# **GAS SAFETY**



### 1GA 47917MET/P - Natural gas CH4 1GA 47917GPL/P - LPG

### "ZEFIRO" series wall-mounted and / or Semi-recessed detector with BUS output

- Power supply 230V a.c. 50-60Hz
- 1 potential-free changeover contact output: 8 (2) A / 250Va.c.
- Microprocessor with fume selection program to prevent false alarms
- Microprocessor with timer to signal product service every 5 years
- Remote sensor recognition (BUS system)
- Digital BUS output for signaller control (max 15)
- Interconnection length max 800m (2 x 1.5 mm<sup>2</sup>)
- Alarm memory
- ON / TEST selector

- Self-diagnosis test
- Signalling buzzer 85dB at 1m
- ON indicator LED
- Fault indicator LED
- Gas concentration LED on 3 signalling levels
- Intervention level: 5.000 ppm 10% LIE (CH4)
   1.860 ppm 10% LIE (LPG)
- Wall-mounted IP 42
- Dimensions (L x W x H) 120 x 40 x 82 mm
- Semi-recessed installation with accessory IP 40
- Dimensions (L x W x H) 120 x 27.5 x 82 mm



## 1GA 48917MET/P - Natural gas CH4 1GA 48917GPL/P - LPG

"ZEFIRO" series wall-mounted and / or Semi-recessed signaller with BUS input series

- Power supply 230V a.c. 50-60Hz
- Microprocessor with fume selection program to prevent false alarms
- Microprocessor with timer to signal product service every 5 years
- Digital BUS input
- Alarm memory
- ON / TEST selector
- Self-diagnosis test
- Signalling buzzer 85dB at 1m

- ON indicator LED
- Fault indicator LED
- Gas concentration LED on 3 signalling levels
- Intervention level: 5.000 ppm 10% LIE (CH4) 1.860 ppm 10% LIE (LPG)
- Wall-mounted IP 42
- Dimensions (L x W x H) 120 x 40 x 82 mm
- Semi-recessed installation with accessory IP 40
- Dimensions (L x W x H) 120 x 27.5 x 82 mm



# 1GA 50917MET/P - Natural gas CH4 1GA 50917GPL/P - LPG

"ZEFIRO" series wall-mounted and / or Semi-recessed detector with BUS output

- Power supply 230V a.c. 50-60Hz
- 1 potential-free changeover contact output: 8 (2) A / 250Va.c.
- Signalling buzzer 85dB at 1m
- ON indicator LED
- Fault indicator LED
- Gas presence indicator LED

- Intervention level: 5.000 ppm 10% LIE (CH4)
   1.860 ppm 10% LIE (LPG)
- Wall-mounted IP 42
- Dimensions (L x W x H) 120 x 40 x 82 mm
- Semi-recessed installation with accessory IP 40
- Dimensions (L x W x H) 120 x 27.5 x 82 mm



### 1GA 51917MET/P - Natural gas CH4 1GA 51917GPL/P - LPG

"ZEFIRO" series wall-mounted and / or Semi-recessed natural gas (CH4) signaller

- Power supply 230V a.c. 50-60Hz
- Signalling buzzer 85dB at 1m
- ON indicator LED
- Fault indicator LED
- Gas presence indicator LED

- Signalling level: 5.000 ppm 10% LIE 1.860 ppm 10% LIE (LPG)
- Wall-mounted IP 42
- Dimensions (L x W x H) 120 x 40 x 82 mm
- Semi-recessed installation with accessory IP 40
- Dimensions (L x W x H) 120 x 27.5 x 82 mm

### 1PA BSGA01 Base for "ZEFIRO" series semi-recessed installation

Base for semi-recessed installation in boxes: round and/or rectangular

# ELECTRIC

PERRY

# **GAS SAFETY**



### 1GA 50916/CHCO

# Wall-mounted carbon monoxide (CO) and natural gas (CH4) detector

The detector can detect two gases: natural gas (CH4) and carbon monoxide (CO) Intervention sensitivity:

- natural gas at 10% of the lower explosion limit
- carbon monoxide, when the maximum allowed 300ppm CO concentration is exceeded, or rather in case low but damaging concentrations 30ppm for 2 hours persist for long periods in the premises.
- Power supply 230V a.c. 50-60Hz
- 2 potential-free changeover contacts output: 5 (2 )A / 250Va.c.
- Natural gas catalytic sensor
- Natural gas intervention level 5000 ppm 10% LIE
- Semi-conductor sensor for CO
- CO intervention level 30 / 300 (30ppm after 2 hours 300ppm immediately)
- Signalling buzzer 85dB at 1m
- ON indicator LED
- Fault indicator LED
- Gas presence indicator LED (2 different)
- Protection degree IP 42
- Dimensions (L x W x H) 115 x 50 x 150 mm



### 1GA 50916/CO

### Wall-mounted carbon monoxide (CO) detector

Intervention sensitivity to carbon monoxide, when the maximum allowed 300ppm CO concentration is exceeded, or rather in case low but damaging concentrations 30ppm for 2 hours persist for long periods in the premises.

- Power supply 230V a.c. 50-60Hz
- 1 potential-free changeover contact output: 5 (2) A / 250Va.c.
- Semi-conductor sensor for CO
- CO intervention level 30 / 300 (30ppm after 2 hours 300ppm immediately)
- Signalling buzzer 85dB at 1m
- ON indicator LED
- Fault indicator LED
- Gas presence indicator LED
- Protection degree IP 42
- Dimensions (L x W x H) 115 x 50 x 150 mm

### **KITS**



### 1GA 50917MET/1.2

# Wall-mounted natural gas detector kit with 1/2" NO solenoid valve

Kit including

no. 1 1GA 50917MET/P with no. 1 1EV EV020



### 1GA 50917GPL/1.2

# Wall-mounted LPG gas detector kit with 1/2" NO solenoid valve

Kit including

no. 1 1GA 50917GPL/P with no. 1 1EV EV020



# 1GA 50917MET/3.4

### Wall-mounted natural gas detector kit with 3/4" NO solenoid valve

Kit including

no. 1 1GA 50917MET/P with no. 1 1EV EV021



### 1GA 50917GPL/3.4

### Wall-mounted LPG gas detector kit with 3/4" NO solenoid valve

Kit including

no. 1 1GA 50917GPL/P with no. 1 1EV EV021



### 1GA 100M - 1 zone 1GA 300M - 3 zones

### Control unit for wall or panel installation

Microprocessor control units to create a complete supervision and control system, with high flexibility. Equipped with a series of micro switches through which it is possible: to eliminate the probe when not installed or faulty, detect which type of gas (Toxic or Explosive), choose the functioning of the relay (pulses or continuous), choose the insertion or deactivation of Positive Safety



- Power supply 230V a.c. 50Hz
- Battery-operated secondary power supply 12V d.c. ±10%
- Pre-alarm output relay in exchange
- Output relay ON / OFF
- 1st alarm set for all the probes at 8% of the L.E.L. (120ppm)
- 2nd alarm set for all the probes at 13% of the L.E.L. (200ppm)
- General alarm set at 20% of the L.E.L. (300ppm)
- 1 connectable probe of type: catalytic,

- electrochemical, semiconductor
- Analogic input signal 4mA ÷ 20Ma
- Accuracy 1% FS
- Working temperature -10 ° C + 60 ° C
- Max probe distance 100m
- TEST command
- Protection degree IP 44
- Variable color display according to work status (1GA300M)
- Dimensions (L x W x H) 144 x 108 x 114 mm



### 1GA 2001

# 1-zone control unit for toxic and explosive gases - 6 DIN

Microprocessor control unit manufactured to remotely control the presence of explosive or toxic gases by means of a probe. Precise self-diagnosis systems perform a continuous control of probe conditions and connection.

- Power supply 230V a.c. 50Hz ±10% Battery-operated secondary power supply 12V d.c. ±10%
- 3 potential-free contact outputs: 10A 250 V a.c. resistive - 5A 30V d.c. resistive
- Pre-alarm 13% of LIE explosive gases and 200ppm
- Alarm 20% of LIE explosive gases and 300ppm for CO
- 1 connectable probe, type: catalytic, electrochemical cell, pellistor, semiconductor
- Analogue input signal 4 mA ÷ 20 mA
- Max probe distance 100m
- RESET and TEST controls
- Signalling buzzer
- Operation status indicator LED
- Gas type indicator LED
- Main alarm and pre-alarm indicator LED
- Gas concentration indicator LED with thresholds
- Dimensions (L x W x H) 105 x 58 x 90 mm



### 1GA 2002

### 2-zones control unit for toxic and explosive gases - 6 DIN

Microprocessor control unit manufactured to remotely control the presence of explosive and/or toxic gases by means of probes. Precise self-diagnosis systems perform a continuous control of probe conditions and connection.

- Power supply 230V a.c. 50Hz ±10% Battery-operated secondary power supply 12V d.c. ±10%
- 3 potential-free contact outputs: 10A 250 V a.c. resistive - 5A 30V d.c. resistive
- Pre-alarm 13% of LIE explosive gases and 200ppm for CO
- Alarm 20% of LIE explosive gases and 300ppm for CO
- 2 connectable probes, type: catalytic, electrochemical cell, pellistor, semiconductor
- Analogue input signal 4 mA ÷ 20 mA

- Max probe distance 100m
- RESET and TEST controls
- Signalling buzzer
- Operation status indicator LED
- Gas type indicator LED
- Main alarm and pre-alarm indicator LED
- Gas concentration indicator LED with thresholds in each
- Dimensions (L x W x H) 105 x 58 x 90 mm



### 1GA 2004

### 4-zones control unit for toxic and explosive gases - 9 DIN

Microprocessor control unit manufactured to remotely control the presence of explosive and/or toxic gases by means of probes. Precise self-diagnosis systems perform a continuous control of probe conditions and connection.

- Power supply 230V a.c. 50Hz ±10% Battery-operated secondary power supply 12V d.c. ±10%
- 3 potential-free contact outputs: 10A 250 V a.c. resistive - 5A 30V d.c. resistive
- Pre-alarm 13% of LIE explosive gases and 200ppm
- Alarm 20% of LIE explosive gases and 300ppm for CO
- 4 connectable probes, type: catalytic, electrochemical cell, pellistor, semiconductor
- Analogue input signal 4 mA ÷ 20 mA

- Max probe distance 100m
- RESET and TEST controls
- Signalling buzzer
- Operation status indicator LED
- Gas type indicator LED
- Main alarm and pre-alarm indicator LED
- Display that shows the gas concentration in sequence for each zone
- Continuous 2" scanning in each probe
  Dimensions (L x W x H) 158 x 58 x 90 mm



### 1GA 4200MET - Natural gas CH4 1GA 4200GPL - LPG

# Catalytic sensor - IP55

Microprocessor probe with AUTOMATIC calibration and self-diagnosis to adapt to harsh environments and variable temperatures to prevent false alarms due to irregular events.

- Power supply 12-24V d.c. +/- 10%
- Catalytic sensor for NATURAL gas (4200MET) or LPG (4200GPL) having a duration of 5 years
- Detector measurement field 0÷20% LIE
- Analogue output signal 4 mA ÷ 20 mA
- Replaceable sensor

- Protection degree IP 55
- Max control unit distance 100m
- Probe body material: self-extinguishing ABS
- Working temperature limit -10°C +40°C
- LED indicator: gree regular, yellow warning, red alarm
- Dimensions (L x W x H) 75 x 58 x 114 mm



### 1GA 4200MET/A - Natural gas CH4 1GA 4200GPL/A - LPG

### Catalytic sensor housing made in die-cast aluminium - IP66

Microprocessor probe with AUTOMATIC calibration and self-diagnosis to adapt to harsh environments and variable temperatures to prevent false alarms due to irregular events.

- Power supply 12-24V d.c. +/- 10%
- Catalytic sensor for NATURAL gas (4200MET/A) or LPG (4200GPL/A) having a duration of 5 years
- Detector measurement field 0÷20% LIE
- Analogue output signal 4 mA ÷ 20 mA
- Replaceable sensor

- Protection degree IP 66
- Max control unit distance 100m
- Probe body material: aluminium
- Working temperature limit -10°C +40°C
- Dimensions (L x W x H) 100 x 60 x 100 mm

# ELECTRIC

# **GAS SAFETY**



### 1GA 4400CO

### CO Sensor - IP 55

Microprocessor probe to detect TOXIC GASES, such as carbon monoxide, with self-diagnosis. It is used when the maximum allowed 300ppm CO concentration is exceeded, or rather in case low but damaging concentrations 30ppm for 2 hours persist for long periods in the premises.

- Power supply 12-24V d.c. +/- 10%
- Electrochemical cell
- Catalytic sensor for LPG gas having a duration of 5 years
- Detector measurement field 0÷20% LIE
- Analogue output signal 4 mA ÷ 20 mA
- Replaceable sensor
- Alarm 300 ppm

- Protection degree IP 55
- Max control unit distance 100m
- Probe body material: aluminium
- Working temperature limit -20°C +50°C
- Power supply indicator LED
- Dimensions (L x W x H) 78 x 58 x 114 mm



### 1GA 4400CO/A

### CO Sensor housing made in die-cast aluminium - IP 66

Microprocessor probe to detect TOXIC GASES, such as carbon monoxide, with self-diagnosis. It is used when the maximum allowed 300ppm CO concentration is exceeded, or rather in case low but damaging concentrations 30ppm for 2 hours persist for long periods in the premises.

- Power supply 12-24V d.c. +/- 10%
- Electrochemical cell
- Catalytic sensor for LPG gas having a duration of 5 years
- Detector measurement field 0:20% LIE
- Analogue output signal 4 mA ÷ 20 mA
- Replaceable sensor

- Alarm 300 ppm
- Protection degree IP 66
- Max control unit distance 100m
- Probe body material: aluminium
- Working temperature limit -20°C +50°C
- Dimensions (L x W x H) 100 x 60 x 100 mm



### 1GA 895MET - Natural gas CH4 1GA 895GPL - LPG

# ATEX explosion-proof probe

ATEX certified gas detection probe with control prerogative with catalytic technology sensors for explosive and toxic gas. Probe managed by a microprocessor that provides an alarm signal to the control panel to which it is connected and allows self-diagnosis and automatic calibration, to maintain maximum detection accuracy over time. The self-calibration allows the probe to adapt in harsh environments and at variable temperatures, avoiding false alarms due to abnormal events.



II 2 GD Ex d tD IIC T6 X -10 < T amb <+60°C

- Power supply 12-24V d.c. +/- 10%
- Catalytic sensor
- Replaceable sensor
- Detector measurement field 0÷20%
- Analogue output signal 4 mA ÷ 20 mA
- Protection degree IP 66
- Max control unit distance 100m
- Probe body material: aluminium
- Working temperature limit -10°C +60°C
- Dimensions (L x W x H) 100 mm

# **ACCESSORIES**

1GA HE55ES Replacement sensor IP 55 for 1GA 4200MET, 1GA 4200GPL, 1GA 4400CO

1GA HE66ES Replacement sensor IP 66 for 1GA 4200MET/A, 1GA 4200GPL/A, 1GA 4400CO/A

1GA HEATES Replacement sensor for 1GA 895MET e 1GA 895GPL



### 1GA 6010 Optical smoke detector

- Power supply 12-24V c.c. ±10%
- Low profile 3,2 cm
- Mounting on universal base ready for 16 mm tubes
- LED optical detector output
- Functional test by laser test tool method
- Internal reed functional test
- Dual LED status indicators (alarm / fault)
- EN 54 Certification part 7/9
- Protection degree IP20
- Overall dimensions (with base) mm Ø 102 x 43 mm



#### 1GA 6020

### Fixed temperature sensor 78 °C

- Reaching the temperature of +78°C the alarm rings
- Power supply 12-24V c.c. ±10%
- Low profile
- Bicolor LED to signal the installation status
- Functional test by laser test tool method
- Mounting on universal base ready for 16 mm tubes
- Internal reed functional test
- Dual LED status indicators (alarm / fault)
- EN 54 Certification part 7/9
- Protection degree IP20
- Dimensions (with base) Ø 102 x 43 mm



### 1GA 6030

### Combined detector with constant feed temperature

- The alarm rings when there is a too quick increase of the temperature
- Power supply 12-24V c.c. ±10%
- Low profile
- Bicolor LED to signal the installation status
- Functional test by laser test tool method

- Mounting on universal base ready for 16 mm tubes
- Internal reed functional test
- Dual LED status indicators (alarm / fault)
- EN 54 Certification part 7/9
- Protection degree IP20
- Dimensions (with base) Ø 102 x 43 mm

### 1PA BRA01 Fixing base



### **SEGNALLERS**

### 1GA 6150

### Fire siren piezoelectric optical-acoustic for indoor installation

- Power supply 12-24V c.c.
- Indoor piezoelectric optical-acoustic fire siren
- Flashing with FIRE writing
- Red ABS container

- 90 dB power, with three types of sound modulation type: siren, bell and pre-alarm
- EN 54-3 CPD certification



### 1GA 6160

# Self powered fire siren for outdoor installation

- Self-powered outdoor fireproof siren
- Steel container with lid in red polycarbonate
- Power 115 dB
- 12V 2Ah battery housing (not included)
- 24V DC power supply
- EN 54-3 certification



### 1GA 6170 Fire bell

- Badenia electromechanical fire extinguishing 6 "red color complete with bracket for fixing
- 24V DC power supply
- EN 54-3 certification



### 1GA 6180

# Resettable manual fire button for conventional systems

- Resettable manual fire button for conventional systems complete with key for rearmament
- Transparent protection cover

- Red surface mounting bracket
- EN 54-11 CPD certification

### 1PA BPA01 Wall base for fire button 6180

- Support for red color surface mounting
- EN 54-11 CPD certification

# 1PA BSA01 Replacement batteries for fire siren 6160

- Nominal voltage 12V
- Nominal capacity 2Ah

- Maximum charging current 0,5A
- Dimensions (L x W x H) 178 x 34 x 60 mm



# GAS SOLENOID VALVES, with manual reset NORMALLY CLOSED N.C.

This solenoid valve is made in such a way as to ensure the gas shut-off for both danger signals sent by gas detectors (methane, LPG, carbon monoxide, and others) or safety thermostats, or for power failure in the network (black out). For added security this solenoid valve can be reset only in the presence of mains voltage and only when the gas detector is not detecting any danger.

Simply powering the coil the valve does not open. You need to act manually on the reset mechanism.

CE APPROVAL IN ACCORDANCE WITH EN 16 1

COMPLIANCE DIRECTIVE 2009 / 142 / EC (GAS DIRECTIVE)

**6 BAR VERSION COMPLIANT WITH** DIRECTIVE 97 / 23 / EC (PED DIRECTIVE)

COMPLIANCE WITH DIRECTIVE 94/9/EC [ATEX DIRECTIVE)

COMPLIANCE WITH DIRECTIVE 2004 / 108 / EC (ELECTROMAGNETIC COMPATIBILITY)

COMPLIANCE WITH DIRECTIVE 2006 / 95 / EC (LOW VOLTAGE)







<b>1EV EV</b> 040	N.C. ½" Solenoid valve DN15 threaded 230V 50-60 Hz brass body int. 66
1EV EV041	N.C. ¾" Solenoid valve N.C. DN20 threaded 230V 50-60 Hz brass body int. 66
1EV EV042	N.C. 1"Solenoid valve DN25 threaded 230V 50-60 Hz brass body int. 82
<b>1EV EV</b> 045	N.C. 1"1/4 Solenoid valve DN32 threaded 230V 50-60 Hz aluminium body int. 160
<b>1EV EV</b> 043	N.C. 1"½ Solenoid valve DN40 threaded 230V 50-60 Hz aluminium body int. 160
<b>1EV EV</b> 044	N.C. 2" Solenoid valve DN50 threaded 230V 50-60 Hz aluminium body int. 160
<b>1EV EV</b> 060	N.C. Solenoid valve DN65 flanged 230V 50-60 Hz aluminium body int. 290
<b>1EV EV</b> 061	N.C. Solenoid valve DN80 flanged 230V 50-60 Hz aluminium body int. 310
<b>1EV EV062</b>	N.C. Solenoid valve DN100 flanged 230V 50-60 Hz aluminium body int. 350
<b>1EV EV063</b>	N.C. Solenoid valve DN125 flanged 230V 50-60 Hz aluminium body int. 480
<b>1EV EV</b> 064	N.C. Solenoid valve DN150 flanged 230V 50-60 Hz aluminium body int. 480
<b>1EV EV065</b>	N.C. Solenoid valve DN200 flanged 230V 50-60 Hz aluminium body int. 600
<b>1EV EV066</b>	N.C. Solenoid valve DN300 flanged 230V 50-60 Hz aluminium body int. 737

# GAS SOLENOID VALVES, with automatic reset NORMALLY CLOSED N.C. in Class "A"

Solenoid valves for gas, normally closed which open when the coil is powered and close when there is no power. These solenoid valves may be controlled by pressure switches, thermostats, etc.

CE APPROVAL IN ACCORDANCE WITH EN 16 1

COMPLIANCE DIRECTIVE 2009/142 / EC (GAS DIRECTIVE)

COMPLIANCE WITH DIRECTIVE 94/9 / FC (ATEX DIRECTIVE)

COMPLIANCE WITH DIRECTIVE 2004 / 108 / EC (ELECTROMAGNETIC COMPATIBILITY)

COMPLIANCE WITH DIRECTIVE 2006 / 95 / EC (LOW VOLTAGE)



<b>1EV EV005</b>	N.C. ½" solenoid valve DN15 threaded 230V 50-60 Hz aluminium body int. 70
<b>1EV EV006</b>	N.C. ¾" solenoid valve DN20 threaded 230V 50-60 Hz aluminium body int. 70
<b>1EV EV007</b>	N.C. 1" solenoid valve DN25 threaded 230V 50-60 Hz aluminium body int. 90
<b>1EV EV017</b>	N.C. 1" ¼ solenoid valve DN32 threaded 230V 50-60 Hz aluminium body int. 160
<b>1EV EV008</b>	N.C. 1" ½ solenoid valve DN40 threaded 230V 50-60 Hz aluminium body int. 160
<b>1EV EV009</b>	N.C. 2" solenoid valve DN50 threaded 230V 50-60 Hz aluminium body int. 160
<b>1EV EV010</b>	N.C. solenoid valve DN65 flanged 230V 50-60 Hz aluminium body int. 290
1EV EV011	N.C. solenoid valve DN80 flanged 230V 50-60 Hz aluminium body int. 310
1EV EV012	N.C. solenoid valve DN100 flanged 230V 50-60 Hz aluminium body int. 350

# GAS SOLENOID VALVES, with manual reset NORMALLY OPEN N.O.

The operation principle of the N.O. solenoid valves is very simple and therefore extremely safe. The electromagnetic coil, when powered, releases the valve closing device which is normally open.

The reset is manual to check the causes for gas detection.

During normal operation there is no power consumption, and therefore, in addition to energy saving, no component is subjected to usury.

**6 BAR VERSION COMPLIANT WITH** DIRECTIVE 97 / 23 / EC (PED DIRECTIVE)

COMPLIANCE WITH DIRECTIVE 94 / 9 / EC (ATEX DIRECTIVE)

**COMPLIANCE WITH DIRECTIVE** 2004 / 108 / EC (ELECTROMAGNETIC COMPATIBILITY)

**COMPLIANCE WITH DIRECTIVE** 2006 / 95 / EC (LOW VOLTAGE)



<b>1EV EV020</b>	N.O. $\frac{1}{2}$ " solenoid valve DN15 threaded 230V 50-60 Hz brass body int. 66
<b>1EV EV021</b>	N.O. ¾" solenoid valve DN20 threaded 230V 50-60 Hz brass body int. 66
<b>1EV EV022</b>	N.O. 1" solenoid valve DN25 threaded 230V 50-60 brass body int. 82
<b>1EV EV027</b>	N.O. 1" ¼ solenoid valve DN32 threaded 230V 50-60 Hz aluminium body int. 160
<b>1EV EV023</b>	N.O. 1" ½ solenoid valve DN32 threaded 230V 50-60 Hz aluminium body int. 160
<b>1EV EV024</b>	N.O. 2" solenoid valve DN40 threaded 230V 50-60 Hz aluminium body int. 160
<b>1EV EV025</b>	N.O. solenoid valve DN65 flanged 230V 50-60 Hz aluminium body int. 280
<b>1EV EV026</b>	N.O. solenoid valve DN80 flanged 230V 50-60 Hz aluminium body int. 310