80-60°C)	°C	76
Smokes temperature minimum (80-60°C)	°C	63
Smokes temperature maximum (50-30°C)	°C	56
Smokes temperature minimum (50-30°C)	°C	35
Smokes flow	kg/h	95,2
CO_2 maximum/minimum G20	%	9,0/9,0
CO_2 maximum/minimum G31	%	10,0/10,0
Maximum pressure exhaust manifold output	Pa	110
Adsorbed power consumption	W	198
Electrical protection grade		IPX4D
CE certification	n°	1312BP4141
Category		II_{2H3P}
Type		B_{23-53} / $C_{13-33-43-53-83}$
C.H.		
Maximum water head	bar	4
Maximum temperature	°C	85
Water content boiler	l	4,8
C.H. setting range	°C	20/80
GAS PRESSURE END NOZZLES		
Gas supply pressure G20	mbar	20
Gas supply pressure G31	mbar	37
Nozzles quantity	n°	1
Nozzles diameter G20	ø	9,3
Nozzles diameter G31	ø	6,7
Gas consumption nominal/minimum G20	m^3/h	6,14/1,84
Gas consumption nominal/minimum G31	kg/h	4,51/1,80
WEIGHT	kg	61

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

"PLANET DEWY 60 BFR" boilers can be installed in boiler rooms whose size and requirements meet current regulations.
Furthermore, vents ,with surface areas at least 3.000 sq. cm or 5.000 sq. cm for gas with density over 0.8, must be installed in the outer walls for room ventilation.

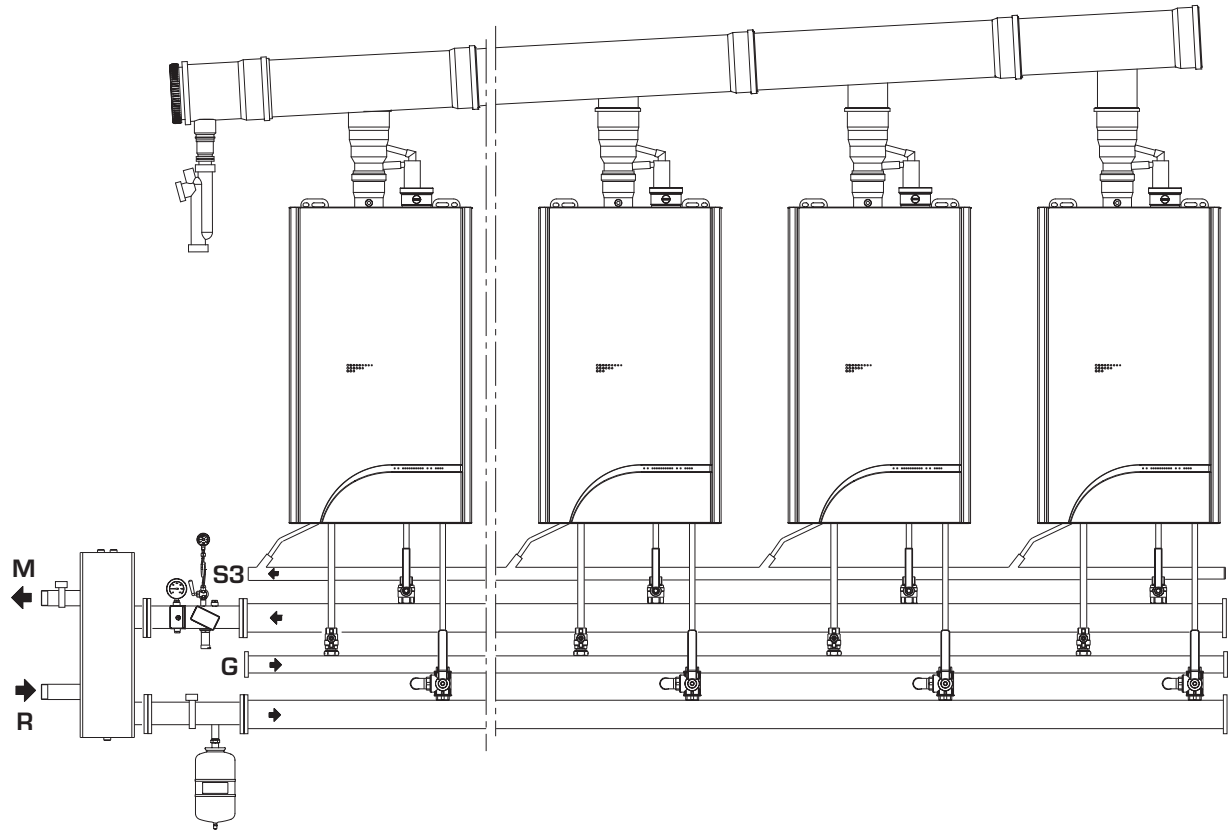
2.2 INSTALLATION

For installation for single or sequence/cascade operations, refer to the example in fig. 3.
With control unit code 8096301, supplied by Sime upon request, a maximum of four boilers can be controlled. The control unit kit is supplied with assembly and use instructions.

2.3 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.

WARNING: In both single and sequence/cascade installation, the heating system must be equipped with a hydraulic separator and safety components.



R C.H. return
M C.H. flow
G Gas connection
S3 Condensation outlet

Fig. 3

For long-term protection agains 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.

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 m^3/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).
A sticker inside the module includes identification and gas type data specific to the module.

2.3.1 Condensation drain installation.

A siphoned drain must be connected to the civil drain by a pipe with minimum 5 mm per meter gradient for condensation collection.
Only normal plastic civil drain pipes are suitable to convey condensation to the building's sewer drain.

2.3.2 Gas pipe filter

The gas valve has a standard input filter which, in any case, is not capable of filtering all the impurities contained in the gas and mains piping.
To prevent poor valve operations or in certain cases, excluding the valve's safety features, we recommend installing a suitable filter on the gas pipe.

2.5 FILLING THE SYSTEM

Cold system filling pressure must be 1 bar. The system must be filled slowly so that air bubbles are released through the specific escapes.

2.6 EXHAUST

The boiler comes with a ø 80 rubber washer to be installer in the waste pipe (11 fig. 4-4/a).

2.6.1 Type B

If the inlet is not connected, the boiler should be regarded a Class B device.

When installing the boiler in locations where it needs to be protected from water, replace the intake terminal inserted in the flange with terminal code 8089510.
For information on how to configure the boiler in this mode see figure 4.
When the boiler operates at low temperatures, normal flues can be used at the following conditions:
- The flue must not be used by other boilers.
- The inside of the flue must be protected from direct contact with boiler condensation. Combustion products must be conveyed with a flexible pipe or rigid plastic pipe with a diameter of approximately 100 - 150 mm siphon draining condensation at the foot of the pipe. Siphon working height must be at least 150 mm.

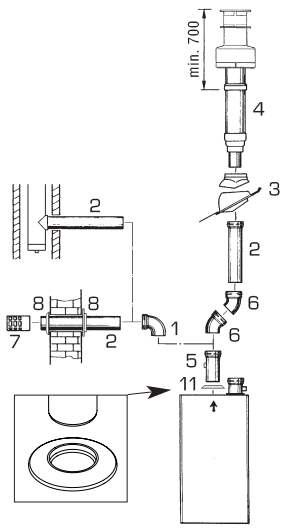
2.6.2 Type C

The boiler becomes a Class C device when the intake terminal is removed from the flange and the intake is connected to separate exhaust ducts (fig. 4).
It is also possible to place the exhaust on a roof using a concentric stack (ø 80/125) and the manifold shown in Figure 4/a.

2.7 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

Type B

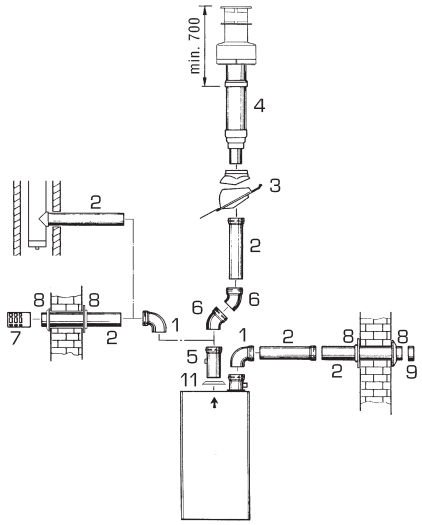


KEY
1 90° MF polypr. curve (6 pcs.) code 8077450
2 a Polypr. extension L.1000 (6 pcs.) code 8077351
2 b Polypr. extension L. 500 (6 pcs.) code. 8077350
3 Hinged tile code 8091300
4 Roof exit terminal L. 1381 cod. 8091204
5 Polypropylene extension L. 250 with test outlet code 6296513
6 45° MF polypr. curve (6 pcs.) code. 8077451
7 Exhaust terminal code 8089501
8 Internal-external ring nut kit code 8091500
9 Intake terminal (supplied as standard)
11 Rubber gasket ø 80 (supplied as standard)

ø 80 ACCESSORY LOAD LOSS TABLE

	Load loss (mm H2O)
90° MF polypropylene curve	1,60
45° MF polypropylene curve	1,30
Polypr. extension L. 1000 (horizontal)	0,60
Polypr. extension L. 1000 (vertical)	0,60
Roof exit terminal L. 1381	1,30
Exhaust terminal	0,60
Intake terminal	0,30

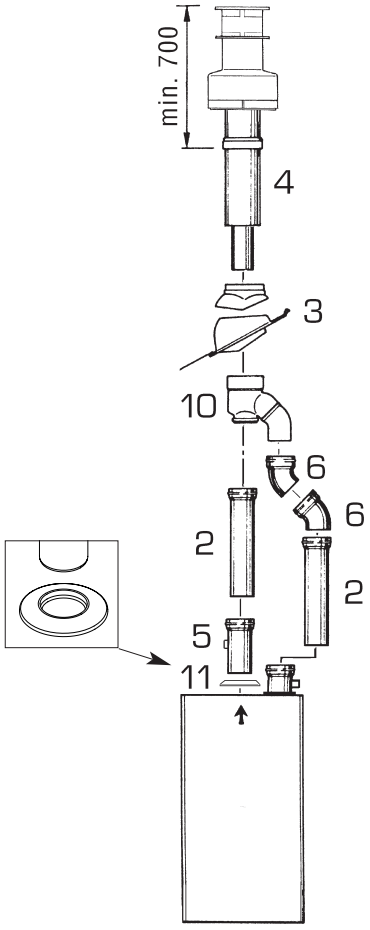
Type C



WARNING:
The maximum length of the exhaust pipe is calculated by the load losses of the single assembled accessories and must not be greater than 11,2 mm H2O.
Before installing accessories, lubricate the internal part of gaskets with silicon-based products. Avoid using oils and greases.

Fig. 4

Type C



KEY
- 2 a Polypr. extension L.1000 (6 pcs.) code 8077351
- 2 b Polypr. extension L. 500 (6 pcs.) code. 8077350
- 3 Hinged tile code 8091300
- 4 Roof exit terminal L. 1381 cod. 8091204
- 5 Polypropylene extension L. 250 with test outlet code 6296513
- 6 45° MF polypr. curve (6 pcs.) code. 8077451
- 10 Manifold code. 8091400
- 11 Rubber gasket ø 80 (supplied as standard)

ø 80 ACCESSORY LOAD LOSS TABLE

	Load loss (mm H_2O)
45° MF polypropylene curve	1,30
Polypropylene extension L. 1000 (vertical)	0,60
Roof exit terminal L. 1381	1,30
Manifold	0,60

WARNING:
The maximum length of the exhaust pipe is calculated by the load losses of the single assembled accessories and must not be greater than 11,2 mm H_2O.
Before installing accessories, lubricate the internal part of gaskets with silicon-based products. Avoid using oils and greases.

Fig. 4/a

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: 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.

2.7.1 Room stat connection (fig. 8 pos. A)

To gain access to the electronic board connector (3), remove the control panel cover and connect the room stat to the terminals TA after having removed the jumper.
The thermostat or 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 conector (3) will irreparably damage the control board. Make sure that any connections to be made are not carrying mains voltage.

2.7.2 "Logica Remote Control" connection (fig. 8 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 mm^2, for longer lengths up to 50 m use cables of section 0.5 mm^2. 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.

WARNING: External voltage must not be connected to terminals 1-2-3-4 of the "Logica Remote Control". A telephone remote switch with a zero potential contact or a window contact can be connected to terminals 3-4.
Equipment for the checking of civil plants via a telephone line includes the model TEL 30.4 LANDIS & STAEFA.

2.7.3 External temperature sensor connection (fig. 8 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 mm^2, for longer lengths up to 50 m use cables of section 0.5 mm^2.
To gain access to boiler connector (3) remove the control panel cover and connect the external temperature sensor to terminals SE.

KEY
1 Control panel
2 "Logica Remote Control" socket
3 Conector (J2)
TA Room stat (not supplied)
CR Logica Remote Control (optional)
SE External temperature sensor (optional)

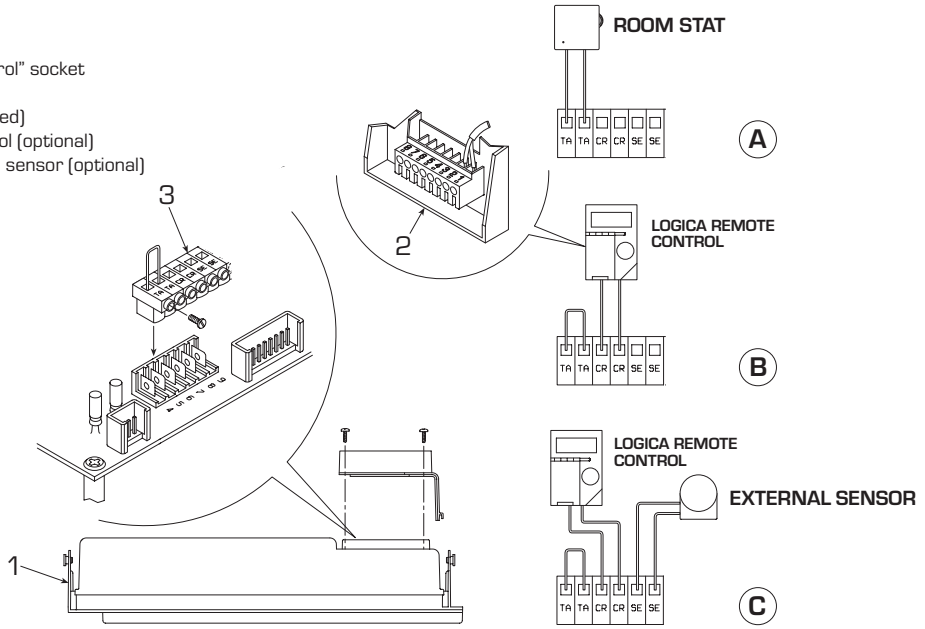
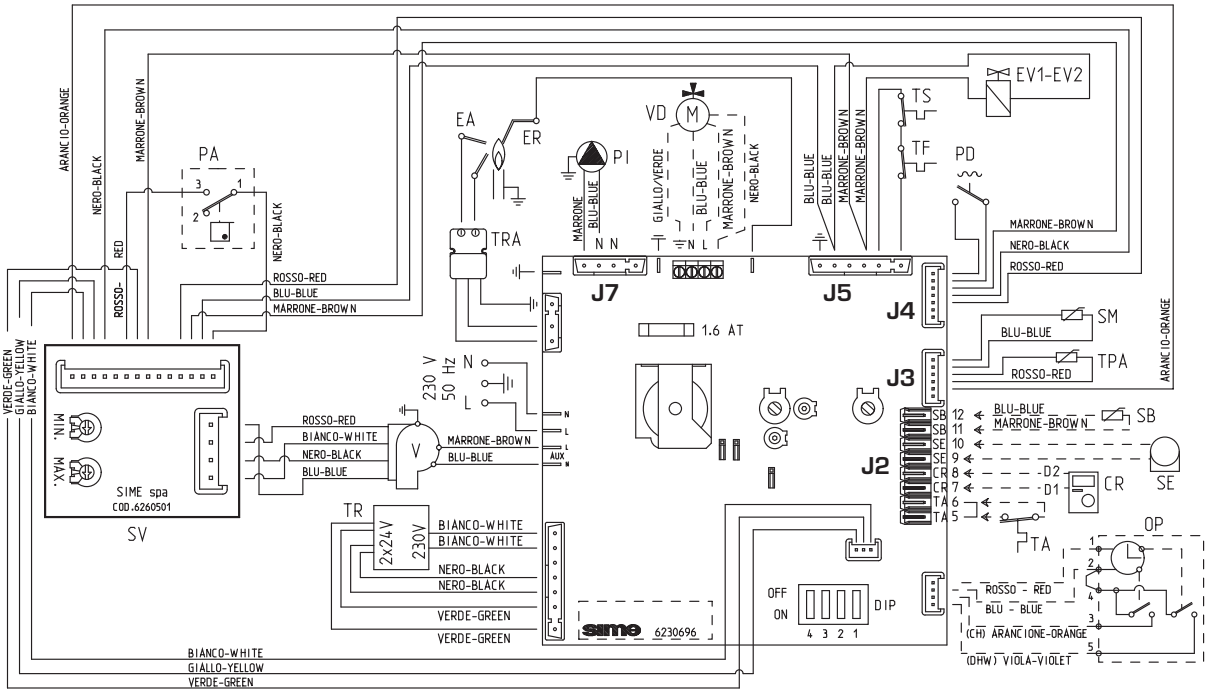


Fig. 8

2.7.4 Wiring diagram



KEY
EV1 Gas valve coil
EV2 Gas valve coil
EA Ignition electrode
ER Detection electrode
TS Safety thermostat 100°C
V Fan
TPA Water pressure transducer
PI System pump
SE External probe (optional)
TA Room thermostat
SM Heating probe
TR 230 - 24V transformer
PD Differential pressure switch
CR Remote Control Logic (optional)
SV Fan board
OP Programmer clock
TF Exhaust thermostat
PA Air pressure switch
SB Boiler probe
VD Shunt valve
TRA Ignition transformer

NOTE: Connect the room thermostat (TA) to terminals 5-6 after removing the bridge. Fan control board (SV) "MAX" and "MIN" trimmers are sealed and must never be tampered with.

CONNECTOR SPARE PART CODES:
J2 cod. 6278613
J3 cod. 6293591
J4 cod. 6293589
J5 cod. 6293586
J7 cod. 6293587

Fig. 9

2.8 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 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.

2.8.1 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 2.8.2). **If there is a thermostatic radiator valve fitted, this must be set to maximum.**

2.8.2 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 [+].

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 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 **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-o 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..

DOMESTIC HOT WATER SETTINGS

Reduced domestic hot water pre-set value	61	The reduced pre-set value of the temperature of the domestic hot water allow the required water temperature to be obtained outside the programmed usage times (daily programme 8).
Domestic hot water load	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 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. **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 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.

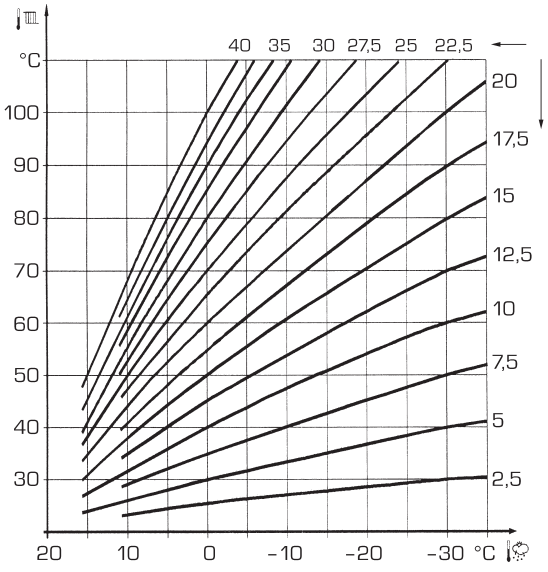
SERVICE VALUES

Final user level 2 programming block	63	This block (1) can be activated to display all the parameters without modifying them. Pressing buttons [−] or [+] displays **"OFF"**. **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.

Input function terminal 3-4	64	The freely programmable input (terminals 3-4) 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.
Modo de acção do contacto externo	65	Se a entrada (bornes 3 e 4 do ropadé) está ligada a um contacto externo de potencial zero (parâmetro 64 = 2 ou 3), pode ser determinado o modo de acção do contacto (tele-interruptor do telefone ou contacto janela). O modo de acção especifica o estado de contacto no qual a função desejada está activa. Display: modo de acção fechado (curto-circuito) 0 0 0 modo de acção aberto (interrupção) _ _ _
Influxo das sondas ambiente + externa	66	Determina o coeficiente de mistura entre a sonda ambiente interna e externa, quando o parâmetro 64 = 1. **0** % = activa só a sonda interna (0% externa - 100% interna) **50** % = valor médio da sonda externa + interna **100** % = activa só a sonda externa Para a regulação ambiente e a visualização, é utilizada a mistura programada. Se a sonda externa apresenta um curto-circuito ou uma interrupção prossegue-se com a sonda interna.
Anti-bacterial function (with storage capacity boiler unit)	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. **0 = not active** **1 = active**

2.8.3 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. 11, 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.

Fig. 11

2.9 EXTERNAL TEMPERATURE SENSOR

The "Logica Remote Control" can be connected to an external temperature sensor available a 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 BOARD

Built according to Low Voltage directive CEE 73/23 and powered at 230 Volt, via a transformer it sends 24 Volt power to the following components: gas valve, safety thermostat, heating probe, external temperature probe (optional), water pressure transducer, air pressure switch, room thermostat or "Remote Control Logic". An automatic and continual modulation system permits the boiler to adjust power to the various system or user needs. Electronic components are guaranteed to operate in a temperature range from 0 to +60°C.

3.1.1 Malfunctions

The led that signal errors and/or malfunctions are indicated in fig. 12.

3.1.2 Devices

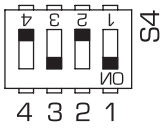
The electronic board is equipped with the following devices:

- **"HEATING POWER" TRIMMER** (10 fig. 13)
  Adjusts maximum heating power. To increase the value, rotate the trimmer clockwise, to reduce it, rotate the trimmer counter-clockwise.

- **"IGNITION POWER" TRIMMER** (6 fig. 13)
  Trimmer to vary the gas valve ignition pressure level (STEP). According to the type of gas the boiler is designed for, the trimmer must be adjusted to achieve a burner pressure of approximately 6.5 mm H_2O for methane gas and 9.5 mm H_2O for propane gas (G31). To increase pressure, rotate the trimmer clockwise, to reduce it, rotate the trimmer counter-clockwise. The slow ignition pressure level can be set during the first five seconds after the burner is lit.
  After setting the ignition pressure level (STEP) according to the type of gas, make sure that the heating gas pressure is still the previously set value.

- **"ANN. RIT." CONNECTOR** (5 fig. 13)
  The electronic board is programmed, during heating, with a technical burner delay of about 90 seconds that is performed both at cold start and subsequent ignitions. This is to prevent rapid ignitions and shutdowns that could, in particular, occur in systems with high load losses. Each time the boiler restarts, after the slow ignition, for about 1 minute it will run at minimum modulation pressure before moving to the set heating pressure.
  The addition of a bridge will cancel both the programmed technical delay and the minimum pressure operating period at ignition.
  In this case, the time between shutdown and the next ignition will depend on a 5°C differential detected by the heating probe (SM).

- **DIP SWITCH** (13 fig. 13)
  For correct module operations, the dip switches must be positioned as indicated below:



- **"Modureg Sel." connector** (14 fig. 13)
  The bridge must always be off.

- **"Albatros" connector** (15 fig. 13)
  The bridge must always be off. It is only engaged in sequence/cascade installations with several boilers.

WARNING:
All the above operations must be performed by authorised personnel, otherwise the warranty shall be invalidated.

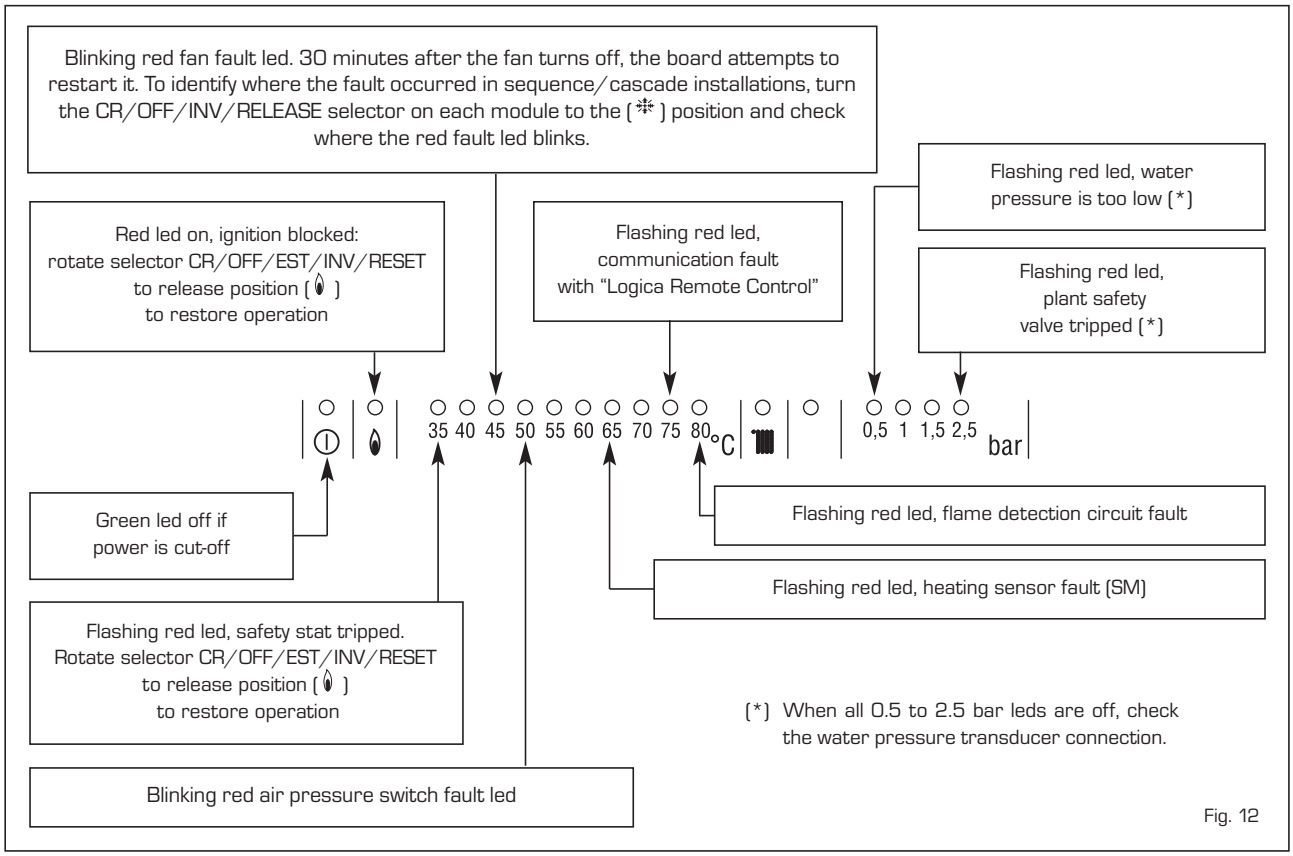
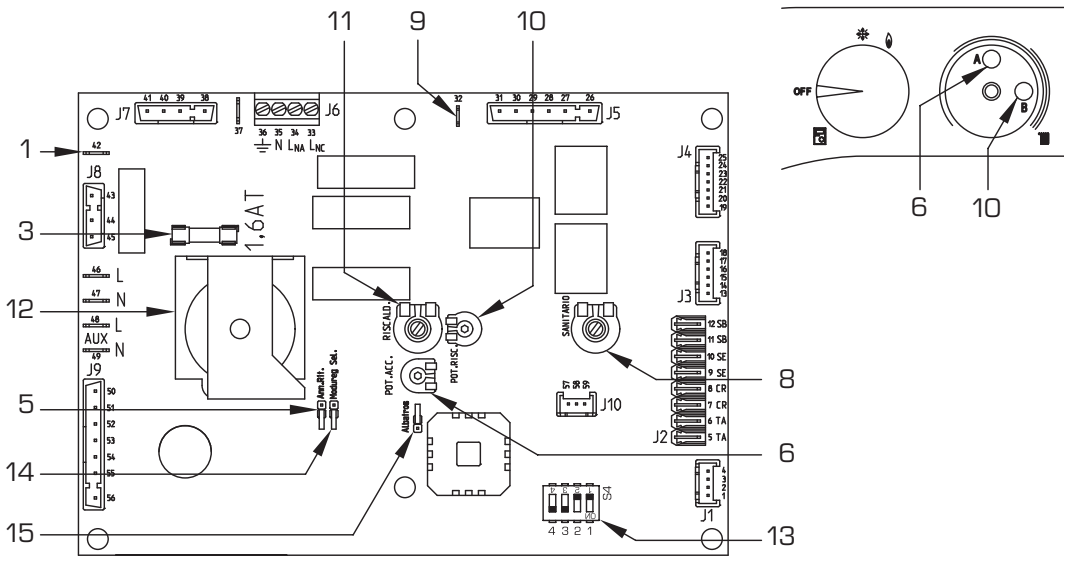


Fig. 12



KEY
1 Ignition electrode earth faston
3 Fuse (1,6 AT)
5 "ANN. RIT." connector
6 "POT. ACC." trimmer
8 D.H.W. potentiometer
9 Detector electrode faston
10 "POT. RISC." trimmer
11 C.H. potentiometer
12 Selector CR/OFF/EST/INV/RESET
13 DIP SWITCH
14 Connector "Modureg Sel."
15 Connector "Albatros"

NOTE: To gain access to trimmers (6) and (10), unscrew the central heating potentiometer knob.

Fig. 13

3.2 TEMPERATURE PROBE AND WATER PRESSURE TRANSDUCER

Antifreeze system made up of the NTC heating sensor that activates when the water temperature reaches 6°C.
Tables 1 - 1/a include the resistance values (Ω) that are obtained on the probe (SM) when the temperature changes and those on the transducer when pressure changes.

The module does not work when the heating probe (SM) is cut off.

TABLE 1 (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 1/a (Transducer)

Pressure (bar)	Resistance (Ω) mín	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 to summer or winter and check the green led (ⓘ) to make sure power is on. The burner should ignite within max. 10 seconds. Failed ignition consequently lighting the appliance block signal may occur due to the following:

- **Ignition electrode does not spark**
  Only gas is supplied to the boiler and, after 10 sec., the block led turns on.

  It may be caused by the fact that the electrode is cut-off or is not secured in the ignition transformer terminal.

- **No flame detection**
  At ignition, the electrode continues to spark even though the burner is on. After 10 sec. it stops sparking, the burner turns off and the block led turns on.

  The detection electrode wire is cut-off or the electrode is grounded; the electrode is worn and requires replacement. The electronic board is defective.

A sudden blackout immediately turned

off the burner, when power is restored, the boiler will automatically start.

3.4 AIR PRESSURE SWITCH

The pressure switch signal value is measured by a specific tool connected to the positive and negative pressure fixtures. The pressure switch is factory set to 35-45 Pa.

3.5 SYSTEM AVAILABLE HEAD

The head available for the heating plant is shown as a function of the flow in graph in fig. 14.

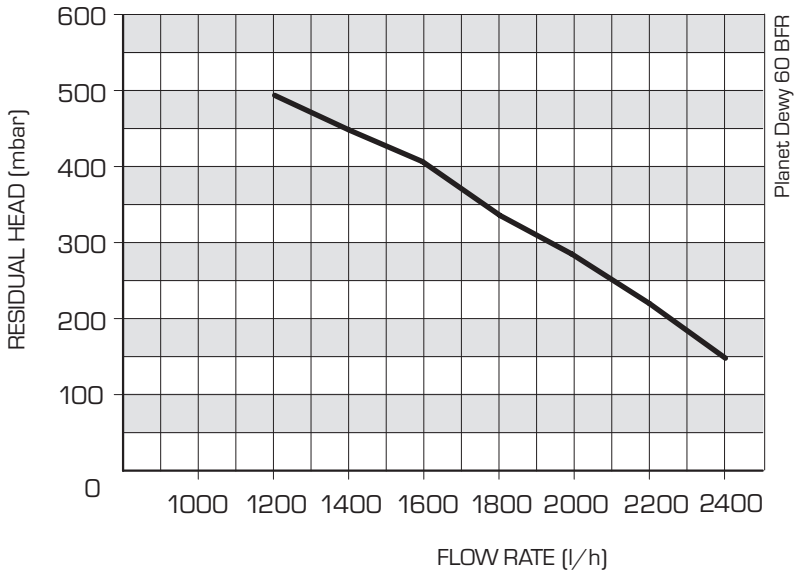
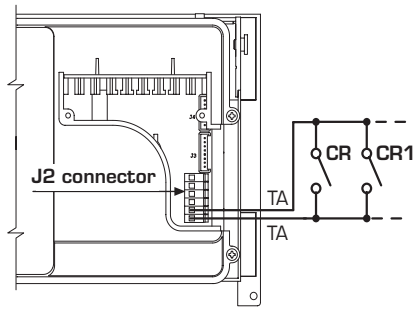
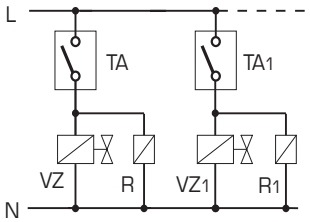


Fig. 14

3.6 MAINS ELECTRICITY CONNECTION

Use a separate electrical line where the room thermostats with relevant area valves must be connected.
Switch or relay contacts must be connected to the electronic board connector (J2) after removing the existent bridge (fig. 15).





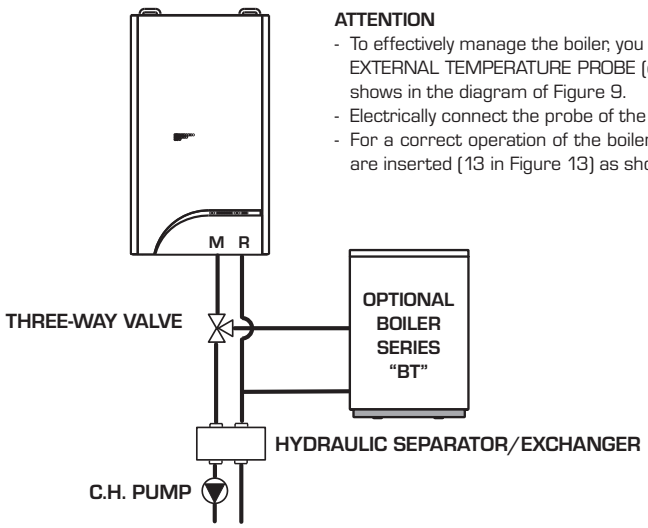
KEY

TA-TA1	Zone room stat
VZ-VZ1	Zone valve
R-R1	Zone relay
CR-CR1	Relay contact or micro zone valve

NOTE: Relays are used only if the area valves have no microswitches.

Fig. 15

3.7 HYDRAULIC CONNECTION OF THE EXTERNAL ACCUMULATION BOILER, SERIES "BT" (optional)



ATTENTION

- To effectively manage the boiler, you need to install the REMOTE CONTROL LOGIC (optional) and the EXTERNAL TEMPERATURE PROBE (optional), which must be electrically connected to the boiler, as shows in the diagram of Figure 9.
- Electrically connect the probe of the boiler (SB) as shown in the diagram of Figure 9.
- For a correct operation of the boiler, make sure that the cordless plugs of the board DIP SWITCH are inserted (13 in Figure 13) as shown below.

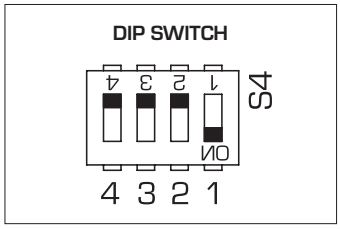
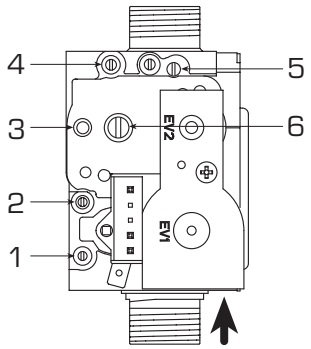


Fig. 15/a

4 USE AND MAINTENANCE

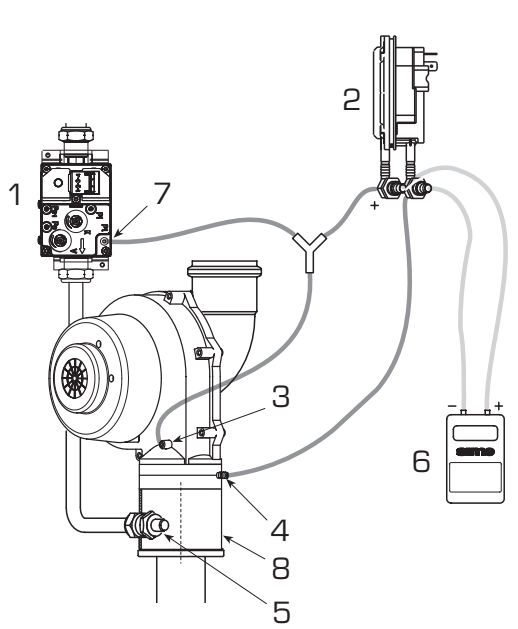
4.1 GAS VALVE

The boiler, is equipped standard with the SIT 848 SIGMA gas valve (fig. 16).



KEY
1 Upstream pressure fixture
2 Intermediate pressure fixture
3 Air signal intake
4 Downstream pressure fixture
5 Shutter
6 OFF-SET

Fig. 16



KEY
1 Gas valve
2 Air pressure switch
3 Fan socket (+)
4 Mixer intake (-)
5 Nozzle
6 Digital pressure gauge
7 Air signal intake
8 Air/gas mixer

Fig. 17

4.2 ADJUSTMENT HEATING POWER

To adjust heating power by changing the 58 kW factory setting, use a screwdriver on the heat power trimmer (10 fig. 13) To increase operating pressure, rotate the trimmer clockwise, to reduce it, rotate the trimmer counter-clockwise.
Boiler power settings can be checked by observing the hour-counter and comparing its value to **Table 2 - 2/a**; or "Δp air" can be measured with a digital pressure gauge connected as indicated in fig. 17. The values must be compared with those in **Table 2 - 2/a**.

TABLE 2 - G20

Variable heat output		Δp aria *		Gas flow **
(80-60°C)	(50-30°C)	(80-60°C)	(50-30°C)	G20
kW	kW	mm H_2O	mm H_2O	m^3/h
17,0	19,0	6,6	6,7	1,84
26,6	29,7	9,7	9,9	2,89
36,9	41,0	19,8	20,5	4,01
47,3	52,1	36,8	38,3	5,13
56,6	62,1	58,2	60,7	6,14

* "Δp aria" is measured with the boiler on using a differential pressure gauge connected to the fan sockets.
** Gas flow is referred to lower heat strength in standard 15°C and 1013 mbar conditions.

TABLE 2/a - G31

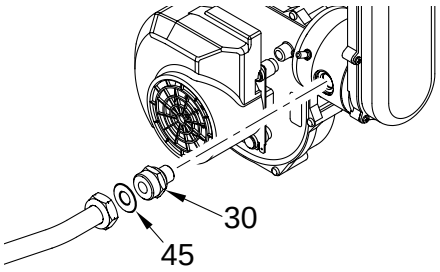
Variable heat output		Δp aria *		Gas flow **
(80-60°C)	(50-30°C)	(80-60°C)	(50-30°C)	G31
kW	kW	mm H_2O	mm H_2O	kg/h
22,6	25,4	10,2	10,9	0,95
26,5	29,6	10,8	11,5	1,11
36,8	40,9	19,1	19,6	1,54
47,2	52,1	36,9	36,8	1,98
56,6	62,1	61,1	60,2	2,37

* "Δp aria" is measured with the boiler on using a differential pressure gauge connected to the fan sockets.
** Gas flow is referred to lower heat strength in standard 15°C and 1013 mbar conditions.

4.3 BOILER CALIBRATION

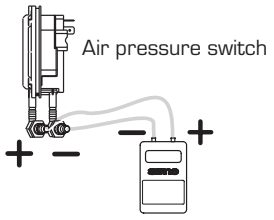
GAS CONVERSION

- Close the gas cock.
- Replace the injector (pos. 30) and the relevant gasket (pos. 45).
- Cut the specified resistance on the fan control board.
- Test for soundness all the gas connections using soapy water or appropriate products. DO NOT USE NAKED FLAMES.
- Stick onto the casing panel the plate showing the relevant feeding gas.
- Proceed with air and gas calibration as described below.



Single modules are calibrated in heating position.

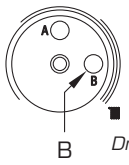
"Δp air" ADJUSTMENT
To measure "Δp air" simply connect the differential pressure gauge, equipped with a decimal scale in mm or Pascal, to the positive and negative sockets on the air pressure switch *(Drawing 1)*.



Drawing 1

Operating sequence:

1) Rotate the module heating power adjustment trimmer clockwise to the limit *(B – Drawing 2)*, fan on maximum.



Drawing 2

2) Find the "max Δp air" values in the table, using the fan board "MAX" trimmer *(Drawing 3)*.

Max. Δp air

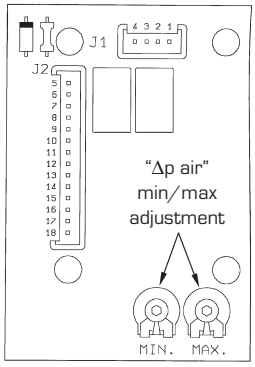
	Single module
Met. (G20)	66,4
Prop. (G31)	73,6

3) Rotate the module heating power adjustment trimmer counter-clockwise to the limit *(B – Drawing 2)*, fan on minimum.

4) Find the "min Δp air" values in the table, using the fan board "MIN" trimmer *(Drawing 3)*.

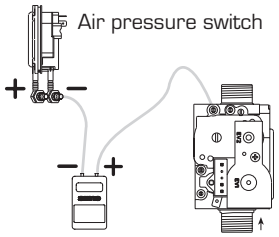
Min. Δp air

	Single module
Met. (G20)	7,1
Prop. (G31)	12,0



Drawing 3

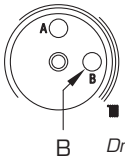
"Δp air-gas" ADJUSTMENT
To measure "Δp air-gas" simply connect the positive socket on the differential pressure gauge to the valve gas intake and the negative socket to the air pressure switch *(Drawing 4)*.
Gas pressure is always adjusted with the fan on minimum.



Drawing 4

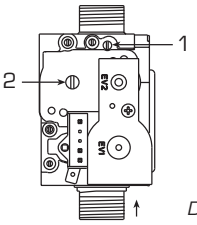
Operating sequence:

1) Rotate the module heating power adjustment trimmer counter-clockwise to the limit *(B – Drawing 5)*, fan on minimum.



Drawing 5

2) Completely unscrew the valve gas shutter *(1 – Drawing 6)*.



Drawing 6

3) Use the gas valve OFF-SET adjustment screw *(1 – Drawing 6)* and find the "Δp air-gas" value in the table.

Shutter open

	Single module
Methane (G20)	5,8
Propane (G31)	10,8

4) Use the shutter *(1 – Drawing 6)* and find the "Δp air-gas" value in the table:

Adjusted shutter

	Single module
Methane (G20)	5,0
Propane (G31)	9,8

After calibrations, check the CO_2 values with a combustion analyser. If they deviate more than 0.2 from the table values, the following corrections must be made:

	CO_2	
	Methane (G20)	Propane (G31)
"MIN" Power	9,0	10,0
"MAX" Power	9,0	10,0

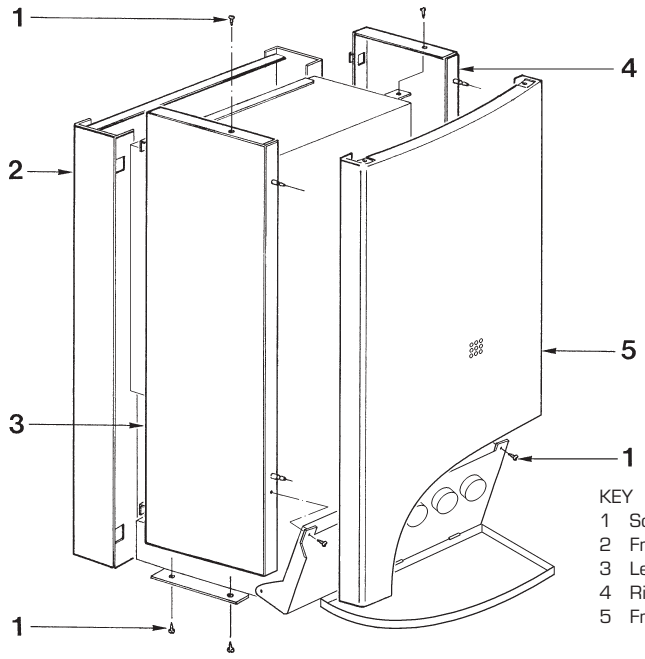
– To correct CO_2 to the "MIN" power, use the OFF-SET screw *(2 – Drawing 6)*.
– To correct CO_2 to the "MAX" power, use the shutter *(1 – Drawing 6)*.

GB - 04/05

Fig. 18

4.4 SHELL REMOVAL

For easy boiler maintenance the shell can be completely removed by following these instructions (fig. 19):
- Pull the front panel forward to unhook it from the pegs on the sides.
- Unscrew the two screws that secure the instrument panel to the sides
- Unscrew the four screws that secure the side to the instrument panel support.
- Push the sides upwards sliding them off the frame hooks.



KEY
1 Screw
2 Frame
3 Left side
4 Right side
5 Front panel

Fig. 19

4.5 CLEANING AND MAINTENANCE

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

4.5.1 Chimney sweep function

To check single module combustion, rotate the selector to position ( ) until the yellow led ( ) starts to blink (fig. 20). At this time the module will start to heat at maximum power and turn off at 80°C, restarting at 70°C.
Before starting the chimney sweep function, make sure the radiator valves or any other area valves are open.
After checking combustion, turn OFF the module by rotating the selector to (OFF); return the selector to the required function.

ATTENTION: After about 15 minutes the chimney sweep function automatically deactivates.

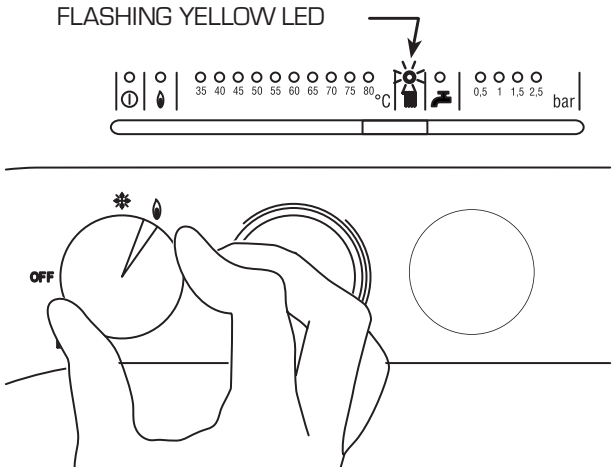


Fig. 20

USER INSTRUCTIONS

WARNINGS

- *In case of fault and/or incorrect equipment operation, deactivate it, without making any repairs or taking any direct action. Contact an authorised technical staff.*
- *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 tap, lower the control cover and turn on the boiler by rotating the selector knob to winter (❄).
The green led (ⓘ) turn on to indicate that power is on. The boiler, once the temperature set on the potentiometer is reached, will start automatic operations to provide the system with the required power.

BOILER SHUTDOWN (fig. 1)

To turn OFF the boiler, turn the selector knob to (**OFF**).
For prolonged periods of disuse, disconnect the power supply, close the gas tap and, in the event of low temperatures, empty the boiler and hydraulic system to prevent pipes from bursting due to frozen water.

HEATING TEMPERATURE ADJUSTMENT (fig. 2)

Heating temperature is adjusted using the heating knob (▥).
The set temperature is indicated on the red led scale from 35 - 80°C and the yellow heating led (▥) turns on simultaneously.
If the water return temperature is lower than about 55° C, combustion product condensates further increasing heat exchange efficiency.

GAS CONVERSION

Should it be necessary to convert the appliance to a different gas from the

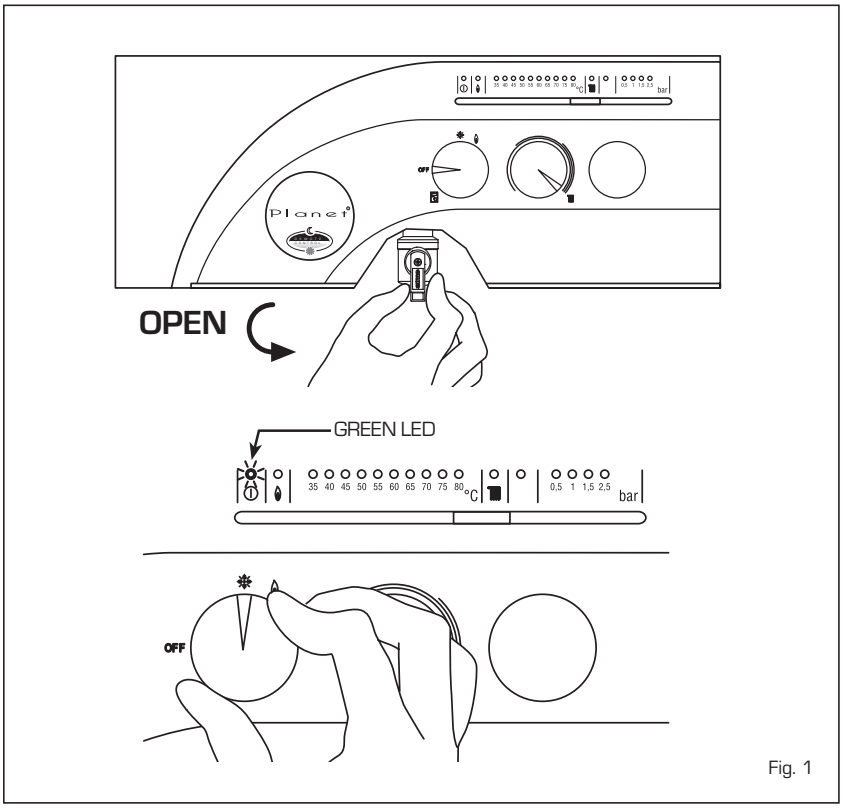


Fig. 1

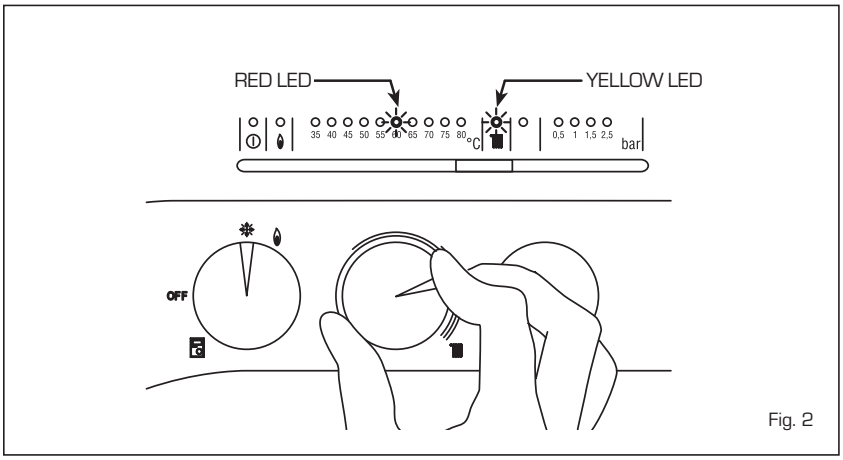


Fig. 2

one for which the boiler has been equipped, approach the technical staff.

CLEANING AND MAINTENANCE

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.

MALFUNCTIONS

- **Ignition lock** (fig. 3)
  If the burner does not light the red led ( ) turns on.
  To attempt ignition again, rotate the selector knob to ( ) and release it immediately after returning it to winter operations ( ).
  If it locks again, request an authorised service control.

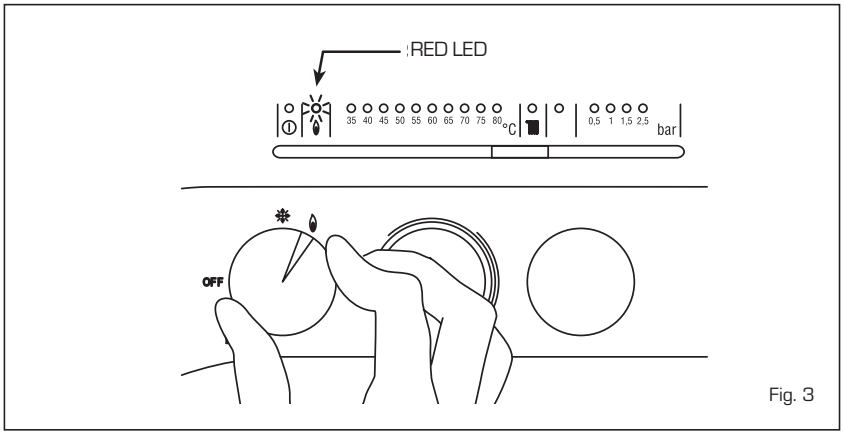


Fig. 3

- **Insufficient water pressure** (fig. 4)
  If the **"0.5 bar"** red light blinks, the boiler does not work.
  To restore operations, fill the system until the green **"1 bar"** led turns on. If all leds are off, request an authorised service call.

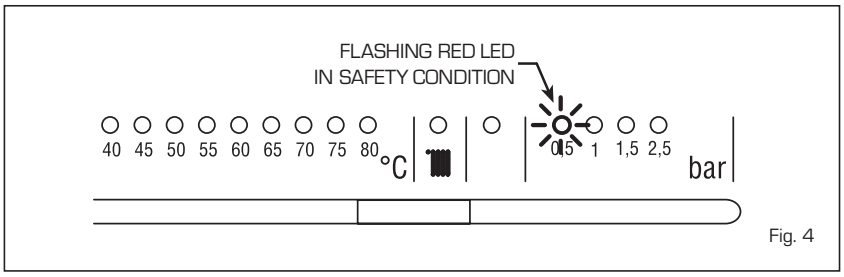


Fig. 4

- **Safety/exhaust thermostat triggered** (fig. 5)
  If the safety/exhaust thermostat triggers the red "35°C" led blinks. To attempt ignition again, rotate the selector knob to ( ) and release it immediately after returning it to winter operations ( ).
  If it locks again, request an authorised service control.

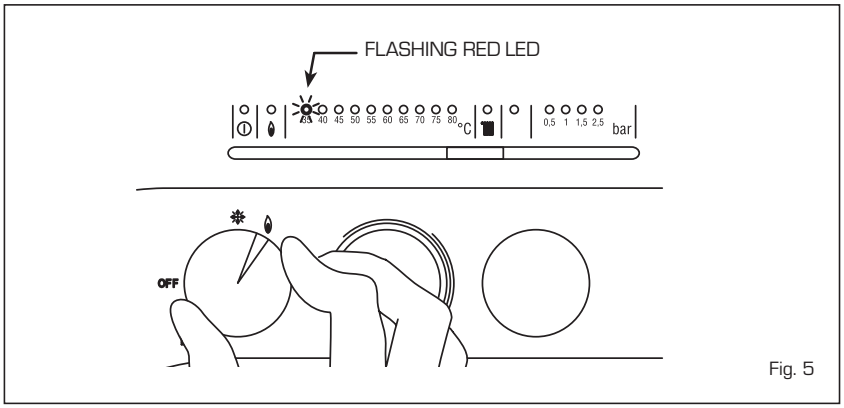


Fig. 5

- **Other faults** (fig. 6)
  When one of the red **"40-80°C"** leds blinks, turn off the boiler and attempt ignition again. This operation can be repeated 2-3 times at most, in the event of failure, request an authorised service call.

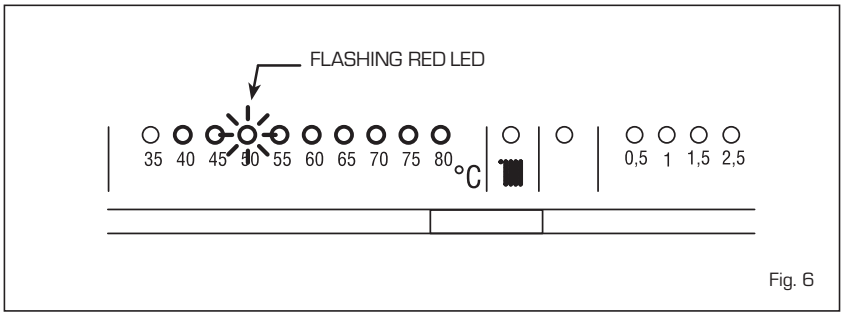


Fig. 6

"PLANET DEWY 60 BFR" BOILER INSTALLATION IN SEQUENCE/CASCADE

WHEN THE "PLANET DEWY 60 BFR" IS CONNECTED TO REGULATOR RVA 47.320 IN SEQUENCE/CASCADE INSTALLATIONS, ALL BOILERS IN THE HEATING UNIT MUST HAVE THEIR "CR/OFF/INV/RELEASE" SELECTORS POSITIONED AS INDICATED IN FIG. 7.
THE HEATING POTENTIOMETER KNOB NO LONGER HAS ANY CONTROL AND ALL FUNCTIONS WILL BE CONTROLLED BY THE TVA 47.320 REGULATOR.

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 ( ); 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 (o), position, obviously without consequent control of the room temperature.
No interior da tampa estão indicadas as instruções de funcionamento (fig. 8). Cada programação ou modificação é visualizada e confirmada no display (fig. 9).

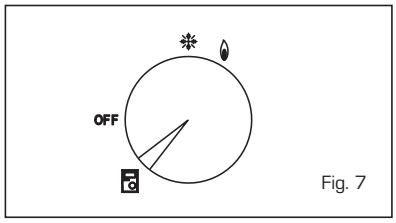
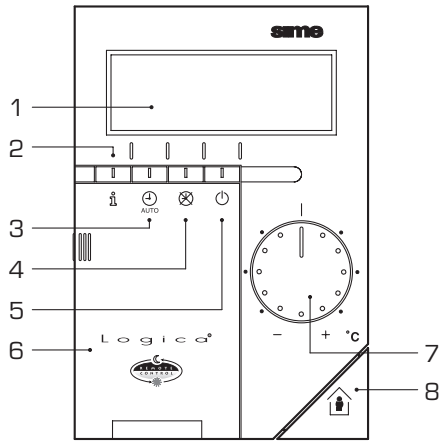
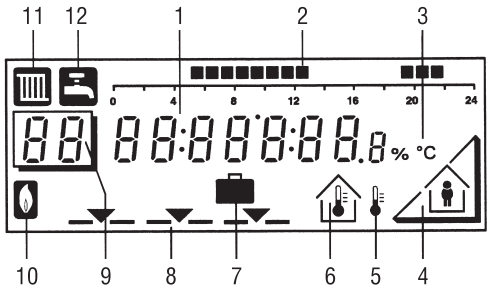


Fig. 7



KEY
1 Display
2 Info button
3 Operating mode button: automatic operation
4 Operating mode button: manual operation
5 Operating mode button: availability
6 Cover with instruction compartment
7 Temperature knob
8 Presence button

Fig. 8



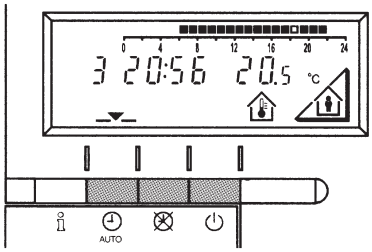
KEY
1 Display, time
2 Heating programme
3 Unit (%/C°)
4 Presence button display
5 External temperature
6 Ambient temperature
7 Holiday function
8 Operating mode
9 Line number/day
10 Burner on
11 Heating function
12 Domestic hot water/temperature/D.H.W. load

Fig. 9

ACTIVATING

During functioning the lid of the regulator must be closed.

– **Selection of the operating mode**
(reference keys grey colour)



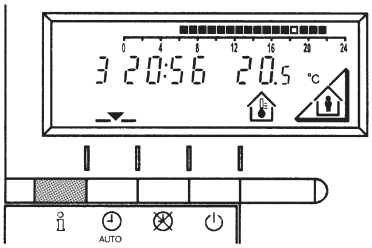
The operating mode desired is selected by pressing the relative key with the corresponding symbol. The choice is displayed with the symbol

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.

– **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

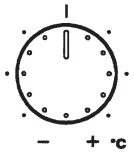
External temperature*

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

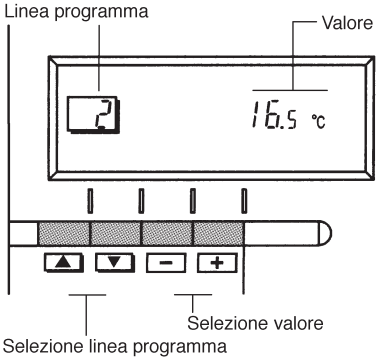
NOTA: The choice made will work in a permanent way when manually ⊛, carried out, instead, if automatic AUTO it will work up to the next switching according to the heating programme.

PROGRAMMING

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

You can set or display the following values:

- Temperatures 1 up to 3
- Heating programme 4 up to 11
- Day of the week and hour 12 up to 14
- Current values 15 up to 17
- Vacation period 18
- Return to the default values 19



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.

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

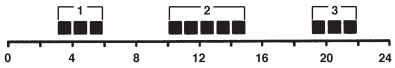
2 Reduced temperature:
temperature during periods of absence or night

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 +.

– **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 – o + 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

– **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 2.8.3

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)

– **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:

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

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

AUTO

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

– **Default values**

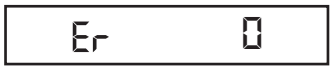
19 To take the setting to the default values, press the [+] and [−] keys at the same time for at least 3 seconds. As confirmation a sign will appear on the display.

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



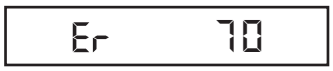
Ignition lock-out
Rotate selector CR/OFF/EST/INV/RESET on the boiler control panel to the release position (🔥) to reset operation.
If the lock-out re-occurs, call an authorised Service Centre.

Safety thermostat trip
Rotate selector CR/OFF/EST/INV/RESET on the boiler control panel to the release position (🔥) to reset operation.
If the lock-out re-occurs, call an authorised Service Centre.

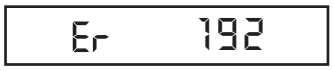
Domestic hot water sensor fault (with storage capacity boiler unit)
Call an authorised Service Centre.

Heating sensor fault (SM)
Call an authorised Service Centre.

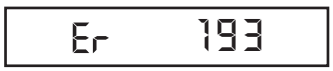
Insufficient water pressure
Reset operation using the boiler charge valve.



Plant overpressure
Call an authorised Service Centre.



Safety thermostat trips
Call an authorised Service Centre.



Ventilator malfunction
Call an authorised Service Centre.

No communication between the "Logica Remote Control" and the boiler.
Call an authorised Service Centre.

DICHIARAZIONE DI CONFORMITA' CALDAIE MURALI A GAS

La **FONDERIE SIME S.p.A.**, con riferimento **all'art. 5 DPR n°447 del 6/12/1991** "Regolamento di attuazione della **legge 5 marzo 1990 n°46**" ed in conformità alla **legge 6 dicembre 1971 n° 1083** "Norme per la sicurezza dell'impiego del gas combustibile", dichiara che le proprie caldaie murali a gas serie:

FORMAT OF - BF
METRÒ OF - BF
FORMAT 25/60 OF - 25/60 BF - 30/60 BF
PLANET OF - BF - BFT
PLANET Low NOx*
PLANET AQUAQUICK 25 BF - 30 BF
PLANET 25/60 BF - 30/60 BF
PLANET DEWY BF - BFT - BFR *
OPEN OF - BF
FORMAT.zip OF - BF
FORMAT.zip 4/5 OF - BF
OPEN.zip BF
METRÒ.zip OF - BF
FORMAT DEWY.zip *
FORMAT.zip PC
DEWY EQUIPE - DEWY EQUIPE BOX *

sono complete di tutti gli organi di sicurezza e di controllo previsti dalle norme vigenti in materia e rispondono, per caratteristiche tecniche e funzionali, alle prescrizioni delle norme:
UNI-CIG 7271 (aprile 1988)
UNI-CIG 9893 (dicembre 1991)
UNI EN 297 per APPARECCHI A GAS DI TIPO B AVENTI PORTATA TERMICA ≤ 70 kW
EN 483 per APPARECCHI A GAS DI TIPO C AVENTI PORTATA TERMICA ≤ 70 kW.

La portata al sanitario delle caldaie combinate è rispondente alla norma:
UNI EN 625 per APPARECCHI AVENTI PORTATA TERMICA ≤ 70 kW

Le caldaie a gas sono inoltre conformi alla:
DIRETTIVA GAS 90/396 CEE per la conformità CE di tipo
DIRETTIVA BASSA TENSIONE 73/23 CEE
DIRETTIVA COMPATIBILITÀ ELETTROMAGNETICA 89/336 CEE
DIRETTIVA RENDIMENTI 92/42 CEE

Il sistema qualità aziendale è certificato secondo la norma **UNI EN ISO 9001: 2000**.

*Caldaie a basse emissioni inquinanti **("classe 5" rispetto alle norme europee UNI EN 297 e EN 483)**.

Legnago, 29 luglio 2005

Il Direttore Generale
ing. Aldo Gava

TAGLIARE LUNGO LA LINEA TRATTEGGIATA

Rendimenti caldaie murali a gas DPR 412/93 e DPR 551/99

MODELLO	Potenza termica	Portata termica	Rendimento a carico nominale		Rendimento al 30% del carico	
	kW	kW	minimo richiesto	misurato	minimo richiesto	misurato
PLANET 25 OF	23,3	25,8	86,7	90,3	84,1	86,5
PLANET 30 OF	28,6	31,6	86,9	90,4	83,9	86,5
PLANET 25 BF - 25 BFT	23,3	25,8	86,7	90,3	84,1	86,0
PLANET 30 BF	29,0	31,6	86,9	92,0	83,9	87,2
PLANET AQUAQUICK 25 BF	23,3	25,8	86,7	90,3	84,1	86,0
PLANET AQUAQUICK 30 BF	29,0	31,6	86,9	92,0	83,9	87,2
PLANET Low NOx 25 BF	23,2	25,0	86,7	92,8	83,7	90,7
PLANET Low NOx 30 BF	27,9	30,0	86,9	93,1	83,9	92,4
PLANET 25/60 BF	25,0	26,7	86,8	93,5	84,2	92,0
PLANET 30/60 BF	29,5	31,6	86,9	93,5	84,4	92,0
PLANET DEWY 25 BF - 25 BFT	24,0	24,9	92,4	96,6	98,4	106,2
PLANET DEWY 30 BF - 30 BFT	29,3	30,0	92,5	97,7	98,5	106,6
PLANET DEWY 30 BFR	28,3	29,0	92,5	97,7	98,5	106,6
PLANET DEWY 60 BFR	56,6	58,0	92,8	97,5	98,8	109,8
PLANET DEWY 30/50 BF	29,2	30,0	92,5	97,2	97,9	106,7
FORMAT 25 OF - METRÒ 25 OF	23,3	25,8	86,7	90,3	84,1	86,5
FORMAT 30 OF	28,6	31,6	86,9	90,4	83,9	86,5
FORMAT 25 BF - METRÒ 25 BF	23,3	25,8	86,7	90,3	84,1	86,0
FORMAT 30 BF	29,0	31,6	86,9	92,0	83,9	87,2
FORMAT 25/60 OF	23,2	25,8	86,7	89,9	84,1	89,6
FORMAT 25/60 BF	25,0	26,7	86,8	93,5	84,2	92,0
FORMAT 30/60 BF	29,5	31,6	86,9	93,5	84,4	92,0
FORMAT.zip 25 OF - METRÒ.zip 25 OF	23,5	25,8	86,7	91,2	82,9	91,1
FORMAT.zip 30 OF	28,8	31,6	86,9	91,1	83,9	90,0
FORMAT.zip 25 BF - METRÒ.zip 25 BF	23,4	25,8	86,7	90,6	83,6	88,5
FORMAT.zip 30 BF	28,8	31,6	86,9	91,0	83,9	89,4
FORMAT.zip 35 BF	31,6	34,8	87,0	90,8	84,0	88,0
FORMAT.zip 4 25 OF - FORMAT.zip 5 25 OF	23,5	25,8	86,7	91,2	82,9	91,1
FORMAT.zip 4 25 BF - FORMAT.zip 5 25 BF	23,4	25,8	86,7	90,6	83,6	88,5
FORMAT DEWY.zip 25 BF	22,7	23,3	92,4	97,5	97,9	109,2
FORMAT DEWY.zip 30 BF	27,3	27,9	92,4	97,9	98,3	110,4
FORMAT.zip 30 PC	29,1	30,0	92,5	96,9	98,5	102,8
OPEN 25 OF	23,3	25,8	86,7	90,3	84,1	86,5
OPEN 25 BF	23,3	25,8	86,7	90,3	84,1	86,0
OPEN 30 BF	29,0	31,6	86,9	92,0	83,9	87,2
OPEN.zip 25 BF	23,4	25,8	86,7	90,6	83,6	88,5
OPEN.zip 30 BF	28,8	31,6	86,9	91,0	83,9	89,4
DEWY EQUIPE 3 - DEWY EQUIPE 3 BOX	84,6	87,0	92,9	97,3	98,9	105,5
DEWY EQUIPE 4 - DEWY EQUIPE 4 BOX	112,8	116,0	93,0	97,3	99,1	105,5
DEWY EQUIPE 60 BOX	57,0	58,0	92,8	98,2	98,8	106,4
DEWY EQUIPE 120 - DEWY EQUIPE 120 BOX	113,9	116,0	93,1	98,2	99,1	106,4
DEWY EQUIPE 180 - DEWY EQUIPE 180 BOX	170,9	174,0	93,2	98,2	99,2	106,4
DEWY EQUIPE 240 - DEWY EQUIPE 240 BOX	227,8	232,0	93,4	98,2	99,4	106,4
DEWY EQUIPE 300 - DEWY EQUIPE 300 BOX	284,8	290,0	93,5	98,2	99,5	106,4
DEWY EQUIPE 360 - DEWY EQUIPE 360 BOX	341,7	348,0	93,5	98,2	99,5	106,4

NOTA: I dati sono stati ottenuti secondo le modalità di prova indicate dall'allegato E del DPR 412.

CERTIFICATO DI ORIGINE E CONFORMITÀ

DEI DISPOSITIVI AUTOMATICI DI SICUREZZA E DEL BRUCIATORE A NORME DELLE CIRCOLARI N° 68 DEL 25.11.1969 E N° 42 DEL 20.05.1974 DEL MINISTERO DEGLI INTERNI D.G.S.A. E P.C.

Si certifica che i dispositivi automatici di sicurezza montati sulle caldaie premiscelate a condensazione marca SIME modello:

PLANET DEWY 60 BFR (portata termica **58 kW**)
DEWY EQUIPE 60 BOX (portata termica **58 kW**)
DEWY EQUIPE 120 BOX (portata termica **116 kW**)

sono a norma delle circolari n° 68 del 25.11.1969 e n° 42 del 20.05.1974 del Ministero dell'Interno D.S.G.A. e P.C.

- Apparecchiatura di regolazione e controllo fiamma mod. LMU 11.30 Ditta Siemens - Landis & Staefa Produktion GmbH - Berliner Ring, 23 - 76437 Rastatt - Germania, conforme alla norma EN 298 (rapporto di prova TÜV n° GA 02/00).

- Elettrovalvola gas mod. 848 SIGMA Ditta SIT Control srl - Via dell'Industria 32 - Padova - Certificazione GASTEC n° 0063AS4831 secondo direttiva gas (90/396/EEC) norma EN 126.

- Termostato sicurezza mod. 36TXE21-14376 Ditta THERM-O-DISC - Division of Capax B.V. - 5605 KC Eindhoven NL - Certificazione VDE n° 81670 del 23/02/1994.

FONDERIE SIME SpA
il Direttore Generale
ing. ALDO GAVA

Fonderie Sime S.p.A. - Via Garbo, 27 - 37045 Legnago (Vr) - Tel. 0442 631111 - Fax Servizio Tecnico 0442 631292

TAGLIARE LUNGO LA LINEA TRATTEGGIATA

(da completarsi a cura di chi chiede ai VV.FF. il collaudo della centrale termica)

Si dichiara che la caldaia SIME tipo .....avente i dispositivi automatici di sicurezza e le caratteristiche tecniche sopra specificate, è stata installata

in .... (.....)
CAP città Prov.

c/o .....
nome dell'utente

. ..... addì .....
luogo data

Il tecnico Il proprietario

....

Cod. 62742234A - Documentation Dpt.

Fonderie Sime S.p.A - Via Garbo, 27 - 37045 Legnago (Vr)
Tel. + 39 0442 631111 - Fax +39 0442 631292 - www.sime.it