Flame sensor spare part

CODE	20132573

1 General warnings

1.1 Guarantee and responsibility

The rights to the guarantee and the responsibility will no longer be valid in the event of damage to things or injury to people, if such damage/injury was due to any of the following causes:

- ➤ intervention of unqualified personnel;
- ➤ carrying out of unauthorised modifications on the appliance;
- ➤ powering of the burner with unsuitable fuels;
- ➤ faults in the fuel supply system;
- ➤ repairs and/or overhauls incorrectly carried out;
- ➤ use of non-original components, including spare parts, kits, accessories and optionals;
- ➤ force majeure.

The manufacturer furthermore declines any and every responsibility for the failure to observe the contents of this manual.

- Personnel must always use the personal protective equipment envisaged by legislation and follow the indications given in this manual.
- Personnel must observe all the danger and caution indications shown on the machine.
- Personnel must not carry out, on their own initiative, operations or interventions that are not within their province.
- Personnel must inform their superiors of every problem or dangerous situation that may arise.

1.2 Notes on safety for the installation

DANGER

It is obligatory to carry out all installation, maintenance and dismantling operations with the electrical supply disconnected.

DANGER

Isolate the fuel supply.

WARNING

The installation must be carried out by qualified personnel, as indicated in this manual and in compliance with the standards and legal requisites in force.

CAUTION

After removing all the packaging, check the integrity of the contents. If in doubt, do not use the spare parts kit; contact the supplier.

Wait for the components in contact with heat sources to cool down completely.

After carrying out maintenance, cleaning or checking operations, reassemble the cover and all the safety and protection devices of the burner.

2 Flame sensor spare part

2.1 Kit description

The flame sensor, featuring semiconductor technology, completely replaces the cadmium oxide CdO or photocell sensors, in accordance with the following directives:

- 2002/95/EC RoHs Directive
- 2011/65/EC Directive as RoHs2

The kit is composed of:

Flame sensor . . . . . No. 1

Instruction booklet No. 1

NOTE:

The new flame sensor is polarised, therefore it is important to pay close attention to the replacement procedure, as set out on page 2 of this manual.

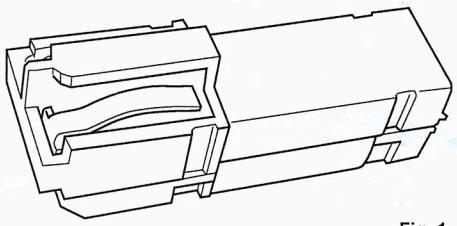

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Fig. 1

2.2 Compatibility

New spare part Flame sensor	Replaces Spare part Photocell	Direct connection to RIELLO Control boxes	IMPORTANT Other control boxes
20132573	3002280	530 SE	LAL ... LMO ... LOA ... RMO ... 503 SE
		531 SE	
		530/B SE	
		531/B SE	
		479 SE	
		539 SE	
		531/E SE	
		531/E1 SE	
		554 SE	
		555 SE	

Tab. A

NOTE:

Spare part N. 20132573 is not suitable for use with control boxes other than those indicated in Tab. A

2.3 Use with PRESS range N/N-ECO/TG/TN/GW/GBW/G type burners

2.3.1 Wiring check and flame sensor installation procedure

The new flame sensor is polarised, therefore it is important to pay close attention to the following procedure in order to identify the poles correctly on the control box terminal board.

DANGER

Disconnect the burner from the power supply!

- remove the burner cover by loosening the fixing screws;
- identify the control box and unscrew the fixing screws;
- remove the control box from its housing;

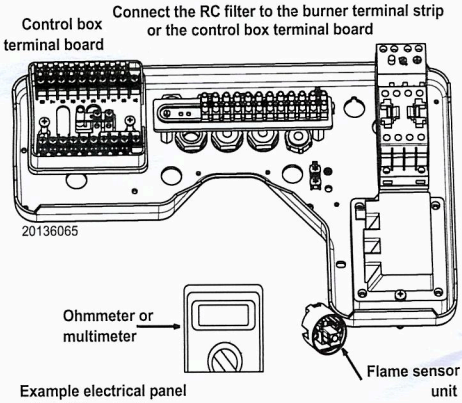
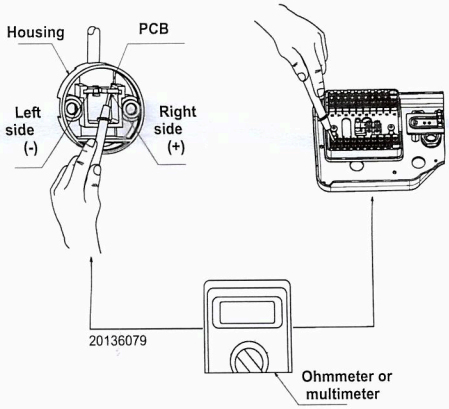


Fig. 2

- extract the sensor from the flame sensor unit (Fig. 2);
- identify the left and right-hand sides of the printed circuit board inside the flame sensor case (Fig. 3);
- using a multimeter, check that the polarity of the wires is correct, with reference to Tab. B. If necessary, swap the wires on the terminal board;
- check continuity in order ensure correct polarity, as indicated in Tab.4;
- insert the replacement flame sensor in the adaptor (Fig. 3);
- position the control box on the terminal board, taking care not to crush the electrical wires;
- tighten the fixing screws on the control box;
- position the burner cover and tighten the screws;
- switch the burner on and check the operating cycle.

Once the installation procedure has been completed, replace the cover and all the burner safety and protection devices.



Check continuity in order to ensure correct polarity, as indicated in Tab.B

Fig. 3

2.3.2 Reference pin-out diagram with commercial flame controls

Reference table listing the connections between the flame sensor and the control boxes in use.

CONTROL BOXES: PIN-OUT IN TERMINAL BOARD					
	LAL ...	LMO ...	LOA ...	**RMO ...**	**503SE**
Right side of sensor (+)	23	12	12	**9**	**9**
Left side of sensor (-)	22	11	11	**N**	**N**

Tab. B

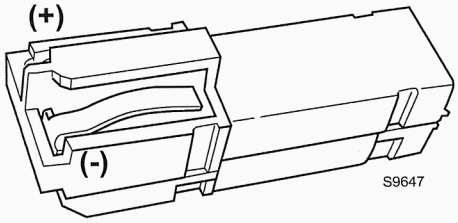


Fig. 4

Key (Fig. 4):
(+) = Brown
(-) = Blue