

*Gas Detection*



# Gas Detection

## GAS DETECTION

### GAS DETECTORS & CONTROL UNITS



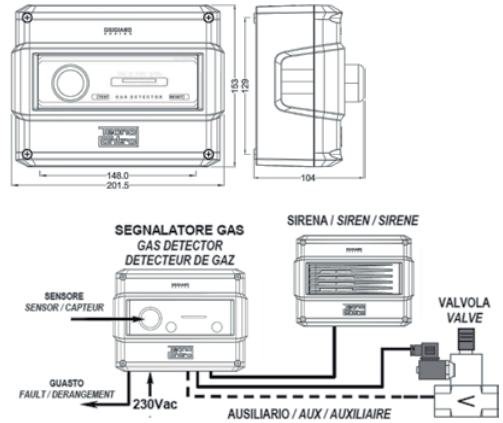
## Control unit with incorporated sensor



### CTR21

Control unit realized with microprocessor technology and printed circuits are SMD assembled. The sensor is integrated on the housing, to facilitate the installation.

- Display by the LED bar placed at the front of the device
- N° 3 relays for alarm and fault
- TEST function
- RESET function
- N° 1 AUX input for electrovalves with magnetic sensor
- N° 3 positive safety relay with alarm memory



CE IP44

Power supply: 230Vac 50-60Hz 12-24Vcc - Installation: Wall

Absorption: 3,5Va - 1,5W

Alarm level: 10% LIE - 20% LEL - Measuring range: 0÷20% LEL

Sensor: Catalytic

| Type  | Detected gas   | Output                     | Capacity       | Cylinder calibration | Sensor life | Storage time |
|-------|----------------|----------------------------|----------------|----------------------|-------------|--------------|
| CTR21 | Methane<br>LPG | N° 3 relays<br>24V/1A SPDT | 230Vac 3A SPDT | B0200                | 5 years     | 5 years      |

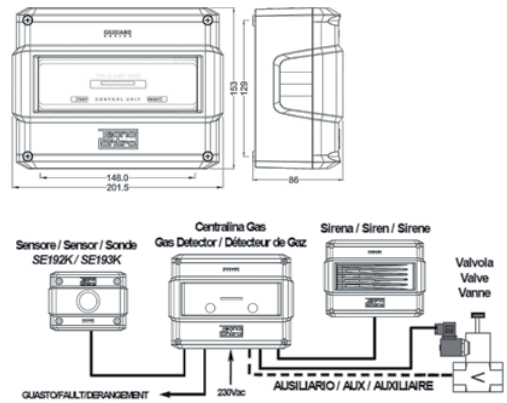
## Control unit for 1 remote sensor



### CTM21

Control unit realized with microprocessor technology and printed circuits are SMD assembled. External gas sensor to be installed in the conform place to detect gas.

- Display by the LED bar placed at the front of the device
- N° 3 relays for alarm and fault
- TEST function
- RESET function
- N° 1 AUX input for electrovalves with magnetic sensor



CE IP65

Power supply: 230Vac 50-60Hz - Installation: Wall

Absorption: 3,5VA

Alarm level: 10% LEL - 20% LEL - Measuring range: 0÷20% LEL

To be connected to a remote sensor

A led bar indicate the reached gas concentration

N° 3 safety positive relay with alarm memory

| Type  | Sensors        | Output      | Capacity       | Sensors        |
|-------|----------------|-------------|----------------|----------------|
| CTM21 | Methane<br>LPG | N° 3 relays | 230Vac 3A SPDT | ST441<br>SE193 |

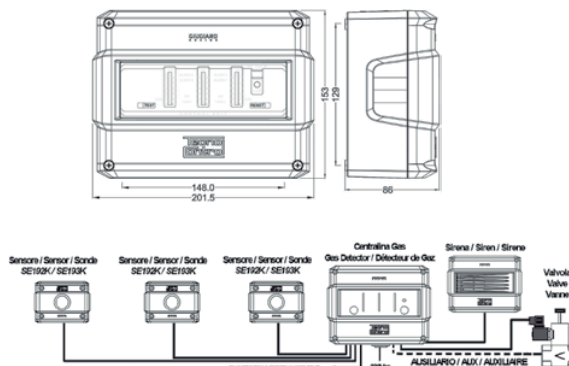
## Control Unit for 3 remote sensors



CTP21

Control unit is equipped with three led bars that indicate the reached gas concentration, The green led indicates fresh air, the first and second red leds indicate pollution and the third and fourth red leds indicate the switching on of the alarm relay. The yellow led indicate an anomaly of the system and it operate on the fault relay.

| Type  | Sensors        | Output                      | Capacity          | Sensors (max 3) |
|-------|----------------|-----------------------------|-------------------|-----------------|
| CTP21 | Methane<br>LPG | N° 3 relays<br>230V 3A SPDT | 230Vac<br>3A SPDT | ST441<br>SE193  |



CE IP65

Power supply: 110/230Vac 50-60Hz 12Vcc - Installation: Wall

Absorption: 10 VA

Alarm level: 10% LIE - 20% LEL - Measuring range: 0÷20% LEL

N° 3 safety positive relay with alarm memory for all sensors

A led bar indicate the reached gas concentration; 1 for each sensor

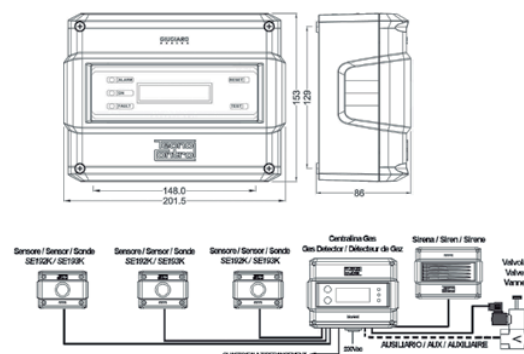
## Control unit with display for 3 remote sensors



CTP23

Control unit is equipped with graphic backlitged DISPLAY that indicate the reached gas concentration. It is equipped with n° 3 inputs for sensors and n° 3 relays output for alarm and fault with alarms memory. Alarm levels are programmable via DIP-switch. TEST and RESET functions.

| Type  | Sensors        | Output                      | Capacity          | Sensors (max 3) |
|-------|----------------|-----------------------------|-------------------|-----------------|
| CTP23 | Methane<br>LPG | N° 3 relays<br>230V 3A SPDT | 230Vac<br>3A SPDT | ST441<br>SE193  |



CE IP65

Power supply: 110/230Vac 50-60Hz - 24Vdc - Installation: Wall

Absorption: 15 VA

Alarm level: 10% LIE - 20% LEL - Measuring range: 0÷20% LEL

N° 3 safety positive relay with alarm memory for all sensors

Backlitged DISPLAY that indicate the reached gas concentration.

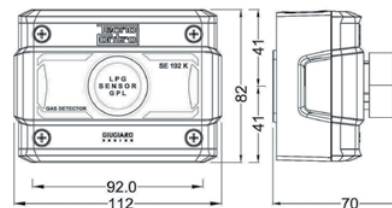
## Gas detector - IP44



ST441

Catalytic sensor to detect methane or LPG. In spite of its low price, this sensor stands out because of its high reliability and such a rating that makes it perfectly fit to be installed in heating plants and a number of industrial appliances.

| Type  | Detected gas | Cylinder calibration | Average time | Sensors |
|-------|--------------|----------------------|--------------|---------|
| ST441 | Methane LPG  | B0200                | 5 years      | 5 years |



CE IP44

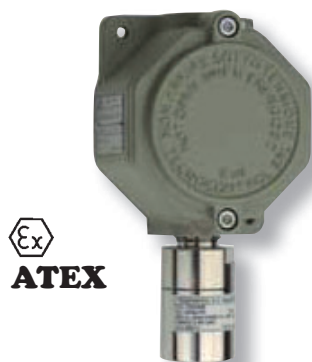
Power supply: 12Vdc

Absorption: 1W

Output: 4÷20 mA - Measuring range: 0÷20% LEL

Sensor: Catalytic

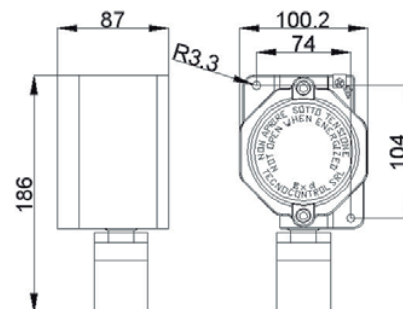
## Gas Detector - ATEX



SE193K

The article SE 193K only differs for its explosion-proof case certified by ATEX, which makes it fit for industrial installations where the area classification requires this type of cases. It can be equipped with an (optional) explosion-proof joint Art.-Nr. ZT163 required for the connection to the cable raceway. Such connection is made easier by coupling terminals. Type of protection: II 2G Ex d IIC T6 - Certificazione CESI 03 ATEX 323

| Type               | Detected gas | Cylinder calibration | Average time | Sensors |
|--------------------|--------------|----------------------|--------------|---------|
| SE193KM<br>SE193KG | Methane LPG  | B0200                | 5 years      | 5 years |



CE EXPLOSION PROOF

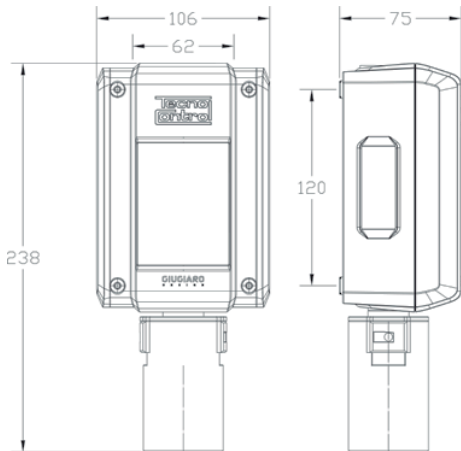
Power supply: 12Vdc

Absorption: 1W

Output: 4÷20 mA - Measuring range: 0÷20% LEL

Sensor: Catalytic

## Stand Alone industrial gas detector - with replaceable sensor



SE237

| Code    | Gas detected | Cartridge replacement | Measuring range | Electrical input | Calibration cylinder | Average Life in clean air |
|---------|--------------|-----------------------|-----------------|------------------|----------------------|---------------------------|
| SE237KM | Methane      | ZSK01/IP-ZSK02/IP     | 0÷20% LEL       | 3 W              | B0200                | 5 anni/years              |
| SE237KG | LPG          | ZSK01/IP-ZSK02/IP     | 0÷20% LEL       | 3 W              | B0200                | 5 anni/years              |
| SE237KI | Hydrogen     | ZSK01/IP-ZSK02/IP     | 0÷20% LEL       | 3 W              | B0200                | 5 anni/years              |
| SE237EO | Oxygen       | ZSE0/IP               | 0÷25% Vol.      | 2 W              | B0416                | 2 anni/years              |

**Power Supply:** 12÷24Vdc - 110/230 Vac

**IP Rating:** IP65

No. 3 Alarm relays. MAX resistive load 24V/1A SPST

No. 1 Fault relay. MAX resistive load 24V/1A SPST

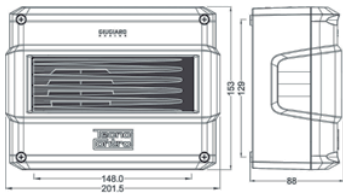
Alarm levels (relays) programmables via DIP-Switch

No. 1 linear 4÷20 mA current output

No. 5 LED shows the working conditions (red: alarms; green: normal; yellow: fault)

Terminals plug-in polarized type

## Siren



SE301A  
SE301B

Piezoelectric modulated siren with flashing red light indication.

## CE IP43

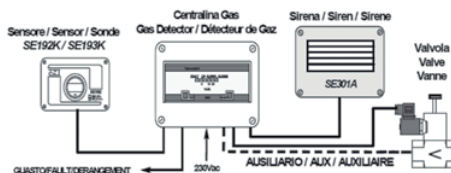
Power supply: 230Vca 50-60Hz - 12Vdc

Absorption: 9VA - 230V / 5W - 12Vdc

Sound intensity: 115db

Installation: Wall

On request: SE301B with power supply 24Vdc - 5W



## Portable gas leak detectors



**SE 151NM**

The SE151NM is an ideal instrument for seek combustible gas leaks in a number of residential, commercial and industrial applications, including gas pipeline and valve, regulator and gas meter inspection. It uses a long-life (5 years) sensor and is easy to operate. The SE151NM has a long, flexible neck for detecting leaks in hard-to-reach areas. Only Audible alarm if limit value is exceeded

CE

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Sensibility: 20 ppm

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Power supply: 4 x 1.5V (battery enclosed)

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Operation range: 8hours

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Automatic switching off: 10min

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Case: 220x160x40mm

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**SE 153NM**

The SE153NM is an ideal instrument for seek combustible gas leaks in a number of residential, commercial and industrial applications, including gas pipeline and valve, regulator and gas meter inspection. It uses a long-life (5 years) sensor and is easy to operate. The SE153NM has a long, flexible neck for detecting leaks in hard-to-reach areas, with bar LED display to show relative leak sizes and a manual balance feature for finding leaks in backgrounds where target gas is present. Display LED & Audible alarm if limit value is exceeded

CE

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Sensibility: 20 ppm

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Power supply: Rechargeable batteries Ni-MH

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Operation range: 5hours

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Recharge time: 14hours

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Automatic switching off: 10min

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Case: 280x120x90mm

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