

GAS MONITORING SENSORS FOR DOMESTIC PREMISES

SRC c1 Eng.



- Power supply 230 V ~ or 12 V – Protection IP42
- For use connected to RGM or RGD detectors
- Supplied with internal sensing element for methane (natural gas) or propane - LPG or carbon monoxide
- Output signal 0.5 to 5 V dc ; Pre-alarm threshold 1.5 V dc ; Alarm threshold 2.5 V dc
- Pre-alarm threshold (1.5 V): methane (nat. gas)=0.5% (5,000 ppm); propane - LPG=0.2% (2,000 ppm); carbon monoxide= 0.03% (300 ppm)
- Alarm threshold (2.5 V): methane (nat. gas)=0.8% (8,000 ppm); propane-LPG=0.35% (3,500 ppm); carbon monoxide=0.05% (500 ppm)
- Power and sensor fault LEDs
- Construction and operation according to BSI 7348, EN 50054 and CEI-UNI:CIG 70028 regulations

APPLICATION

SRC gas monitoring sensors are designed to guarantee the safe use of domestic gas appliances such as : cookers, boilers and calorifiers.

They can control, by means of an internal sensing element, the concentration in air of dangerous gases which may be present in domestic premises eg : methane (natural gas), propane - LPG, carbon monoxide.

Connected to RGM or RGD detectors, they permit using one or two monitoring points in addition to the detector's internal sensor.

INSTALLATION

The exact siting of the monitoring sensor is essential for its correct functioning and depends on the type of gas to be monitored and its density in respect of air :

methane (natural gas) (light) : 10 to 50 cm. from ceiling

LPG (heavy) : 10 to 50 cm. from floor
carbon monoxide : 150 to 200 cm. from floor
 It is advisable to site the detector at a certain distance from the domestic appliances in order to avoid unnecessary alarms :
Burners and calorifier : 1 to 2 metres
Cookers : 2 to 3 metres

ELECTRICAL CONNECTIONS

The power lines for SRC. . . sensors can be in parallel with those of the detector or taken separately from another point of the mains network. The electric leads for signals (terminals 5 and 6 of sensors) must have a cross section of 1 mm² for distances up to 50 metres and of 1.5 mm² for distances up to 70 metres.

MODELS

Code	Power supply	Type of gas	Internal sensor	% gas at 2.5 V –	Length connections 4x1mm ² 4x1.5mm ²	Suitable detectors RGM - RGD
SRC 158	230 V ~	methane (natural gas)	TGS 842	0.8 %	50 m 75 m	128 - 228 - 148 - 248
SRC 152	12 V –	methane (natural gas)	TGS 842	0.8 %	50 m 75 m	122 - 222
SRC 258	230 V ~	propane - LPG	TGS 813	0.35 %	50 m 75 m	128 - 228 - 148 - 248
SRC 252	12 V –	propane - LPG	TGS 813	0.35 %	50 m 75 m	122 - 222
SRC 358	230 V ~	carbon monoxide	TGS 812	0.05 %	50 m 75 m	128 - 228 - 148 - 248
SRC 352	12 V –	carbon monoxide	TGS 812	0.05 %	50 m 75 m	122 - 222

TYPICAL INSTALLATION

fig. 1



