INSTALLER INSTRUCTIONS

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IMPORTANT

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

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

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.





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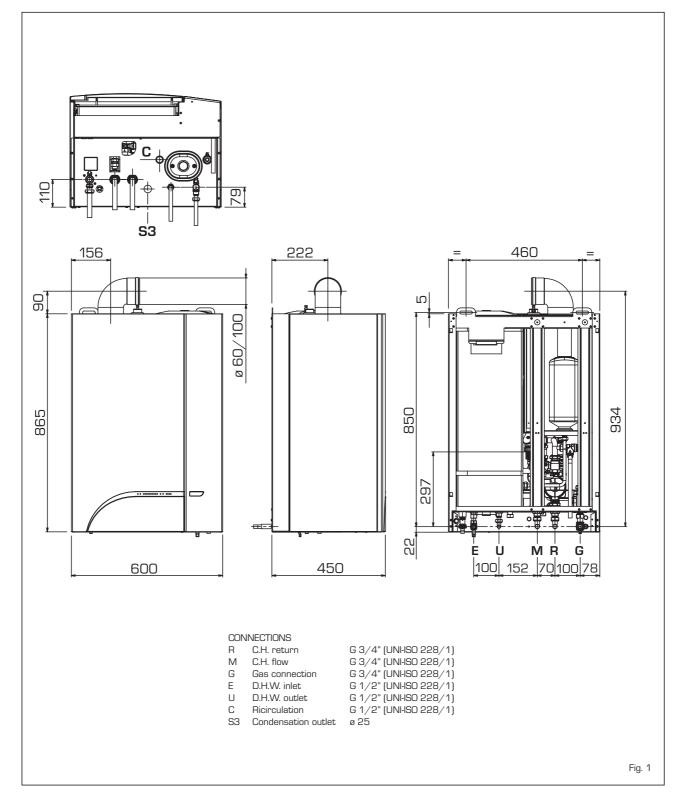
DESCRIPTION OF THE BOILER

1.1 INTRODUCTION

"PLANET DEWY 30/50 BF" with stainless steel hot water tank, boilers are premix condensation thermal appliances which use microprocessor technology for function control and management. They comply with the european directives 90/396/CEE, 89/336/CEE, 73/23/CEE, 92/42/CEE and with the european specification EN 483 - EN 625. They may be fuelled by natural gas (methane gas) or propane (G31). The instructions given in this manual are

provided to ensure proper installation and perfect operation of the appliance.

1.2 DIMENSIONS



1.3 TECHNICAL FEATURES

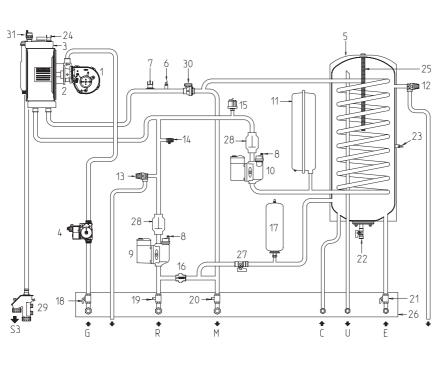
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D.H.W. setting range °C 30/60
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Gas consumption nominal/minimum G31 kg/h 2.33/0.62
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Gas supply pressure G31 mbar 37
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1.4 FUNCTIONAL DIAGRAM



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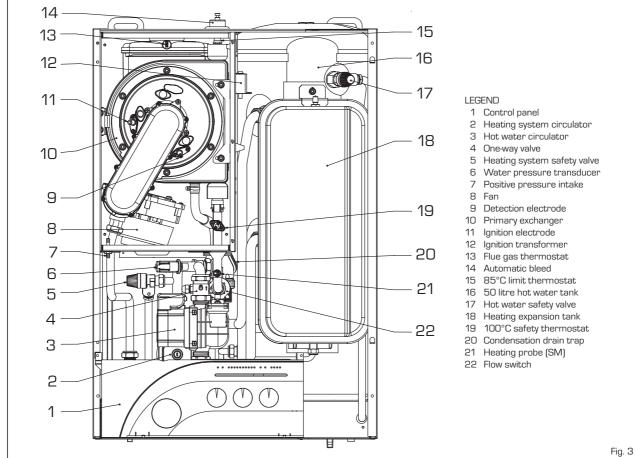
LEGEND 1 Fan

- 2 Air/gas mixer
- 3 Primary exchanger
- 4 Gas valve
- 5 50 litre hot water tank
- 6 Heating probe (SM) 7 100°C safety thermostat
- 8 Air bleed valve
- 9 Heating system circulator
- 10 Hot water circulator
- Heating expansion tank 11
- 12 Hot water safety valve
- 13 Heating system safety valve
- 14 Boiler drain
- 15 Water pressure transducer
- 16 Automatic bypass
- 17 Hot water expansion tank
- 18 Gas cock (optional)
- 19 Heating system return cock (optional)
- 20 Heating system delivery cock (optional)

Fig. 2

- 21 Incoming tap water cock
- 22 Hot water tank drain cock
- 23 Hot water probe (SB)
- 24 Limit thermostat 85°C
- 25 Magnesium anode
- 26 Assembly template (optional)
- 27 Manual filling unit
- 28 One-way valve
- 29 Condensation drain trap
- 30 Flow switch
- 31 Air bleed valve

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

The boilers can be installed in any domestic environment without any location restrictions or comburent air requirements.

2.3 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.

2.3.1 Installation plate (optional)

The installation plate code 8081216 is supplied with an instruction sheet for the fixing.

2.3.2 System connection unions

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

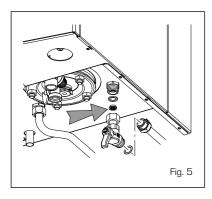
- curve kit, code 8075423

- cock kit, code 8091809

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

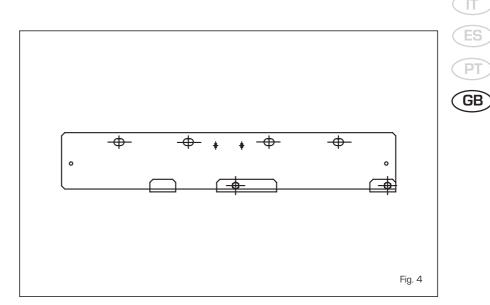
2.3.3 Flow regulator

At the inlet of the hot water a flow regulator brown is installed, from 12 I/ min (fig. 5).



2.4 CONNECTING UP SYSTEM

To protect the heat system from damaging corrosion, incrustation or deposits, after installation it is extremely important to clean the system using suitable products



such as, for example, Sentinel X300 or X400.

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

For long-term protection 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. If the heating system is on a higher floor than the boiler, install the on/off taps supplied in kit code 8091809 on the heating system delivery/return pipes.

WARNING:

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

Gas connections must be made in accordance with current standards and regulations. When dimensioning gas pipes from the meter to the module, both capacity volume (consumption) in 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).

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.

2.4.1 Connection of condensation water trap

The drip board and its water trap must be connected to a civil drain through a pipe with a slope of at least 5 mm per metre to ensure drainage of condensation water. The plastic pipes normally used for civil

drains are the only type of pipe which is appropriate for conveying condensation to the building's sewer pipes.

2.4.2 Filter on the gas pipe

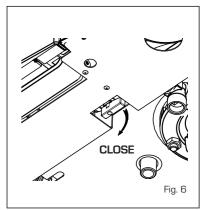
The gas valve is supplied ex factory with an inlet filter, which, however, is not adequate to entrap all the impurities in the gas or in gas main pipes. To prevent malfunctioning of the valve, or in certain cases even to cut out the safety device with which the valve is equipped, install an adequate filter on the gas pipe.

2.5 SYSTEM FILLING

The boiler and the heating system are filled with water using the fill cock (fig. 6). The charge pressure, with the system cold,

must be **1 bar**.

Filling must be done slowly so as to allow any air bubbles to be bled off through the air valves.



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When you have finished filling the system close the fill cock.

2.6 COAXIAL DUCT ø 60/100

The air inlet-smoke outlet assembly, code 8096250, is included in the standard supply of the appliance complete with mounting instructions.

2.6.1 Coaxial duct accessories

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

With the pipe bend included in the kit, the maximum length of the piping should not exceed 4.6 meter.

When the vertical extension code 8086950 is used, the terminal part of the pipe must always come out horizontally.

2.6.2 Coaxial duct outlet on the roof

The accessories to be used for this type of installation and some of the connecting systems that may be adopted are illustrated in fig. 8.

It is possible to insert up to a maximum of three extensions and reach a maximum rectilinear distance of 7 meter.



- 1a-b Coaxial duct kit code 8096250
- 2a Extension L. 1000 code 8096150
- 2b Extension L. 500 code 8096151
- 3 Vertical extension L. 140 with take-off point code 8086950
- 4a 90° additional bend code 8095850
- 4b 45° additional bend code 8095950



NOTE

Before connecting accessories, it is always advisable to lubricate the internal part of the gaskets with silicon products. Avoid using oils and greases.

IMPORTANT:

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

max 4,6 m

Fig. 7

Should it be necessary to make two changes of direction in the pipe development, the maximum length of the pipe must not exceed 4.5 meter.

2.7 SEPARATE PIPES ø 80

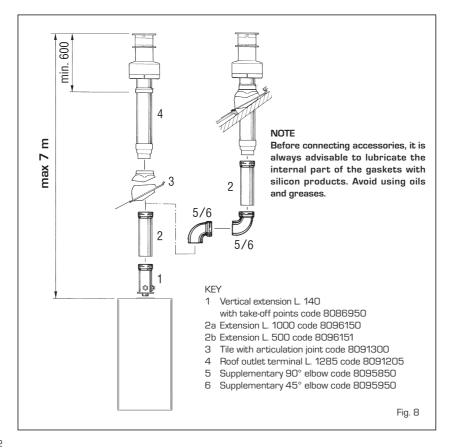
A special kit may be used to separate the flue gas outlet from the fresh air intake. The intake may be installed to the right or

left of the flue gas outlet.

Both ducts may be oriented in any direction. Refer to fig. 9 for positioning.

The maximum overall length of the intake and exhaust ducts depends on the head losses of the single fittings installed (excluding the doublers) and must not be greater than 13 mm H2O.

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



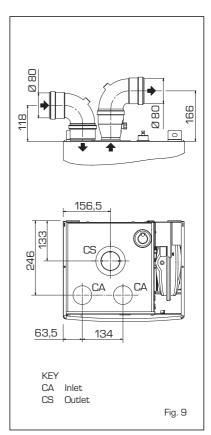
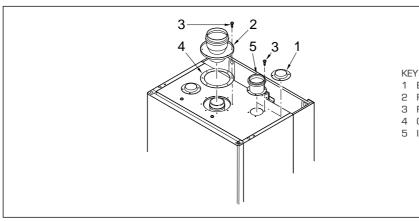


TABLE 2

Accessories ø 80	Total head loss (mm H2O) "PLANET DEWY 30/50 BF" model			
	Inlet	Outlet	Roof outlet	
90° elbow MF	0,30	0,50	-	
45° elbow MF	0,20	0,40	-	
Extension L. 1000 (horizontal)	0,20	0,40	-	
Extension L. 1000 (vertical)	0,30	0,30	-	
Outlet terminal	-	0,40	-	
Inlet terminal	0,10	-	-	
Doubler fitting	0,30	-	_	
Roof outlet terminal L. 1381	-	-	0,60	

Example of allowable installation calculation in that the sum of the head losses of the single fittings is less than 12,5 mm H2O:

Inlet	Outlet	
1,40	-	
-	2,80	
0,60	-	
-	1,00	
0,10	0,40	
2,10	+ 4,20 =	6,3 mm H2O
	1,40 - 0,60 - 0,10	1,40 - - 2,80 0,60 - - 1,00 0,10 0,40





Kit code 8089911 is supplied for this purpose (fig. 10).

pose (fig. 10). A complete range of accessories to meet all

installation requirements is shown in fig. 11.



2.7.2 Connection with existing flues

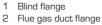
The ø 80 flue gas pipe may be connected to an existing flue.

When the boiler is running at a low temperature, a regular flue may be used under the following conditions:

- No other boiler must be using the flue.
- The flue interior must be shielded from direct contact with condensation from the boiler.

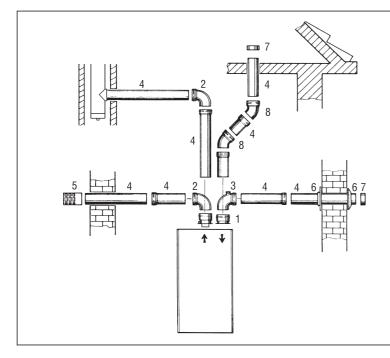
The products of combustion must be conveyed through a flexible or rigid plastic pipe around 100 to 150 mm in diameter, and condensation must be siphoned off at the foot of the pipe.

The usable height of the water trap must be at least 150 mm.



- 3 Fixing screw
- 4 Gasket ø 125/95
- 5 Intake duct collar

Fig. 10



KEY

- 1 Separate pipes kit code 8089911
- 2 90° elbow MF (6 pz.) code 8077450
- 3 90° elbow MF with take-off points code 8077452
- 4a Extension L. 1000 (6 pz.) code 8077351
- 4b Extension L. 500 (6 pz.) code 8077350
- 5 Outlet terminal code 8089501
- 6 Int.-est. ring kit code 8091500
- 7 Inlet terminal code 8089500
- 8 45° elbow MF (6 pz.) code 8077451

NOTE

Before connecting accessories, it is always advisable to lubricate the internal part of the gaskets with silicon products. Avoid using oils and greases.



2.7.3 Separate-pipes roof outlet

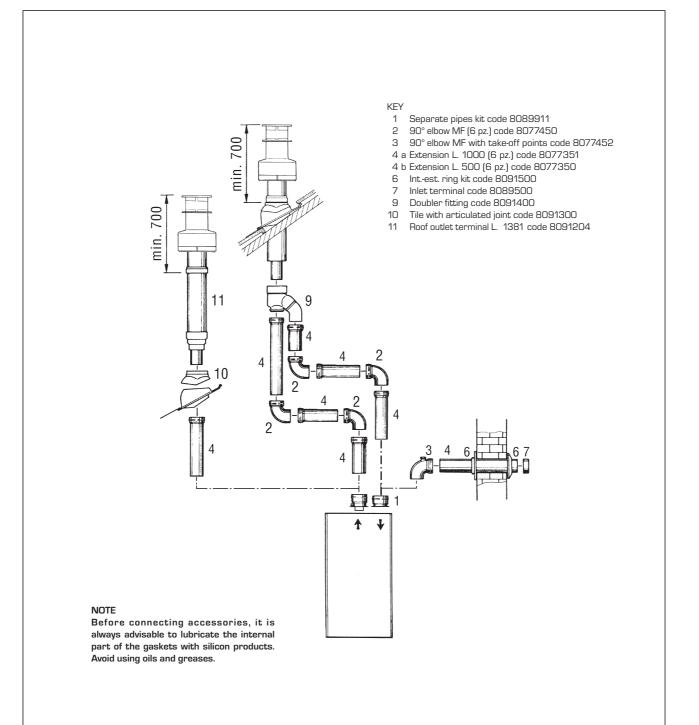
The accessories to be used for this type of installation and some of the connecting systems that may be adopted are illustrated in fig. 12.

There is the possibility of doubling the airintake and smoke-outlet pipes and then bringing them back together again so as to obtain a concentric discharge by using the doubler fitting (9 fig. 12).

For this type of discharge the sum of the

maximum rectilinear development allowed for the pipes must not exceed 13 mm H2O.

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



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2.8 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. 13.

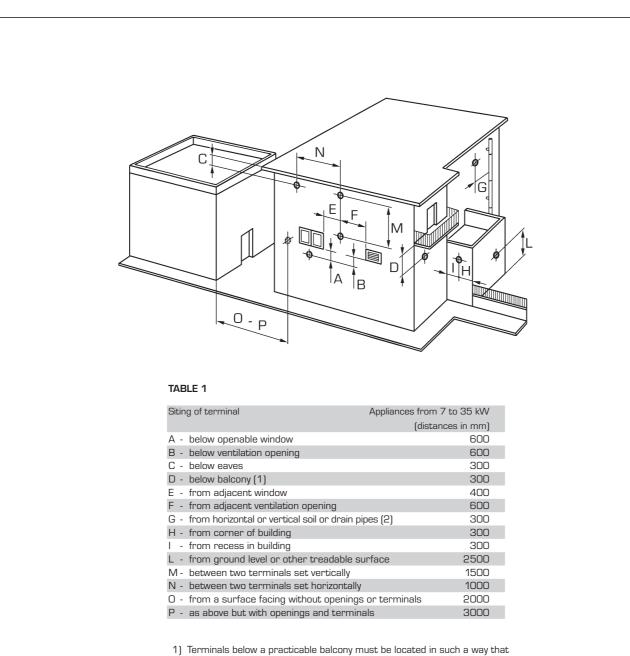
2.10 ELECTRICAL CONNECTION

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

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

Respect the L and N polarities and the earth connection.

NOTE: SIME declines all responsibility for injury or damage to persons, animals or



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

Fig. 13



things, resulting from the failure to provide for proper earthing of the appliance.

2.10.1 Room stat connection (fig. 15 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.

2.10.2 "Logica Remote Control" connection (fig. 15 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 (6-7).

WARNING:

External voltage must not be connected to terminals 1-2-3-4 of the "Logica Remote Control".

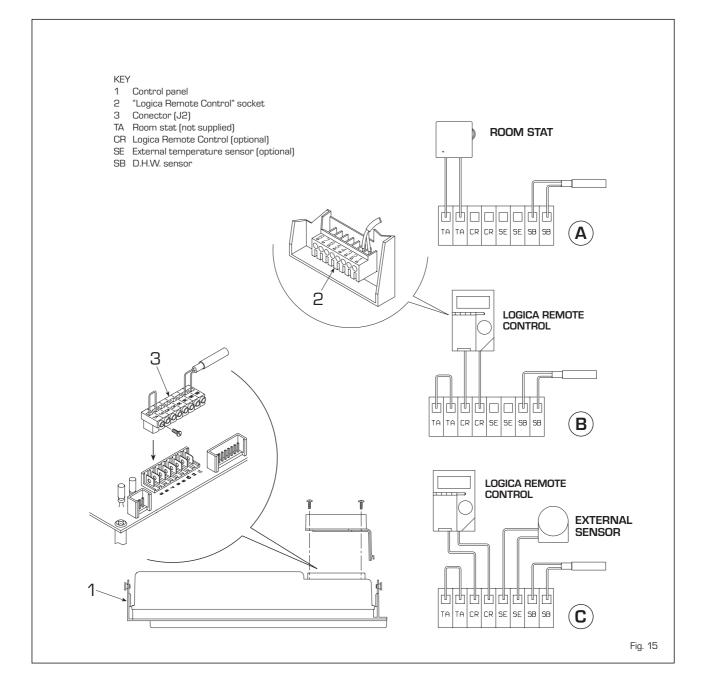
A telephone remote switch with a zero potential contact or a window contact can be connected to terminals 3-4. Equipment for the checking of civil plants via a telephone line includes the model TEL 30.4 LANDIS & STAEFA.

2.10.3 External temperature sensor connection (fig. 15 pos. C)

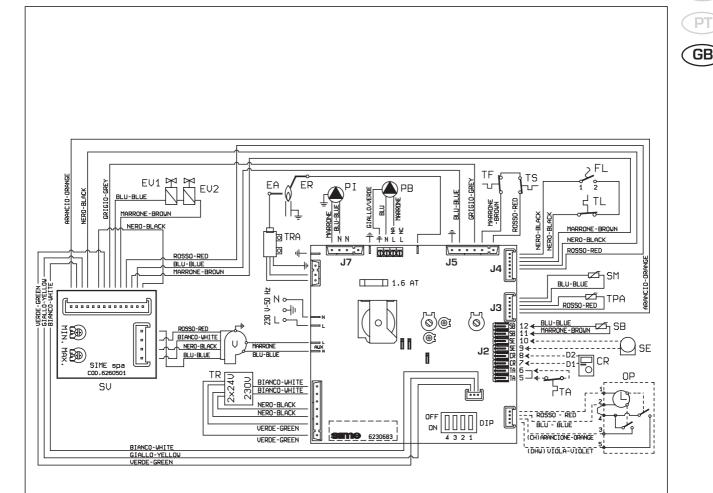
The cables must comply with low safety voltage requirements of EN 60730. For lengths up to $25~{\rm m}$, use cables of sec-

tion 0.25 mm², for longer lengths up to 50 m use cables of section 0.5 mm². To gain access to boiler connector (3) remo-

ve the control panel cover and connect the external temperature sensor to terminals SE (9-10).



2.10.4 Wiring diagram



KEY

- EV1 Gas valve coil
- EV2 Gas valve coil
- EΑ Ignition electrode
- ER Sensing electrode
- TS 100°C safety stat
- V Fan
- TPA Water pressure transducer
- Ы Heating system pump
- External sensor (optional cod. 8094100) SE
- ΤA Room stat
- SM C.H. sensor
- TL Limit stat
- TRA Ignition transformer
- ΤR Transformer 230 - 24V
- FL Flowmeter
- SB D.H.W. sensor

- Logica Remote Control (optional cod. 8092204) CR
- SV Ventilator board
- OP Time programmer
- TF Smoke stat
- ΡB Heating system pump

Note: The room stat (TA) must be connected to the terminals 5-6

CONNECTOR SPARE PART CODES:

- J2 code 6278613
- J3 code 6278660
- J4 code 6278659
- J5 code 6278658
- J7 code 6278636

Fig. 16

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2.11 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 pre-

vious 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 telepho-

ne 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 (,, the installer can adjust the basic parameters settings according to the individual needs (point 2.10.2). If there is a thermostatic radiator valve fitted, this must be set to maximum.

2.10.2 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: 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 refe- rence room and without an external sensor connected), the value must be set at O (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	55	The increase per minute of the prescribed delivery temperature value sent in $^\circ\mathrm{C}$ is limited to the imposed value.
Activation of adaptation	51	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" modi- fies 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 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 temperature18.5°CNominal ambient temperature20°CHeating gradient30 min/KPresetting 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
OMESTIC HOT WATER SETTINGS		
Reduced domestic hot vater 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.

To permanently remove the activation block, set parameter 63 on O.

(ES) (PT) (GB)	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 antifreeze 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	55	 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.

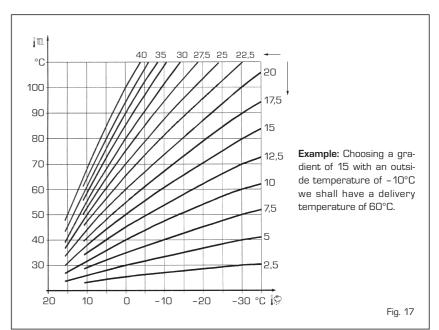
O = not active 1 = active

2.11.3 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. 17, the delivery temperature increases in correspondence to the outside temperature.

2.12 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

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

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

3.1.1 Fault finding

The indicator leds signalling irregular and/or incorrect operation of the equipment are indicated in fig. 18.

3.1.2 Devices

The electronic board is equipped with the following devices:

 "POT. RISC." trimmer (10 fig. 19) Sets the maximum heating power value. To increase the value turn the trimmer clockwise; to reduce the value turn the trimmer anticlockwise.

- "POT. ACC." trimmer (6 fig. 19)

Trimmer to vary the pressure level upon ignition (STEP), of the gas valve.

According to the type of gas for which the boiler is equipped, the trimmer must be regulated so as to obtain a pressure of approx. 3 mbar at the burner for methane gas and 7 mbar for propane gas (G31). To increase pressure, turn the trimmer clockwise; to reduce pressure, turn the trimmer counterclockwise. The slow ignition pressure level can be set during the first 3 seconds following burner ignition.

After setting the pressure level upon ignition (STEP) according to the type of gas, check that the pressure for heating is still at the value previously set.

- "MET-GPL" connector (7 fig. 19)
 When the connector is not connected up the boiler is ready to operate on NATURAL GAS. With connector installed for PROPANE fuelled operation.
- "ANN. RIT." connector (5 fig. 19) In the heating phase, the electronic board is programmed to include a burner technical delay interval of approx. 90 seconds, which occurs both at system cold starting and at subsequent re-ignitions. The aim is to overcome the problem of repeated ignitions and turning off with very short time intervals between. This could occur in particular in systems presenting high head losses. At each restart after the period of slow ignition, the boiler will

set itself for about 1 minute at the minimum modulation pressure, and will then move to the heating pressure value set. When the connecting link is inserted, both the programmed technical pause and the period of operation at minimum pressure in the startup phase will be cancelled. In this case, the times elapsing between turning off and subsequent reignition will depend on a temperature difference of 5°C detected by the SM sensor (heating flow sensor).



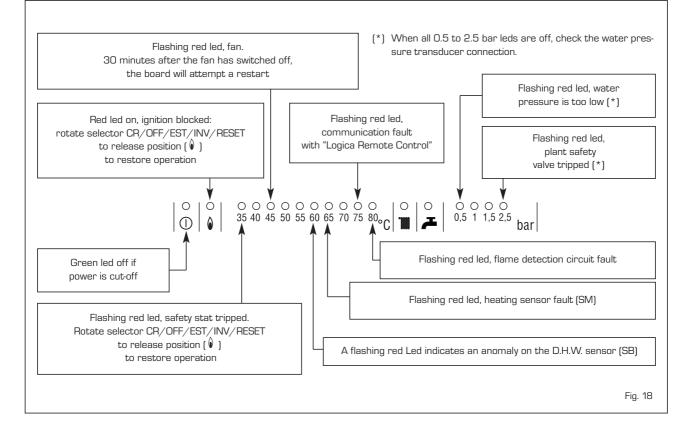
- **DIP SWITCH** (13 fig. 19) Check that the cordless plugs are inser-

ted in the position indicated:

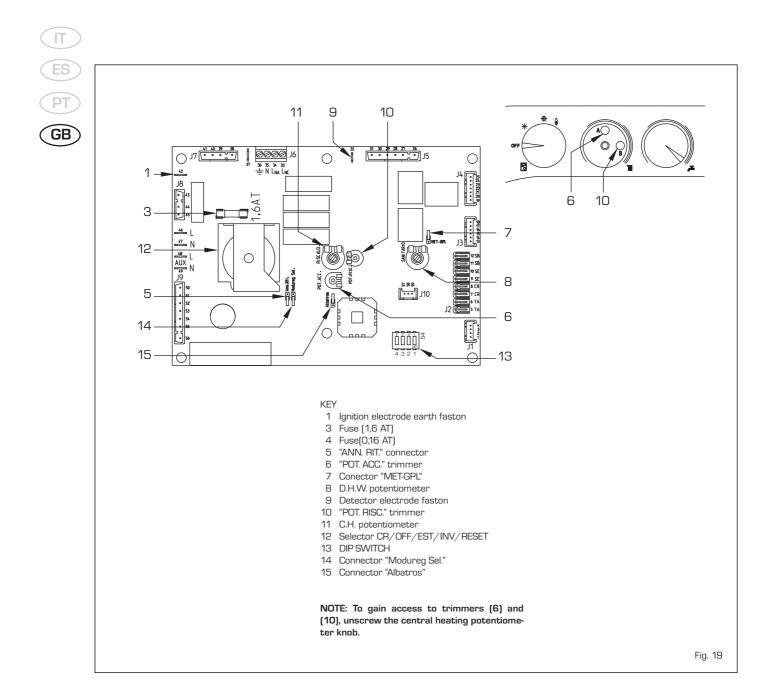


- "Modureg Sel." connector (14 fig. 19)
 With the bridge disconnected the boiler is predisposed to function with the SIT gas valve, and with the bridge connected it is predisposed to function with the HONEYWELL gas valve.
- "Albatros" connector (15 fig. 19)
 The bridge must always be disconnected.
 It is connected only when multiple boilers are installed in a sequence/cascade.

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



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3.2 TEMPERATURE SENSOR AND WATER PRESSURE TRANSDUCER

Tables 3 - 3/a show the resistance values (Ω) that are obtained on the sensor as the temperature varies and the transducer values obtained as the pressure varies. When sensor (SM) is interrupted, neither of the boiler's heating services will function. With D.H.W. (SB) sensor interrupted, the boiler will only work in heating mode.

TABLE 3 (Sensors)

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

TABLE 3/a (Transducer)

Pressure	Resista	nce (Ω)
(bar)	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 knob to summer or winter, and verify that green led (①) lights up to confirm the presence of voltage.

The boiler is now ready to start working upon demand for heating or drawing off of D.H.W.; a discharge current is sent to the ignition electrode through the programmer, and the gas valve opens at the same time. The burner must be ignited within 10 seconds. However, it is possible for ignition failures to occur, with consequent activation of signal indicating that the control box has "locked out".

- Gas failure

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

- Ignition electrode fails to spark

In the boiler, only the gas to the burner is seen to open. After 10 sec. the warning light indicating equipment "lockout" lights up.

This may be due to a break in the wire of the electrode or to the wire not properly fastened to the electric terminal of the control box;

- No detection of flame

The continuous spark discharge of the electrode is noted starting from ignition even though the burner is lit.

After 10 seconds have elapsed, the sparks cease, the burner goes out, and the warning light indicating equipment "lock-out" lights up.

There could have a break in the wire of the sensing electrode or the electrode itself is touching earth: the electrode is worn out and needs replacing. The control box is defective.

When there is a sudden voltage failure, the burner shuts out immediately; when power supply returns, the boiler will start up again automatically.

3.4 SYSTEM AVAILABLE HEAD

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

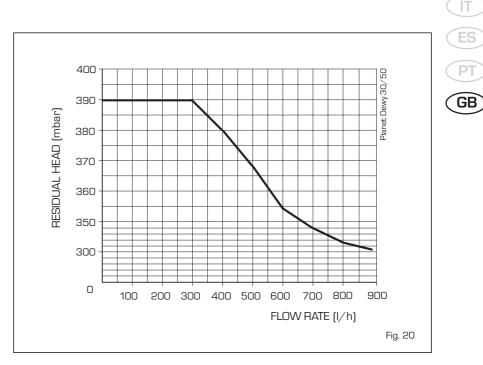


fig. 20.

3.5 FLOW SWITCH SAFETY VALVE

A flow switch safety valve intervenes, blocking the operation of the burner if the boiler is without water due to the formation of an air lock in the heat exchanger or if the circulator is not working, or because the "Aqua Guard" filter is obstructed with impurities.

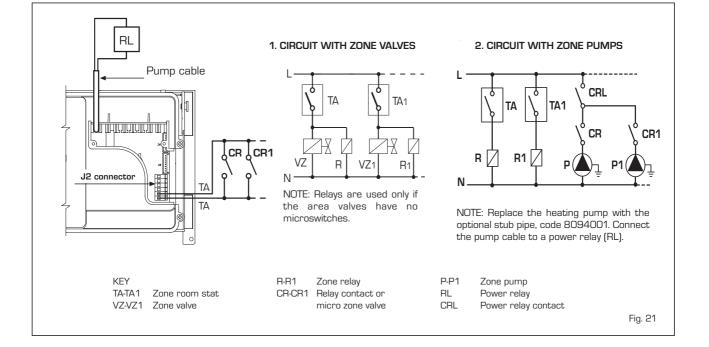
NOTE: If replacing the flow switch valve, make sure that the arrow stamped on the

valve points in the same direction as the flow of water.

3.6 MAINS ELECTRICITY CONNECTION

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

The micro or relay contact connection is made to TA-CR-SE (J2) connector of the circuit board after having removed the jumper (fig. 21).



4 USE AND MAINTENANCE

4.1 D.H.W. PRODUCTION

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

The magnesium anode must be checked annually and substituted when it is worn. It is advisable to place a sluice gate at the entrance of the D.H.W. tank unit which, apart from the total closure, allows the regulation of the supply capacity.

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.

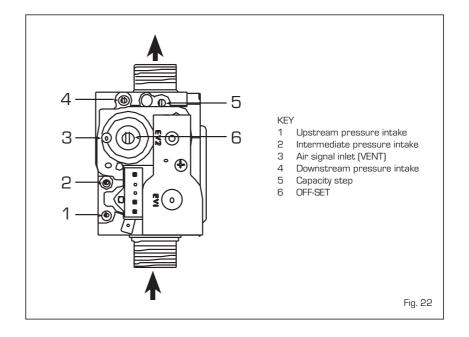
4.2 GAS VALVE

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The boiler, is equipped standard with the SIT 848 SIGMA gas valve (fig. 22).

4.3 ADJUSTMENT OF HEAT OUTPUT FOR HEATING

To adjust boiler heat output for heating purposes, i.e., modifying the setting made at the factory which is approximately 17 kW, use a



screwdriver to adjust the heating heat output trimmer (8 fig. 23).

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

To determine boiler heat output setting,

check energy consumption by observing the meter and then compare with the values shown in **Table 4**; or checked with a digital pressure gauge connected (segno +) alla presa (7 fig. 23). Compare values with those shown in **Table 4**.

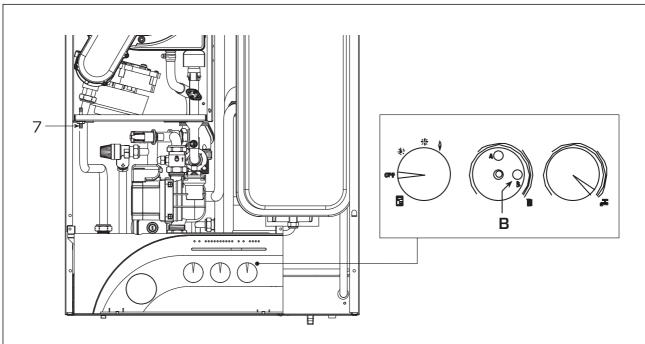


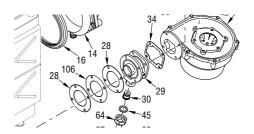
TABLE 4

-			-	_
Pressure	Variable	heat output	Gas consumption*	Gas consumption*
mbar	(80-60°C)	(50-30°C)	G20	G31
	kW	kW	m ³ /h	kg/h
9,18	29,2	32,2	3,17	2,33
6,37	24,1	26,7	2,64	1,94
4,08	19,2	21,2	2,12	1,55
2,30	14,3	15,8	1,59	1,17
1,11	9,5	10,5	1,06	0,78
0,80	7,6	8,4	0,85	0,62

 * The gas consumptions refer to the calorific value at standard conditions at 15°C - 1013 mbar.

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.



Adjustment and control operations must be performed with the heater in operation while heating is underway

AIR CALIBRATION

Electrically disconnect the heating probe (SM) and connect the wires to another similar free probe. Turn the heating potentiometer knob to the maximum setting, remove the knob and connect the differential manometer (+ sign) to the air pressure intake [7 - Drawing 1].

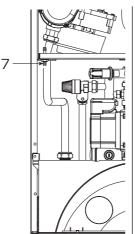
Sequence of operations:

- 1) Turn the heating power trimmer anticlockwise to the bottom of the scale [B -Drawing 2].
- 2) Calibrate the air signal using the minimum fan power adjustment trimmer [MIN. -Drawing 3] to obtain the figure in mmH2O shown in the table:

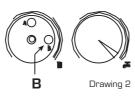
	30/50 BF	
G20	7,6/8,0	
G31	73/76	

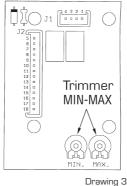
- 3) Turn on a hot water tap to bring the boiler up to maximum hot water power.
- 4) Calibrate the air signal using the maximum fan power adjustment trimmer [MAX. -Drawing 3] to obtain the figure in mmH2O shown in the table:

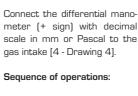
	30/50 BF	
G20	85/95	
G31	89/101	



Drawing 1







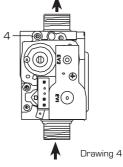
GAS CALIBRATION

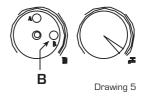
- 1) Turn the heating power adjustment trimmer anticlockwise to the bottom of the scale [B - Drawing 5].
- 2) Open the gas capacity step all the way [5 - Drawing 6]. 3) Calibrate minimum gas pressure using the OFF-SET adjustment screw [6 -Drawing 6] to obtain the figure in mmH2O shown in the table:

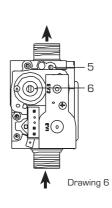
	30/50 BF	
G20	7,2/7,5	
G31	7,3/7,6	

4) Close the gas capacity step [5 - Drawing 6] to obtain the value in mmH2O shown in the table:

		30/50 BF
	G20	6,9/7,2
	G31	7,2/7,5
Imer MAX	bring mum 6) Calibr press capad 6] to	on a hot water tap to the boiler up to maxi- hot water power. rate the maximum gas sure using the gas city step [5 - Drawing o obtain the figure in I2O shown in the table:
MAX.		30/50 BF
	G20	77/87
Drawing 3	G31	86/96







After completion of calibration operations, check CO2 values using a combustion analyser. If discrepancies are found with respect to the values appearing in the tables, correct as necessary:

	"Planet Dewy 30/50 BF"		
	CO2 (Methane)	CO2 (Propane)	
"MIN" power	9,0 ±0,3	10,0 ±0,2	
"MAX" power	9,0 ±0,3	10,0 ±0,2	

Use the capacity step to correct CO2 at "MAX" output (5 – Drawing 6).

Fig. 24



4.5 DISASSEMBLY OF EXPANSION VESSEL

To disassemble the expansion vessel, proceed as follows:

- Make sure that the water has been emptied out of the boiler.
- Unscrew the connection and the locknut.
- Remove the expansion vessel.

Before refilling the system, using a pressure gauge attached to the valve make sure that the expansion vessel is preloaded at a pressure of 0.8 to 1 bar.

4.6 CLEANING AND MAINTENANCE

Preventive maintenance and checking of

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

4.6.1 Chimney sweep function

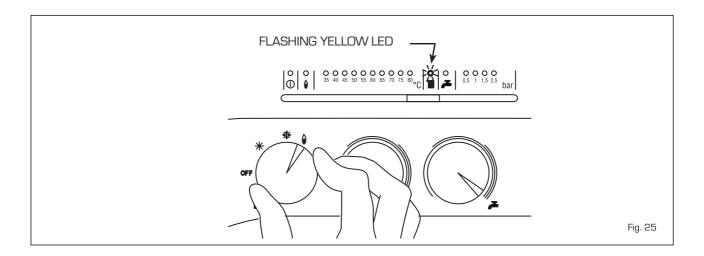
To carry out the verification of combustion in the boiler, turn the selector and stop on the position ($\hat{\mathbf{0}}$) until the orange led (\mathbf{IIII}) starts to flash intermittently (fig. 25). From that moment the boiler will start functioning in heating mode at the maximum

power, 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 taps; after a few minutes the request of the hot-water service feeler 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 taps 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.



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.

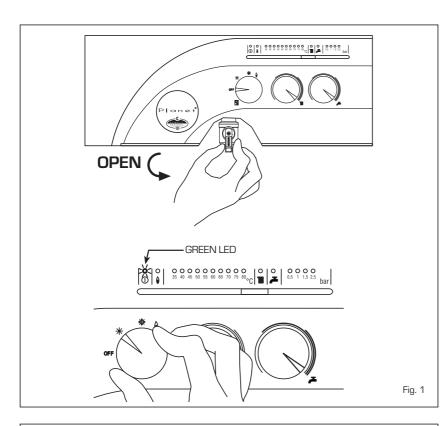
LIGHTING AND OPERATION

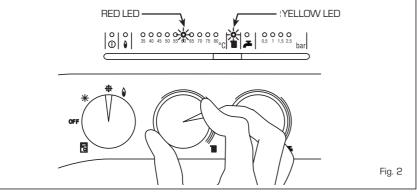
BOILER IGNITION (fig. 1)

Open the gas valve, lower the control panel cover and activate the boiler by rotating the selector knob to the summer positio (*). The lighting-up of the green led (①) will

indicate that the apparatus is switched-on and ready.

 With the rotary switch in the summer position (*) I the boiler will start-up upon demand for domestic hot water, and run at full power to reach the selec-





ted temperature.

The gas feeding pressure will then automatically vary to ensure that the required temperature is kept constant.

- With the rotary switch in the winter position (⅔) once the boiler has reached the value set on the heating potentiometer, it will start to modulate in automatically in order to supply the required power output to the system. The operation of the boiler will be stopped through the intervention of the thermostat or "Logica Remote Control".

TEMPERATURES ADJUSTMENT (fig. 2)

- The D.H.W. temperature can be adjusted by turning the knob of the D.H.W. potentiometer (A). When there is a demand for hot water, the set temperature is displayed on the red led scale from 35÷80°C and the yellow domestic hot water led lights-up at the same time (J). When there is no request for heating or D.H.W. production (the leds IIII and A are off), the tank unit maintenance temperature will appear on the red led scale 35÷80°C.
- The C.H. temperature can be adjusted by turning the knob of the C.H. potentiometer (Ⅲ). The set temperature is indicated on the red led scale from 35÷80°C and the yellow heating led lights up at the same time (Ⅲ).

If the temperature of the C.H. return water is lower than around 55° C, condensation of the combustion by-products is obtained, further increasing the efficency of thew thermal exchange.

TURNING THE BOILER OFF (fig. 1)

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





due to the freezing of the water.

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

GAS CONVERSION

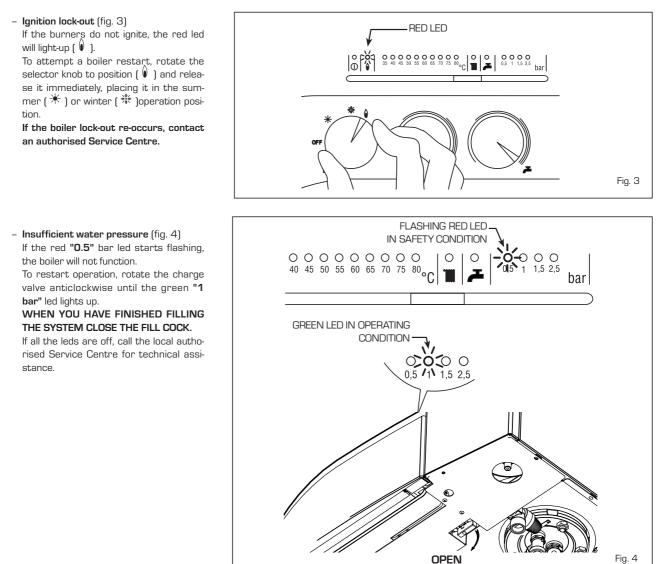
Should it be necessary to convert the appliance to a different gas from the one

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.

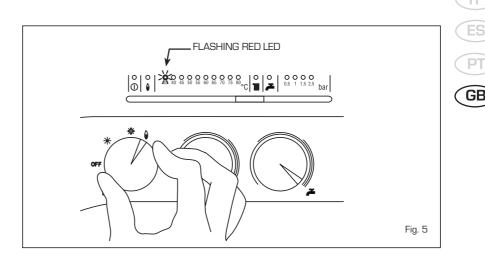
FAULT FINDING



- Safety stat trip (fig. 5)

If the safety thermostat trips, the red " $35^{\circ}C$ " led will start flashing. In order to attempt a boiler restart, rotate the selector knob to position () and release immediately, returning it to the summer () or winter () position.

If the boiler lock-out occurs again, call local authorised Service Centre for technical assistance.



- Other anomalies (fig. 6)

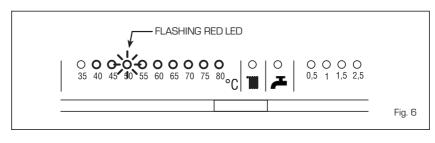
When one of the red "40÷80°C" leds start flashing, switch-off the boiler and then try to ignite again.

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



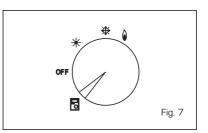
When the boiler is connected to the "Logica Remote Control" regulator, the selector CR/OFF/SUM/WIN/UNBLOCK must be placed in the position []; the knobs of the hot-water service heating potentiometers do not have any effect and all of the functions will be managed by the regulator (fig. 7).

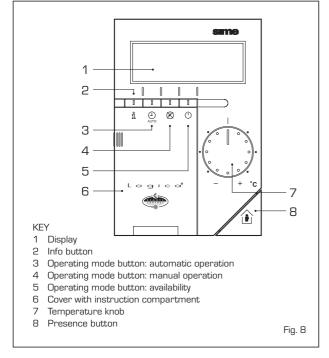
If the "Logica Remote Control" breaks

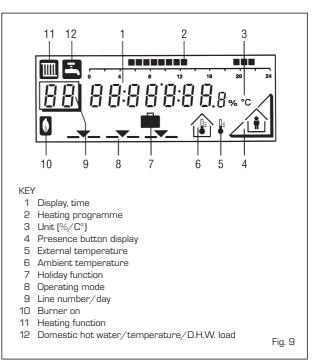


down, the boiler will function by placing the selector on the (\star o \star), position, obviously without consequent control of the room temperature.

No interior da tampa estão indicadas as instruções de funcionamento (fig. 8). Cada programação ou modificação é visualizada e confirmada no display (fig. 9).





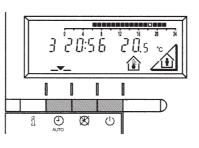




ACTIVATING

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.

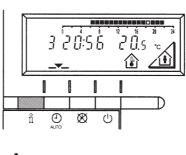


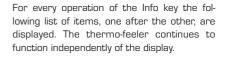
Manual functioning: the heating functions manually according to the choice made with the on-line key.

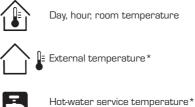
Availability: the heating is deactivated.

- Info key

(reference key grey colour)







(-(_)-

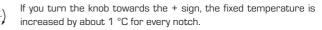
* This data appear only if the relative feeler is connected or if they are transmitted by the regulator of the boiler.

- 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 decreased by about 1 $^{\circ}\mathrm{C}$ 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.

up to

up to

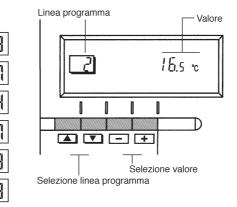
up to

up to

You can set or display the following values:

• Temperatures

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



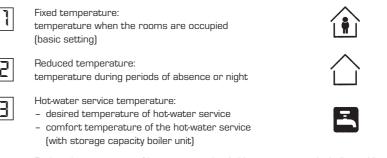
As soon as the cover is open, the display and the key functions are switched on. GB

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.





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 \blacktriangle and \bigtriangledown keys at the same time for at least 5 seconds and then go along the entered lines with the key \bigtriangledown 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 programmes me 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.

24

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12



Select the days that correspond with the heating phase. 1= Monday, ... 7 = Sunday/8 = hot-water service programme Start of phase 1: heating with fixed modality End phase 1: heating with reduced modality Start phase 2: heating with fixed modality End phase 2: heating with reduced modality Start phase 3: heating with fixed modality End phase 3: heating with reduced modality

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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 \frown 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.



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Start phase 1: preparation of the boiler unit to the comfort temperature

End phase 1: Temperature of boiler unit maintained at the reduced value

Start phase 2: Preparation of boiler unit to the comfort temperature

End phase 2: Temperature of boiler unit maintained at the reduced value

Start phase 3: preparation of boiler unit to the comfort temperature

End phase 3: Temperature of boiler unit maintained at the reduced value

- Setting the time



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

15 16

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 2.11.3 Display of the current boiler temperature.



Display of the current power of the burner and of the current operating mode ($\boxed{10}$ = = heating/ $\boxed{2}$ = hot-water service)

- Vacation function

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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.



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

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

- Default values

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.

1

to

ATTENTION

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

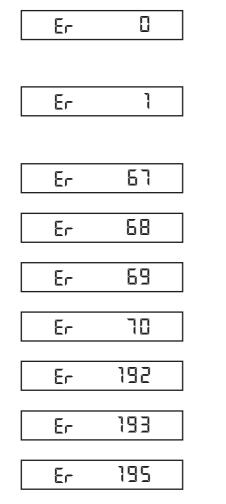
• Temperature and time programme



• Vacation period



- Error display



Ignition lock-out

 $\bar{\rm Rotate}$ selector CR/OFF/EST/INV/RESET on the boiler control panel to the release position () to reset operation (fig. 3). 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 (fig. 5). If the lock-out re-occurs, call an authorised Service Centre.

Domestic hot water sensor fault (SB)

Call an authorised Service Centre.

Heating sensor fault (SM)

Call an authorised Service Centre.

Insufficient water pressure

Reset operation using the boiler charge valve (fig. 4).

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 \leq 70 kW **EN 483** per APPARECCHI A GAS DI TIPO C AVENTI PORTATA TERMICA \leq 70 kW.

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

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

MODELLO	Potenza termica	Portata termica	Rendimento a cario	o 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	
DPEN 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	
DPEN.zip 25 BF	23,4	25,8	86,7	90,6	83,6	88,5	
DPEN.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 BC	X 113,9	116,0	93,1	98,2	99,1	106,4	
Dewy Equipe 180 - Dewy Equipe 180 BC	X 170,9	174,0	93,2	98,2	99,2	106,4	
DEWY EQUIPE 240 - DEWY EQUIPE 240 B(DX 227,8	232,0	93,4	98,2	99,4	106,4	
DEWY EQUIPE 300 - DEWY EQUIPE 300 B	DX 284,8	290,0	93,5	98,2	99,5	106,4	
DEWY EQUIPE 360 - DEWY EQUIPE 360 B		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.



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