

ITALKERO

Ceiling gas radiators

- FORCED -



PS40 R2

PS60 R2

PS80 R2

PS90 R2



0694
n°BL3197

**INSTRUCTION BOOKLET:
INSTALLATION AND
AFTER-SALES SERVICE**



CONFORMITY

Our **appliances** are in conformity with:

- Gas Directive 90/396/EEC
- Electromagnetic Compatibility Directive 89/336/EEC
- Low-Voltage Directive 73/23/EEC 0694



RANGE

<i>MODEL</i>	<i>CODE</i>
Poster 40	PS40R2 M0000
Poster 60	PS60R2 M0000
Poster 70	PS80R2 M0000
Poster 90	PS90R2 M0000

Dear Technician,

Congratulations on having chosen a POSTER PS CONVECTOR. This unit is able to provide many years of well-being with extremely high standards of efficiency, reliability, quality and safety. By means of this booklet, we intend providing you with all the information we consider necessary for correct and easy installation.

Thank you once again

The Manufacturer

GARANZIA

The radiator comes with a specified warranty from the manufacturer. We invite you to apply to the above-mentioned Technical service that with no payment will:

- Make a free service on the convector
- Ratify the warranty certificate furnished with apparatus that we like to advice you to read.

General Information page	5
Fundamental safety rules	5
Description of the appliance	6
Safety devices	6
Identification	6
Structure	7
Technical details	8
Accessories	8
Functional wiring diagram	9
Control panel	10

INSTALLER

Receipt of product	11
- Pipe kit Ø 32 or Ø 54 mm with COMBINED end piece	11
- Pipe kit Ø 32 or Ø 54 mm SEPARATE end piece	13
Dimensions and weights	14
Installation area	14
Installation and masonry works	15
- CEILING installation with COMBINED end piece	17
- BRACKET installation with COMBINED end piece	20
- Fitting the CONVECTOR	22
- Installation with SEPARATE end pieces	23
- Fitting the stack	26
- Checking Pressure Loss (Pa)	26
Power connections	28
Gas supply connections	29

TECHNICAL AFTER-SALES SERVICE

Preliminary operations before initial startup	30
Initial startup	30
Control unit malfunctions	31
Controls during and after the initial startup	32
Switching from one type of gas to another	33
Settings	35
Routine maintenance	38
Removing and refitting the casing	45
Troubleshooting	46

This booklet consists of 48 pages.

- After removing the packaging, check the integrity and completeness of the supply and in case of any discrepancies, contact the Agency that sold the appliance.







In same parts of the book there are used these symbols:



Attention: it used to underline particular caution or actions.











Prohibited: it used to underline the actions that don't half to be executed.

-  - After removing the packaging, check the integrity and completeness of the supply and in case of any discrepancies, contact the Agency that sold the appliance.
-  If the appliance is not used for a long period of time, the following operations must be performed:
 - position the master switch (if fitted) on "off" or disconnect the plug from the power mains;
 - close the gas tap.
-  - The appliance must be installed by companies approved pursuant to Law no. 46 dated 5 March 1990. Upon completing the installation, such companies must issue a declaration of installation conformity in accordance with applicable national laws and the instructions provided by the Manufacturer in the installer's booklet attached to the product.
-  Once in the year you must service the appliance.
-  - The appliance must only be used for the purpose intended by the Manufacturer and for which it has been expressly designed. The Manufacturer disclaims any contractual and non-contractual liability for injuries caused to people or animals and damage to things, due to installation errors, wrong settings, bad maintenance or improper use.
-  - This booklet and that of the User are an integral part of the appliance and must therefore be carefully looked after and ALWAYS accompany the appliance even when this is sold to another person or user or transferred to another system. In case of damage or loss, ask the Area After-Sales Service for another copy.

FUNDAMENTAL SAFETY RULES

Please remember that the use of products involving fuels and electricity requires the enforcement of a number of fundamental safety rules such as:

-  - children and unassisted disabled persons must not use the appliance.
-  - cleaning is forbidden without first disconnecting the appliance from the power mains by turning the master switch, if fitted, to "OFF" or taking out the plug.
-  - do not start electric appliances or equipment, such as switches, household appliances etc in case of a smell of fuel or of combustion fumes.
In this case:
 - o ventilate the premises by opening the doors and windows;
 - o close the fuel opening/closing device;
 - o promptly call the After-Sales service or professionally qualified personnel.
-  - It is forbidden to change or tamper with safety or setting devices without prior manufacturer agreement
-  - do not touch the appliance with wet or damp parts of the body or if your feet are wet.
-  - do not pull, disconnect or twist the power cables exiting from the appliance even when this is disconnected from the power mains. Do not place objects, such as towels, rags, etc., on the appliance which could cause malfunctions or prove to be a hazard
-  - do not close or reduce sizes of venting opening in the installation area o on the appliance
-  - Never leave packaging material (cartons, plastic bags, etc.) within reach of children as this could be a potential hazard source.

DESCRIPTION OF THE APPLIANCE

CONVECTOR units are independent gas appliances for heating environments.

They use an atmospheric burner with combustion chamber of the C TYPE, sealed with respect to the place of installation, offering utmost safety as the return is prevented of exhaust fumes or fuel into the environment.

The combustion air is taken from outside the place of installation and the combustion products are conveyed outside by means of the centrifugal fan fitted to the appliance.

In view of their compact dimensions, the appliances can be installed in small spaces.

The appliances are factory set for running on NATURAL GAS and can be transformed for LPG (G30/G31) thanks to the nozzle kit provided as standard

The heat exchanger, consisting of aluminium die casting with fins, ensures high combustion efficiency. The tangential fan ensures rooms are quickly heated up after switch-on.

An electronic board controls all the main appliance functions and automatically interrupts the gas supply in case of a fault.

The control panel permits starting or stopping the appliance in "manual" mode and restoring normal operation after a fault.

- The remote control permits programming weekly operating periods, setting the temperature and starting summer ventilation.

SAFETY DEVICES

The appliance features the following safety devices:

- **Safety thermostat:** this trips and switches the appliance to stop mode if the temperature in the exchanger exceeds the set limit (107°C).
- **Pressure switch:** this trips and switches the appliance to safety standby in case of faults in the fume extraction circuit.
- **Protection fuse:** this protects the electrical parts of the appliance from any power surges.

⚠ The engagement of the safety devices points to a potentially hazardous appliance malfunction; contact the Manufacturer's After-Sales Service immediately.

⊘ The appliance must never ever be operated with the safety devices not engaged or tampered with.

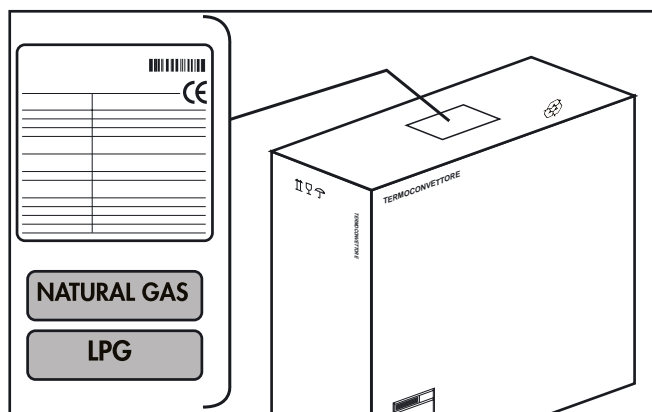
⚠ The safety devices must only be replaced by the Manufacturer's After-Sales Service, using only original spare parts. Refer to the attached spare parts catalogue.

To order spare parts and/or perform technical jobs, the exact model of the appliance must be known. After making the repairs, perform a start-up test and check correct operation.

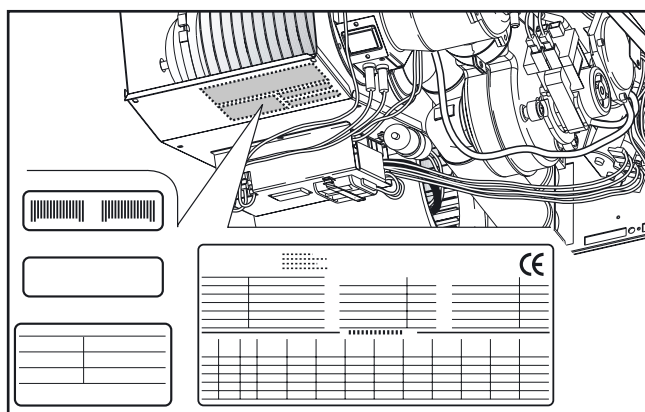
IDENTIFICATION

The appliance is identifiable by means of:

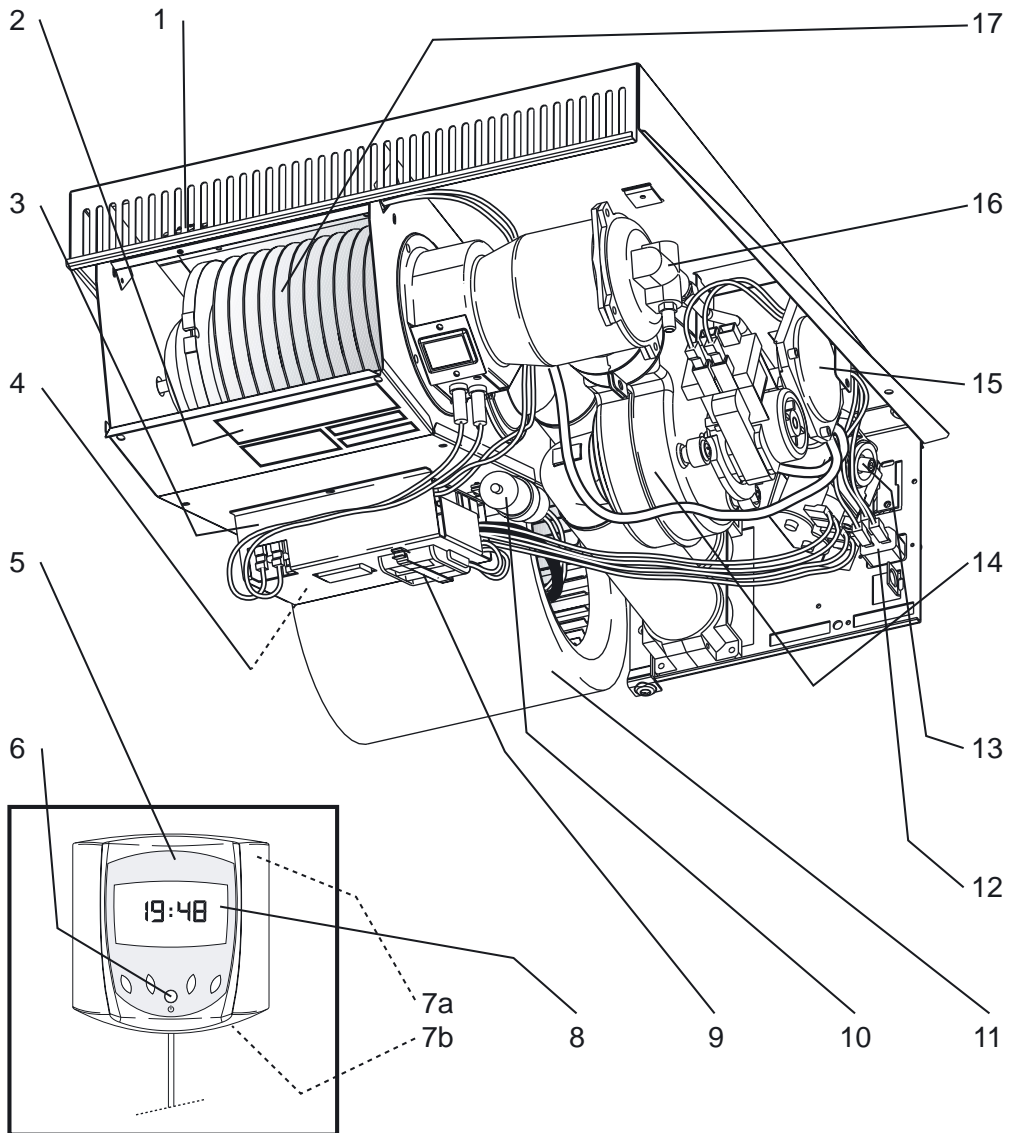
- the packaging label



- the **Technical Plate** which shows the serial number, the model and the main technical/performance data.



⚠ Tampering with and removing the Technical Plate will make it impossible to identify the product with any certainty and make any installation and maintenance job difficult.



- | | | | |
|-----------|--|-----------|-----------------|
| 1 | Safety thermostat | 11 | Convection fan |
| 2 | Technical plate Gas Valve | 12 | Power plug |
| 3 | Control unit | 13 | Gas valve |
| 4 | Protection fuse | 14 | Combustion fan |
| 5 | Digital remote control | 15 | Room thermostat |
| 6 | Main switch | 16 | Burner unit |
| 7a | "Integrated" room heat probe | 17 | Heat exchanger |
| 7b | "Split" room heat probe | | |
| 8 | Display | | |
| 9 | Battery holder (<i>buffer batteries</i>) | | |
| 10 | Condenser (<i>mod. 70 and 90</i>) | | |

TECHNICAL SPECIFICATIONS

MODEL	40		60		80		90			
	G20	G30/G31	G20	G30/G31	G20	G30/G31	G20	G30/G31		
Mains gas supply pressure (nominal) G20	20								mbar	
Category of appliance	II 2H3+									
Type of appliance	C13 / C33 / C53 / C63								-	
Nom. heat output / min. HI	3,5 / 2,4		5,85 / 4,0		7,4 / 5,07		9,1 / 6,2		kW	
Nom. heat input /min. HI	3,85 / 2,7		6,5 / 4,55		8 / 5,6		10 / 7,0		kW	
Working efficiency Pn	90,5 / 88,5		90,2 / 88,4		92,5 / 90,7		91 / 83		%	
Efficiency class*	1								-	
Power supply	230 ~ 50								V-Hz	
NOM power input	135								W	
Insulation standard	IP20								-	
Nozzles	3								n°	
	1,02	0,58	1,30	0,74	1,42	0,82	1,65	0,95	Ø mm	
Pressure at nozzles	12	28,8/36,8	12	28,8/36,7	12	28,5/35,8	10	27,2/34,5	mbar	
Gas consumption (15°C) nom. / red	G20	0,407		0,688		0,847		1,06		m³/h
		0,285		0,481		0,593		0,742		
			0,303		0,512		0,630		0,788	kg/h
.	G30		0,212		0,358		0,441		0,552	kg/h
			0,299		0,505		0,621		0,777	kg/h
.	G31		0,209		0,354		0,435		0,544	kg/h
MAX volume, room heated by a convector (approximate figure)	95		155		196		245		m³	
Quantity of heated air (approximate figure)	160		265		335		410		m³/h	
Gross weight (with packaging)	23,5		32		39,5		47,5		kg	

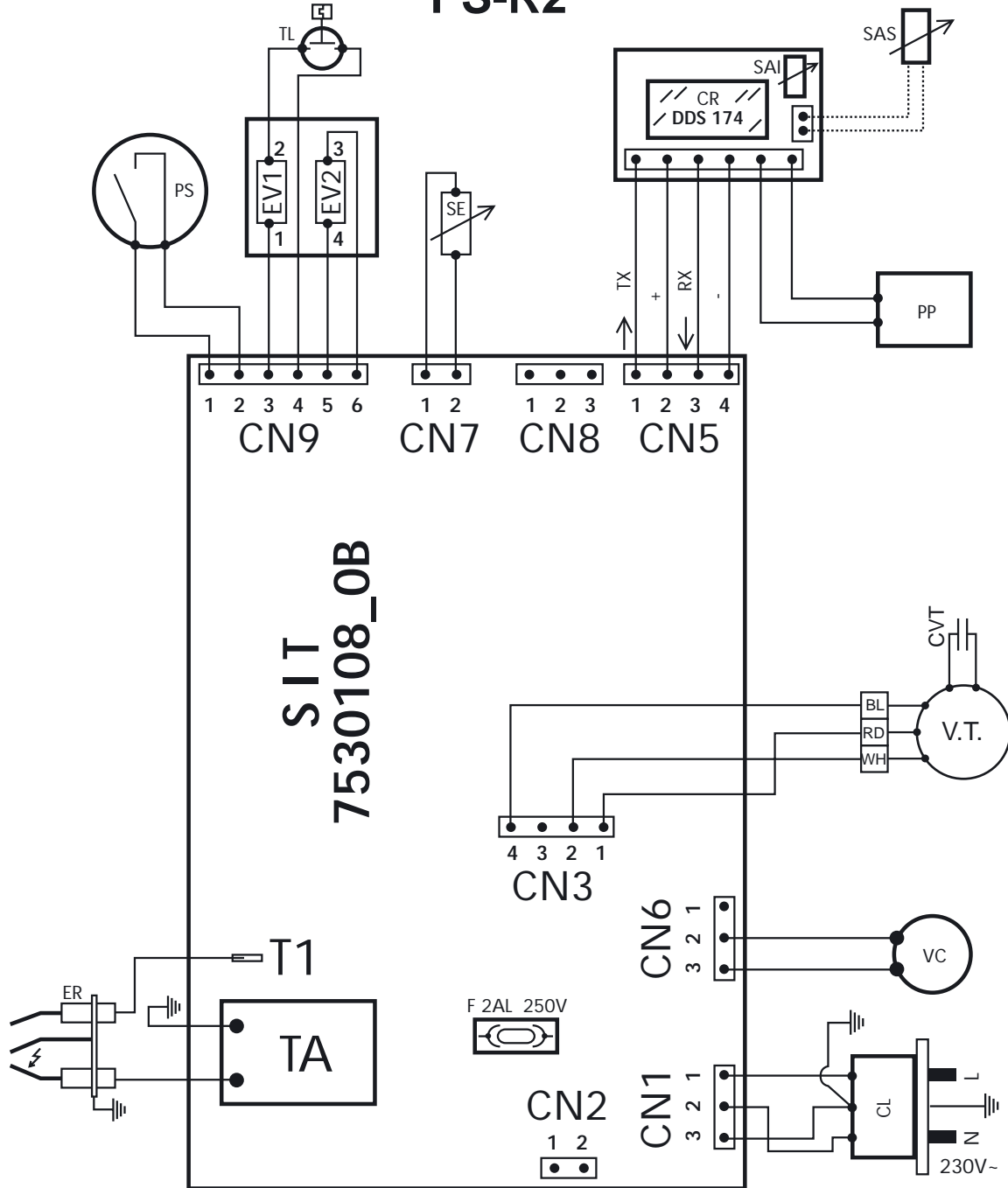
* Efficiency class obtained according to prEN 1266 dated 6/1997.

ACCESSORIES

On request, the following accessories are available:

DESCRIPTION	CODE
Wall spacer bracket 30	70000666 00
Wall spacer bracket 50	70000676 00
Wall spacer bracket 70	70000686 00
Wall spacer bracket 90	70000696 00
90° curves _Ø 32mm pipe union	70000700 00
Extension Ø 32mm L = 500mm	70000720 00
Extension Ø 32mm L = 1000mm	70000710 00
135° curves _Ø 32mm	70000705 00
Outer protection grille "GP" for separate end piece Ø 32mm	70000350 00
Griglia prot. esterna "GPu" per Term. Unico Ø 32mm	70000600 00
Recessed screen "SDP" for separate end piece Ø 32mm	70000365 00
Stack for pipe Ø 32mm	70000730 00
90° curve _Ø 54mm pipe union	70000370 00
Extension Ø 54mm L = 500mm	70000390 00
Extension Ø 54mm L = 1000mm	70000380 00
90° _curve Ø 54mm cast	70000755 00
135° curves _Ø 54mm	70000375 00
Outer protection grille "GP" for separate end piece Ø 54mm	70000350 00
Outer protection grille "GPu" for combined end piece Ø 54mm	70000610 00
Recessed screen "SDP" for separate end piece Ø 54mm	70000365 00
Stack for pipe Ø 54mm	70000740 00
Daily TIMER	70000270 00
Weekly TIMER	70000280 00
INSULATION for pipe Ø 32mm L = 1000mm (pack of 5 pcs.)	70000840
INSULATION for pipe Ø 54mm L = 1000mm (pack of 4 pcs.)	70000850 00
Inlet/Outlet end piece Ø 32mm L = 5 cm	70000466
Inlet/Outlet end piece Ø 54mm L = 6 cm	70000465 00

General wiring diagram
PS-R2



SA I INTEGRATED ROOM PROBE
 SAS SPLIT ROOM PROBE
 SE OUTSIDE PROBE (optional)
 VC COMBUSTION FAN
 VT TANGENTIAL FAN
 CN... CONNECTOR
 T1 POWER TERMINAL
 VT TANGENTIAL FAN
 TA IGNITION TRANSFORMER
 GND/+24V REMOTE POWER SUPPLY
 TX/RX TRANSMISSION/SIGNAL RETURN
 BL BLUE WIRE
 WH WHITE WIRE
 RD RED WIRE

PP BATTERY HOLDER
 SIT CONTROL BOARD
 EA IGNITION ELECTRODE
 ER DETECTION ELECTRODE
 EV1 ELECTRIC GAS VALVE
 F FUSE
 CL LINE CONNECTOR
 EV2 POWER MODULATOR
 L PHASE LINE
 N NEUTRAL LINE
 CRD DIGITAL REMOTE CONTROL
 PS PRESSURE SWITCH
 TL LIMIT THERMOSTAT

**DESCRIPTION OF KEYS**

- a** - Switch on the appliance (key 3);
 - b** - Press MENU key (key 5);
 - c** - Press DOWN key (key 2) to move the cursor onto the required menu line;
 - d** - Press SELECT key (key 5);
- note: keys 1, 2, 4 and 5 acquire different functions in the different menus.

- required setting
- e** - Press keys 1 and 2 to set the required parameter;
- f** - Press key 4 to store the parameter just set and pass onto the next;
- g** - Press OK key (key 5) to store all the set parameters and return to main menu;