2019

seitron

Founded in 1981 by M.Sc. Vito Feleppa, **SEITRON SpA** since its beginning is active in thermoregulation.

Over time it has widened its range in safety gas sector (residential and light industrial gas leakage detectors), and portable instruments, (flue gas analyzers, whose is actually the first Italian manufacturer). Actually the Company, with its headquarter in Mussolente (VI), ITALY, is one of the foremost European companies in its sector.

The company history is rich of intuitions and choices that have brought it lasting success. From the creation of the first low-cost transformerless thermostat, to the radio timer thermostat, to the combustion analyzer with self-calibrating sensors.

Seitron has followed an important evolution that required substantial changes during the years, but the goal has been always the same: to achieve utmost satisfaction of the customer needs to whom it devotes care and attention, thanks to a strong team and through a constant improvement in quality, performances and services.

While strongly rooted in Italy, Seitron boasts a global market: thanks to the experience it has acquired the reliability of its brand and a catalogue featuring an incomparable mix: the company is present in Europe, Asia, Oceania and America. Export covers 50% of total turnover, exporting in more than 60 Countries.

This success has been obtained thanks to brand reliability and a catalogue with a wide and complete range of products.

A further strength is Seitron's investments in research and development that made expand Seitron; the will to propose constantly innovative products, with high performances but environmentally friendly and the capability to manage the entire production process, directly managing design, production and sales phases. Our designers constantly seek the optimal balance between a product's functionality and appearance, without ever neglecting practicality of use.

Seitron SpA numbers:
- 13 milion Euro turnover
- 80 employees

Seitron Service Milan is the facility which Seitron opened in Segrate with the main purpose to service the whole North-West area of Italy (Lombardia, Liguria, Piemonte, Valle d'Aosta) for what concerns Seitron's combustion and emissions analyzers' calibration and technical assistance service. Strategically located close to Milan's East bypass road exit, providing a wide parking lot, Seitron Service Milan is endowed with a laboratory equipped at the same level of the headquarter in Bassano del Grappa.

Seitron is able to provide an high level service to the Customer due to experienced personnel with a 20 years background in combustion analyzer post sales. The employed personnel is experienced with over 20 years of service in post-sales with Seitron's combustion analyzers. So the service offered to the owners of the Seitron analyzers is technically high level, very fast and reliable. Seitron Service Milan also hosts a commercial office, at the heart of which sits the North West Area Manager.

This investment represents for Seitron S.p.A. the willing to consolidate the Italian supremacy in combustion analyzers' supply and assistance, thanks to a stronger direct presence in North West that is the commercially most important area.

FAMILY PRODUCTS INDEX

FAN COIL THERMOSTATS

RESIDENTIAL GAS DETECTORS

INDUSTRIAL GAS DETECTORS

SOLAR HEATING CONTROLLERS

CLIMATE CONTROLLERS

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COMBUSTIONS AND EMISSIONS ANALYZERS

CHEMIST 100 BE GREEN 2-3 GAS SENSORS

PORTABLE COMBUSTION ANALYZER

2 or 3 GAS SENSORS

B/W BACKLIT LCD (50 x 50 mm)

USER FRIENDLY MENU

**15 PREPROGRAMMED FUELS
(INCLUDING WOOD, PELLETS, BIOGAS AND COAL)**

RECHARGEABLE LITHIUM ION BATTERIES

IR COMUNICATION

STANDARD BLUETOOTH® CONNECTIVITY

**AUTOMATIC GENERATION OF QR CODE TO ACQUIRE
ANALYSIS WITH SMARTPHONE**

DRAUGHT MEASUREMENT (OPTIONAL)

TIGHTNESS TEST (OPTIONAL)

Bluetooth®

**CHEMIST 100 BE GREEN
WARRANTY: 2 YEARS ON
INSTRUMENT, GAS SENSORS**

MAIN FEATURES

- Compliant with EN 50379-1 and EN 50379-2
- Precalibrated gas sensors, field replaceable
- Plastic body with magnets
- Rubber protection holster
- Internal memory for 5 analyses
- Rechargeable Lithium Ion batteries
- Recharge: 6 hrs. up to 90%
- Up to 10 hrs. autonomy of continuous operation
- Self diagnostic function with sensors status
- 2 different programmed languages
- Dimensions: Analyzer 70x60x170mm (HxWxD), weight 0,35 Kg
- QR code generation for analyses detail (using the APP)
- Automatic recognition of condensation boiler

Chemist QR Code

MEASURED VALUES

- Flue gas temperature and differential temperature
- Outdoor air temperature and room temperature
- Gage and differential pressure
- O_2
- CO
- Ambient CO
- NO (3rd sensor)

CALCULATED VALUES

- CO_2
- NOx (if 3rd sensor is present)
- Boiler efficiency, including condensation
- Stack loss

KITS without printer

CHEMIST 101 BE GREEN

- 2 sensors (O2, CO 0 .. 4000 ppm)
- Not expandable
- No printer
- IR Comunication
- Bluetooth® module included

€ **927**

CHEMIST 102 BE GREEN

- 2 sensors (O2, CO 0 .. 4000 ppm)
  Expandable to NO 3° sensor
- No printer
- High precision draught measurement
- IR Comunication
- Bluetooth® module included
- Tightness test (optional)

€ **1442**

CHEMIST 103 BE GREEN

- 3 sensors (O2, CO 0 .. 4000 ppm, NO)
- No printer
- High precision draught measurement
- IR Comunication
- Bluetooth® module included
- Tightness test (optional)

€ **1957**

KITS with printer

CHEMIST 101 S BE GREEN

- 2 sensors (O2, CO 0 .. 4000
  ppm)Not expandable
- With Bluetooth® printer
- IR Comunication
- Bluetooth® module included

€ **1133**

CHEMIST 102 S BE GREEN

- 2 sensors (O2, CO 0 .. 4000 ppm)
  Expandable to NO 3° sensor
- With Bluetooth printer
- High precision draught measurement
- IR Comunication
- Bluetooth® module included
- Tightness test (optional)

€ **1648**

CHEMIST 103 S BE GREEN

- 3 sensors (O2, CO 0 .. 4000 ppm, NO)
- With Bluetooth printer
- High precision draught measurement
- IR Comunication
- Bluetooth® module included
- Tightness test (optional)

€ **2163**

EVERY KIT INCLUDES:

Instrument - Protective holster - Flue gas Probe 180 mm with 1,6 m cable Water trap - Power supply adapter - EU Plug - Hard plastic case - Calibration Certificate - Quick Guide

CHEMIST 100 BE GREEN MAIN CONFIGURATIONS

FEATURES	101	102	103
O2 Sensor	✓	✓	✓
CO Sensor	✓	✓	✓
NO Sensor	-	-	✓
NOx Calculated	-	-	✓
Precalibrated and replaceable sensors	✓	✓	✓
Expandable to 3 sensors	-	✓	✓
Ambient CO measurement	✓	✓	✓
15 Programmed fuels	✓	✓	✓
Memory for 5 analyses	✓	✓	✓
Draft measurement with internal sensor (optional)	-	✓	✓
Gas pipe tightness (optional)	-	✓	✓
Gas pipes volume automatic calculation (optional)	-	✓	✓
Bluetooth® communication (class 1, up to 100 m)	✓	✓	✓
2 Years warranty	✓	✓	✓
Flue gas sensor probe 180 mm	✓	✓	✓

CHEMIST 100 BE GREEN TECHNICAL FEATURES

MEASUREMENT	SENSOR	RANGE	RESOLUTION	ACCURACY	
O2	Electrochemical sensor	0 .. 21.0% vol	0.1% vol	±0.2% vol	
CO high immunity H2 with NOx filter	Electrochemical sensor	0 .. 4000 ppm	1 ppm	±20 ppm ±5% measured value	0 .. 400 ppm 401 .. 4000 ppm
NO	Electrochemical sensor	0 .. 2000 ppm	1 ppm	±5 ppm ±5% measured value ±10% measured value	0 .. 100 ppm 101 .. 1000 ppm 1001 .. 2000 ppm
NOx	Calculated				
CO2	Calculated	0 .. 99.9% vol	0.1% vol		
Air temperature	TcK sensor	-20.0 .. 120.0 °C	0.1 °C	±1 °C	
Flue gas temperature	TcK sensor	-20.0 .. 800.0 °C	0.1 °C	±1 °C ±1% measured value	0 .. 100 °C 101 .. 800 °C
Pressure (draught & differential)	Piezoeletric Sensor	-100.0 .. 200.0 hPa	0.01 hPa	±1% measured value ±0.02 hPa ±1% measured value	-100.00 .. -2.01 hPa -2.00 .. +2.00 hPa +2.01 .. +200.00 hPa
Differential temperature	Calculated	0 .. 800°C	0.1 °C		
Air index	Calculated	0.00 .. 9.50	0.01		
Excess air	Calculated	0 .. 850 %	1 %		
Stack loss	Calculated	0.0 .. 100.0 %	0.1 %		
Efficiency	Calculated	0.0 .. 120.0 %	0.1 %		
Efficiency (condensing)	Calculated	0.0 .. 120.0 %	0.1 %		

CHEMIST 100 BE GREEN SENSORS

GAS	RANGE	COD	EURO
CO high immunity H2 with NOx filter	0…4000 ppm	AACSE58	331
NO	0…2000 ppm	AACSE60	371
O2	0…21% v/v	AACSE50	175

CHEMIST 500 BE GREEN 2-4 GAS SENSORS

PORTABLE COMBUSTION ANALYZER

from 2 to 4 GAS SENSORS

BLUE BACKLIT LCD (55 x 95 mm) WITH ZOOM FUNCTION

15 PREPROGRAMMED FUELS
(INCLUDING WOOD, PELLETS, BIOGAS AND COAL)

RECHARGEABLE LITHIUM ION BATTERIES

AUTOMATIC GENERATION OF QR CODE TO ACQUIRE
ANALYSIS WITH SMARTPHONE

STANDARD BLUETOOTH® CONNECTION

DRAUGHT MEASUREMENT

TIGHTNESS TEST

Bluetooth®

NEW

NEW APP 2019
Chemist Smart Analysis
Full Remote Control of your CHEMIST

ANDROID APP ON
Google play

Download on the
App Store

**CHEMIST 500 ANALYZERS
WARRANTY: 4 YEARS ON
INSTRUMENT, GAS SENSORS**

MAIN FEATURES

- Compliant with EN 50379-1 and EN 50379-2 standards
- Precalibrated gas sensors, user replaceable
- 3 consecutive analysis with average calculation
- Internal memory for 1000 analysis
- Rechargeable lithium ion batteries
- Recharging time: 6 hrs. up to 90%
- Up to 60/70 analysis autonomy (with printouts)
- Additional dilution pump for CO cell auto range, measurement up to 100.000 ppm
- Automatic autozero with sampling probe in the stack
- Self diagnostic function with sensors status
- 32 additional programmable fuels
- 10 different preprogrammed languages
- Dimensions: Analyzer 270x93x68mm (HxWxD), weight 0,8 Kg - Kit 130x510x430mm, weight 3,4 Kg
- Internal pressure probe for high precision draught measurement
- Automatic calculation of gas pipes volume
- TPV protective holster
- Hard plastic body with magnets

Chemist QR Code

MEASURED VALUES

- Flue gas temperature and differential temperature
- Outdoor air temperature and room temperature
- Draft and differential pressure
- Ambient CO
- Bacharach pump for carbon meaurement (AA PM02)
- NO (3rd Sensor)
- Ionization current with accessory (AAC SO01)

CALCULATED VALUES

- CO_2
- NOx (if 3rd sensor is present)
- Boiler efficiency, including condensation
- Stack loss and excess air
- Flow velocity with Pitot tube
- Burning power

CHEMIST 500 BE GREEN KITS

CHEMIST 502 BE GREEN
- 2 sensors (O2, CO/H2 0 .. 8000 ppm)
- Expandable up to 4 sensors
- With dilution pump for CO
- Ready for tightness test

€ **3502**

CHEMIST 502 B BE GREEN
- 2 sensors (O2, CO/H2 0 .. 8000 ppm)
- Expandable up to 4 sensors
- No dilution pump for CO
- Ready for tightness test

€ **2890**

CHEMIST 502 C BE GREEN
- 2 sensors (O2, CO 0 .. 20000 ppm)
- Expandable up to 4 sensors
- Suitable for pellet and wood stoves (CO sensor)
- With dilution pump for CO
- Ready for tightness test

€ **3919**

CHEMIST 503 B BE GREEN
- 3 sensors (O2, CO/H2 0 .. 8000 ppm, NO)
- Expandable up to 4 sensors
- No dilution pump for CO
- Ready for tightness test

€ **3400**

CHEMIST 503 BE GREEN
- 3 sensors (O2, CO/H2 0 .. 8000 ppm, NO)
- Expandable up to 4 sensors
- With dilution pump for CO
- Ready for tightness test

€ **4027**

CHEMIST 504 N BE GREEN
- 4 sensors (O2, CO/H2 0 .. 8000 ppm, NO, NO2)
- With dilution pump for CO
- Ready for tightness test

€ **4862**

CHEMIST 504 S BE GREEN
- 4 sensors (O2, CO/H2 0 .. 8000 ppm, NO, SO2)
- With dilution pump for CO
- Ready for tightness test

€ **4862**

CHEMIST 500 X BE GREEN
Modular gas analyzer kit with 4 sensors.
With O2 gas measuring cell only and the possibility to add 3 additional sensors to be chosen among 14 references.
This enormous versatility makes it possible to generate 352 different analyzers.

€ **3085**

For CHEMIST 500 BE GREEN there is a DISCOUNT
FOR SECONDHAND COMBUSTION ANALYZERS EXCHANGE

CHEMIST 500 BE GREEN MAIN CONFIGURATIONS

FETAURES	502 B	502	502 C	503 B	503	504 N	504 S
O2 sensor	✓	✓	✓	✓	✓	✓	✓
CO sensor	✓	✓	0-20000 ppm	✓	✓	✓	✓
Expandable to 4 sensors	✓	✓	✓	✓	✓	✓	✓
NO sensor	-	-	-	✓	✓	✓	✓
Calculated NOx	-	-	-	✓	✓	-	✓
Measured NOx (NO+NO2)	-	-	-	-	-	✓	-
NO2 sensor	-	-	-	-	-	✓	-
SO2 sensor	-	-	-	-	-	-	✓
Sensors replaceble by the user	✓	✓	✓	✓	✓	✓	✓
Flue gas interception solenoid electrovalve	✓	✓	✓	✓	✓	✓	✓
2nd dilution pump	-	✓	✓	-	✓	✓	✓
Ambient CO measurement	✓	✓	✓	✓	✓	✓	✓
15 Programmed fuels	✓	✓	✓	✓	✓	✓	✓
Memory for 1000 analysis	✓	✓	✓	✓	✓	✓	✓
Draft measurement with internal sensor	✓	✓	✓	✓	✓	✓	✓
Gas pipe tightness	✓	✓	✓	✓	✓	✓	✓
Gas pipes volume automatically calculated	✓	✓	✓	✓	✓	✓	✓
Differential pressure kit	✓	✓	✓	✓	✓	✓	✓
Bluetooth® communication (class 1) / USB	✓	✓	✓	✓	✓	✓	✓
SW for updating and memory download for pc	✓	✓	✓	✓	✓	✓	✓
Warranty 4 years	✓	✓	✓	✓	✓	✓	✓
Flue gas sensor probe 180 mm	✓	✓	✓	✓	✓	✓	✓
Combustion air temperature probe	✓	✓	✓	✓	✓	✓	✓

EVERY KIT INCLUDES:

- Instrument
- Protective rubber holster
- Flue gas probe 180 mm with 2 m cable
- outdoor/indoor air temperature Probe
- Water Trap with dust filter, stainless steel fitttings and silicon hose

- Power EU plug
- Hard plastic Case
- Calibration Certificate
- Differential pressure measurement kit
- Quick start guide

CHEMIST 500 BE GREEN TECHNICAL FEATURES

MEASUREMENT	SENSOR	RANGE	RESOLUTION	ACCURACY	
O2	Electrochemical sensor	0 .. 21.0% vol	0.1% vol	±0.2% vol	
CO with H2 compensation	Electrochemical sensor	0 .. 8000 ppm	1 ppm	±10 ppm ±5% ±10%	0 .. 200 ppm 201 .. 2000 ppm 2001 .. 8000 ppm
CO Low range with H2 compensation	Electrochemical sensor	0 .. 500 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
CO Mid range	Electrochemical sensor	0 .. 20000 ppm	1 ppm	±100 ppm ±5% ±10%	0 .. 2000 ppm 2001 .. 4000 ppm 4001 .. 20000 ppm
CO Hi range	Electrochemical sensor	0 .. 10.00% vol	0.01% vol	±0.1% vol ±5%	0 .. 2.00 % 2.01 .. 10.00 %
CO *H2 Hi immunity*	Electrochemical sensor	0 .. 8000 ppm	1 ppm	±20 ppm ±5% ±10%	0 .. 400 ppm 401 .. 4000 ppm 4001 .. 8000 ppm
NO	Electrochemical sensor	0 .. 5000 ppm	1 ppm	±5 ppm ±5%	0 .. 100 ppm 101 .. 5000 ppm
NO Low range	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
NOx	Calculated				
SO2	Electrochemical sensor	0 .. 5000 ppm	1 ppm	±5 ppm ±5%	0 .. 100 ppm 101 .. 5000 ppm
SO2 Low range	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
NO2	Electrochemical sensor	0 .. 1000 ppm	1 ppm	±5 ppm ±5%	0 .. 100 ppm 101 .. 1000 ppm
NO2 Low range	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
CxHy	Sensore Pellistore	0 .. 5.00% vol	0.01% vol	±0.25% vol	
CO2	Calculated	0 .. 99.9% vol	0.1% vol		
CO2	Sensore NDIR	0 .. 50.0% vol	0.1% vol	±1% ±2% FS	0 .. 10 % 10 .. 50 %
Air Temperature	TcK Sensor	-20.0 .. 1250.0 °C	0.1 °C	±0.5 °C ±0.5%	0 .. 100 °C 101 .. 1250 °C
Smoke Temperature	TcK Sensor	-20.0 .. 1250.0 °C	0.1 °C	±0.5 °C ±0.5%	0 .. 100 °C 101 .. 1250 °C
Pressure (draught & differential	External instrument	-1000 .. 20000 Pa	1 Pa	±2 Pa ±1% ±1%	-200 .. +200 Pa +201 .. +20000 Pa -201 .. -1000 Pa
Differential Temperature	Calculated	0 .. 1250.0 °C	0.1 °C		
Air Index	Calculated	0.00 .. 9.50	0.01		
Air excess	Calculated	0 .. 850 %	1 %		
Stack loss	Calculated	0.0 .. 100.0 %	0.1 %		
Efficiency	Calculated	0.0 .. 100.0 %	0.1 %		
Condensing Efficiency	Calculated	0.0 .. 120.0 %	0.1 %		
Smoke index	External instrument	0 .. 9			

CHEMIST 500 X BE GREEN : MODULAR GAS ANALYZER KIT WITH 4 SENSORS

The Chemist 500 X is a basic configuration that allows the customer to create a customized kit according to his needs. In this version there is only the O2 sensor.
It is possible to add one or more sensors up to a maximum of 4, choosing from the wide range available in the catalog.
This enormous versatility allows to generate different configurations, resulting from the combinations of sensors, satisfying a large number of needs in many sectors and applications.

TYPE AND POSITION SENSORS

GAS SENSORS	COD	S1	S2	S3	S4
Sniffer fuel gas	AACSE19	--	--	--	✓
CO - 8000ppm High Immunity H2	AACSE20	--	✓	✓	✓
CO / H2 - 8000ppm	AACSE12	--	✓	--	--
CO / H2 - 500.0ppm	AACSE24	--	✓	--	--
CO - 10.00%	AACSE17	--	✓	✓	✓
CO - 20000ppm	AACSE18	--	✓	✓	✓
CO2 NDIR - 50.0%	AACSE47	--	--	✓	✓
CxHy - 5.00%	AACSE39	--	--	✓	✓
NO - 5000ppm	AACSE10	--	--	✓	--
NO - 500.0ppm	AACSE25	--	--	✓	--
NO2 - 1000ppm	AACSE14	--	✓	✓	✓
NO2 - 500.0ppm	AACSE26	--	✓	✓	✓
O2 LL - 21.0% vol	AACSE43	✓	--	--	--
SO2 - 5000ppm	AACSE13	--	✓	✓	✓
SO2 - 500.0ppm	AACSE28	--	✓	✓	✓

Screenshot with internal sensors arrangement

CHEMIST 500 2-4 GAS SENSORS

PORTABLE COMBUSTION ANALYZERS

from 2 to 4 GAS SENSORS

BLUE BACKLIT LCD (55 x 95 mm) WITH ZOOM FUNCTION

BUILT IN THERMAL PRINTER ON UNERASABLE THERMAL POLYESTER

**13 PREPROGRAMMED FUELS
(INCLUDING WOOD, PELLETS, BIOGAS AND COAL)**

RECHARGEABLE LITHIUM ION BATTERIES

STANDARD BLUETOOTH® CONNECTION

DRAUGHT MEASUREMENT

TIGHTNESS TEST

CHEMIST 500 ANALYZERS WARRANTY:
4 YEARS ON INSTRUMENT, GAS SENSORS AND PRINTER

Bluetooth® di serie

NEW APP 2019
Chemist Smart Analysis

NEW

Full Remote Control of your CHEMIST

ANDROID APP ON Google play   Download on the App Store

Chemist QR Code

MAIN FEATURES

- Compliant with EN 50379-1 and EN 50379-2 standards
- Precalibrated gas sensors, user replaceable
- 3 consecutive analysis with average calculation and result printout
- Internal memory for 1000 analysis
- Rechargeable lithium ion batteries
- Recharging time: 6 hrs. up to 90%
- Up to 60/70 analysis autonomy (with printouts)
- Additional dilution pump for CO cell auto range, measurement up to 100.000 ppm (from Chemist 502 up)
- Automatic autozero with sampling probe in the stack
- Self diagnostic function with sensors status
- 32 additional programmable fuels
- 10 different preprogrammed languages
- Dimensions: Analyzer 310x90x60mm (HxWxD), weight 0,9 Kg - Kit 130x510x430mm, weight 3,4 Kg
- Internal pressure probe for high precision draught measurement
- Automatic calculation of gas pipes volume
- TVP holster
- Hard plastic body with magnets

MEASURED VALUES

- Flue gas temperature and differential temperature
- Outdoor air temperature and room temperature
- Draft and differential pressure
- Ambient CO
- Bacharach pump for carbon meaurement (AA PM02)
- NO (3rd Sensor)
- Ionization current with accessory (AAC SO01)

CALCULATED VALUES

- CO_2
- NOx (if 3rd sensor is present)
- Boiler efficiency, including condensation
- Stack loss and excess air
- Flow velocity with Pitot tube
- Burning power

CHEMIST 500 KITS

CHEMIST 502 € 3554

- 2 sensors (O2, CO/H2 0 .. 8000 ppm)
- Expandable up to 4 sensors
- Integrated printer
- With dilution pump for CO
- Ready for tightness test

CHEMIST 502 B € 2940

- 2 sensors (O2, CO/H2 0 .. 8000 ppm)
- Expandable up to 4 sensors
- Integrated printer
- No dilution pump for CO
- Ready for tightness test

CHEMIST 502 C € 3971

- 2 sensors (O2, CO 0 .. 20000 ppm)
- Expandable up to 4 sensors
- Suitable for pellet and wood stoves (CO sensor)
- Integrated printer
- With dilution pump for CO
- Ready for tightness test

CHEMIST 503 € 4079

- 3 sensors (O2, CO/H2 0 .. 8000 ppm, NO)
- Expandable up to 4 sensors
- Integrated printer
- With dilution pump for CO
- Ready for tightness test

CHEMIST 503 B € 3450

- 3 sensors (O2, CO/H2 0 .. 8000 ppm, NO)
- Expandable up to 4 sensors
- Integrated printer
- No dilution pump for CO
- Ready for tightness test

CHEMIST 504 N € 4913

- 4 sensors (O2, CO/H2 0 .. 8000 ppm, NO, NO2)
- Integrated printer
- With dilution pump for CO
- Ready for tightness test

CHEMIST 504 S € 4913

- 4 sensors (O2, CO/H2 0 .. 8000 ppm, NO, SO2)
- Integrated printer
- With dilution pump for CO
- Ready for tightness test

CHEMIST 500 X € 3136

Modular gas analyzer kit with 4 sensors.
With O2 gas measuring cell only and the possibility to add 3 additional sensors to be chosen among 14 references.
This enormous versatility makes it possible to generate 352 different analyzers.

FOR CHEMIST 500 COMBUSTION ANALYZERS THERE IS A DISCOUNT FOR SECONDHAND COMBUSTION ANALYZERS EXCHANGE

CHEMIST 500 MAIN CONFIGURATIONS

FETAURES	502 B	502	502 C	503 B	503	504 N	504 S
O2 sensor	✓	✓	✓	✓	✓	✓	✓
CO sensor	✓	✓	0-20000 ppm	✓	✓	✓	✓
Expandable to 4 sensors	✓	✓	✓	✓	✓	✓	✓
NO sensor	-	-	-	✓	✓	✓	✓
Calculated NOx	-	-	-	✓	✓	-	✓
Measured NOx (NO+NO2)	-	-	-	-	-	✓	-
NO2 sensor	-	-	-	-	-	✓	-
SO2 sensor	-	-	-	-	-	-	✓
Sensors replaced by the user	✓	✓	✓	✓	✓	✓	✓
Flue gas interception Solenoid Electrovalve	✓	✓	✓	✓	✓	✓	✓
2nd dilution pump	-	✓	✓	-	✓	✓	✓
Ambient CO measurement	✓	✓	✓	✓	✓	✓	✓
15 Pre-programmed fuels	✓	✓	✓	✓	✓	✓	✓
Memory for 1000 analysis	✓	✓	✓	✓	✓	✓	✓
Draft measurement with internal sensor	✓	✓	✓	✓	✓	✓	✓
Gas pipe tightness	✓	✓	✓	✓	✓	✓	✓
Gas pipes volume automatically calculated	✓	✓	✓	✓	✓	✓	✓
Differential pressure kit	✓	✓	✓	✓	✓	✓	✓
Bluetooth® communication (class 1) / USB	✓	✓	✓	✓	✓	✓	✓
SW for updating and memory download for pc	✓	✓	✓	✓	✓	✓	✓
Warranty 4 years	✓	✓	✓	✓	✓	✓	✓
Flue gas sensor probe 180 mm	✓	✓	✓	✓	✓	✓	✓
Combustion air temperature probe	✓	✓	✓	✓	✓	✓	✓

EVERY KIT INCLUDES:

- Instrument
- Protective rubber holster
- Flue gas probe 180 mm with 2 m cable
- outdoor/indoor air temperature Probe
- Water Trap with dust filter, stainless steel fitttings and silicon hose

- Power EU plug
- Hard plastic Case
- Unerasable printing paper
- Calibration Certificate
- Differential pressure measurement kit
- Quick start guide

CHEMIST 500 TECHNICAL FEATURES

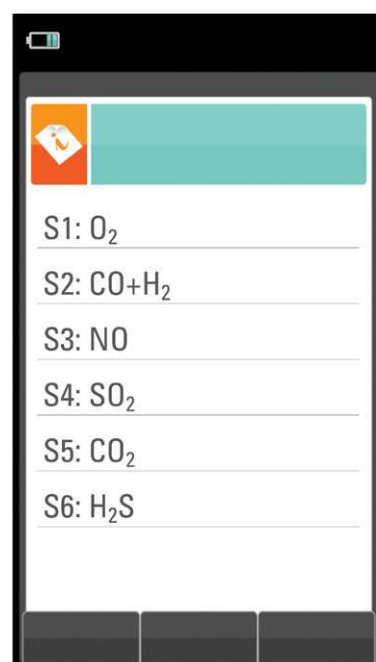| MEASUREMENT	SENSOR	RANGE	RESOLUTION	ACCURACY	
O2	Electrochemical sensor	0 .. 21.0% vol	0.1% vol	±0.2% vol	
CO with H2 compensation	Electrochemical sensor	0 .. 8000 ppm	1 ppm	±10 ppm ±5% ±10%	0 .. 200 ppm 201 .. 2000 ppm 2001 .. 8000 ppm
CO Low range with H2 compensation	Electrochemical sensor	0 .. 500 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
CO Mid range	Electrochemical sensor	0 .. 20000 ppm	1 ppm	±100 ppm ±5% ±10%	0 .. 2000 ppm 2001 .. 4000 ppm 4001 .. 20000 ppm
CO Hi range	Electrochemical sensor	0 .. 10.00% vol	0.01% vol	±0.1% vol ±5%	0 .. 2.00 % 2.01 .. 10.00 %
CO H2 Hi immunity	Electrochemical sensor	0 .. 8000 ppm	1 ppm	±20 ppm ±5% ±10%	0 .. 400 ppm 401 .. 4000 ppm 4001 .. 8000 ppm
NO	Electrochemical sensor	0 .. 5000 ppm	1 ppm	±5 ppm ±5%	0 .. 100 ppm 101 .. 5000 ppm
NO Low range	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
NOx	Calculated				
SO2	Electrochemical sensor	0 .. 5000 ppm	1 ppm	±5 ppm ±5%	0 .. 100 ppm 101 .. 5000 ppm
SO2 Low range	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
NO2	Electrochemical sensor	0 .. 1000 ppm	1 ppm	±5 ppm ±5%	0 .. 100 ppm 101 .. 1000 ppm
NO2 Low range	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
CxHy	Sensore Pellistore	0 .. 5.00% vol	0.01% vol	±0.25% vol	
CO2	Calculated	0 .. 99.9% vol	0.1% vol		
CO2	Sensore NDIR	0 .. 50.0% vol	0.1% vol	±1% ±2% FS	0 .. 10 % 10 .. 50 %
Air Temperature	TcK Sensor	-20.0 .. 1250.0 °C	0.1 °C	±0.5 °C ±0.5%	0 .. 100 °C 101 .. 1250 °C
Smoke Temperature	TcK Sensor	-20.0 .. 1250.0 °C	0.1 °C	±0.5 °C ±0.5%	0 .. 100 °C 101 .. 1250 °C
Pressure (draught & differential	External instrument	-1000 .. 20000 Pa	1 Pa	±2 Pa ±1% ±1%	-200 .. +200 Pa +201 .. +20000 Pa -201 .. -1000 Pa
Differential Temperature	Calculated	0 .. 1250.0 °C	0.1 °C		
Air Index	Calculated	0.00 .. 9.50	0.01		
Air excess	Calculated	0 .. 850 %	1 %		
Stack loss	Calculated	0.0 .. 100.0 %	0.1 %		
Efficiency	Calculated	0.0 .. 100.0 %	0.1 %		
Condensing Efficiency	Calculated	0.0 .. 120.0 %	0.1 %		
Smoke index	External instrument	0 .. 9			

CHEMIST 500 X : MODULAR GAS ANALYZER KIT WITH 4 SENSORS

The Chemist 500 X is a basic configuration that allows the customer to create a customized kit according to his needs. In this version there is only the O2 sensor.
It is possible to add one or more sensors up to a maximum of 4, choosing from the wide range available in the catalog.
This enormous versatility allows to generate different configurations, resulting from the combinations of sensors, satisfying a large number of needs in many sectors and applications.

TYPE AND POSITION SENSORS ON CHEMIST 500

GAS SENSORS	COD	S1	S2	S3	S4
Sniffer flue gas	AACSE19	--	--	--	✓
CO - 8000ppm alta immunità H2	AACSE20	--	✓	✓	✓
CO / H2 - 8000ppm	AACSE12	--	✓	--	--
CO / H2 - 500.0ppm	AACSE24	--	✓	--	--
CO - 10.00%	AACSE17	--	✓	✓	✓
CO - 20000ppm	AACSE18	--	✓	✓	✓
CO2 NDIR - 50.0%	AACSE47	--	--	✓	✓
CxHy - 5.00%	AACSE39	--	--	✓	✓
NO - 5000ppm	AACSE10	--	--	✓	--
NO - 500.0ppm	AACSE25	--	--	✓	--
NO2 - 1000ppm	AACSE14	--	✓	✓	✓
NO2 - 500.0ppm	AACSE26	--	✓	✓	✓
O2 LL - 21.0% vol	AACSE43	✓	--	--	--
SO2 - 5000ppm	AACSE13	--	✓	✓	✓
SO2 - 500.0ppm	AACSE28	--	✓	✓	✓

Screenshot with internal sensors arrangement

CHEMIST 600 BE GREEN 2-6 GAS SENSORS

INDUSTRIAL EMISSIONS ANALYZER

PROCESS CONCURRENTLY FROM 2 TO 6 GAS MEASURES

BLUE BACKLIT LCD (55 x 95 mm) WITH ZOOM FUNCTION

**15 PREPROGRAMMED FUELS
(INCLUDING WOOD, PELLETS, BIOGAS AND COAL)**

EXTERNAL WATER TRAP WITH DUST FILTER

PRESSURE MEASUREMENT POSITIVE, NEGATIVE AND DIFFERENTIAL

**PRICE ON REQUEST
CHEMIST 600 BE GREEN WARRANTY:
2 YEARS ON INSTRUMENT, GAS SENSORS**

Bluetooth®

NEW

**NEW APP 2019
Chemist Smart Analysis**

Full remote control of your CHEMIST

ANDROID APP ON Google play

Download on the App Store

MAIN FEATURES

- Single gas sensors combinations can generate hundreds of different versions
- Precalibrated and field replaceable gas sensors
- Choice of many different gas sampling probes
- External water trap with dust filter
- Sucking pump / second dilution pump to allow CO measurements up to 100.000 ppm
- Integral thermal printer
- Wide colour LCD, with backlight. 10 preprogrammed languages
- TPV holster
- Lithium ions rechargeable batteries
- 15 preprogrammed fuels + 16 more user programmable
- Memory up to 500 complete analysis
- Measurement of flue gas , external and ambient air temperatures
- Positive, negative and differential pressure measurement
- USB output
- Bluetooth® connectivity, Class 1 < 100 m
- Dimensions 270x93x68 mm , weight 0,8 kg
- Compliant with EN 50379-1 and EN 50379-2 standards

MEASURED VALUES

- O2, CO/H2, NO, NO2, SO2, H2S (electrochemical sensors) CxHy (pellistor cell), CO2 (Infrared NDIR). Several ranges and accuracies are available for several gases

ANDROID APP ON Google play

Chemist QR Code

Download on the App Store

CHEMIST 600 BE GREEN FEATURES

FUELS	
Natural Gas	Coal
Propane	Biogas
LPG	Pellet 8% (RH)
Butane	Wood 20% (RH)
Diesel Oil	Wood Chips
Fuel Oil	Propane Air
Olive pits	Rice husk Basmati
CO of gas	

LANGUAGES	
Italian	Dutch
English	Rumanian
French	Slovak
Spanish	Brazilian
German	Galician
Russian	Catalan
Polish	Czech

CHEMIST 600 BE GREEN KITS

CHEMIST 605 BE GREEN

- 5 sensors (O2, CO/H2 0 .. 8000 ppm, NO, NO2, SO2)
- Expandable up to 6 sensors
- With dilution pump for CO
- Ready for tightness test

CHEMIST 606 HC BE GREEN

- 6 sensors (O2, CO/H2 0 .. 8000 ppm, NO, NO2, SO2, CxHy)
- With dilution pump for CO
- Ready for tightness test

CHEMIST 606 CO2 BE GREEN

- 6 sensors (O2, CO/H2 0 .. 8000 ppm, NO, NO2, SO2, CO2)
- With dilution pump for CO
- Ready for tightness test

CHEMIST 600 X BE GREEN

Kit expandabile up to 6 gas measuring sensors. The 6 gas sensors can be chosen from the 15 available. The number of different gas sensors combinations is close to one thousand.

EVERY KIT INCLUDES:

Instrument - Protective rubber holster - Flue gas probe 300 mm with 3 m cable - Outdoor/indoor air temperature Probe - USB key with software - Water Trap with dust filter, stainless steel fitttings and silicon hose - Power EU plug - Hard plastic Case

CHEMIST 600 X BE GREEN : MODULAR GAS ANALYZER KIT WITH 6 SENSORS

The Chemist 600 X is a basic configuration that allows the customer to create a customized kit according to his needs. In this version there is no sensor sensor. It is possible to add one or more sensors up to a maximum of 6, choosing from the wide range available in the catalog.
This enormous versatility allows to generate different configurations, resulting from the combinations of sensors, satisfying a large number of needs in many sectors and applications.

SENSOR TYPE AND POSITION

GAS SENSORS	COD	S1	S2	S3	S4	S5	S6
CO / H₂ - 8000 ppm	AACSE12		✓				
CO / H₂ - 500.0 ppm	AACSE24		✓				
CO - 10.00%	AACSE17	✓	✓	✓	✓	✓	✓
CO - 20000 ppm	AACSE18	✓	✓	✓	✓	✓	✓
CO₂ NDIR - 50.0% vol	AACSE47	✓	✓	✓	✓	✓	✓
CₓHᵧ - 5.00% vol	AACSE39	✓	✓	✓	✓	✓	✓
H₂S - 500.0 ppm	AACSE35	✓	✓	✓	✓	✓	✓
NH₃ - 500.0 ppm	AACSE56	✓	✓	✓	✓	✓	✓
NO - 5000 ppm	AACSE10	✓	✓	✓			
NO - 500.0 ppm	AACSE25	✓	✓	✓			
NO₂ - 1000.0 ppm	AACSE14	✓	✓	✓	✓	✓	✓
NO₂ - 500.0 ppm	AACSE26	✓	✓	✓	✓	✓	✓
O₂ LL - 21.0%	AACSE43	✓	✓	✓			
SO₂ - 5000 ppm	AACSE13	✓	✓	✓	✓	✓	✓
SO₂ - 500.0 ppm	AACSE28	✓	✓	✓	✓	✓	✓

S1: O₂
S2: CO+H₂
S3: NO
S4: SO₂
S5: CO₂
S6: H₂S

LCD screen with internal sensors arrangement

CHEMIST 600 BE GREEN TECHNICAL FEATURES

MEASUREMENT	SENSOR	RANGE	RESOLUTION	ACCURACY	
O2	Electrochemical sensor	0 .. 21.0% vol	0.1% vol	±0.2% vol	
CO with H2 compensation	Electrochemical sensor	0 .. 8000 ppm	1 ppm	±10 ppm ±5% ±10%	0 .. 200 ppm 201 .. 2000 ppm 2001 .. 8000 ppm
CO Low range with H2 compensation	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
CO Mid range	Electrochemical sensor	0 .. 20000 ppm	1 ppm	±100 ppm ±5% ±10%	0 .. 2000 ppm 2001 .. 4000 ppm 4001 .. 20000 ppm
CO Hi range	Electrochemical sensor	0 .. 10.00% vol	0.01% vol	±0.1% vol ±5%	0 .. 2.00 % 2.01 .. 10.00 %
NO	Electrochemical sensor	0 .. 5000 ppm	1 ppm	±5 ppm ±5%	0 .. 100 ppm 101 .. 5000 ppm
NO Low range	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
SO2	Electrochemical sensor	0 .. 5000 ppm	1 ppm	±5 ppm ±5%	0 .. 100 ppm 101 .. 5000 ppm
SO2 Low range	Electrochemical sensor	0 .. 500 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
NO2	Electrochemical sensor	0 .. 1000 ppm	1 ppm	±5 ppm ±5%	0 .. 100 ppm 101 .. 1000 ppm
NO2 Low range	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
CxHy	Sensore Pellistore	0 .. 5.00% vol	0.01% vol	±0.25% vol	
CO2	Calculated	0 .. 99.9% vol	0.1% vol		
CO2	NDIR Sensor	0 .. 50.0% vol	0.1% vol	±1% vol ±2% FS	0,00 .. 10,00 % 10,0% a 50,0%
H2S	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±5 ppm ±5%	0 .. 100.0 ppm 100.1 .. 500 ppm
NH3	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±10 ppm ±10%	0 .. 100.0 ppm 100.1 .. 500.0 ppm
Air Temperature	TcK Sensor	-20.0 .. 1250.0 °C	0.1 °C	±0.5 °C ±0.5%	0 .. 100 °C 101 .. 1250 °C
Smoke Temperature	TcK Sensor	-20.0 .. 1250.0 °C	0.1 °C	±0.5 °C ±0.5%	0 .. 100 °C 101 .. 1250 °C
Pressure (draught & diffrential)	Piezoelectric Sensor	-10.00 .. 200.00 hPa	0.01 hPa	±1% valore misurato ±0.02 hPa ±1% valore misurato	-10.00 .. -2.01 hPa -2.00 .. +2.00 hPa +2.01 .. +200.00 hPa
Differential Temperature	Calculated	0 .. 1250.0 °C	0.1 °C	-	
Air Index	Calculated	0.00 .. 9.50	0.01	-	
Air excess	Calculated	0 .. 850 %	1 %	-	
Stack loss	Calculated	0.0 .. 100.0 %	0.1 %	-	
Efficiency	Calculated	0.0 .. 100.0 %	0.1 %	-	
Condensing Efficiency	Calculated	0.0 .. 120.0 %	0.1 %	-	
Smoke index	External Instrument	0 .. 9	-	-	

CHEMIST 600 2-6 GAS SENSORS

INDUSTRIAL EMISSIONS ANALYZER

PROCESS CONCURRENTLY FROM 1 TO 6 GAS MEASURES

BLUE BACKLIT LCD (55 x 95 mm) WITH ZOOM FUNCTION

BUILT IN THERMAL PRINTER ON UNERASABLE THERMAL POLYESTER

15 PREPROGRAMMED FUELS (INCLUDING WOOD, PELLETS, BIOGAS AND COAL)

EXTERNAL WATER TRAP WITH DUST FILTER

PRESSURE MEASUREMENT POSITIVE , NEGATIVE AND DIFFERENTIAL

PRICE ON REQUEST
CHEMIST 600 WARRANTY:
2 YEARS ON INSTRUMENT, GAS SENSORS, PRINTER

Bluetooth®

NEW APP 2019
Chemist Smart Analysis
Full Remote Control of your CHEMIST

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MAIN FEATURES

- Single gas sensors combinations can generate hundreds of different versions
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- Sucking pump / second dilution pump to allow CO measurements up to 100.000 ppm
- Integral thermal printer
- Wide colour LCD, with backlight. 10 preprogrammed languages
- TPV holster
- Lithium ions rechargeable batteries
- 15 preprogrammed fuels + 16 more user programmable
- Memory up to 2000 complete analysis
- Measurement of flue gas , external and ambient air temperatures
- Positive, negative and differential pressure measurement
- USB output
- Bluetooth® connectivity, Class 1 < 100 m
- Dimensions 310x90x60 mm , weight 1.1 kg
- Compliant with EN 50379-1 and EN 50379-2 standards

MEASURED VALUES

- O2, CO/H2, NO, NO2, SO2, H2S (electrochemical sensors) CxHy (pellistor cell), CO2 (Infrared NDIR).
  Several ranges and accuracies are available for several gases.

ANDROID APP ON Google play

Chemist QR Code

Download on the App Store

CHEMIST 600 FEATURES

FUELS	
Natural Gas	Coal
Propane	Biogas
LPG	Pellet 8% (RH)
Butane	Wood 20% (RH)
Diesel Oil	Wood Chips
Fuel Oil	Propane Air
Olive pits	Rice husk Basmati
CO of gas	

LANGUAGES	
Italian	Dutch
English	Rumanian
French	Slovak
Spanish	Brazilian
German	Galician
Russian	Catalan
Polish	Czech

CHEMIST 600 KITS

CHEMIST 605
- 5 sensors (O2, CO/H2 0 .. 8000 ppm, NO, NO2, SO2)
- Expandable up to 6 sensors
- Integrated printer
- With dilution pump for CO
- Ready for tightness test

CHEMIST 606 HC
- 6 sensors (O2, CO/H2 0 .. 8000 ppm, NO, NO2, SO2, CxHy)
- Integrated printer
- With dilution pump for CO
- Ready for tightness test

CHEMIST 606 CO2
- 6 sensors (O2, CO/H2 0 .. 8000 ppm, NO, NO2, SO2, CO2)
- Integrated printer
- With dilution pump for CO
- Ready for tightness test

CHEMIST 600 X
Kit expandabile up to 6 gas measuring sensors. The 6 gas sensors can be chosen from the 15 available. The number of different gas sensors combinations is close to one thousand.

EVERY KIT INCLUDES:

Instrument - Protective rubber holster - Flue gas probe 300 mm with 3 m cable - Outdoor/indoor air temperature Probe - USB key with software - Water Trap with dust filter, stainless steel fitttings and silicon hose - Power EU plug - Hard plastic Case

CHEMIST 600 X : MODULAR GAS ANALYZER KIT WITH 6 SENSORS

The Chemist 600 X is a basic configuration that allows the customer to create a customized kit according to his needs. In this version there is no sensor sensor. It is possible to add one or more sensors up to a maximum of 6, choosing from the wide range available in the catalog.
This enormous versatility allows to generate different configurations, resulting from the combinations of sensors, satisfying a large number of needs in many sectors and applications.

SENSOR TYPE AND POSITION

GAS SENSORS	COD	S1	S2	S3	S4	S5	S6
CO / H_2 - 8000 ppm	AACSE12		✓				
CO / H_2 - 500.0 ppm	AACSE24	✓					
CO - 10.00%	AACSE17	✓	✓	✓	✓	✓	✓
CO - 20000 ppm	AACSE18	✓	✓	✓	✓	✓	✓
CO_2 NDIR - 50.0% vol	AACSE47	✓	✓	✓	✓	✓	✓
C_xH_y - 5.00% vol	AACSE39	✓	✓	✓	✓	✓	✓
H_2S - 500.0 ppm	AACSE35	✓	✓	✓	✓	✓	✓
NH_3 - 500.0 ppm	AACSE56	✓	✓	✓	✓	✓	✓
NO - 5000 ppm	AACSE10	✓	✓	✓			
NO - 500.0 ppm	AACSE25	✓	✓	✓			
NO_2 - 1000.0 ppm	AACSE14	✓	✓	✓	✓	✓	✓
NO_2 - 500.0 ppm	AACSE26	✓	✓	✓	✓	✓	✓
O_2 LL - 21.0%	AACSE43	✓	✓	✓			
SO_2 - 5000 ppm	AACSE13	✓	✓	✓	✓	✓	✓
SO_2 - 500.0 ppm	AACSE28	✓	✓	✓	✓	✓	✓

S1: O_2
S2: CO+H_2
S3: NO
S4: SO_2
S5: CO_2
S6: H_2S

LCD screen with internal sensors arrangement

CHEMIST 600 TECHNICAL FEATURES

MEASUREMENT	SENSOR	RANGE	RESOLUTION	ACCURACY	
O2	Electrochemical sensor	0 .. 21.0% vol	0.1% vol	±0.2% vol	
CO with H2 compensation	Electrochemical sensor	0 .. 8000 ppm	1 ppm	±10 ppm ±5% ±10%	0 .. 200 ppm 201 .. 2000 ppm 2001 .. 8000 ppm
CO Low range with H2 compensation	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
CO Mid range	Electrochemical sensor	0 .. 20000 ppm	1 ppm	±100 ppm ±5% ±10%	0 .. 2000 ppm 2001 .. 4000 ppm 4001 .. 20000 ppm
CO Hi range	Electrochemical sensor	0 .. 10.00% vol	0.01% vol	±0.1% vol ±5%	0 .. 2.00 % 2.01 .. 10.00 %
NO	Electrochemical sensor	0 .. 5000 ppm	1 ppm	±5 ppm ±5%	0 .. 100 ppm 101 .. 5000 ppm
NO Low range	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
SO2	Electrochemical sensor	0 .. 5000 ppm	1 ppm	±5 ppm ±5%	0 .. 100 ppm 101 .. 5000 ppm
SO2 Low range	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
NO2	Electrochemical sensor	0 .. 1000 ppm	1 ppm	±5 ppm ±5%	0 .. 100 ppm 101 .. 1000 ppm
NO2 Low range	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
CxHy	Sensore Pellistore	0 .. 5.00% vol	0.01% vol	±0.25% vol	
CO2	Calculated	0 .. 500.0 ppm	0.1 ppm	±10 ppm ±10%	0 .. 100.0 ppm 100.1 .. 500.0 ppm
CO2	NDIR Sensor	0 .. 99.9% vol	0.1% vol		
H2S	Electrochemical sensor	0 .. 50.0% vol	0.1% vol	±1% vol nel campo compreso tra 0,00 .. 10,00 % ±2% FS da 10,00% a 50,00%	
NH3	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±5 ppm ±5%	0 .. 100 ppm 100.1 .. 500 ppm
Air Temperature	TcK Sensor	-20.0 .. 1250.0 °C	0.1 °C	±0.5 °C ±0.5%	0 .. 100 °C 101 .. 1250 °C
Smoke Temperature	TcK Sensor	-20.0 .. 1250.0 °C	0.1 °C	±0.5 °C ±0.5%	0 .. 100 °C 101 .. 1250 °C
Pressure (draught & diffrential)	Piezoelectric Sensor	-10.00 .. 200.00 hPa	0.01 hPa	±1% valore misurato ±0.02 hPa ±1% valore misurato	-10.00 .. -2.01 hPa -2.00 .. +2.00 hPa +2.01 .. +200.00 hPa
Differential Temperature	Calculated	0 .. 1250.0 °C	0.1 °C	-	
Air Index	Calculated	0.00 .. 9.50	0.01	-	
Air excess	Calculated	0 .. 850 %	1 %	-	
Stack loss	Calculated	0.0 .. 100.0 %	0.1 %	-	
Efficiency	Calculated	0.0 .. 100.0 %	0.1 %	-	
Condensing Efficiency	Calculated	0.0 .. 120.0 %	0.1 %	-	
Smoke index	External Instrument	0 .. 9	-	-	

CHEMIST 900 1-12 GAS SENSORS

EMISSIONS INDUSTRIAL ANALYZER

Chemist 900 is an industrial emissions and combustion analyzer, mainly used for Industrial burners, cogeneration groups, gas turbines, industrial ovens and processes, laboratories and generally everywhere the need is to measure and register for long periods the gas emissions in compliance with existing regulations .

Bluetooth®

PRICE ON REQUEST
CHEMIST 900 WARRANTY:
2 YEARS ON INSTRUMENT, GAS SENSORS, PRINTER

NEW APP 2019
Chemist Smart Analysis
Full Remote Control of your CHEMIST

ANDROID APP ON Google play

Download on the App Store

MAIN FEATURES

- Compliant with EN 50379-1 and EN 50379-2 standards
- Possibility to measure simultaneously up to 12 different gases, with up to 9 single gas measuring sensors and one infrared bench (NDIR) for CO/CO2/CH4.
- Measurable gases: O2, CO, CO2, CxHy, NO, NO2, SO2, H2S with different ranges and accuracies .
- Standard fuels in memory: methane, LPG, propane, butane, light oil, heavy oil, biogas, wood, pellets, coal. Other 16 fuels user defined can be added.
- Sucking pump for gas sample and 2nd dilution pump for CO cell protection
- Measurement of flue gas temperature, of combustion air and outdoor air
- Measurement of positive, negative and differential pressure
- Gas sampling probes of different type and length / heated head and heated hose gas sampling probe
- Double dust filter
- Standard expansion water trap or Peltier quick cooler
- Automatic condensate drainage with peristaltic pump
- Memory up to 16.000 complete analysis
- USB output for PC connection
- Bluetooth® Class 1 connectivity
- Power supply from lithium ions battery or mains 90…260 Vac
- Charger / power supply inside the instrument. It is also possible to work with the batteries completely discharged, connecting to the 90 ... 260 Vac mains power supply. The supplied AC cable is in place.
- Datalogger function
- Bulky metal frame

Composition: central unit and gas sampling system

The Chemist 900 industrial analyser is made up of two parts:
- the central unit
- the gas sampling system

Central Unit Version	Flex gas sensors (max 9)	NDIR bench (CO2/CO/CxHy)	Anti condensation cyclone cooler with Peltier cell	Anti condensation trap
Chemist 901	✓	-	-	✓
Chemist 901 IR3	✓	✓	-	✓
Chemist 902	✓	-	✓	-
Chemist 902 IR3	✓	✓	✓	-

N.B. A gas sampling probe with heated head and tube, powered by mains electricity, must always be installed together with the Chemist 902 central unit.

GAS SAMPLING SYSTEMS

- Passive Type: utilises sensors with different tip lengths and fittings, made of different materials, with flexible tube connection to the central unit in various lengths. On page 9 you will find a complete list of available models.

- Active Type: utilises gas sampling sensor with heated head and flexible tube. This characteristic is in order to avoid water vapour condensation reaching the central unit thus affecting measurements of gases easily soluble in water, such as NO2 and SO2. The active sensor maintains the gas sample at a higher temperature than the dew point and keeps it stable as far as the cooling system: this is a fast, cyclone type with Peltier cell. The water vapour condenses so quickly that the NO2 and SO2 gases do not have time to dissolve in water.

Active gas sampling probe with heated head and hose

Passive gas sampling probe

750 mm gas sampling probe for industrial motors

CHEMIST 900 - ACCESSORIES

AAC CV01	Schuko plug cable.
AAC CV04	European plug cable.
AAC DP02	Draught gauge for draught measurement.
AAC SA04	100mm Auxiliary temperature sensor PT100 4W, with 3m cable.
AA SA08	Combustion air temperature sensor, 200 mm distance, with 3m cable.
AA SP01	Heat protection shield for probes
AA TT01	'L' shaped Pitot Tube (without Tc-K thermocouple): length 300mm - external ø 6 mm. Supplied with two silicone tubes with length 2 meters.
AA TT02	'L' shaped Pitot Tube (without Tc-K thermocouple): length 800mm - external ø 6 mm. Supplied with two silicone tubes with length 2 meters.
AAC KP01	Differential pressure kit.
AA KT05	Tightness test kit.
AA PM02	Manual pump kit for smoke measurement.
AA SW08	Configuration software on USB flash drive.
AA UA03	USB-A / USB-B adapter cable.
AA EB01	Trunk extension.
AA TY01	Trunk trolley.

CHEMIST 900 - GAS PROBES

AA SF31	180 mm gas sampling probe, extended temperature range to 400°C, with 3 m hose.
AA SF32	300 mm gas sampling probe, extended temperature range to 600°C, with 3 m hose.
AA SF35	750 mm gas sampling probe, extended temperature range to 800°C, with 3 m hose.
AA SF36	1000 mm gas sampling probe, extended temperature range to 1100°C, with 3 m hose.
AA SX03	750mm smoke sampling sensor for industrial motors with 3 m hose.
AA SY01	Probe for carbon black measurement with 3.5 m hose.
AA PT03	300 mm tip for carbon black measurement probe (AASY01)
AA PT04	750 mm tip for carbon black measurement probe (AASY01)
AAC EX02S	3 m extension hose for smoke sampling sensors.
AA SR03	Smoke sampling sensor with heated head, 300 mm tip and electrically heated 3 m hose (with thermocoupling).
AA SR04	Smoke sampling sensor with heated head, 1000mm tip and electrically heated 3m tube (with thermocoupling).

CHEMIST 900 - SPARE PARTS

AA PB12	Li-Ion battery pack 11.1V 6.2 Ah
AA RC08	Printer thermal paper roll, h=57mm, diameter =30mm
AA RC09	Printer thermal paper roll (unerasable), h=57mm, diameter =30mm
AAC ADX005	Dummy sensor
AA FS01	Inox filter for heated head
AA FA02	Anti dust filter (2 pcs)
AAFA04	Anti dust filter (2 pcs) only with NH3 sensors installed

CHEMIST 900 - TECHNICAL FEATURES

Power:	100 .. 260V~
	or
	Li-ion battery pack with internal protection circuit, rechargeable
	With mains cable with IEC C14 socket.
Battery charge:	8 hours for recharge from 0% to 90%.
Recharging time:	10 hours of continuous operation (except: printing and Peltier cell group).
Instrument battery life:	2 hours with Cooler active.
Display:	4.3" 480×272 pixel backlit TFT graphical colour display.
Connectivity	
Communication port:	TYPE B USB connector.
Bluetooth:	Communication distance: <100 metres (open field).
Autozero:	Automatic autozero cycle with gas sampling probe in stack.
Dilution:	CO sensor measurement range expansion system up to 100,000ppm (10.00%), starting point programmable by the user.
Gas measurement sensor:	Up to 9 sensors, configurable between electrochemical, NDIR (single cell) and pellistor.
Infrared bench:	3 gas NDIR bench: CO, CO_2, CxHy.
Fuel type:	12 preset by the factory and 16 programmable by the user.
Self diagnostics:	Check of all functions and internal sensors with status indication.
Temperature measurement:	TcK double input with mini connector (ASTM E 1684-96) for differential temperature measurement (supply and return).
Ambient temperature measurement:	Via internal sensor or via T2 TcK input with remote sensor.
Printer:	Integrated, thermal, with easy paper loading and paper level sensor.
Printer power supply:	Analyser batteries.
Printer battery life:	With fully charged batteries up to 40 analysis reports.
Internal Data Memory:	16000 complete data analyses, time and customer name can be stored.
User data:	8 programmable user names.
Printer header:	6 lines × 24 characters, user customisable.
In-line filter:	With replaceable cartridge, 99% efficiency with 20μm particles.
Vacuum pump:	2.0 l/min flow rate in the stack up to 300hPa head.
Capacity pump:	Internal sensor measuring pump flow rate.
Cooler sample treatment	
Drying system:	Rapid water condensation using cyclone system.
Type:	with Peltier cell.
Set point temperature cooler:	+5°C
Max. temp. deviation from set point:	+10°C from set-point.
Condensate emptying pump:	Peristaltic hose 38 ml/min
Peristaltic duty cycle pump:	30s On .. 30s Off
Warm-up time:	~ 15 .. 20 minutes.
Operating temperature:	-5°C .. +45°C
Anti-condensation trap	
Type:	Integrated in the instrument.
Condensate emptying pump:	Peristaltic hose 38 ml/min.
Operating temperature:	-5°C .. +45°C

Carbon black:	Using a manual external pump; the smoke index can be input and printed.
Tightness test (where required):	Tube gas tightness test with separate receipt printing, using AAKT05 accessory, subject to UNI 7129 (new installations) and UNI 11137: 2012 (existing installations), with automatic calculation of the tube volume.
Condensing boiler efficiency :	Automatic assessment of the condensing boiler, with calculation and printing of the boiler efficiency.
Ambient gases:	Separate measurement and printing of the ambient CO concentration.
Draught test:	Draught test execution: using external probe (AACDP02).
Working temperature:	-5°C .. +45°C
Storage temperature:	-20°C .. +50°C
Humidity limit:	20% .. 80% RH
Protection level:	IP21
External dimensions:	50 x 36 x 20 cm (W x H x D). 50 x 46 x 13 cm (W x H x D) with intermediate drawer for heated head and sensor transportation.
Weight:	~ 12 kg (Typical configuration: nine sensors - Cooler - IR bench - a smoke sampling sensor - power cable - USB cable - carrying strap - two paper rolls - a USB stick - a condensate drain tube - a remote air intake tube - combustive air sensor). ~ 13 kg (Typical configuration with additional accessories such as: a 3m extension for smoke sensor - an auxiliary air sensor - a 300mm Pitot tube - a draught gauge). ~ 16,7 kg (Typical configuration with additional accessories and intermediate drawer containing: a heated head sensor with 300mm tip and heated tube).
Compliant with European standards EN 50379-1 and EN 50379-2 for the following measurements:	• O2 • CO average • NO • SO2 • Temperature (flue gas) • Temperature (combustion air) • Pressure (draught) • Pressure (differential)

MEASUREMENT RANGES AND ACCURACIES

MEASUREMENT	GAS SENSOR	MEASUREMENT RANGE	RESOLUTION	ACCURANCY
O2	Sensor Electrochemical	0 .. 21.0% vol	0.1% vol	±0.2% vol
CO with H2 compensation	Sensor Electrochemical	0 .. 8000 ppm	1 ppm	±10 ppm 0 .. 200 ppm ±5% measured value 201 .. 2000 ppm ±10% measured value 2001 .. 8000 ppm
CO with active dilution	Sensor Electrochemical	0 .. 100000 ppm	100 ppm	±20% measured value
CO Low range with H2 compensation	Sensor Electrochemical	0 .. 500.0 ppm	0.1 ppm	±2 ppm 0 .. 40.0 ppm ±5% measured value 40.1 .. 500.0 ppm
CO Low range with active dilution	Sensor Electrochemical	6.250 ppm	10 ppm	±20% measured value
CO	Sensor Electrochemical	0 .. 20000 ppm	1 ppm	±100 ppm 0 .. 2000 ppm ±5% measured value 2001 .. 4000 ppm ±10% measured value 4001 .. 20000 ppm
CO with dilution	Sensor Electrochemical	0 .. 250000 ppm	100 ppm	±20% measured value
CO	Sensor Electrochemical	0 .. 100000 ppm	100 ppm	±0.02% vol o ±5% m.v. 0 .. 2.00 % ±5% measured value 2.01 .. 10.00 %
NH3	Sensor Electrochemical	0 .. 5000 ppm	0.1 ppm	±10 ppm 0 .. 100 ppm ±10% valore misurato 101 .. 500.0 ppm
NO	Sensor Electrochemical	0 .. 5000 ppm	1 ppm	±5 ppm 0 .. 100 ppm ±5% measured value 101 .. 5000 ppm
NO Low range	Sensor Electrochemical	0 .. 500.0 ppm	0.1 ppm	±2 ppm 0 .. 40.0 ppm ±5% measured value 40.1 .. 500.0 ppm
NOx	Calculated			
SO2	Sensor Electrochemical	0 .. 5000 ppm	1 ppm	±5 ppm 0 .. 100 ppm ±5% measured value 101 .. 5000 ppm
SO2 Low range	Sensor Electrochemical	0 .. 500.0 ppm	0.1 ppm	±2 ppm 0 .. 40.0 ppm ±5% measured value 40.1 .. 500.0 ppm
NO2	Sensor Electrochemical	0 .. 1000 ppm	1 ppm	±5 ppm 0 .. 100 ppm ±5% measured value 101 .. 1000 ppm
NO2 Low range	Sensor Electrochemical	0 .. 500.0 ppm	0.1 ppm	±2 ppm 0 .. 40.0 ppm ±5% measured value 40.1 .. 500.0 ppm
CxHy	Sensor Pellistor	0 .. 5.00% vol	0.01% vol	±0.25% vol
H2S	Sensor Electrochemical	0 .. 500.0 ppm	0.1 ppm	±5 ppm 0 .. 100.0 ppm ±5% measured value 100.1 .. 500.0 ppm
CO2	Calcolated	0 .. 99.9% vol	0.1% vol	
CO2	NDIR sensor	0 .. 50.0% vol	0.01% vol	±1% Vol 0.00 .. 10.00 % ±2% Fondo scala 10.01 .. 50.00 %
CO2 *	NDIR bench	0 .. 50.0% vol	0.1% vol	±0.3% vol 0.00 .. 8.00 % ±5% measured value 8.01 .. 40.00 % ±10% measured value 40.01 .. 50.00 %
CO% *	NDIR bench	0 .. 150000 ppm	100 ppm	±0.03% vol 0.0 .. 10.0 % ±5% measured value 10.1 .. 15 %
CH4 *	NDIR bench	0 .. 50000 ppm	1 ppm	±50 ppm 0 .. 200 ppm ±2% measured value 201 .. 50000 ppm

MEASUREMENT	GAS SENSOR	MEASUREMENT RANGE	RESOLUTION	ACCURANCY
Air temperature	TcK Sensor	-20.0 ..120.0 °C	0.1 °C	±1 °C
Flue gas temperature	TcK Sensor	-20.0 .. 1250.0 °C	0.1 °C	±1 °C 0 .. 100 °C ±1% measured value 101 .. 1250 °C
Auxiliary sensor temperature	PT100	-20.0 .. 200.0 °C	0.1 °C	±0.5 °C
Pressure (draught and differential)	Piezo electric Sensor	-10.00 .. 200.00 hPa	0.01 hPa	±1% measured value -10.00 .. -2.01 hPa ±2 hPa -200 .. 200 hPa ±1% measured value 2.01 .. +200.00 hPa
Differential temperature	Calculated	0 .. 1250.0 °C	0.1 °C	
Air index	Calculated	0.00 .. 9.50	0:01	
Air excess	Calculated	0 .. 850 %	1%	
Stack heat loss	Calculated	0.0 .. 100.0 %	0.1 %	
Efficiency	Calculated	0.0 .. 100.0 %	0.1 %	
Efficiency (condensation)	Calculated	0.0 .. 120.0 %	0.1 %	
Smoke index	External instrument	0 .. 9		

Note:
*: The NDIR bench always measures the 3 gases CO, CO2 and CH4

PRINTERS AND CONSUMABLES

COD.	PHOTO	DESCRIPTION	EURO	CHEMIST 2/300	CHEMIST 400	CASPER	CHEMIST 100 BG	CHEMIST 500	CHEMIST 500 BG	CHEMIST 600	CHEMIST 600 BG
AAC NI01		Ribbon ink cartridge for printer	10	✓	✓						
AAC RC01		Plain paper roll	3	✓	✓						
AA RC06		Plain thermal paper roll 57x35	5					✓		✓	
AA RC08		Plain thermal paper roll 57x30	5			✓	✓		✓		✓
AA RC09		Long life plain thermal paper roll 57x35	8			✓	✓		✓		✓
AARC10		Long life plain thermal paper roll 57x30	8					✓		✓	
AA ST01		Thermal printer with Bluetooth connection	259			✓	✓		✓		✓
AC ST02		Infrared (IR) thermal printer	433			✓	✓				

CASE, HOLSTER AND ACCESSORIES

COD	PHOTO	DESCRIPTION	EURO	CHEMIST 2/300	CHEMIST 400	CASPER	CHEMIST 100 BG	CHEMIST 500/500 BG	CHEMIST 600/600 BG
AAC CT01		Fabric bag with shoulder belt	151	✓	✓			✓	✓
AAC R03		Hard plastic kit case	146			✓			
AAC R10		Hard plastic kit case	174					✓	✓
AAC R09		Hard plastic kit case	131				✓		
AA ZN01		Fabric bag with shoulder belt / backpack	287					✓	✓
AACSM03		EVA rubber holster with magnets	81	✓	✓				
AA SM10		Rubber holster	70					CHEMIST 500 BG	CHEMIST 500 BG
AA SM05		EVA holster with magnets	57				✓		
AA SM06		EVA rubber holster	81					CHEMIST 500	CHEMIST 500
AA SM07		Rubber holster	44				✓		

ACCESSORIES AND SPARE PARTS

COD	PHOTO	DESCRIPTION	EURO	CHEMIST 2/300	CHEMIST 400	CASPER	CHEMIST 100 BG	CHEMIST 500/500 BG	CHEMIST 600/600 BG
AA PB13		Rechargeable Ni-MH battery, 7,4 V, 1800 mAh	43				✓		
AAC PB02		Rechargeable Ni-MH battery, 6 V, 1800 mAh	39	✓					
AAC PB06		Rechargeable LiIon battery, 7,2 V, 2,4 Ah	52		✓				
AAC PB07		Rechargeable Ni-MH battery, 7,4 V, 1800 mAh	51			✓			
AA PB01		Rechargeable LiIon battery, 3,7 V, 4,8 Ah	55					✓	✓
AA SP01		Guard shield for lue gas probe	252					✓	✓
AA SI01		EU plug adapter	21					✓	✓
AA AL05		90÷264V~ / 5V= Power adapter with USB output and interchangeable AC connector	57					✓	✓
AA UA01		USB A / USB B cable, 2 m lenght	11					✓	✓
AAC CV03		Cable with Italy plug	9	✓	✓	✓	✓		
AAC AL04		230V / 12V Power adapter	41	✓	✓	✓	✓		

ACCESSORIES AND SPARE PARTS

COD	PHOTO	DESCRIPTION	EURO	CHEMIST 2/300	CHEMIST 400	CASPER	CHEMIST 100 BG	CHEMIST 500/500 BG	CHEMIST 600/600 BG
AAC ADX005		Dummy sensor (replaces not installed gas sensors)	5			✓	✓	✓	✓
AAC BF01		Mounting adapter for sensor	12	✓					
AAC FA01		Fine dust filters for AACTA03 (5 pcs. package)	34	✓	✓	✓	✓	✓	✓
AAC TA03		Water trap with dust filter without stainless steel fittings and silicon hose	44	✓	✓	✓	✓	✓	✓
AAC TA03A		Water trap with dust filter, stainless steel fittings and silicon hose suitable for all combustion analyzers	57	✓	✓	✓	✓	✓	✓
AA PM02		Bacharach hand pump for carbon measurements	326	✓				✓	✓
AA RA01		Threaded 9 mm diameter fitting, 1/4" gas coupling, 1/4" to 1/8" gas nipple (for tightness test)	34					✓	✓
AA FA03		HDPE filter for industrial engine probe (2PCS)	80					✓	✓
AA FS01		Inox filter for industrial engine probe	250					✓	✓
AA FS02		Stainless steel filter with adapter for 8mm tips	297	✓	✓	✓	✓	✓	✓

PROBES

COD	PHOTO	DESCRIPTION	EURO	CHEMIST 2/300	CHEMIST 400	CASPER	CHEMIST 100 BG	CHEMIST 500/500 BG	CHEMIST 600/600 BG
AAC SO01		Ionization current probe. Range: ±100uA. Accuracy: ±2uA	174					✓	✓
AA SA06		Outdoor air temperature Pt100 probe with 200 mm tip (4 wire + conical stopper)	87	✓	✓				
AA SF51A		180 mm flue gas probe with 2 m cable	258		✓	✓	✓	✓	✓
AA SF62A		300 mm flue gas probe with 2 m cable	278		✓	✓	✓	✓	✓
AA SF65A		750 mm flue gas probe with 3 m cable	420		✓			✓	✓
AA SF66A		1000 mm flue gas probe with 3 m cable	499		✓			✓	✓
AA SF71A		180 mm flue gas probe with 1,6 m cable	185				✓		
AA SF72A		300 mm flexible flue gas probe with 1,6 m cable	201				✓		
AA SL05A		300 mm flexible flue gas probe with 2 m cable	336		✓	✓	✓	✓	✓
AA SX02		750 mm industrial motors probe with 3 m cable	1339					✓	✓
AA SC01		CO ambient probe Range: 0 .. 500.0ppm Accuracy: ±5 ppm up to 100.0 ppm ±5% measured value up to 500.0 ppm	377				✓		

SENSORS, KITS AND EXTENSIONS

COD	PHOTO	DESCRIPTION	EURO	CHEMIST 2/300	CHEMIST 400	CASPER	CHEMIST 100 BG	CHEMIST 500/500 BG	CHEMIST 600/600 BG
AAC DP02		High accuracy and resolution external pressure sensor with cable and plug Range: **±250 Pa** Accuracy: **±0.5 Pa -10.0 .. +10.0 Pa** **±2 Pa elsewhere**	377		✓			✓	✓
AAC EX01		3 m extension cable for flue gas probe (cod. AASFXXA)	207		✓			✓	✓
AAC KP01		Differential pressure measurement kit. 2 x 1 m hoses + fittings	36					✓	✓
AAC KP02		Differential pressure measurement kit. 1 m hose + fitting	18	✓		✓	✓	✓	✓
AAC SA04		Outdoor air temperature 100 mm Pt100 probe with 3 m cable	80	✓	✓				
AAC TO01		Silicone conical fitting 44 - 22 mm	56	for thightness kit					
AAC TO02		Silicone conical fitting 32 - 18 mm	51	for thightness kit					
AAR A02		Gas valve hose adapter: d.i. 7 mm	23	✓	✓	✓	✓	✓	✓
AA KT05		Kit for tightness test with 4 ways manifold, manual pump, 100 ml syringe, hoses, 1 silicone conical fitting	275	✓	✓	✓	✓	✓	✓
AA SA05		Outdoor air temperature 100 mm Pt100 probe with 1,8 m cable	77			✓	✓		
AA SA08		Outdoor air temperature 200 mm TcK probe, with 2 m cable	79					✓	✓
AA SG01		Gas sniffer probe for Chemist 500 analyzers da 1 m + raccordo	79					✓	✓
AA TT01		"L"shaped Pitot tube. 300 mm length, 6 mm external diameter. Without thermocouple	493					✓	✓
AA TT02		"L"shaped Pitot tube. 800 mm length, 6 mm external diameter. Without thermocouple	536					✓	✓

KIT AND EXTENSIONS

COD	PHOTO	DESCRIPTION	EURO	CHEMIST 100 BG	CHEMIST 500/500 BG	CHEMIST 600/600 BG	CHEMIST 900
AAPT 07		300mm flexible tip (*). Measuring range temperature 130 ° c - for AASJ02 / AASJ03 handle	248	✓	✓	✓	✓
AAPT 08		180mm rigid tip (*). Temperature measurement range 400 °C - for AASJ02 / AASJ03 handle	193	✓	✓	✓	✓
AAPT 09		300mm rigid tip (*). Measuring range temperature 600 °C - for AASJ02 / AASJ03 handle	198	✓	✓	✓	✓
AAPT 10		750mm rigid tip (*). Temperature measurement range 800 °C - for AASJ02 / AASJ03 handle	270	✓	✓	✓	✓
AAPT 11		1000mm rigid tip (*). Temperature measuring range 1200 °C - for AASJ02 / AASJ03 handle	308	✓	✓	✓	✓
AASJ 02		Flue gas suction probe handle; without ferrule - length Cable: 3 meters. + Fitting diameter 9 mm	160	✓	✓	✓	
AASJ 03		Flue gas suction probe handle; without ferrule - length Cable: 3 meters. + Fitting diameter 9 mm	171				✓

(*) Using the AA SP01 protective flange it is possible to increase the immersion depth of the tip while also protecting the plastic handle.

CERTIFICATES, MAINTENANCE

COD	DESCRIPTION	EURO	CASPER	CHEMIST 100 BG	CHEMIST 500 / 500 BG
CER 012	ISO 9001 calibration certificate for 2 sensors analyzers: Casper 201, 201S, 202, 202S - Chemist 100 BE GREEN 101, 101S, 102, 102S Chemist 502, 502B, 502C - Chemist 500 BE GREEN 502, 502B, 502C	150 (*)	✓	✓	✓
CER 013	ISO 9001 calibration certificate for 3 sensors analyzers: Casper a 3 celle 301, 301S - Chemist 100 BE GREEN 103, 103S Chemist 503, 503B - Chemist 500 BE GREEN 503, 503B	170 (*)	✓	✓	✓
CER 014	ISO 9001 calibration certificate for 4 sensors analyzers: Chemist 504N - Chemist 504N BE GREEN	200 (*)			✓
CER 015	ISO 9001 calibration certificate for 4 sensors analyzers: Chemist 504S - Chemist 504S BE GREEN	200 (*)			✓
CER 016	ISO 9001 calibration certificate for Chemist 500X - Chemist 500X BE GREEN: (O2, CO, + 2 sensori a scelta)	240 (*)			✓
CON 009	Annual maintenance contract for 2 sensors analyzers: Casper 201, 201 S, 202, 202 S Chemist 502, 502B, 502C, 401, 402	350 (*)	✓		✓
CON 010	Annual maintenance contract for 3 sensors analyzers: Casper 301, 301S Chemist 503, 403	400 (*)	✓		✓
CON 011	Annual maintenance contract for 4 sensors analyzers: Chemist 504N, 504S, 404N, 404S	470 (*)			✓

(*) : net non-discountable

SENSORS FOR ANALYZERS

GAS	RANGE	COD	EURO	Chemist 200-300	Chemist 400	Casper	Chemist 100 BG	Chemist 500/500 BG	Chemist 600/600 BG	Chemist 900
CH4	0…10000 ppm CH4	AAC SE19	123					✓		
CO	0…8000 ppm	AAC SE20	387			✓				
CO high immunity H2 with NOx filter	0…4000 ppm	AAC SE58	331				✓			
CO / H2	0...8000 ppm	AAC SE05	531	✓						
CO / H2	0...8000 ppm	AAC SE12	517		✓			✓	✓	✓
CO / H2 Lo Range	0...500,0 ppm	AAC SE24	539					✓	✓	✓
CO Hi Range	0...10.00% Vol (100.000 ppm)	AAC SE17	941					✓	✓	✓
CO Mid Range	0...20000 ppm	AAC SE18	941					✓	✓	✓
CO2	0…50% v/v	AAC SE47	1035					✓	✓	✓
CxHy	0...5.00% Vol CH4	AAC SE39	481					✓	✓	✓
H2S	0...500,0 ppm	AAC SE35	345						✓	✓
H2	0...2000 ppm	AAC SE57	1050						✓	✓
NH3	0...500,0 ppm	AAC SE56	928						✓	✓
NO	0...2000 ppm	AACSE60	371				✓			
NO	0...5000 ppm	AAC SE06	585	✓						
NO	0...5000 ppm	AAC SE10	523		✓	✓		✓	✓	✓
NO Lo Range	0...500 ppm	AAC SE25	617					✓	✓	✓
NO2	0...1000 ppm	AAC SE14	836					✓	✓	✓
NO2 Lo Range	0...500 ppm	AAC SE26	941					✓	✓	✓
O2	0...25% v/v	AAC SE07	230	✓						
O2	0...25% v/v	AAC SE15	230		✓	✓		✓		
O2	0...25% v/v	AAC SE50	175				✓			
O2 Long Life	0...25% v/v	AAC SE43	381					✓	✓	✓
SO2	0...5000 ppm	AAC SE13	836					✓	✓	✓
SO2 Lo Range	0...500 ppm	AAC SE28	941					✓	✓	✓

PORTABLE INSTRUMENTS

PRESSOTEST 100

POR MDZ BI .... € **238**

CER 006 .... € **40**
Calibration Certificate ISO9001

DIGITAL MICROMANOMETER

Digital micromanometer with selectable measurement unit among the 6 most widely used, auto-zero, hold and auto-shut off.

TECHNICAL FEATURES

Power supply (battery)	6 x 1,5V AAA
Battery life	100h
Auto shut-off	Adjustable 1 .. 30 min.
Zeroing	Automatic
Full scale range	±130 hPa (mBar)
Resolution	0.01hPa (P<100hPa), 0.1hPa (P>100hPa)
Accuracy	1.5% v.l. (P<-15hPa); ±0.1hPa (-15hPa <P<+15hPa); 1% v.l. (P>15hPa);
LCD display	2x4 digits+analog scale
Dimensions	H162 W87 D41mm
Measurement units	Pa, hPa (mBar), kPa, mmH2O, mmHg, PSI
IP rating	IP30

WARRANTY
2 YEARS

PRESSOTEST 200

POR MDX BI .... € **312**

CER 008 .... € **40**
Calibration Certificate ISO9001

DIGITAL MICROMANOMETER

Digital micromanometer for the pipes tightness test by pressure decay, compliant with UNI 7129 standard concerning the new plants and UNI 11137 standard concerning the pre-existent plants: it allows the printing of the receipt of the test results by means of an external infrared printer. Main features include: data-logger functions, digital auto-zero, hold, the possibility of selecting the desired measurement unit among the 6 most widely used, programmable alarms, time, auto cut-off.

TECHNICAL FEATURES

Power supply (battery)	6 x 1,5V AAA
Battery life	100h
Auto shut-off	Adjustable 1 .. 30 min.
Zeroing	Automatic
Full scale range	±130 hPa (mBar)
Resolution	0.01hPa (P<100hPa), 0.1hPa (P>100hPa)
Accuracy	1.5% v.l. (P<-15hPa); ±0.1hPa (-15hPa <P<+15hPa); 1% v.l. (P>15hPa);
LCD display	2x4 digits+analog scale
Dimensions	H162 W87 D41mm
Measurement units	Pa, hPa (mBar), kPa, mmH2O, mmHg, PSI
IP rating	IP30

WARRANTY
2 YEARS

PRESSOTEST 300

POR DPZ BI .... € **360**

CER 009 .... € **40**
Calibration Certificate ISO9001

**WARRANTY
2 YEARS**

DIGITAL MICROMANOMETER FOR DRAFT TEST MEASUREMENT

Digital micromanometer for high resolution (UNI 10845) draft test measurement: it allows the printing of the receipt of the test results by means of an external infrared printer. Main features include: the possibility of selecting the desired measurement unit among the 3 most widely used, digital auto-zero, hold, time, auto cut-off.

TECHNICAL FEATURES

Power supply (battery)	6 x 1,5V AAA
Battery life	100h
Auto shut-off	Adjustable 1 .. 30 min.
Zeroing	Automatic
Full scale range	± 250Pa
Resolution	0.1Pa, 0.001 hPa, 0.01 mm H2O
Accuracy	-0.3Pa -10Pa < P< +10Pa;
	-1PA -100Pa < P< +100Pa;
	-2Pa -250Pa < P < +250Pa;
LCD display	2x4 digits + analog scale
Dimensions	H162 W87 D41mm
Measurement units	Pa, hPa, mm H2O
IP rating	IP30

POR RDZ BI .... € **262**

**WARRANTY
2 YEARS**

PORTABLE GAS DETECTOR

Microprocessor based portable gas detector. Wide LCD display with 4 digits, with measurement unit and battery charge indication, acoustic alarm. For hydrocarbon gases (natural gas, LPG,...). Hold and auto-zero functions.

TECHNICAL FEATURES

Power supply battery	6 x 1,5V AAA
Battery life/auto power down	4h / 1 .. 30 min.
LCD display	4 digits
Min. detectable value	100ppm CH4
Detectable gas	Natural gas, LPG
Dimensions	H151 W72 D37mm
IP rating	IP20

Notes: The gas sniffer POR RDZ BI is not a measurement instrument. Digits figures in ppm on LCD are for indication only.

PO LF02 .... € 325

PORTABLE GAS DETECTOR
RECHARGEABLE BATTERY

Microprocessor based portable gas detector. Wide LCD display with 4 digits, with measurement unit and battery charge indication, acoustic alarm. For hydrocarbon gases (natural gas, LPG,...). Hold and auto-zero functions.

TECHNICAL FEATURES

Power supply battery	Battery pack Li-ion 3.7V, 2000 mAh
Battery life/auto power down	20h.. 30 min.
Display LCD	4 digits
Min. detectable value	100ppm CH4
Detectable gas	Natural gas, LPG, CxHy
Dimensions	H151 W72 D37mm
IP rating	IP20
Battery charger	5V

Notes: The gas sniffer PO LF02 is not a measurement instrument. Digits figures in ppm on LCD are for indication only.

**WARRANTY
2 YEARS**

GAS-T-ONE

KV 0001 .... € 1094
Kit for the pipes tightness test, with printer

KV 0002 .... € 919
Kit for the pipes tightness test, without printer

KIT FOR PIPES TIGHTNESS TEST

Kit for checking the tightness of fuel gas distribution systems. Supplied in a practical rigid case it includes the GAS-T-ONE micromanometer, developed for performing leak tests in accordance with the UNI 7129 (new systems) and UNI 11137 (existing systems) standards, a bluetooth printer (KV0001 code) for printing the receipts documenting the results of the checks, a power supply unit and rechargeable batteries supplied with the printer, a series of tubes in a special non-porous plastic material with a ball cock, plugs of different diameters, metal fittings and pump in rubber for the use of air as a test gas.

 Bluetooth®

**WARRANTY
2 YEARS**

 Chemist QR Code

ANDROID APP ON Google play   Download on the App Store

PO TK01................................. € **213**
Including 2 STS KX 01 probes

CER 017 .... € **40**
Calibration Certificate ISO9001

THERMOMETER 2 TCK INPUT

Portable digital thermometer with LCD display. 2 thermocouple K inputs. Max, data hold, differential between the two temperatures and offset adjustment.

TECHNICAL FEATURES

Power supply (battery)	1x 9V
Battery life	~100h
Operating range	-200°C~1370°C -328°F~2490°F
Resolution	1°C or 1°F, 0,1°C or 0,1°F
Accuracy	±(0.5% T1-T2 reading +2°C or +2°F)
LCD display	4 digital liquid crystal display
Sensor	TcK
Dimensions	H184 W64 D30mm

**WARRANTY
2 YEARS**

ACCESSORIES

STS KZ.................................... € **93**
Clamp thermocouple K type probe

ACC CHIAVE 01..................... € **8**
Chiave gas 24-30 mm

STS KL 01............................... € **38**
Thermocouple K type probe for liquids

STS KC 01 .... € **76**
Thermocouple K type probe for contact

POR FLU .... € **43**
Glass fluxmeter

AC ST01................................. € **259**
Infrared thermal printer

PROGRAMMABLE THERMOSTATS

FREETIME *plus*

TC D01B .... € 89

• ACCESSORI
Room temperature probe
STA D01 .... € 11

DIGITAL PROGRAMMABLE THERMOSTAT - DAILY -

Battery powered programmable thermostat for heating/cooling, daily programming with pins for 2 adjustable temperature levels and anti-frost function. Large backlit LCD display. Adjustable differential. Facility for remote sensor. Very user friendly.

TECHNICAL FEATURES

Battery powered	2 x 1,5V AA
Operation	On/Off Heating/Cooling
Available set-points	2 (comfort-economy)
Working range	10 .. 30°C
Adjustable Anti-frost	0°C .. 25.0°C
Adjustable differential	0.0°C .. 20.0°C
Internal sensor	NTC (10k Ohm @ 25°C)
Temperature display	Backlit 3 digit LCD
Output (relay)	5(1)A @ 250V~ SPDT
IP rating	IP30
Dimensions	H87 W133 D32mm
Class Reg.2013/811/EC	I = 1,0%
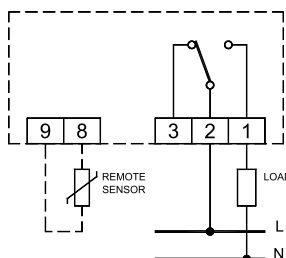
Main applications:
driving zone valves - pumps - wall boilers

FREETIME *plus* VIA RADIO

KCR 005 .... € 186
DCD 01B + DRR 01M

• ACCESSORI
Room temperature probe
STA D01 .... € 11

KIT KCR 005 – SPECIAL FEATURES
for pellets boilers and floor heating systems

* Ambient temperature offset compensation, ± 9,9°C, useful to adjust possible wrong controllers positioning
* Adjustable set point hysteresis, from 0.1°C to 5°C, useful to avoid too many recurring starts of the boiler, very damaging for pellets boilers
* Minimum on time, adjustable in 10 min steps, up to 90 min. Essential for pellets boilers
* Control function of floor temperature through additional sensor, with high and low limits. Useful in Under Floor Heating systems.
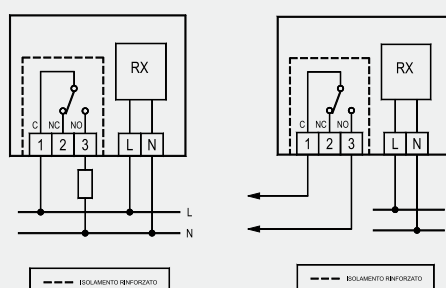
DRR 01M:
Typical wiring

TEMPORA

TCE GIO BI 03........................ € **78**
Daily

TCE SET BI 03........................ € **87**
Weekly

ELECTRONIC PROGRAMMABLE THERMOSTAT

Battery powered analog electronic programmable thermostat, daily (TCEGIOBI03) and weekly (TCESETBI03) programming with timer for 2 temperatures adjustable with knobs. Three operating modes: off-antifrost/automatic/manual.

TECHNICAL FEATURES

Programming	Daily (TCEGIOBI03)
	Weekly (TCESETBI03)
Operation	On/Off-anti frost/manual
Available set-points	2 (comfort-economy)
IP rating	IP20
Working range (comfort)	10 .. 30°C
Working range (economy)	10 .. 26°C
Internal sensor	NTC (10k Ohm @ 25°C)
Output (relay)	5(1)A @ 250V~ SPDT
Dimensions	H84 W156 D36mm
Class Reg.2013/811/EC	I = 1,0%
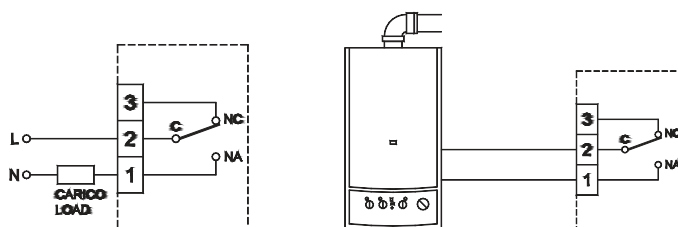
BLUETIME *plus*

TC W02B .... € **110**

DIGITAL PROGRAMMABLE THERMOSTAT - WEEKLY -

Battery powered programmable thermostat, heating/cooling modes, up to 7 different programs with 48 time cycles per day and 3 temperature levels (Comfort, Economy, Off/Antifrost). Antifrost function. Large backlit LCD. Start optimizer. Holidays (1h ÷ 99dd) and cleaning mode. Facility for switching on via telephone and facility for remote sensor.

TECHNICAL FEATURES

Programming	Daily/weekly
Operation	On/Off
Available set-points	3 (comfort-economy-Off/anti frost)
Working range	5 .. 40°C
Anti-frost	0,5 .. 25°C
Available time cycles per day	1 .. 48
Internal sensor	NTC (10k Ohm @ 25°C)
Output	5(1)A @ 250V~ SPDT
IP rating	IP30
Dimensions	H87 W132 D27mm
Class Reg.2013/811/EC	I = 1,0%

For switching via telephone use ITP F22 1 or ITR 011

MAGICTIME *plus*

TC W01B .... € 102

• **ACCESSORIES**
  Room temperature probe
  STA D01 .... € 11

DIGITAL PROGRAMMABLE THERMOSTAT - WEEKLY -

Battery powered programmable thermostat, heating/cooling modes, up to 7 different programs with 48 time cycles per day and 3 temperature levels (Comfort, Economy, Off / Antifrost). Antifrost function. Large backlit LCD. Start optimizer.
Holidays (1h ÷ 99dd) and cleaning mode. Facility for switching on via telephone and facility for remote sensor.

TECHNICAL FEATURES

Programming	Daily/weekly
Operation	On/Off
Available set-points	3 (comfort-economy-Off/anti frost)
Working range	5 .. 35°C
Anti-frost	0,5 .. 25°C
Available time cycles per day	1 .. 48
Internal sensor	NTC (10k Ohm @ 25°C)
Output (relay)	5(1)A @ 250V~ SPDT
IP rating	IP30
Dimensions	H87 W132 D32mm
Class Reg.2013/811/EC	I = 1,0%
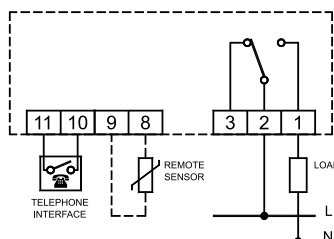
For switching via telephone use ITP F22 1 or ITR 011

MAGICTIME *plus* VIA RADIO

KCR 006 .... € 192
DCW 01B + DRR 01M

• **ACCESSORIES**
  Room temperature probe
  STA D01 .... € 11

KIT KCR 006 – SPECIAL FEATURES
for pellets boilers and floor heating systems

• Ambient temperature offset compensation, ± 9,9°C, useful to correct possible wrong controllers positioning
• Adjustable set point hysteresis, from 0.1°C to 5°C, useful to avoid too many recurring starts of the boiler, very damaging for pellets boilers
• Minimum switching off time after last restart, adjustable in 10 min steps, up to 90 min. Essential for pellets boilers
• Control function of floor temperature through additional sensor, with high and low limits. Useful in Under Floor Heating systems.
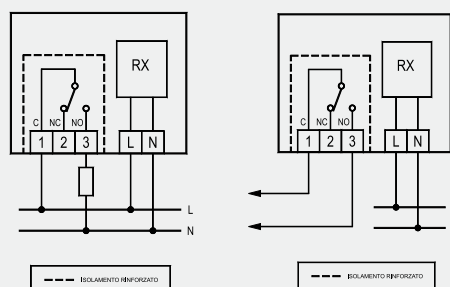
TT 401M .... € **308**

MULTIZONES PROGRAMMABLE THERMOSTAT

Programmable thermostat over 4 adjustable temperature levels (off, antifrost, economy, comfort) and weekly programs up to 7 daily sets. Manual operation allowed for each temperature level.

TECHNICAL FEATURES

Power supply	230V~ -15% +10% 50Hz
Electrical absorption	< 3.2VA
Sensore	NTC (10K Ohm@25°C)
Regulation range	Comfort: +5°C .. +35°C
	Reduced: -5°C .. +25°C
	Antifreeze: -5°C .. +15°C
Accuracy	± 1° C
Resolution	0.2°C
Hysteresis	0.2°C
Contacts rating	8 x 8 (1) A @ 250V~ SPST
Protection grade	IP 30 mounted in frame
Operating temperature	0°C .. 40°C
Humidity limits	20% .. 80% RH non condensing
Size	157 x 90 x 71 mm (W x H x D)
Weight	685 g

• **ACCESSORIES**

Room temperature probe

STA D01 .... € **11**
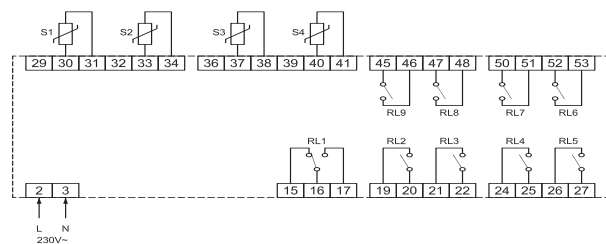
PROGRAMMABLE THERMOSTAT FOR 4 ZONES

Floor heating

4 zones Prog. Thermostat

Room temperature probe

Room temperature probe

Room temperature probe

Room temperature probe
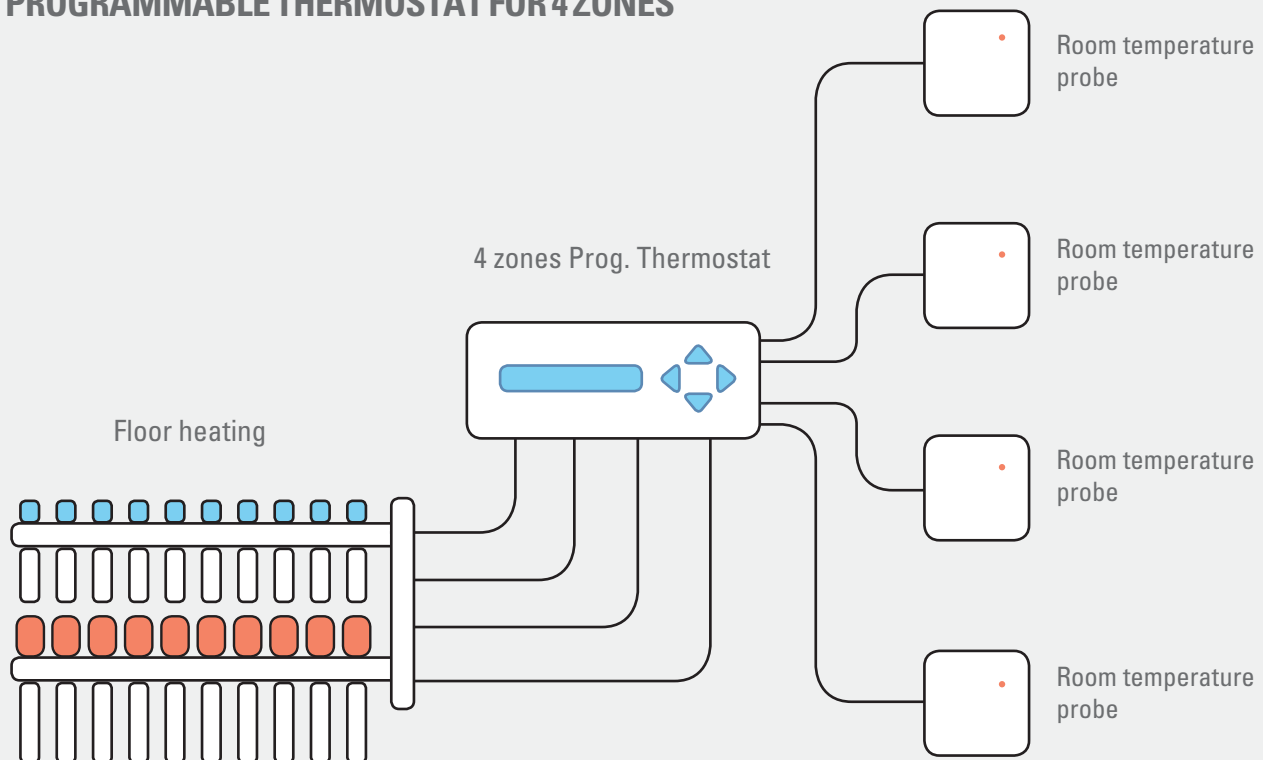
FREETIME *in*

TCP ID0 BI .... € 117
Versione Antracite

TCP ID0 BIW .... € 117
Versione Bianca

PROGRAMMABLE THERMOSTAT FLUSH-MOUNTED - DAILY -

Battery powered digital programmable thermostat for 3 module flush-mounting boxes heating/cooling, daily programming with pins for 2 adjustable temperature levels and anti-frost function. Large backlit LCD. Very user friendly. Available in anthracite (RAL7016) and white (RAL9003) plastics.

TECHNICAL FEATURES

Programming	Daily
Operation	On/Off Heating/Cooling
Available set-points	2 (comfort-economy)
Working range	5 .. 35°C
Adjustable Anti-frost	2°C .. 25.0°C
Internal sensor	(4k7 Ohm @ 25°C)
Temperature display	Backlit 3 digit LCD
Output (relay)	5(1)A @ 250V~ SPDT
IP rating	IP20
Dimensions	H68 W105 D50mm
Class Reg.2013/811/EC	I = 1,0%

Main applications: driving zone valves - pumps - wall boilers

	5 6 7

LOAD
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PLACCHE ADATTABILI		
BTICINO®	light
	light tech
	Living International
	Matix
	Luna
	Axolute
VIMAR®	Idea
	Idea Rondò
	Plana
	Eikon
GEWISS®	Playbus
	Playbus Young
	Chorus
AVE®	Banquise
	Sistema 45
	Noir
SIEMENS®	Delta Futura
LEGRAND®	Ergo
	Cross
	Vela
MASTER®	Modo
	Mix

MAGICTIME *in*

TCP IW0 BI .... € 125
Versione Antracite

TCP IW0 BIW .... € 125
Versione Bianca

PROGRAMMABLE THERMOSTAT FLUSH-MOUNTED - WEEKLY -

Battery powered digital programmable thermostat, for 3 module flush mounting boxes, heating/cooling modes, up to 7 different programs with 48 time cycles per day and 3 temperature levels (Comfort, Economy, Off / Antifrost). Anti-frost function. Large backlit LCD. Start optimizer. Holidays(1h ÷ 99dd) and cleaning mode. Facility for switching on via telephone.

TECHNICAL FEATURES

Programming	Daily/weekly
Operation	On/Off
Available set-points	3 (comfort-economy-Off/anti frost)
Working range	5 .. 35°C
Anti-frost	0,5 .. 25°C
Available time cycles per day	1 .. 48
Internal sensor	NTC (4k7 @ 25°C)
Output (relay)	5(1)A @ 250V~ SPDT
IP rating	IP30
Dimensions	H68 W105 D50mm
Class Reg.2013/811/EC	I = 1,0%

1	2	7	8	9

INTERFACCIA
TELEFONICA

CARICO
L
N

PLACCHE ADATTABILI		
BTICINO®	light
	light tech
	Living International
	Matix
	Luna
	Axolute
VIMAR®	Idea
	Idea Rondò
	Plana
	Eikon
GEWISS®	Playbus
	Playbus Young
	Chorus
AVE®	Banquise
	Sistema 45
	Noir
SIEMENS®	Delta Futura
LEGRAND®	Ergo
	Cross
	Vela
MASTER®	Modo
	Mix

ITR 011 .... € 406

GSM PHONE INTERFACE

GSM phone interface for remote control at any distance of one or two electric devices, enabling control of burners, programmable thermostats, cooling plants, etc. Via SMS messages, it is possible to drive up to two external device, read outputs and inputs status and get included external sensor temperature reading. Manual override of the outputs status. Two-colour LED showing GSM gateway status and assessment of the signal strength. Advanced functions of alarm and antifrost. Power supply backup with NiMH battery.

TECHNICAL FEATURES

Power supply	12V= (with mains adapter 230V/12V)
Outputs (relay)	2x3A @ 250V~ SPDT
Current absorption	0,5 VA max
Bicolour LED indicator	On/connect
Red LED 1 indicator	Output 1 on
Red LED 2 indicator	Output 2 on
Internal sensor	NTC (10k Ohm @ 25°C)
IP rating	IP20
Dimensions	H198 W78 D30,5mm

ITR Manager

• **ACCESSORI**
   Antenna with magnetic base

   ACA N02 .... € 45
   88 mm stylus with 3 m cable and SMA M connector. (Only for weak signal reception)
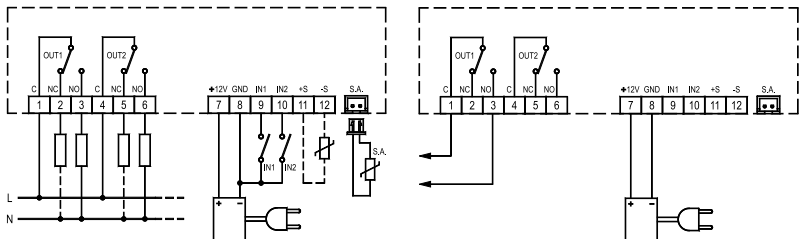
GSM PHONE INTERFACE

ITR 011 phone interface is a multifunction device, powered by 230 Vac through supplied power supply. What Phone interface can do:
- Allows to remotely activate Seitron Magictime plus, a weekly programmable thermostat. After made the connection from output 1 of ITR 011 to Magictime terminals, it is possible through an SMS to set the programmable thermostat from the previous switch off status with an anti frost function, to Comfort status. In this status Magictime Plus will switch on/off the burner to keep the Comfort temperature already set up using the programmable thermostat knob. This function is possible only with Seitron Magictime Plus.
- Allows to read from remote with an SMS the room temperature where ITR 011 is installed, through an external probe supplied in the package.
- Allows to set through an SMS the Comfort temperature and also anti frost temperature that will be maintained by ITR 011 using the temperature probe. ITR 011 output 1 can be connected in parallel to thermostat and programmable thermostats output of every other different Seitron's brand, and it will switch on/off the burner to keep the comfort temperature set by SMS.
- Activate and deactivate through SMS 1 or 2 electrics loads of any type: illumination plant, irrigation, opening doors, etc. Allows to check from remote the 2 output status, i.e. the possibility to receive the confirmation of the previous sent commands via SMS.
- Allows to receive the status of 2 ITR 011 digital inputs. These 2 inputs can be used for instance to communicate a burner stuck condition, a door open, etc. The information can be sent through an SMS up to 10 different telephone numbers recorded.

How can we be sure that all this functions are really available? The device sends data periodically in GSM network and it communicates the credit available in the SIM-card, avoiding any possible problem with telephone operator. Moreover, in case of a power supply issue ITR 011 keeps in memory all data, and it starts again operation when power comes back.

CONCLUSION: GSM ITR 011 Interface is multifunction device that allows both to manage a house heating plant from remote and to be informed if something is wrong: comfort and reliability are guaranteed.

ITP F22 1................................ € **193**

TELEPHONE INTERFACE FOR PSTN

Phone interface for remote activation of any electrical load through the telephone line. 2 outputs and 2 digital inputs, whose state can be checked via telephone. Visualization of the state of the outputs through LEDs. Buttons for manual toggle of the outputs. Supplied with 230V/12V power adapter.

TECHNICAL FEATURES

Power supply	12V= (with mains adapter 230V/12V)
Outputs (relays)	2x3A @ 250V~ SPDT
Inputs	2 digital
Green LED indicator	On/communication
Red LED indicator	Output channel 1
Red LED indicator	Output channel 2
Buttons	Outputs toggle
IP rating	IP30
Dimensions	H85 W85 D31mm
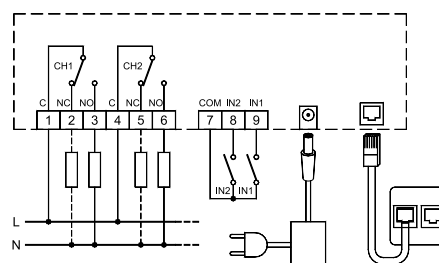
THYGROS

THW 01B................................ € **183**
Dehumidification only in cooling mode

THW 02B................................ € **183**
Dehumidification in heating and cooling modes

PROGRAMMABLE THERMO-HYGROSTAT

Battery powered programmable thermo-hygrostat, heating/cooling and humidification/dehumidification modes, up to 7 different programs with 48 time cycles per day and 3 temperature and humidity levels (Comfort, Economy, Off/Antifrost). Antifrost function and dew point control. Large backlit LCD. Start optimizer. Holidays (1h ÷ 99dd) and cleaning mode. Facility for switching on via telephone and facility for remote sensor.

TECHNICAL FEATURES
TEMPERATURE:

Available modes	3 (comfort-economy-Off/anti frost)
Working range	5 .. 40°C
Anti-frost	0,5 .. 25°C
Internal sensor	NTC (10k Ohm @ 25°C)
Output	5(1)A @ 250V~ SPDT
Dimensions	H87 W132 D27mm
IP rating	IP30

RELATIVE HUMIDITY:

Available set-points	3 (comfort-economy-Off/dew point)
Working range	10 .. 95% RH
Output	5(1)A @ 250V~ SPDT
Class Reg.2013/811/EC	I = 1,0%
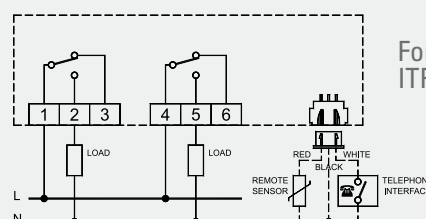
• **ACCESSORIES**

Room temperature probe
STA D01 .... € **11**

For switching via telephone use
ITP F22 1 or ITR 011

THERMOSTATS / WIRING BOXES

TADDY

TA D02B .... € 51

BATTERY POWERED DIGITAL THERMOSTAT

The device can be used both in heating and cooling systems, and it is featured with a wide backlit display for the visualization of all the functional indications and the detected room temperature. Furthermore, the device offers the possibility to set the value of the antifreeze temperature and the Offset regulation on the internal and remote sensor.

TECHNICAL FEATURES

Power supply:	2 x 1,5V, alkaline batteries (type AAA)
Setting range:	Comfort: 5°C .. 40°C - Economy: 5°C .. 40°C
Type of sensor:	NTC 10KOhm ±1% @ 25°C
Differential:	0.0°C .. 5.0°C (Default 0.2°C)
Antifrost:	OFF / 0.0°C .. 25.0°C (Default 3.0°C)
Offset internal sensor:	± 9.9°C (Default 0.0°C)
Contact rating:	5(1)A 250V~ SPDT, voltage free.
Dimensions:	85x85x24,6 mm
Protection rating:	IP 30
Class Reg.2013/811/EC:	I = 1,0%

• **ACCESSORIES**

Room temperature probe
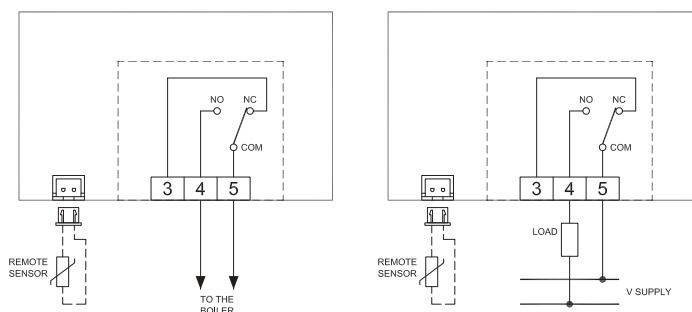
STA D01 .... € 11

TADDY

TA D02M .... € 56
230Vac

TA D022 .... € 56
24Vac

230V/24V DIGITAL ROOM THERMOSTAT

The device can be used both in heating and cooling systems, and it is featured with a wide backlit display for the visualization of all the functional indications and the detected room temperature. Furthermore, the device offers the possibility to set the value of the antifreeze temperature and the Offset regulation on the internal and remote sensor.

TECHNICAL FEATURES

Power supply	(TAD 02M) 230V~ -15/+10% 50Hz
	(TAD 022) 24V~ -15/+10% 50Hz
Absorbed power:	1,7VA
Setting range:	Comfort: 5°C .. 40°C
Differential:	0.0°C .. 5.0°C (Default 0.2°C)
Antifrost:	OFF / 0.0°C .. 25.0°C (Default 3.0°C)
Offset internal sensor:	± 9.9°C (Default 0.0°C)
Contact rating:	5(1)A 250V~ SPDT, voltage free.
Grado di protezione:	IP30
Classe Reg.2013/811/CE:	I = 1,0%

• **ACCESSORIES**

Room temperature probe
STA D01 .... € 11

www.seitron.it
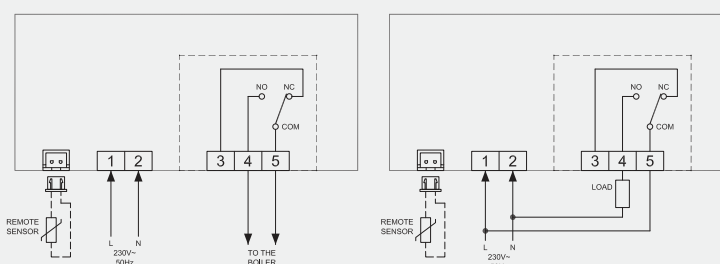
TA S04M .... € 32
230Vac

TA S042 .... € 33
24Vac

TA S04MT .... € 33
230V~ Tamperproof

TA S042T .... € 34
24V~ Tamperproof

ELECTRONIC ROOM THERMOSTAT

On/off room thermostat for heating systems. Special pin stop system for limiting the setpoint range. Internal sensor and facility for remote sensor (STL NTS A 150 or STA NP3).

TECHNICAL FEATURES

Power supply	(TAS04M) 230V~ -15/+10% 50Hz
	(TAS042) 24V~ -15/+10% 50Hz
Working range	6 .. 30°C
Power consumption	7 VA max.
Differential	0.5°C
Sensor	NTC (4k7 Ohm @ 25°C)
Output (relay)	1x5(1)A @ 250V~ SPDT
Red LED indicator	Relay active
Dimensions	H85 W85 D31mm
IP rating	IP30
Class Reg.2013/811/EC	I = 1,0%

• **ACCESSORIES**

Room temperature probe
STA NP3...................................... € 17

Room temperature probe
STL NTS A 150 .... € 8

TA S05M .... € 43
230Vac

TA S052 .... € 28
24Vac

TA S05MT .... € 42
230V~ Tamperproof

TA S052T .... € 29
24V~ Tamperproof

ELECTRONIC ROOM THERMOSTAT NIGHT SET-BACK

On/off room thermostat for heating systems with adjustable night set-back. Special pin stop system for limiting the setpoint range. Internal sensor and facility for remote sensor (STL NTS A 150 or STA NP3).

TECHNICAL FEATURES

Power supply	(TAS05M) 230V~ -15/+10% 50Hz
	(TAS052) 24V~ -15/+10% 50Hz
Working range	6 .. 30°C
Night set-back range	2°C .. 7°C (Default 4,5°C)
Power consumption	7 VA max.
Differential	0.5°C
Sensor	NTC (4k7 Ohm @ 25°C)
Output (relay)	1x5(1)A @ 250V~ SPDT
Red LED indicator	Relay active
Dimensions	H85 W85 D31mm
IP rating	IP30
Class Reg.2013/811/EC	I = 1,0%

• **ACCESSORIES**

Room temperature probe
STA NP3...................................... € 17

Room temperature probe
STL NTS A 150 .... € 8

TA S06M .... €
230Vac

TA S062 .... €
24Vac

NEW

ELECTRONIC ROOM THERMOSTAT FIX NIGHT SET-BACK

On/off room thermostat for heating systems with adjustable night set-back. Special pin stop system for limiting the setpoint range. Internal sensor and facility for remote sensor (STL NTS A 150 or STA NP3).

TECHNICAL FEATURES

Power supply	(TAS06M) 230V~ -15/+10% 50Hz
	(TAS062) 24V~ -15/+10% 50Hz
Working range	6 .. 30°C
Night set-back range	4 °C)
Power consumption	7 VA max.
Differential	0.5°C
Sensor	NTC (4k7 Ohm @ 25°C)
Output (relay)	1x5(1)A @ 250V~ SPDT
Red LED indicator	Relay active
Dimensions	H85 W85 D31mm
IP rating	IP30
Class Reg.2013/811/EC	I = 1,0%

• **ACCESSORIES**

Room temperature probe
STA NP3...................................... € 17

Room temperature probe
STL NTS A 150 .... € 8

TA N01M................................. € 38
230Vac

TA N012................................. € 31
24Vac

ELECTRONIC ROOM THERMOSTAT HEATING/COOLING 230V - 24V

On/off room thermostat for heating/cooling systems. Special pin stop system for limiting the setpoint range. Internal sensor and facility for remote sensor (STL NTS A 150 or STA NP3).

TECHNICAL FEATURES

Power supply	(TAN01M) 230V~ -15/+10% 50Hz
	(TAN012) 24V~ -15/+10% 50Hz
Working range	6 .. 30°C
Power consumption	7 VA max.
Differential	0.5°C
Sensor	NTC (4k7 Ohm @ 25°C)
Output (relay)	1x5(1)A @ 250V~ SPDT
Red LED indicator	Relay active
Slide switch	Off/heating/cooling
Dimensions	H85 W85 D31mm
IP rating	IP30
Class Reg.2013/811/EC	I = 1,0%
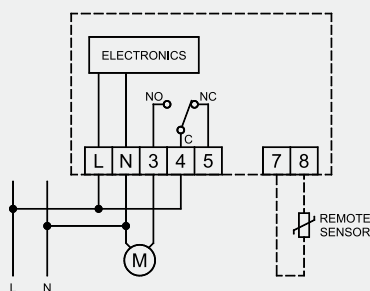
• **ACCESSORIES**

Room temperature probe
STA NP3...................................... € 17

Room temperature probe
STL NTS A 150 .... € 8

www.seitron.it

TAE ZN4 MC.........................€ 67
230Vac

TAE ZN4 2C..........................€ 67
24Vac

● **ACCESSORIES**

Room temperature probe
STA NP3.....................................€ 17

Room temperature probe
STL NTS A 150 ....€ 8

DEADBAND THERMOSTAT

Adjustable deadband thermostat with two outputs for heating/cooling, automatic change-over based on air. Special pin stop system for limiting the set-point range. Internal sensor and facility for remote sensor.

TECHNICAL FEATURES

Power supply	(TAEZN4MC) 230V~ -15/+10% 50Hz
	(TAEZN42C) 24V~ -15/+10% 50Hz
Working range	6 .. 30°C
Neutral zone	1 .. 11°C (adjustable)
Internal sensor	NTC (4k7 0hm @ 25°C)
Differential	<0.5°C
Output (relay)	2x5(1)A @ 250V~ SPDT
Red LED indicator	Heating
Green LED indicator	Cooling
Dimensions	H85 W85 D31mm
IP rating	IP30
Class Reg.2013/811/EC	I = 1,0%
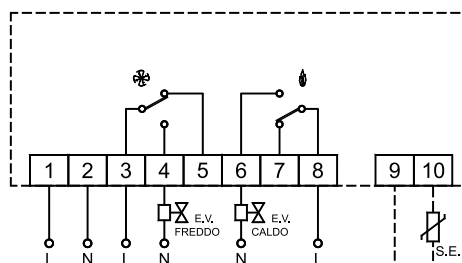
TPE EI0 MI ....€ 63
Cooling/Heating

TPE R00 MI ....€ 73
Economy switch

HEATING-COOLING FLUSH MOUNT THERMOSTAT
COMFORT-ECONOMY FLUSH MOUNT THERMOSTAT

Thermostat for recessed mounting (3 modules), with off/cooling/heating switch (cod. TPEEI0MI) or off/comfort/economy switch (cod. TPER00MI). Plastic colour: RAL 7016.

TECHNICAL FEATURES

Power supply		230V~ -15/+10% 50Hz
Sensor		NTC(4k7 0hm @25°C)
Output (relay)		6(2)A @ 250V~ SPDT
Working range		6 .. 30°C
Differential		0.5°C
Switch	TPER00MI	Off/comfort/economy (3°C)
	TPEEI0MI	Off/cooling/heating
Red LED indicator		Relay active
Green LED indicator		On
Dimensions		H60 W110 D56mm
IP rating		IP20
Class Reg.2013/811/EC		I = 1,0%
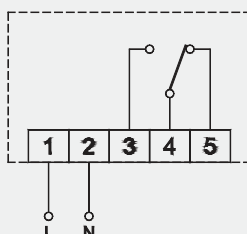
Main applications:
- wall boilers
- air conditioners
- on/off driving valves
- pumps.

NON FITTING PLATES:
Living International (B-TICINO)

FITTING PLATES

BRAND	MODEL
BTICINO®	Living
VIMAR®	Idea
AVE®	Sistema 45

TM 001M..............................€ 22

TM 002M..............................€ 29
With light indication

ROOM THERMOSTAT
ROOM THERMOSTAT WITH LIGHT INDICATION

Electro-mechanical room thermostat with gas filled bellow. Light indication (only for cod. TM002M). Special pin stop system for limiting the set-point range.

TECHNICAL FEATURES

Working range	8 .. 30°C
Sensor	Vapour pressure
Differential	<1°K
Contacts rating	TM0 01M 16A @ 250V~ SPDT
	TM0 02M 16A @ 250V~ SPDT
Dimensions	H85 W85 D31mm
IP rating	IP30
Class Reg.2013/811/EC	I = 1,0%
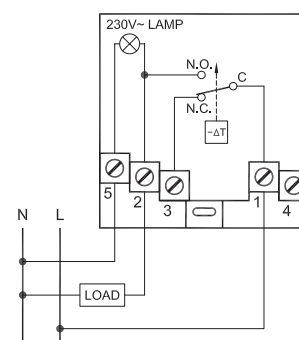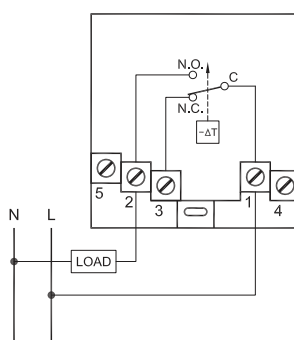
TM 003M..............................€ 30
On/off switch

TM 004M..............................€ 38
Heating/cooling switch

ON/OFF THERMOSTAT
HEATING/COOLING THERMOSTAT

Electro-mechanical room thermostat with gas filled bellow. Light indication. On/off switch (cod. TM003M) or heating/cooling switch (cod. TM004M). Special pin stop system for limiting the set-point range.

TECHNICAL FEATURES

Working range	8 .. 30°C
Sensor	Vapour pressure
Differential	<1°K
Contacts rating	10A @ 250V~ SPDT
Dimensions	H85 W85 D31mm
IP rating	IP30
Class Reg.2013/811/EC	I = 1,0%
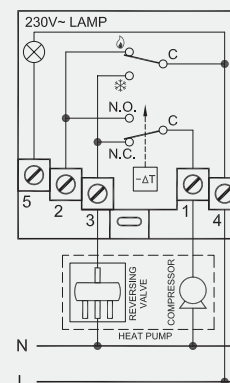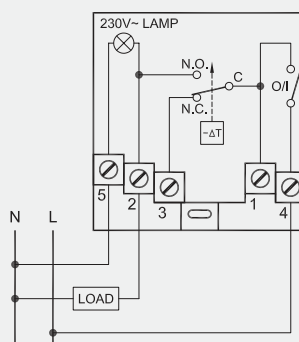
THERMOSTATS RANGE COMPARISON CHART

COD	Mounting	Power	LCD	Swich	Tamper-proof	Remote sensor opt.	Night set-back	De-adband	Output
TAD 02B	Parete	Battery	✓	On-Off	--	✓	✓	--	1x5A
TAD 02M	Parete	230V	✓	On-Off	--	✓	✓	--	1x5A
TAD 022	Parete	24V	✓	On-Off	--	✓	--	--	1x5A
TAS 04 2	Parete	24V	--	--	--	✓	--	--	1x5A
TAS0 42 T	Parete	24V	--	--	✓	✓	--	--	1x5A
TAS 04 M	Parete	230V	--	--	--	✓	--	--	1x5A
TAS 04 MT	Parete	230V	--	--	✓	✓	--	--	1x5A
TAS 05 2	Parete	24V	--	--	--	✓	✓	--	1x5A
TAS 05 2T	Parete	24V	--	--	✓	✓	✓	--	1x5A
TAS 05 M	Parete	230V	--	--	--	✓	✓	--	1x5A
TAS 05 MT	Parete	230V	--	--	✓	✓	✓	--	1x5A
TAN 01 2	Parete	24V	--	Off/risc/raff	--	✓	--	--	1x5A
TAS 06M	Parete	230V	--	On-Off	--			--	1x5A
TAS 062	Parete	24V	--	On-Off	--	✓	✓	--	1x5A
TAN 01 M	Parete	230V	--	Off/risc/raff	--	✓	--	--	1x5A
TAE DI4 2C	Parete	24V	✓	Off/risc/raff	--	✓	--	--	1x5A
TAE ZN4 2C	Parete	24V	--	--	--	✓	--	✓	2x5A
TAE ZN4 MC	Parete	230V	--	--	--	✓	--	✓	2x5A
TPE EI0 MI	Incasso	230V	--	Off/risc/raff	--	--	--	--	1x6A
TPE R00 MI	Incasso	230V	--	Off/comfort/riduz.	--	--	✓	--	1x6A
TM 001 M	Parete	230V	--	--	--	--	--	--	1x16A
TM 002 M	Parete	230V	--	--	--	--	--	--	1x16A
TM 003 M	Parete	230V	--	On/off	--	--	--	--	1x10A
TM 004 M	Parete	230V	--	Risc/raff	--	--	--	--	1x10A

FLOOR HEATING POWER AND WIRING UNITS

European demand for under floor heating systems, also known as UFH (Under Floor Heating) has been constantly increasing for years. This growth is due to a series of advantages which traditional solutions do not have: better environmental comfort, cleaning and design, lower consumption, higher adaptability to condensation boilers and to all renewable heating sources with low temperature as well as the possibility of cooling in summer. In all Northern Europe UFH systems have been the most used solution in the new plants for years. Their sales are continually increasing in Italy, too. UFH systems are intrinsically split into zones, because each room is powered by its own dedicated circuit, starting from a manifold equipped with on – off valves.

SEITRON has developed specific solutions for zone adjustment of under floor heating systems, both with wired products and completely wireless, products communicating via radio. (See else where in the catalogue the wireless system section).

WIRE CONNECTION SOLUTION

This solution is based on two ranges of products:

- Electronic room thermostats : a complete range of reliable competitive and high performance devices with 230V~ or 24V~ supply, available also in tamperproof 230V~ or 24V~ version.

- Wiring center which make easier the connection of the room thermostats and the manifold on- off valves, available in 6, 8 and 12 channels, 230V~ or 24V~ supply.

Control Unit
ALP03U
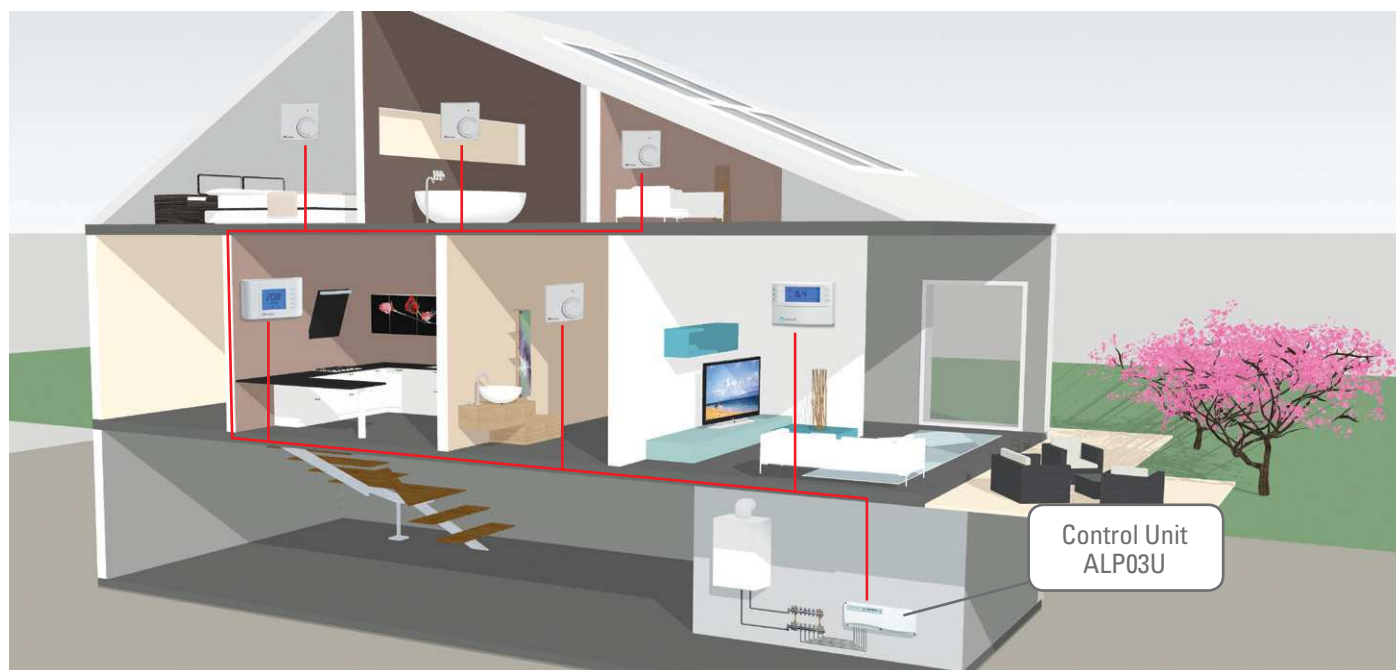
Installation example of a ALP03U with 6 room thermostats in input, 6 valves and a pump connected at the output.

ALC 006 M............................ € 89
With 230V/24V transformer

ALC 006 U............................. € 65
Without transformer

6 CHANNELS WIRING BOX

6 outputs wiring box for floor heating plants with 230V~/24V~ transformer (cod. ALC006M) or without transformer (cod. ALC006U). 6 outputs available.

TECHNICAL FEATURES

Power supply	cod. ALC006M: 230V~ ±10% 50Hz
	cod. ALC006U: Universal (24 .. 230V~)
Power absorption	cod. ALC006M: 24VA
Max load	cod. ALC006M: 1A @ 24V~(Tot.)
	cod. ALC006U: 2A @ V power supply (Tot.)
Dimensions	H100 W245 D60mm
IP rating	IP30

ALC 006 M

ALC 006 U
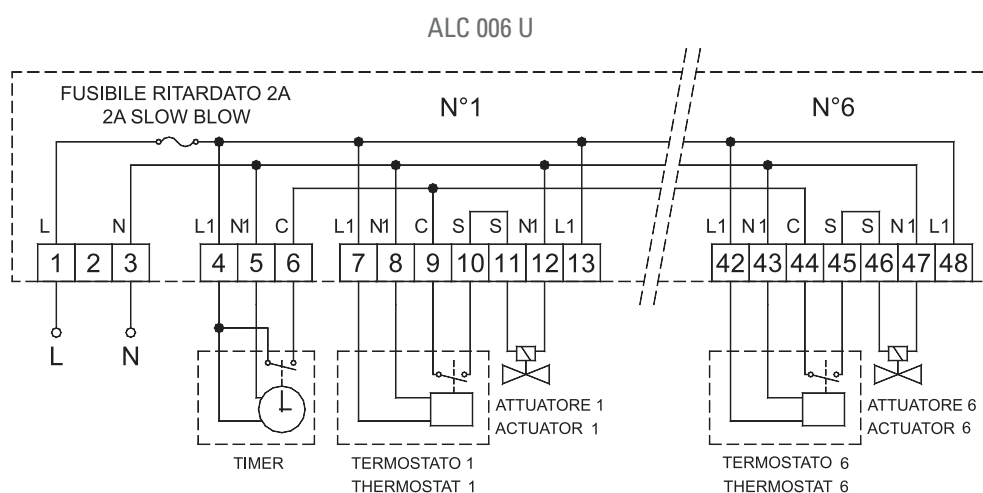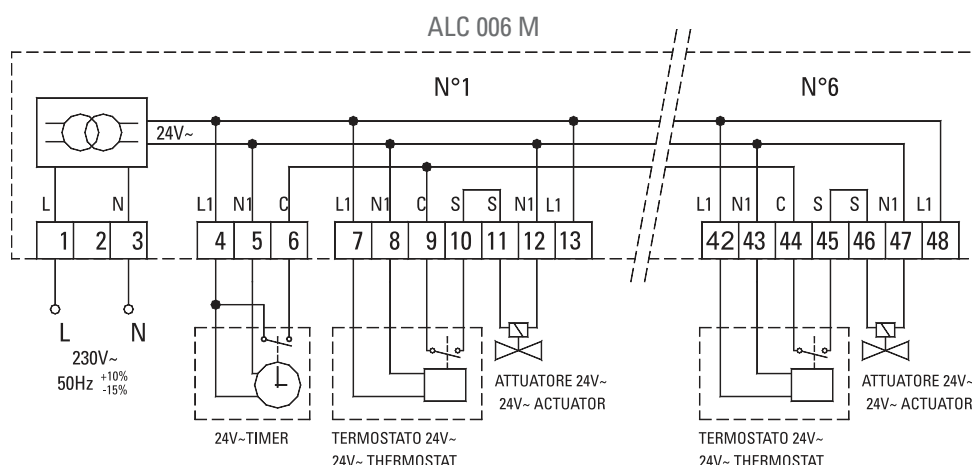
ALC 012 M............................ € 175
With 230V/24V transformer

ALC 012 U............................ € 103
Without transformer

WIRING BOX 12 CHANNELS

12 outputs wiring box for floor heating plants with 230V~/24V~ transformer (cod. ALC012M) or without transformer (cod. ALC012U). 12 outputs available

TECHNICAL FEATURES

Power supply	cod. ALC012M: 230V~ ±10% 50Hz
	cod. ALC012U: Universal (24 .. 230V~)
Power absorption	cod. ALC012M: 40VA
Max load	cod. ALC012M: 10A @ 24V~(Tot.)
	cod. ALC012U: 10A @ V power supply (Tot.)
Dimensions	H100 W245 D60mm
IP rating	IP30

ALC 012 M

ALC 012 U
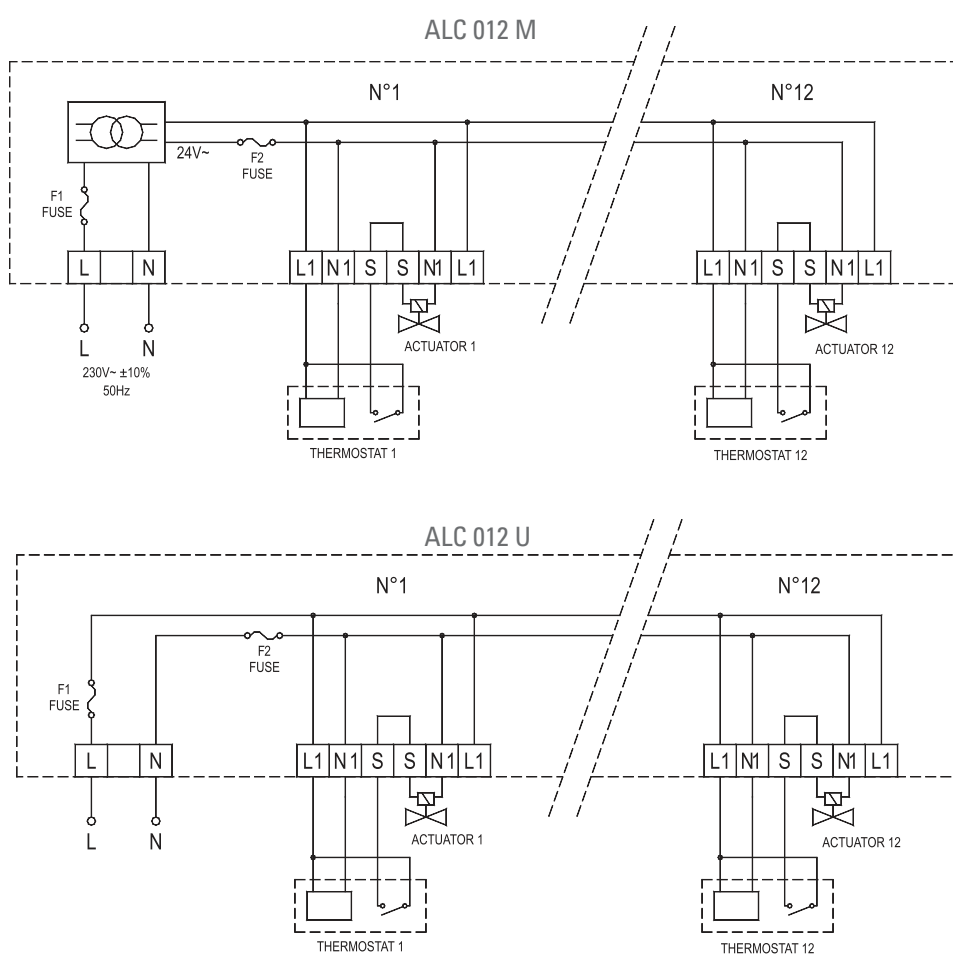
ALP 06U................................ € 56

4 CHANNELS WIRING BOX
PUMP AND BOILER CONTROL 230V-24V

Electronic control for floor heating systems, with 24V~ or 230V~ power supply. The control offers the possibility to connect up to 4 thermostats and up to 4 actuators with selectable power supply between 24V~ or 230V~. Pump output, boiler control output and input for an external clock for the activation of the section of the actuators and thermostats.

TECHNICAL FEATURES

Power supply	230V ±10% 50Hz or
	24V ±10% 50Hz
Power absorption	Depends on the loads connected
Output :	
Pump (powered)	3A
Boiler (voltage free)	1A
Actuators and thermostats	max 1A each channel
	max 1A total
Green LED indicator	Power supply
Red LED indicator	Pump active
IP protection	IP30
Case	ABS V0 self-extinguishing
Dimensions	H100 W130 D60mm
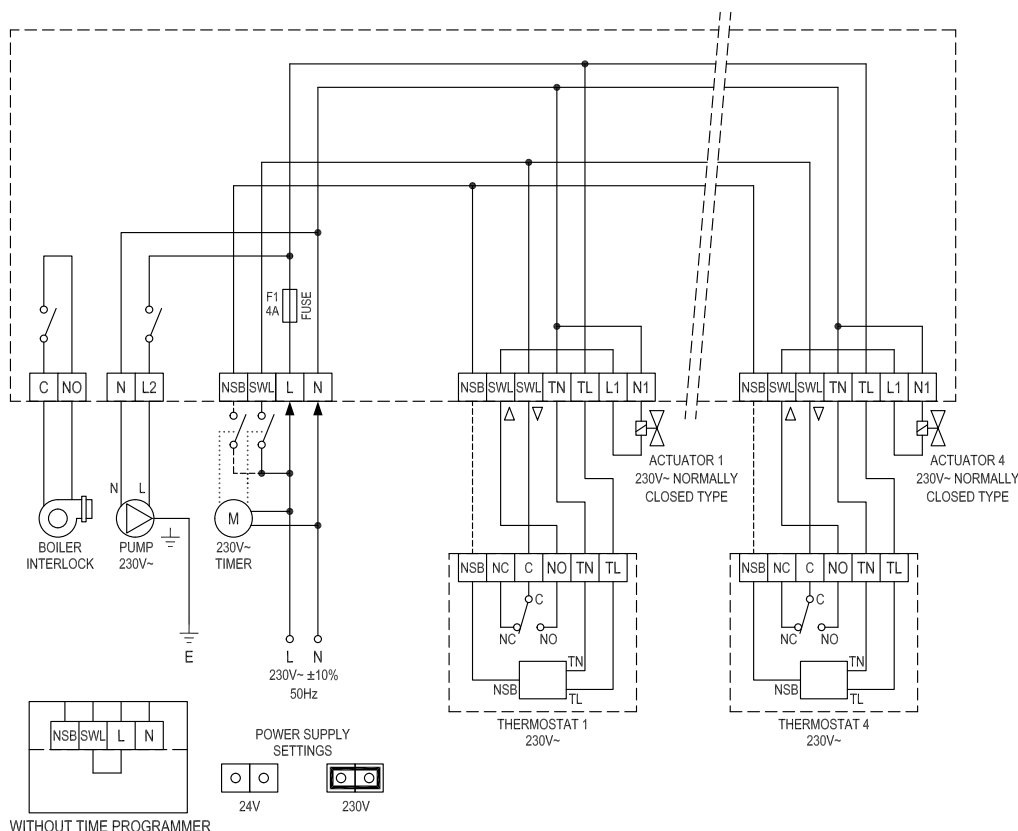
ALC D08 M0M .... € **174**

8 CHANNELS WIRING BOX
PUMP AND BOILER CONTROL 230V

Electronic control for floor heating systems, with 230V~ power supply. The control offers the possibility to connect up to 8 channels, with a thermostat and up to 5 actuators each. Pump output with fixed delay time of 2.5 minutes, boiler control output and input for an external clock for the activation of the section of the actuators and thermostats.

TECHNICAL FEATURES

Power supply	230V~ ±10% 50Hz
Power absorption	According to the loads rating
Illuminated switch	On/Off
IP protection	IP44
Contacts rating: Pump	5A@250V~ SPST
Contacts rating: Boiler interlock	5A@250V~ SPST
Maximum applicable load:	
Actuators and thermostats	1,25A each channel
	2A total
Dimensions	H125 W320 D67mm
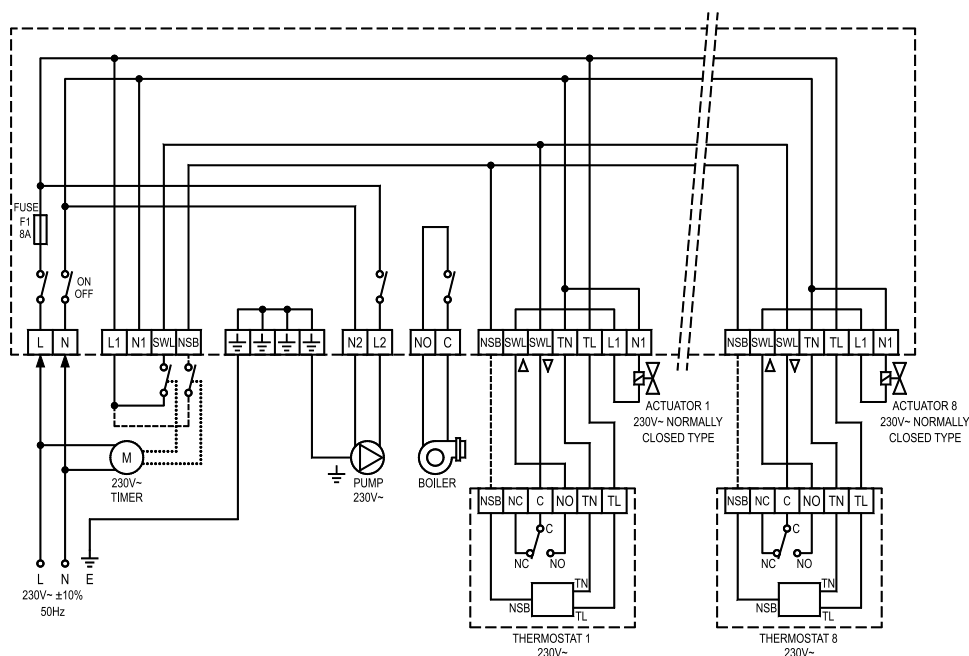
ALC D08 M02.........................€ 217

8 CHANNELS WIRING BOX
PUMP AND BOILER CONTROL 230V-24V

Electronic control for floor heating systems, with 230V~ power supply. The control offers the possibility to connect up to 8 channels, with a thermostat (24V~) and up to 5 actuators (24V~) each. Pump output with fixed delay time of 2.5 minutes, boiler control output and input for an external clock for the activation of the section of the actuators and thermostats.

TECHNICAL FEATURES

Power supply	230V~ ±10% 50Hz
Power absorption	According to the loads rating
Illuminated switch	On/Off
IP protection	IP44
Pump output	230V~
Boiler interlock output	Voltage free contact
Thermostats/actuators outputs	24V~
Time prog. output (optional)	24V~
Contacts rating: Pump	5A@250V~ SPST
Contacts rating: Boiler interlock	5A@250V~ SPST
Maximum applicable load:	
Actuators and thermostats	1A each channel
	2A total
Dimensions	H125 W320 D67mm
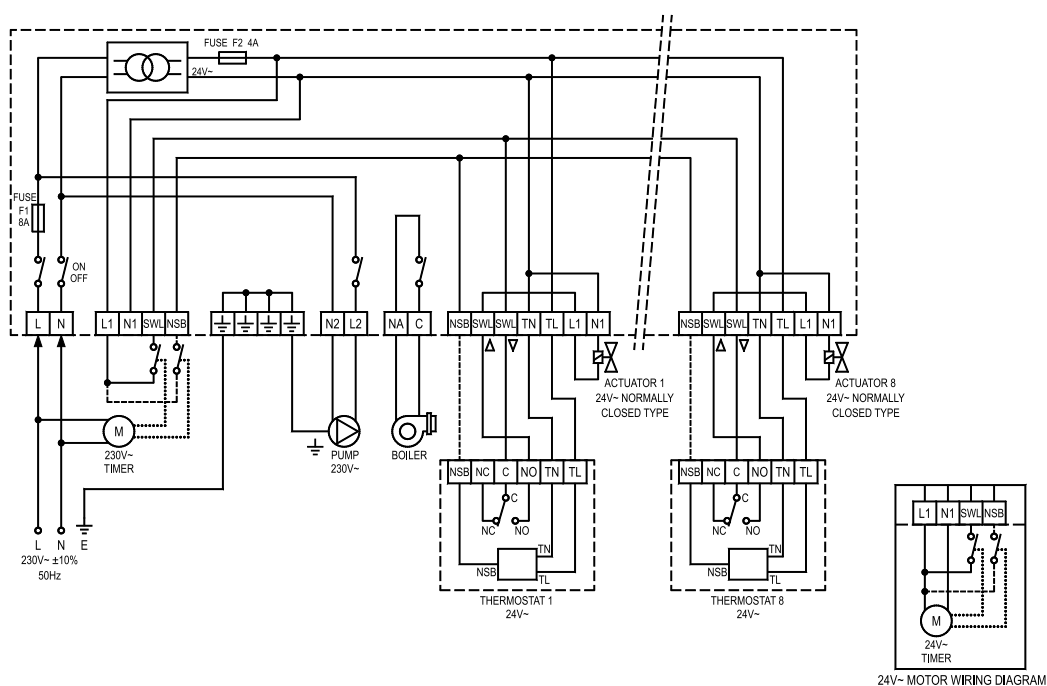
ALP 03U................................ € 102

8 CHANNELS WIRING BOX
PUMP CONTROL 230V - 24V AND BOILER

Electronic control for heating floor systems. The control offers the possibility to connect up to 8 thermostats and 8 actuators with selectable power supply between 230V~ or 24V~. Pump output is available + boiler interlock, input for an external clock for the activation of the section of the actuators and thermostats.

TECHNICAL FEATURES

Power supply	230V ±10% 50Hz or
	24V ±10% 50Hz
Power absorption	Depends on the loads connected
Output :	
Pump (powered)	5A @ 250V~ SPDT
Boiler (voltage free)	1A @ 250V~ SPDT
Actuators and thermostats	8x1A @ 250V~
Green LED indicator	Power supply
Red LED indicator	Pump active
IP protection	IP30
Case	ABS V0 self-extinguishing
Dimensions	H100 W245 D60mm

ALP 03U 230V
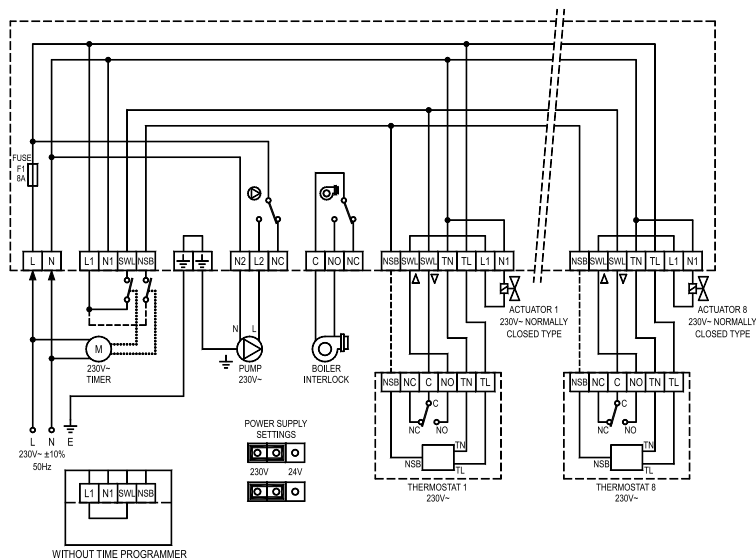
ALP 03U 24V
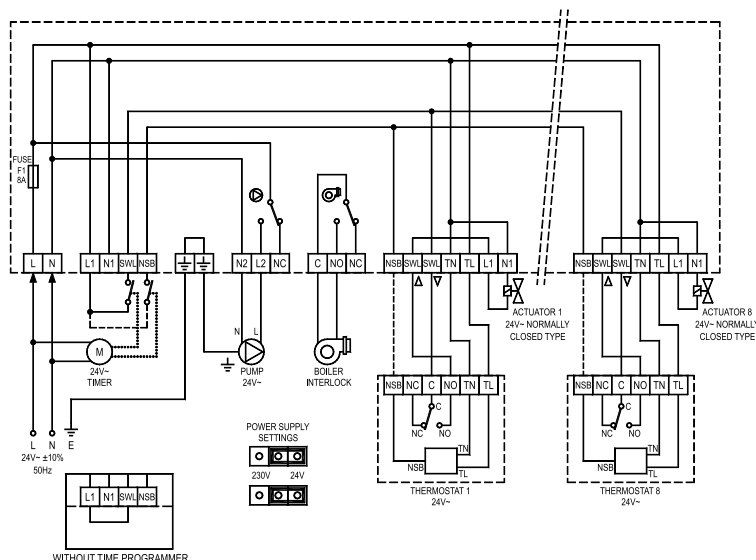
ALP 01U................................. € 219

12 CHANNELS WIRING BOX
PUMP CONTROL 230V - 24V AND BOILER

Electronic control for heating floor systems. The control offers the possibility to connect up to 12 thermostats and 12 actuators with selectable power supply between 230V~ or 24V~. Pump output is available and boiler interlock, input for an external clock for the activation of the section of the actuators and thermostats.

TECHNICAL FEATURES

Power supply	230V -15%+10% 50Hz or 24V -15%+10% 50Hz
Power absorption	1,5VA
Output:	
Pump (powered)	5A @ 250V~ SPDT
Boiler	1A @ 250V~ SPDT
Actuators and thermostats	12x0,5A @ 250V~
Green LED indicator	Power supply
Red LED indicator	Pump active
IP protection	IP44
Case	ABS V0 self-extinguishing
Dimensions	H125 W320 D67mm

ALP 01U 230V
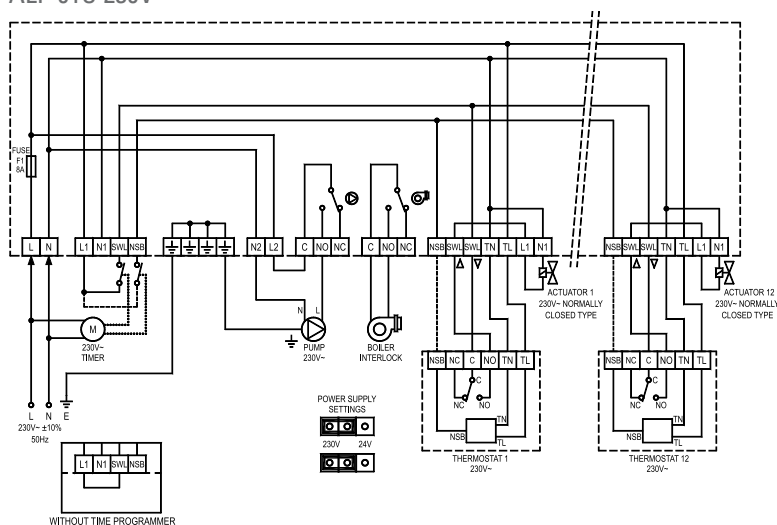
ALP 01U 24V
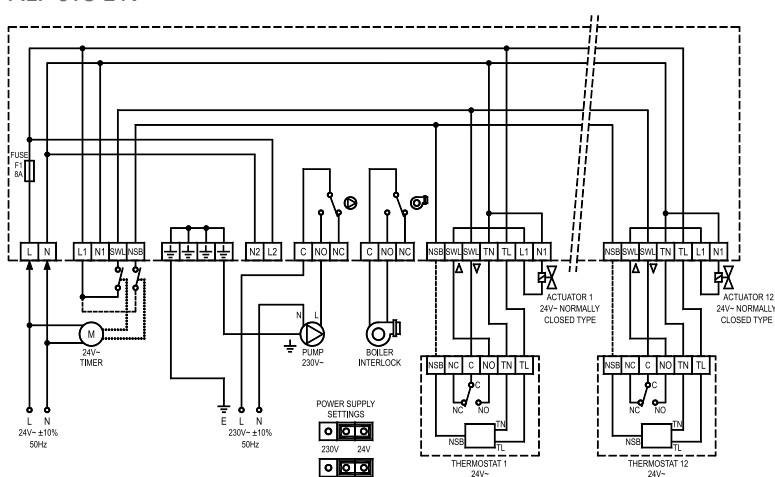
DIN RAIL MOUNTING KIT

AC KB01 .... € **9**
per: DLP241, DLP841, ALCPxx, ALPxxx
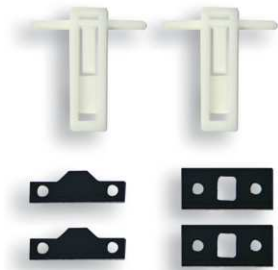
AC KB02 .... € **9**
per: ALCDxxx

WIRELESS SYSTEM

WIRELESS THERMOSTATS

NEW WAVE: THE INNOVATIVE SEITRON WIRELESS LINE

The new wireless line New Wave Seitron: technology and functionality at highest levels

Seitron offers a new wireless line for environmental temperature control: New Wave, an innovative, reliable and functional product that enables the management of up to 80 zones and the answer to implementation and cost issues, which would hardly find a solution otherwise.

If in some circumstances the choice of the cable or radio technology is purely a customer decision, in some other situations it is compulsory to install a wireless system, as an example every time it is not possible to install wires and cables over or inside the wall, such as for buildings with artistic value, or in new systems where non planned additional regulation points need to be added. This type of solution is also preferred in case of systems where the arrangement of the internal walls could often change and therefore the relevant wiring should be re-arranged every time.

Being extremely easy to install, New Wave is also an economical choice with respect to traditional cable systems that require one thermostat for each room in order to control the temperature in a house, each hard-wired to the relevant zone valve. In this case, the highest cost is due to labour, which, combined with the cost of cables and ducts, can easily reach as much as 70-90% of the overall cost. Therefore, even if the wireless solution is more expensive concerning thermostats and receivers, the relevant costs for cables and conduits is close to zero and, all things considered, cost labour is more than halved. In the final analysis, the total installed cost of New Wave compared to hard wired solutions is significantly lower.

Featuring a modern and functional design, the New Wave series of thermostats transmits a very low power radio signal – less than 1 mW – for a few milliseconds, thus reducing at lowest levels any electromagnetic pollution. Also the link reliability is at highest level: actually the European standards established that only devices with intermittent operation can be used at the frequency of 868 Mhz, which is the same as that used by the New Wave.

Convenient, easy and safe, the Seitron New Wave temperature control is the best choice in every situation.

KTR 004 .... € **176**
TRD 01B + DRR 01M

KIT VIA RADIO 1

Kit including one wireless LCD multifunction thermostat and one single channel receiver with 1 output.

KTR 005 .... € **156**
TRD 02B + DRR 01M

KIT VIA RADIO 2

Kit including one wireless LCD thermostat and one single channel receiver with 1 output.

KCR 005 .... € **186**
DCD 01B + DRR 01M

KIT VIA RADIO 3
FREETIME *plus*

Kit including one wireless LCD daily programmable thermostat and one single channel receiver with 1 output.

+ Special functions (pag. 52)

- **ACCESSORIES**
  Room Temperature Probe
  STA D01 .... € **11**

KCR 006 .... € **192**
DCW 01B + DRR 01M

KIT VIA RADIO 4
MAGICTIME *plus*

Kit including one wireless LCD weekly programmable thermostat and one single channel receiver with 1 output.

+ Special functions (pag. 54)

- **ACCESSORIES**
  Room Temperature Probe
  STA D01 .... € **11**

TR D01B .... € **93**

MULTIFUNCTION WIRELESS DIGITAL THERMOSTAT

Wireless thermostat with blue backlit LCD. It has several operating modes: comfort. economy, off, antifreeze, boost and it is configurable by setting parameters: offset, hysteresis setpoint min. max. etc.. Internal sensor for room temperature and facility for remote sensor for floor temperature. Heating/Cooling selection can be managed by the thermostat or on the receiver. Possibility to drive two stages heating systems.

TECHNICAL FEATURES

Working range	5 .. 35°C adjustable
Transmission frequency	868,150 MHz
Internal sensor	NTC (4k7 @ 25°C)
External sensor (opt.)	NTC (4k7 @ 25°C)
Max. distance from receiver	50 meters (inside average buildings)
Data trasmission time	3 min
Antenna type	Internal
IP rating	IP30
Dimensions	H87 W132 D27 mm
Class Reg.2013/811/EC	IV = 2,0%

REMOTE SENSOR
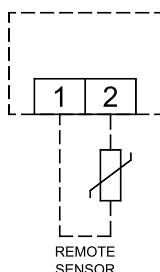
• **ACCESSORIES**
Room temperature probe
STA NP3...................................... € **17**

TR D02B .... € **72**

WIRELESS DIGITAL THERMOSTAT

Wireless thermostat with blue backlit LCD. It has several operating modes: comfort, economy, off/antifreeze. It is configurable by setting parameters: offset, hysteresis setpoint min. max. etc.. Internal sensor for room temperature and facility for remote sensor. Heating/Cooling selection can be managed by the thermostat or on the receiver. Limitation for final user intervention.

TECHNICAL FEATURES

Working range	5 .. 35°C adjustable
Transmission frequency	868,150 MHz
Internal sensor	NTC (4k7 @ 25°C)
External sensor (opt.)	NTC (4k7 @ 25°C)
Max. distance from receiver	> 50 meters (inside average buildings)
Data trasmission time	3 min/10 min
Antenna type	Internal
IP rating	IP30
Dimensions	H85 W85 D23,6 mm
Class Reg.2013/811/EC	IV = 2,0%

REMOTE SENSOR

• **ACCESSORIES**
Room temperature probe
STA NP3................................. € **17**
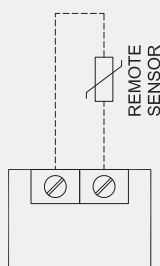
FREETIME *plus* VIA RADIO

DC D01B................................ € 103

- **ACCESSORIES**

  Room temperature probe
  STA D01 .... € 11

WIRELESS DAILY PROGRAMMABLE THERMOSTAT

Battery powered digital programmable thermostat, heating/cooling modes, daily programming with pins for 2 adjustable temperature levels. Redundant data transmission, every 3 minutes. Control of pellet stoves and floor heating systems. Anti-frost function. Large backlit LCD display. Internal sensor and facility for remote sensor.

TECHNICAL FEATURES

Programming	Daily
Operation	On/Off, PWM
Available set points	3 (comfort-economy-Off/anti frost)
Working range	5 .. 35°C
Adjustable hysteresis	0,1 .. 5,0°C
Internal sensor	NTC (10k Ohm @ 25°C)
Input for an external sensor	Configurable
Max. distance from receiver	50 meters
Transmission frequency	868,150 MHz
Antenna type	Internal
Dimensions	H87 W133 D32mm
Class Reg.2013/811/EC	IV = 2,0%

MAGICTIME *plus* VIA RADIO

DC W01B.............................. € 108

- **ACCESSORIES**

  Room temperature probe
  STA D01 .... € 11

WIRELESS WEEKLY PROGRAMMABLE THERMOSTAT

Battery powered digital programmable thermostat, heating/cooling modes, up to 7 different programs with 48 time cycles per day and 3 temperature levels (Comfort, Economy, Off/Antifrost). Redundant data transmission, every 3 minutes. Control of pellet stoves and floor heating systems. Anti-frost function.Holidays(1h ÷ 99dd.) and cleaning mode. Internal sensor and facility for remote sensor. Facility for switching on via telephone.

TECHNICAL FEATURES

Operation	On/Off, PWM
Working range	10 .. 30°C
Available time cycles per day	1 .. 48
Adjustable hysteresis	0,1 .. 5,0°C
Internal sensor	NTC (10k Ohm @ 25°C)
Input for an external sensor	Configurable
Max. distance from receiver	50 meters
Transmission frequency	868,150 MHz
Antenna type	Internal
Dimensions	H87 W133 D32mm
Class Reg.2013/811/EC	IV = 2,0%
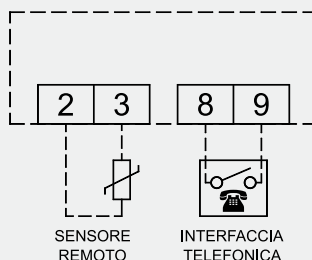
Note: The telephone command use ITP F22 1 or ITR 011

DTP F85 BC...........................€ 49

DTP F85 BCT.........................€ 61
Ver. antimanomissione

• **ACCESSORIES**

Room temperature probe
STA OP3.....................................€ 17

WIRELESS THERMOSTAT

Wireless thermostat for temperature regulation in domestic environment or offices to be combined with relevant receiver system. Internal sensor and input for remote sensor. Special pin stop system to optionally limit the setpoint knob range. Redundant radio command transmission with selectable time period. Heating/Cooling internal selection or manageable at receiver side. Possibility of regulation with economy managed at receiver side.

TECHNICAL FEATURES

Working range	6 .. 30°C
Transmission frequency	868,150 MHz
Internal sensor	NTC (100k @ 25°C)
Red LED indicator	Low battery
Max. distance from receiver	50 meters (inside average buildings)
Data trasmission time	3 min/10 min
Antenna type	Internal
IP rating	IP30
Dimensions	H85 W85 D28,5mm
Class Reg.2013/811/EC	IV = 2,0%
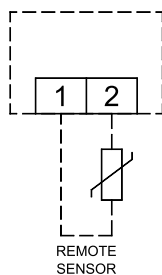
DA 0411 ....€ 77

ACTIVE ANTENNA FOR DLP MODULES

868,150 MHz receiving active antenna for DLP relay modules, equipped with a 5mt cable. It can be configured to make different jobs: Repeater: relays radio commands received by one or more wireless devices, for range problems in harsh environments or doubling the actual range. Receiver for home automation: this antenna can be connected to a pc or a home automation controller via RS485 bus, the home automation controller will get all the commands coming from wireless thermostats via proprietary protocol or MODBUS® RTU protocol. In case the device is used as a repeater or receiver and so it will not be connected to a DLP module, it will need a 12VDC external power supply.

TECHNICAL FEATURES

Transmission frequency	868,150 MHz
Bicolour LED indicator	Active module/status
IP rating	IP30
Power supply	6 .. 14 VDC (read txt)
Power absorption	80 mA max
Dimensions	H85 W85 D31mm
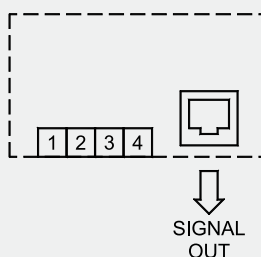
DR R01M .... € 83
Receiver 1 output

RECEIVER 1 OUTPUT

1-channel radio receiver, equipped with an integrated antenna and an SPDT relay output that can drive an actuator or a circulation pump or directly a boiler. Two-color LED for indicating the status of the output relay and the quality of the radio connection with the relative transmitter. Self-learning of the transmission code. Valid solution for all buildings where it is not convenient to take the cables from the thermostats to the heating plant.

TECHNICAL FEATURES

Power supply	230V~ ±10% 50Hz
Power absorption	11VA
Output (relay)	1 (x 6A) @ 250V~
Transmission frequency	868,150 MHz
Antenna type	Internal stylus
Bicolour LED indicator	Active relay/ transmission quality
IP rating	IP4X
Dimensions	H125 W78 D30,5mm
Class Reg.2013/811/EC	IV = 2,0%
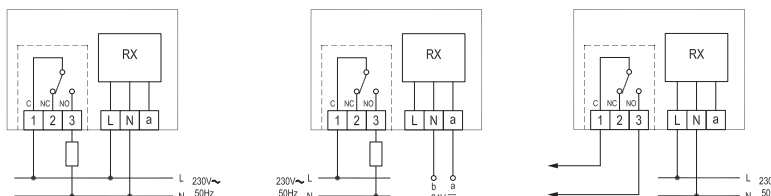
DR R02M .... € 92
Receiver 2 outputs

RECEIVER 2 OUTPUT

2-channel radio receiver, equipped with an integrated antenna and two SPDT relay outputs that can drive an actuator or a circulation pump or directly a boiler. Suitable for 2-zone solutions. Two-color LED for indicating the status of the output relay and the quality of the radio connection with the relative transmitter. Self-learning of the transmission code. Also available hot / cold in sequence with neutral zone, selectable with internal jumper.

TECHNICAL FEATURES

Power supply	230V~ ±10% 50Hz
Power absorption	11VA
Output (relay)	2 (x 6A) @ 250V~
Transmission frequency	868,150 MHz
Antenna type	Internal stylus
Bicolour LED indicator	Active relay/ transmission quality
IP rating	IP4X
Dimensions	H125 W78 D30,5mm
Class Reg.2013/811/EC	IV = 2,0%

DLP RELAYS MODULES 230V~ / 24V~

Two or eight channels relay module and circulator pump output for heating/cooling plants.

MODULES RELAY DLP241M, DLP841M AND DLP8412 INTRODUCTION

The DLP are relay modules for driving electro-thermal actuator or other types in wireless heating or cooling systems for home or offices. They feature 2 (DLP241M) or 8 (DLP841M / DLP8412) independent channels which in turn can be linked up to a wireless thermostat or programmable thermostat.

The modules also feature an auxiliary relay to control a pump or a boiler. Every single thermostat periodically sends a radio signal to the DAPF84 active antenna, which sends through a data cable the information to the DLP module, which will turn on or off the actuator relay output linked to the thermostat.

The auxiliary relay is turned on when at least one of the actuator output is active, and can be used to drive the pump or the boiler.

The modules have several LEDs on the frontal panel to indicate power on, output actuator status, auxiliary relay status; moreover the colour of the output actuator LEDs continuously shows the quality of the radio link with the relevant transmitter.

Configuration and testing of the system is extremely easy thanks to the self-learning function of the thermostat address.

It is possible to control with a night set back on any thermostat channel by associating it to a programmable thermostat channel.

The modules feature a Heating/Cooling input and a Global Standby input.

Actuators are 230V~ supplied or can be supplied from an auxiliary voltage (i.e. 24V~), and both NC normally closed and NO normally open actuators can be driven.

The DLP241M can be connected in chain to a DLP841M module to form a 10 channels system with just one antenna or up to 10 DLP841M modules can be connected in chain to form an up to 80 zone multichannel system with just one antenna. DLP8412, 230 V powered, can drive directly 24 V electro thermal actuators .

This system is a valid solution for all those buildings where it is not convenient to lay down wires from the thermostats to the heating-cooling room, moreover it enables high flexibility in positioning thermostats in the room.

2 CHANNELS RELAY MODULE + PUMP OUTPUT 230V

DLP 241M.............................. € 105

Two channels relay module for heating/cooling plants.

TECHNICAL FEATURES

Power supply	230V~ -15%+10% 50Hz
Power absorption	3W
Relay rating	2x3A @ 250V~ cosfi=1
Maximum total load current	6A
IP rating	IP30
Dimensions	H100 W130 D60mm
Class Reg.2013/811/EC	IV = 2,0%
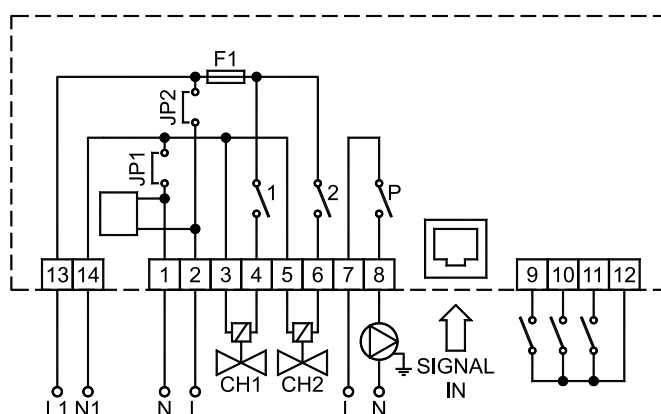
4 CHANNELS RELAY MODULE + PUMP OUTPUT 230V

DLP 441M.............................. € 145

Four channels relay module for heating/cooling plants.

TECHNICAL FEATURES

Power supply	230V~ -15%+10% 50Hz
Power absorption	4W
Relay rating	4x3A @ 250V~ cosfi=1
Maximun total load current	8A
Circulator relay rating	3A @ 250V~ cosfi=1 SPST
IP rating	IP30
Dimensions	H100 W245 D60mm
Class Reg.2013/811/EC	IV = 2,0%

RECEIVERS

Antenna attiva
(DA 0411)

Modulo a 8 relè
(DLP841M / DLP8412)
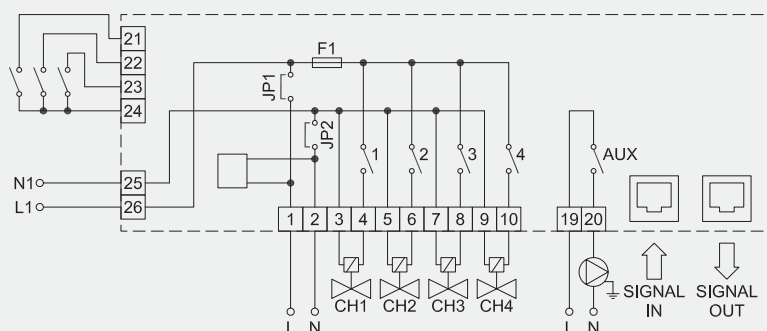
Installation example with 6 wireless thermostats, one DA 0411 active antenna and one DLP 841 2 relay module.

DLP 841M.............................. € 149

8 CHANNELS RELAY MODULE + PUMP OUTPUT 230V

8 channels relay module for heating/cooling plants.

TECHNICAL FEATURES

Power supply	230V~ -15%+10% 50Hz
Power absorption	4W
Relay rating	8x3A @ 250V~ cosfi=1
Maximun total load current	8A
Circulator relay rating	3A @ 250V~ cosfi=1 SPST
IP rating	IP30
Dimensions	H100 W245 D60mm
Class Reg.2013/811/EC	IV = 2,0%
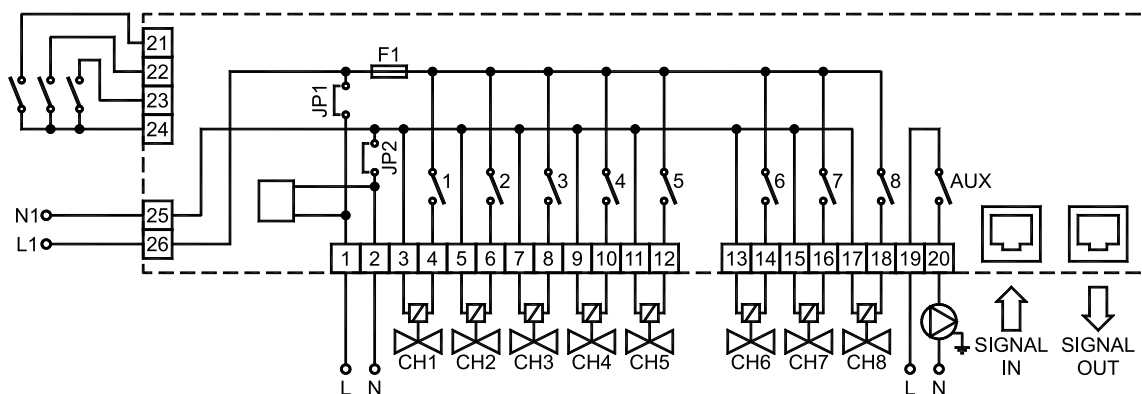
DLP 841 2 .... € 313

8 CHANNELS 24V MODULE + PUMP OUTPUT + BOILER INTERLOCK

Eight channels module for 24V low voltage heating/cooling plants. It is equipped with a high efficiency "green" AC/DC power supply to directly supply electrothermic actuators at 24Vdc.
This module can drive up to 14 electrothermic actuators with 24V 4W startup absorption.
The 8 outputs are overload and short circuit protected: in case of fault, the problem is signalled on the output LEDs.
The module features two auxiliary relay outputs to separately drive the pump and the boiler; a 230V pump can be directly wired.

TECHNICAL FEATURES

Power supply	90-264V~ 47-63Hz
Power absorption	2W (with DAPF84 connected)
Relay rating pump and boiler	5A@250V~ cosfi=1
Output rating actuator	8x3A @ 24V=
Max total power output	63W
Max load number	14 (4W startup)
IP rating	IP44
Dimensions	H125 W320 D67mm
Class Reg.2013/811/EC	IV = 2,0%
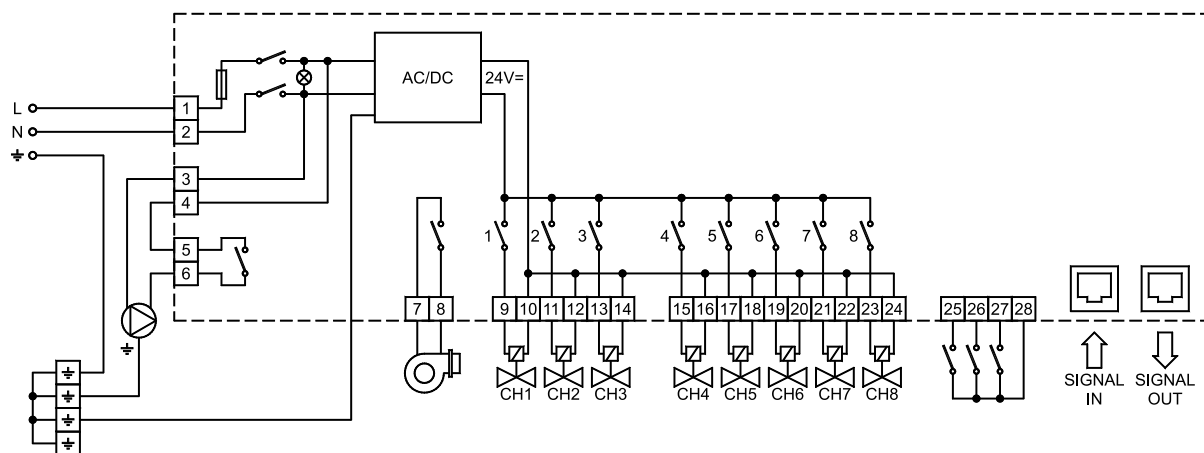
TYPICAL WIRELESS SCHEMES

1 ZONE INSTALLATION WITH WIRELESS PROG. THERMOSTAT OR THERMOSTAT

Wireless programmable thermostat
(DC D01B o DC W01B)

Wireless thermostat with LCD
(TR D02B)

Wireless thermostat with LCD
(TR D01B o TR D02B)

Wireless receiver
(DR R01M o DR R02M)

Boiler

2 ZONES INSTALLATION WITH WIRELESS PROG. THERMOSTAT OR THERMOSTAT - DAY/NIGHT

Active antenna
(DA 0411)

2 channels relay module + pump
(DLP 241M)

Wireless programmable thermostat
(DC D01B o DC W01B)

Wireless thermostat
(DTP F85BC)

Wireless thermostat with LCD
(TR D01B o TR D02B)
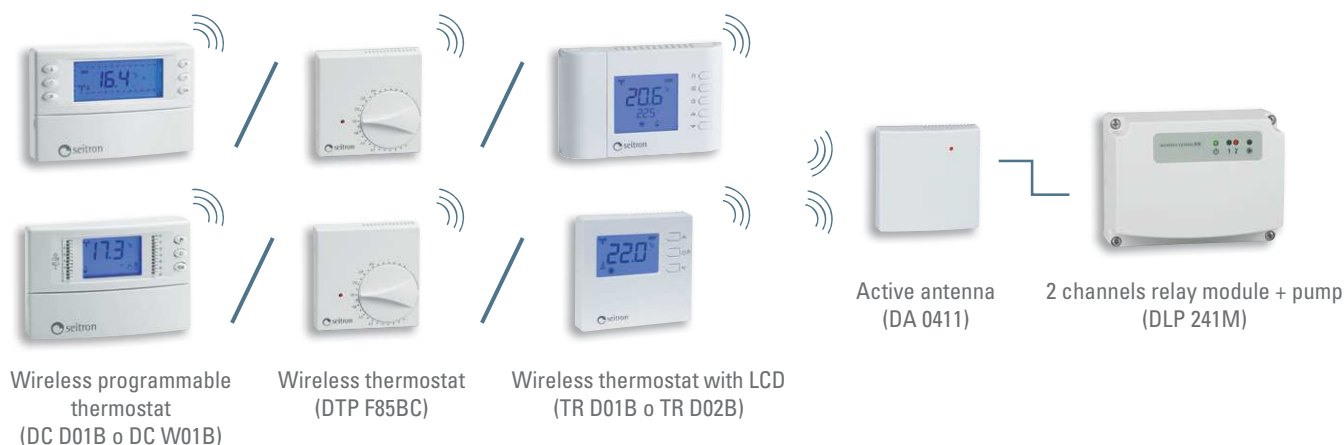
MULTIZONE INSTALLATION WITH WIRELESS PROG. THERMOSTAT OR THERMOSTAT FROM 8 TO 80 ZONE

Active antenna
(DA 0411)

8 channels relay module + pump
(DLP 841M)

UP TO 10 MODULES
(with a single DA 0411)

DC D01B, DC W01B, DTP F85BC, TR D01B, TR D02B FINO A 80
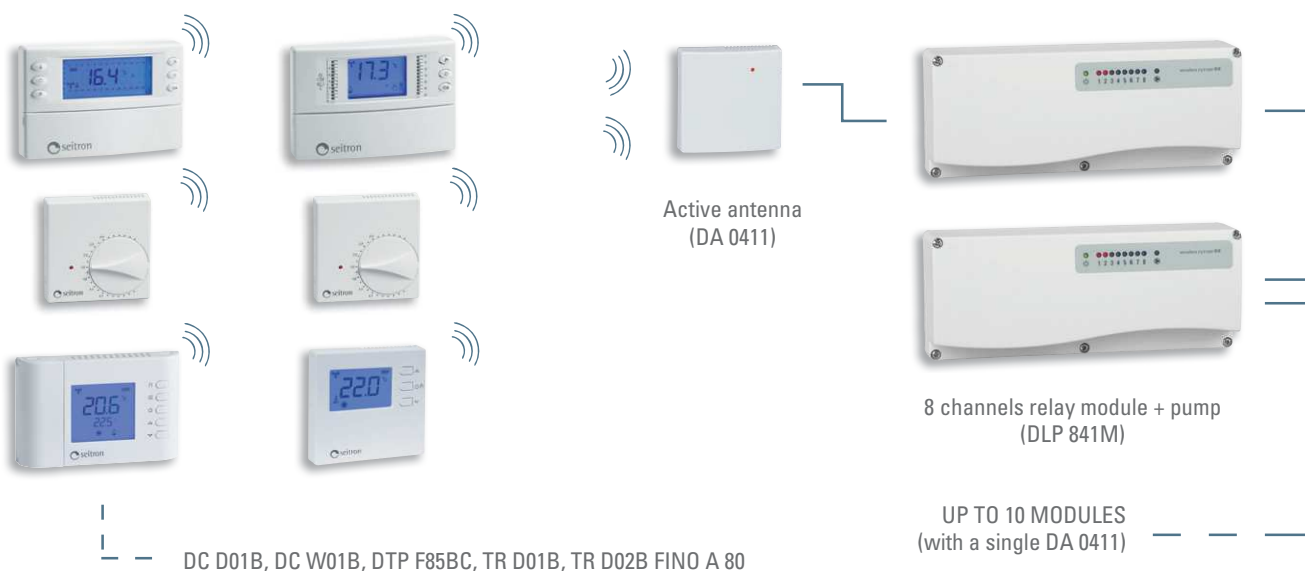
WIRELESS GAS DETECTION SYSTEM

In order to simplify the installation of gas detectors in domestic or commercial living environments where significant numbers of detection points are also present, Seitron has developed a reliable and competitive range of products.

The detector, installed in the room where it is necessary to detect the gas leak, in addition to performing the local safety functions (optical and acoustic alarm, test function, fault detection), also transmits the alarm signal to the receiver via a 868MHz radio signal (ISM band). This makes it possible to do without the cables normally required between the detector and the point where it is necessary to perform the interception of the gas through a suitable electromechanical valve.

The radio transmission is carried out on the devices through Hardware components and extremely reliable Firmware functions, responding to the current European regulations on the use of ISM (Industrial, Medical and Scientific) radio bands and able to guarantee the remote transmission function even at distances very high. If some detectors are particularly distant from the receiver, it is possible to use the appropriate repeater device which then extends, by doubling or tripling, the operating distance between the elements of the system. The antenna of the radio system, both in the detector / transmitter and in the receiver of the system, is incorporated inside the plastic container.

In this architecture, a high number of Segugio Plus Radio gas detection units can coexist and transmit any alarm and fault signals to the radio receiver, which in turn is equipped with exchange relays which will activate the relative actuators.

The DRG02M receiver version can collect the radio signals coming from up to 100 units Segugio Plus Radio, just enough to satisfy the needs of a commercial activity or a medium-sized residential condominium. In order to simplify the installation and configuration of the system, the DRG02M receiver has an OLED graphic display that allows the coupling of each radio gas detector in a quick and safe way. The same display provides information of a diagnostic nature should one wish to check the status of the system or of the individual detectors that constitute it. In particular, the receiver provides the following functions:
- Coupling of a detector.
- Elimination of a detector.
- Indication of the intensity level of the radio signal (this function is of great importance to ensure that the radio connection is functional and efficient.
- Indication of the last alarms received

The receiver is housed in a plastic case that makes the work of the installer extremely simple since it requires only the wiring of the mains power supply and the controlled devices (solenoid valve and fault indicator).

SEGUGIO WIRELESS

DD MSM1
Segugio Wireless Methane

DD MSM1
Segugio Wireless LPG

DR G01M
Receiver up to 12 detectors   Electovalve

DR G02M
Receiver up to 100 detectors   Electovalve
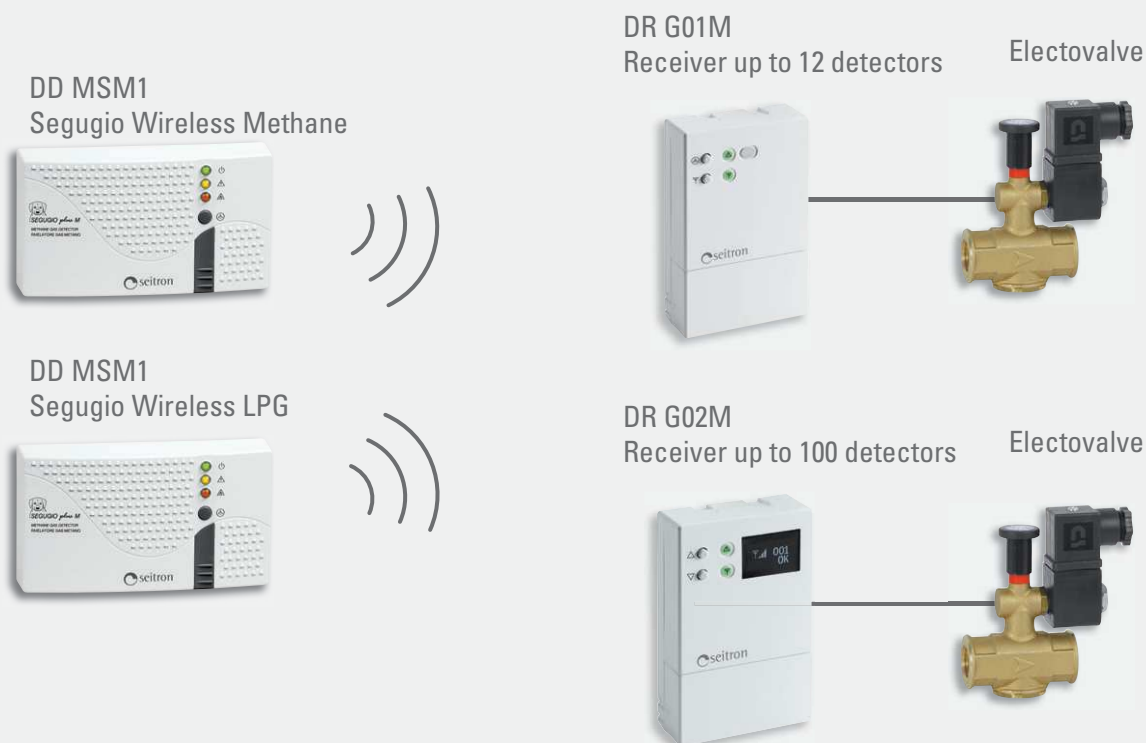
KG M001..................................€ 228

Kit Segugio Methane

KIT SEGUGIO METHANE WIRELESS

KIT includes 1 detector Segugio wireless DD MSM1 and
1 receiver DR G01M

KG G001..................................€ 228

Kit Segugio LPG

KIT SEGUGIO LPG WIRELESS

KIT includes 1 detector Segugio wireless DD GSM1 and
1 receiver DR G01M
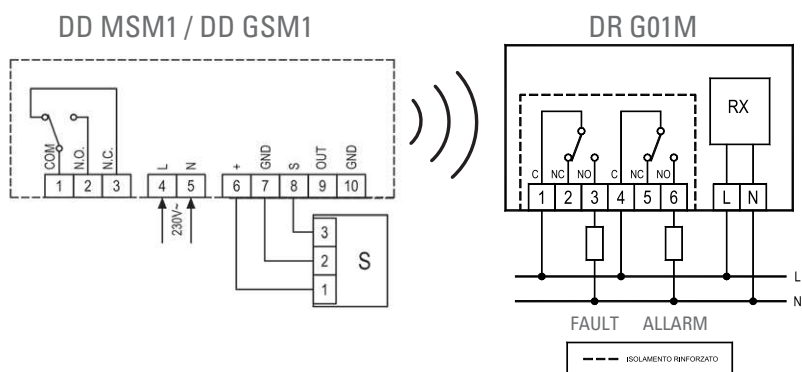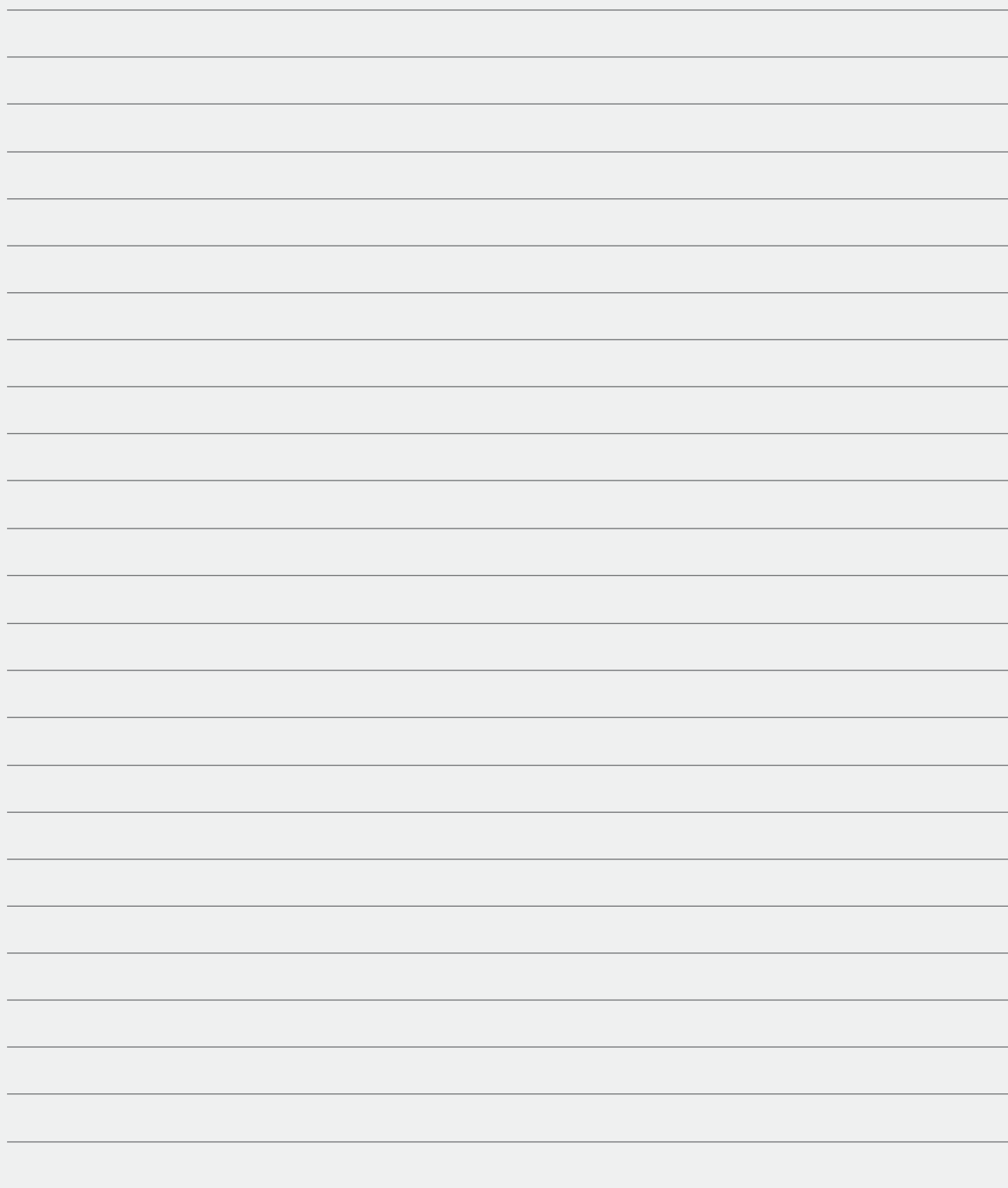
FAN COIL THERMOSTATS

DIAMOND *new line*

SEITRON PRESENTS THE NEW RANGE OF FAN COIL THERMOSTATS

Diamond New Line renews completely its design, while maintaining completeness and technological versatility.
The New Line range consists of 10 different wall-mounted thermostats, 1 recessed-mounted thermostat and 2 power interfaces.
Fan Coil thermostats are the result of 30 years of experience. The range offers from the simplest and cheapest devices up to the most sophisticated ones, reaching 32 digital programmable functions, suitable for driving 2 0-10 Vdc actuators and fan.

DIAMOND RANGE COMPARISON CHART

Code	Mounting	Power	LCD	3 speed selector	Estate/Inverno Heating/Cooling	On/Off	Fan thermostat	Valves thermostat	Programmable Special Functions
TFD01M TFD012	Parete	230V/24V	No	Manual	Manual	Manual	On-Off	2 On-Off	No
TFD04M TFD042	Parete	230V/24V	No	Manual	Remote	Manual	On-Off	2 On-Off	No
TFM01M TFM012	Parete	230V/24V	No	Auto Manual	Manual	Manual	On-Off	2 On-Off	No
TFX01M TFX012	Parete	230V/24V	No	Manual	Auto	Manual	On-Off	2 On-Off	No
TFA01M	Parete	230V/24V	No	Manual	Manual	Manual	On-Off 0..10V	2 On-Off	No
TFF01M	Parete	230V/24V	Si	Auto Manual	Manual Auto Remote	Manual Adjustable	On-Off	2 On-Off PWM	Si
TFPEI2MI	Incasso	230V	No	Auto Manual	Manual	Manual Adjustable	On-Off	2 On-Off	Si
TFZ01M	Parete	230V/24V	Si	Auto Manual	Manual Auto Remote	Manual Adjustable	On-Off 0..10V	2 0..10V	Si

DIAMOND *new line*

TF D01M.................................. € **57**
230V~

TF D012................................... € **53**
24V~

ELECTRONIC FAN COIL THERMOSTAT

Thermostat with cooling/off/heating switch and fan speed slide selector. Fan can be either controlled by thermostat or always running. Facility for external temperature probe and for a bimetal thermostat for the "cutoff thermostat" function. By means of the mechanical pins the angle of rotation of the knob can be limited.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50/60Hz (TFD01M)
	24V~ -15/+10% 50/60Hz (TFD012)
Working range	5 .. 35°C
Differential	< 0.5 °C
Internal sensor	NTC (10k Ohm @ 25°C)
Output (relay)	5(1)A @ 250V~ SPDT
Slide switch 1	3 speeds
Slide switch 2	Heating/off/cooling
Dimensions	H87 W132 D37mm
IP rating	IP20
Class Reg.2013/811/EC	I = 1,0%

• **ACCESSORIES**

Remote sensor
STL D01 .... € **9**

Notes: In order to select the external or internal sensor mode, a jumper is located on the p.c. board. The remote NTC sensor is to be ordered separately (i.e.: STLD01).

DIAMOND *new line*

TF D04M.................................€ 65
230V~

TF D042.................................€ 72
24V~

• **ACCESSORIES**

  Remote sensor
  STL D01 .... € 9

ELECTRONIC FAN COIL THERMOSTAT

Thermostat with off/on/manual switch and fan speed slide selector.
Remote heating/cooling changeover facility. It can control, besides the fan, a valve if installed. Motor and valve can be either controlled by the thermostat or always running. Internal sensor and facility for remote sensor. By means of the mechanical pins the angle of rotation of the knob can be limited.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz (TFD04M)
	24V~ -15/+10% 50Hz (TFD042)
Working range	5 .. 35°C
Differential	< 0.5 °C
Internal sensor	NTC (10k Ohm @ 25°C)
Output (relay)	5(1)A @ 250V~ SPDT
Slide switch 1	3 speeds
Slide switch 2	Off/on/manual
Dimensions	H87 W132 D37mm
IP rating	IP20
Class Reg.2013/811/EC	I = 1,0%
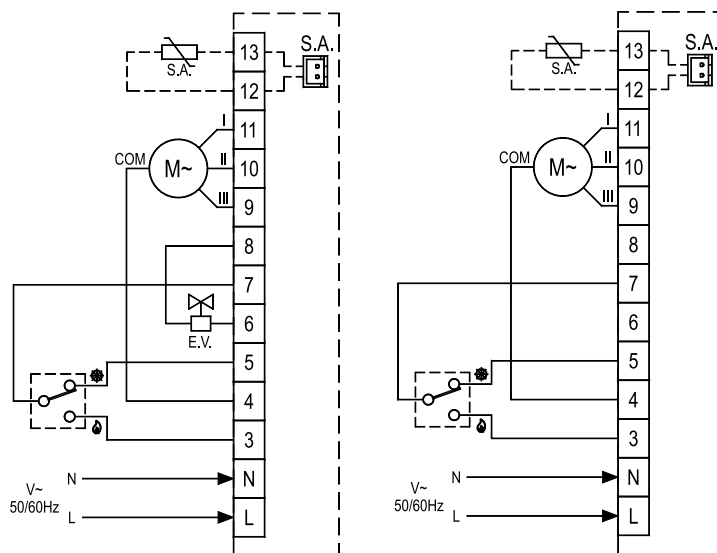
Notes: In order to select the external or internal sensor mode, a jumper is located on the p.c. board. The remote NTC sensor is to be ordered separately (i.e.: STL D01).

DIAMOND *new line*

TF M01M.................................€ **87**
230V~

TF M012.................................€ **111**
24V~

ELECTRONIC FAN COIL THERMOSTAT

Electronic thermostat with heating/off/cooling selector and manual or automatic three-speed selector. Operation with 2 or 4 tubes and anti-stratification function. Operation with internal sensor, remote sensor or with "cutoff thermostat". Input for connecting a window contact.
By means of the mechanical pins the angle of rotation of the knob can be limited.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz (TFM01M)
	24V~ -15/+10% 50Hz (TFM012)
Working range	5 .. 35°C
Internal sensor	NTC (10k Ohm @ 25°C)
Differential	< 0.5 °C
Slide switch 1	I / II / III / auto
Slide switch 2	Cooling/off/heating
Output (relay)	3(1)A @ 250V~ SPDT
Dimensions	H87 W132 D37mm
IP rating	IP30
Class Reg.2013/811/EC	V = 3,0%

• **ACCESSORIES**

Remote sensor
STL D01 .... € **9**
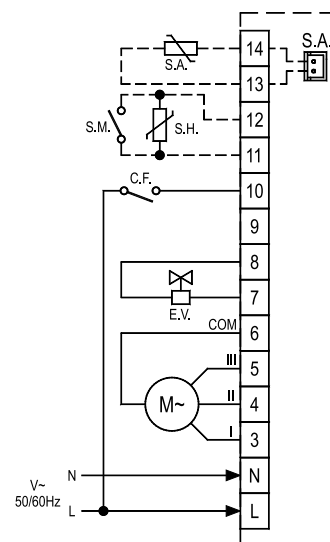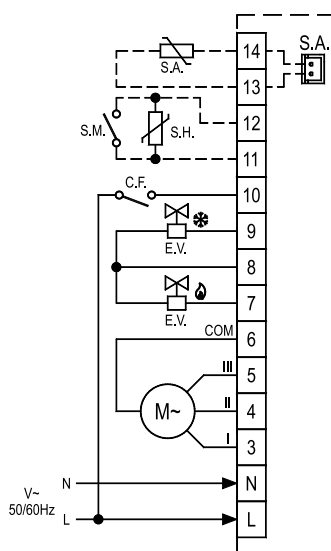
DIAMOND *new line*

TF X01M .... € **82**
230V~

TF X012 .... € **77**
24V~

• **ACCESSORIES**
   Remote sensor
   STL D01 .... € **9**

FAN COIL ELECTRONIC THERMOSTAT WITH DEAD BAND

Thermostat with on/off switch and fan speed slide selector, adjustable dead band, double output heating/cooling, automatic changeover based on air. Internal sensor and facility for remote sensor.
By means of the mechanical pins the angle of rotation of the knob can be limited.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz (TFX01M)
	24V~ -15/+10% 50Hz (TFX012)
Working range	5 .. 35°C
Sensor	NTC (10k Ohm @ 25°C)
Differential	<0.5°C
Bicolour LED	Heating/cooling
Slide switch 1	I / II / III
Slide switch 2	On/off
Dead band (int. trimmer)	1 .. 11°C
Dimensions	H87 W132 D37mm
IP rating	IP30
Class Reg.2013/811/EC	I = 1,0%
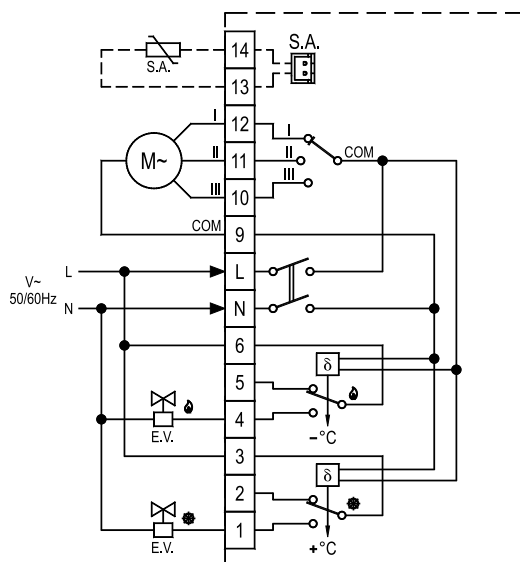
Notes: In order to select the external or internal sensor mode, a jumper is located on the electronic board. The remote NTC sensor is to be ordered separately (i.e.: STL D01).

DIAMOND *new line*

TF F01M.................................. € 112

FAN COIL DIGITAL THERMOSTAT

Digital configurable thermostat with automatic or manual fan speed selection. Manual, automatic or centralised heating/cooling with an external input selection; dead band function and changeover based on supply water. Possibility to control valves or fan or both.
LCD showing all set functions. Suitable for On/Off, PWM, Floating actuators, resistor and heat pump control. Special functions: Economy, Dirty Filter Warning, Window contact. Facility for remote sensor and supply water pipe sensor.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz or
	230V~ ±10% 60Hz or
	24V~ -15/+10% 50/60Hz
Working range	Adjustable: 5 .. 35°C
Internal sensor	NTC (10k Ohm @ 25°C)
Outputs (N.O. relay): 3x fan speed	3A @ 230V ~
Outputs: 4x valves	4x0,3A (cosfi=1)
(on/off or floating), servomotor, electric heater and heat pump	
Speed control	Automatic/manual
Differential	0,2 .. 1,0°C
LCD display	Multifunction
Dimensions	H87 W132 D23,6mm
IP rating	IP30
Class Reg.2013/811/EC	V = 3,0%

A   Opens
C   Closes
Sc   Floating actuator
SA   Room sensor
SM   Supply water sensor
EI   Remote Heat/Cool
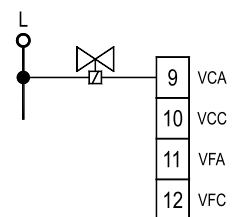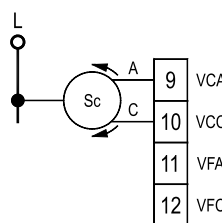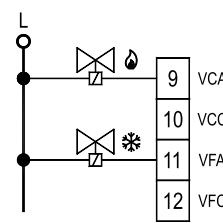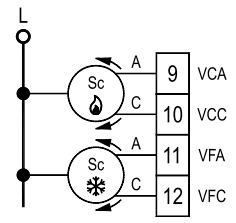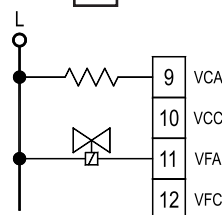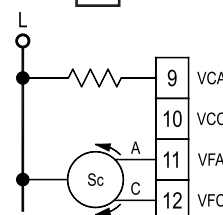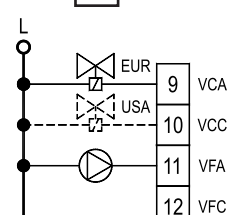
• ACCESSORIES
Remote sensor
STL D01 .... € 9

TFP EI2 MI .... € 134

FAN COIL THERMOSTAT FLUSH-MOUNTED

Programmable fan-coil thermostat for recessed mounting (3 modules), on/off and speed control buttons. Switch for heating/cooling manual change. Output for two electrovalves. Plastics colour: RAL 7016.
Suitable for plates B-TICINO (Living), AVE (Sistema 45), VIMAR (Idea), (not included)(1).

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz
Motor output (relay)	3x3A @ 250V~ SPST
Electrovalve output (relay)	2x3A @ 250V~ SPST
Internal sensor	NTC (4k7 Ohm @ 25°C)
Working range	6 .. 30°C
3 bicolour LED indicator (heating=red; cooling=green)	Fan speed
Switch	Heating/cooling
Button 1	On/off
Button 2	Speed selection
Dimensions	H61 W116 D54mm
IP rating	IP20
Class Reg.2013/811/EC	I = 1,0%
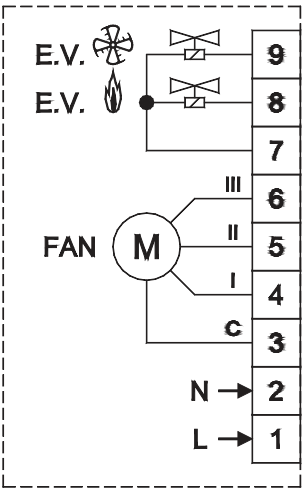
NON FITTING PLATES
(B-TICINO)

FITTING PLATES
MARCA
BTICINO®
VIMAR®
AVE®

PROGRAM POSSIBILITY		
PARAMETER	VALUE=0	VALUE=1
Speed selection	Manual	Automatic
Start/stop	No memory: always starts in off state	Memory: starts as in the last operative state
Electrovalve	Controlled	Non controlled
Motor	Controlled	Non controlled

DIAMOND *new line*

TF A01M................................. € **95**

ANALOG FAN COIL THERMOSTAT 230Vac or 24Vac

Analog regulator for fan-coils with 0..10 Vdc output for proportional drive of fans equipped with E.C. motor. Combined temperature sensor (internal or external). Four positions fan speed switch, with range selectable through internal trimmers. Power supply: 230Vac or 24Vac selectable with internal jumpers. Fan and valves operation selectable with internal jumpers.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50/60Hz (TFD01M)
	24V~ -15/+10% 50/60Hz (TFD012)
Working range	5 .. 35°C
Differential	< 0.5 °C
Internal sensor	NTC (10k Ohm @ 25°C)
Output (relay)	5(1)A @ 250V~ SPDT
Slide switch 1	4 speeds
Slide switch 2	Heating/off/cooling
Dimensions	H87 W132 D37mm
IP rating	IP20
Class Reg.2013/811/EC	V = 3,0%
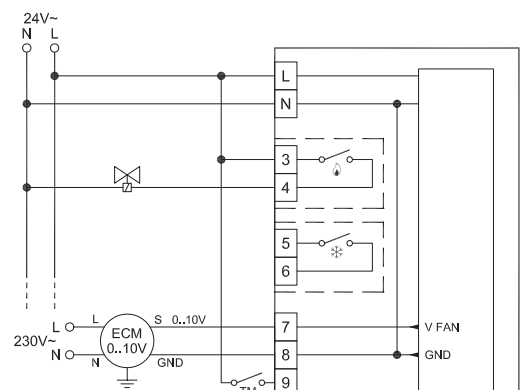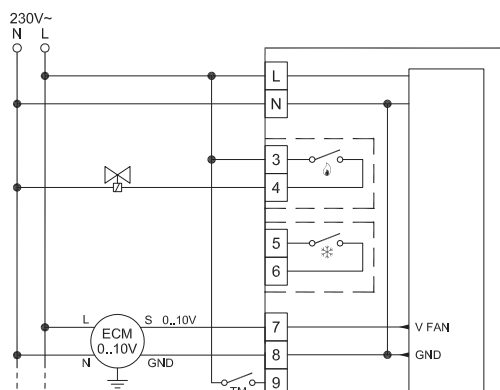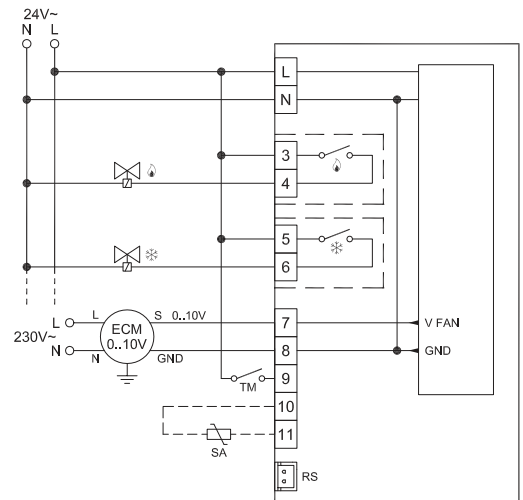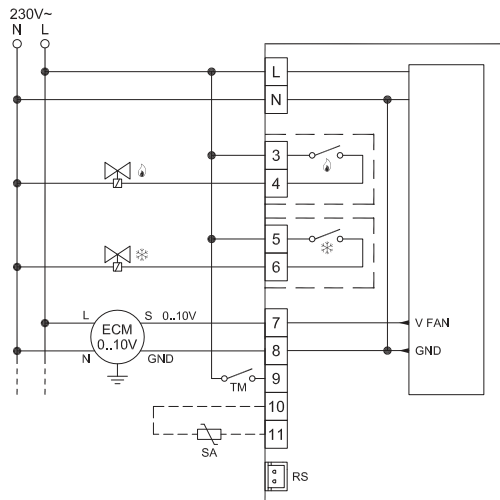
• ACCESSORIES
Remote sensor
  STL D01 .... € **9**

DIAMOND *new line*

TF Z01M .... € **95**

FAN COIL DIGITAL THERMOSTAT
DRIVING 0-10V FOR MOTORIZED VALVES AND FAN

Digital configurable thermostat like TFF01M, but suitable for driving of 0-10V actuators. Driving of fan motor via 3 relays or proportional via 0-10V signal. Possibility to supply the fan motor with 230V~, thermostat and actuators with 24V~. Temperature indication in °C or °F.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz or
	230V~ ±10% 60Hz or
	24V~ -15/+10% 50/60Hz
Working range	Adjustable: 5 .. 35°C
Internal sensor	NTC (10k Ohm @ 25°C)
Proportional outputs	0 .. 10 Vdc
Speed control	Automatic/manual
Differential	0.2 .. 1,0°C
LCD display	Multifunction
Dimensions	H87 W132 D23,6mm
IP rating	IP30
Class Reg.2013/811/EC	V = 3,0%

JP2	230/24V~ selection
V Heat	0..10V heating signal output
V Cool	0..10V cooling signal output
V Fan	0..10V fan signal output
Heat	Heating valve output
Cool	Cooling valve output
E/I	Remote input to activate "centralised Heating/Cooling" function
RDC	Remote input to activate "Economy" function
M	Fan motor
Sc	0..10V Floating actuator
S.M.	Supply water sensor
S.A.	Room sensor
CF	Remote input to activate "Window contact" function
RS	Connector for remote room temperature sensor connection. See "Electric connections"

• **ACCESSORIES**

Remote sensor

STL D01 .... € **9**
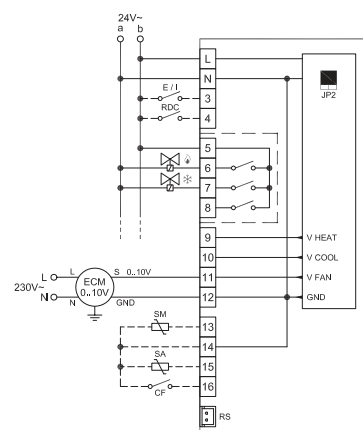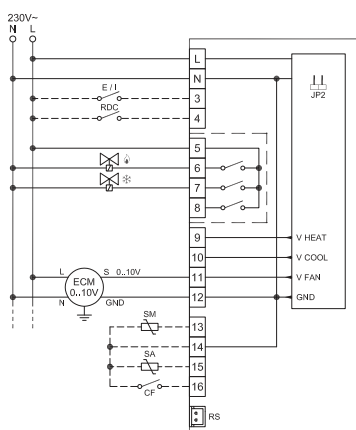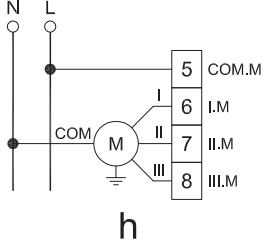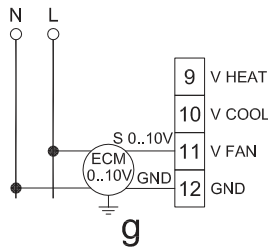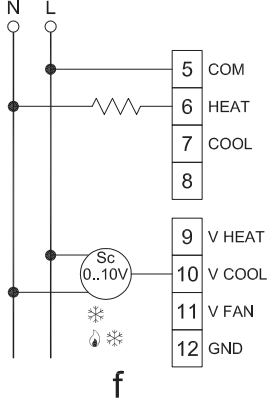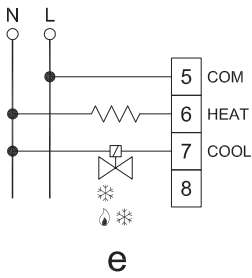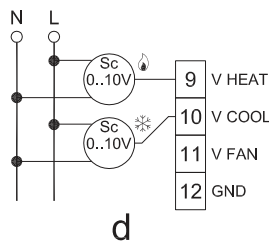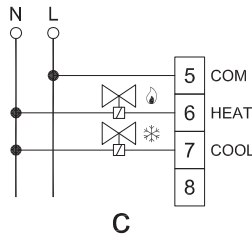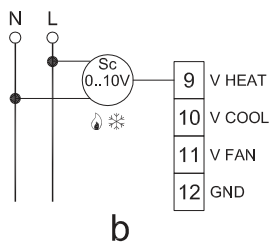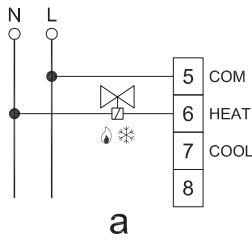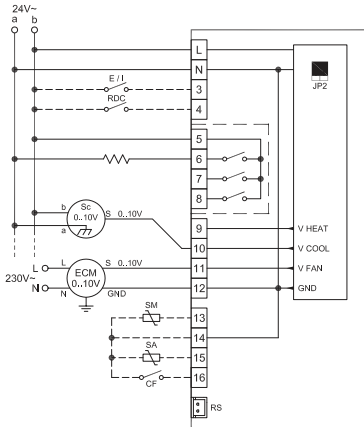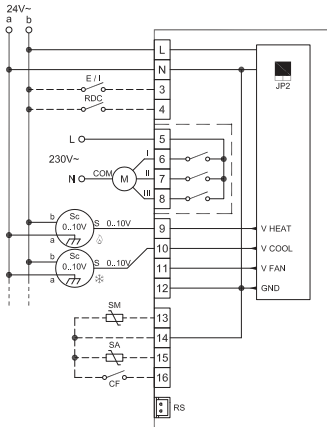
IFM EI1 M .... € **35**

REMOTE CONTROL FOR FAN-COIL

Remote control for fan-coils with 3-speed slide switch and heating/off/cooling switch.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz
Contact rating	5A @ 250V~
Slide switch	3 speeds
Slide switch	Heating/off/cooling
IP rating	IP30
Dimensions	H80 W79 D37mm
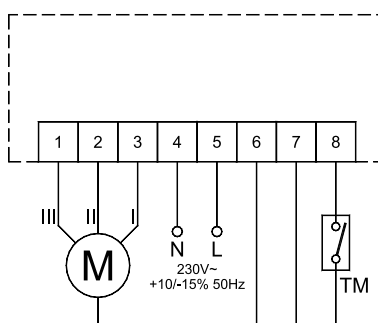
AC VM01 .... € **20**

SPEED REGULATOR FOR FAN-COIL E.C.

Transmitter with 0..10 Vdc output, 0..100% adjustable.
Power supply 24Vac.

TECHNICAL FEATURES

Power supply	24V~ ±20% 50/60Hz
Output	0..10 Vdc
Maximun output load current	10mA
Output load	≥1000 Ohm (1k Ohm)
IP rating	IP30
Dimensions	H85 W85 D31mm
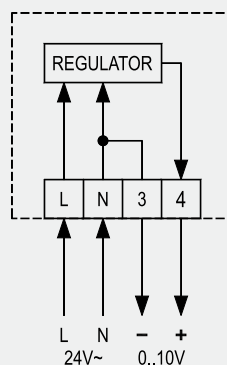
POWER INTERFACE TFEINF

This unit, which is not a thermostat, performs the useful function of controlling up to 4 fan coils in parallel starting from a single thermostat, for example by a TFD01M.
The device has on board all the necessary relays power. The most common application is in the open spaces.

4 fan-coils power interface (TFEINF)

Thermostat for fan-coil (TFD01M)

TFE INF POT .... € **79**
3 relays for one monophase motor 1/2 HP (16A)

TFE INF M01 .... € **88**
3 relays for two 10A motors

TFE INF .... € **95**
3 relays for four 3A motors

FAN COILS POWER INTERFACE

Power interface: it allows driving up to 4 fan-coils through a single thermostat. 6 modules case for DIN rail mounting.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz
Contact rating (for code)	1 x 16A @ 250V~ SPDT
	2 x 10A @ 250V~ SPDT
	4 x 3A @ 250V~ SPDT
IP rating	IP30
Dimensions	H90 W105 D70mm

TFE INF

STRAP-ON MICROTHERMOSTAT
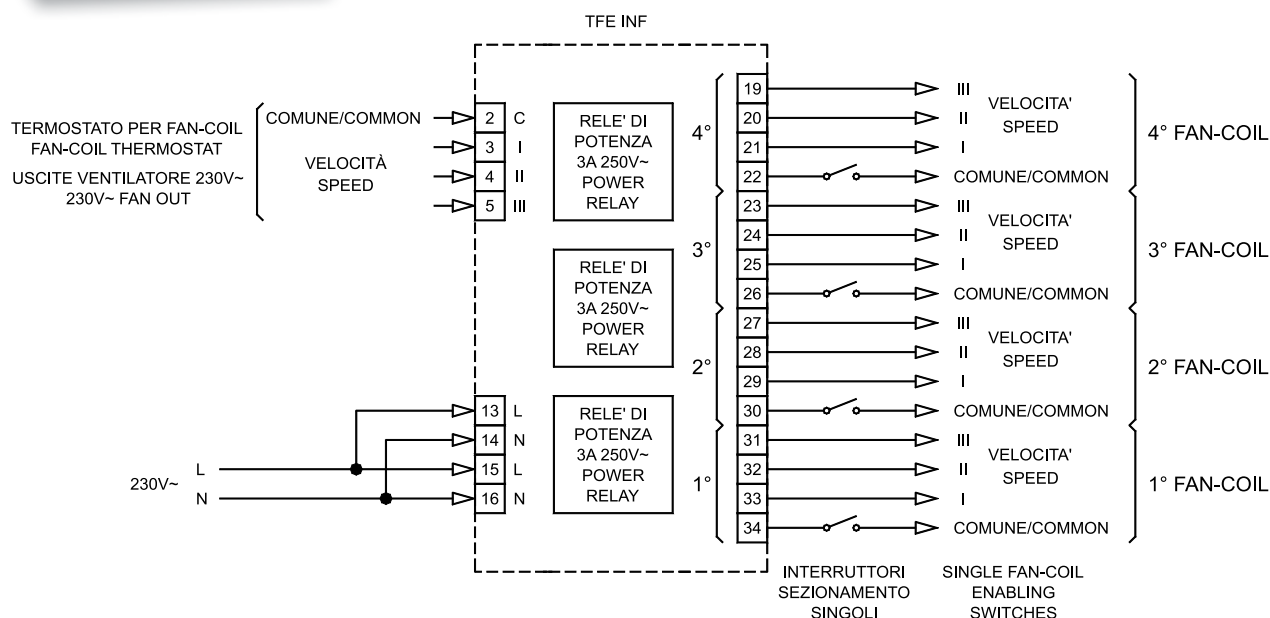
TTM 003 MI .... € **7**

Strap-on microthermostat on-off N.O., working temperature: @ 42°C ± 3.5°C, breaks @ 31°C. Supplied with 200 mm cable, faston and terminals.

TECHNICAL FEATURES

Sensor type	Bimetallic
Accuracy	±3,5°C
Contacts rating	10(1,66)A @ 250V~ n.a.
Dimensions	H30,3 W20,8 D19,3mm

AC IF01 .... € **109**
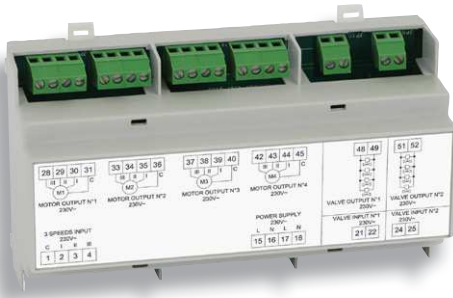
6 OUTPUT POWER INTERFACE

Power interface: it allows driving up to 4 fan-coils through a single thermostat with 230V power supply and 2 outputs to drive up to 4 valves each. 9 modules case for DIN rail mounting.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz
Contact rating motor output	5(1)A @ 230V~
Contact rating valves output	10A - 250V~
IP rating	IP30
Dimensions	H87 W160 D63mm

RESIDENTIAL GAS DETECTORS

GAS LEAK DETECTORS FOR RESIDENTIAL

Seitron designs and manufactures gas detectors for civil or domestic use since more than twenty years. From the beginning the choice was limited to 3 gases (2 explosive gases, methane and LPG, and 1 toxic gas, carbon monoxide - CO) and to produce gas leak detectors that deliver the maximum guarantees to those who use them for their own safety: -Only detectors with acoustic alarm and relay output to activate normally closed (N.C.) and normally open (N.O.) electrovalve. -Only detectors powered with 230V mains voltage. DEFENSE AGAINST POISONING BY CARBON MONOXIDE (CO). Carbon monoxide (CO) has been named the silent killer: it is odorless, colorless and tasteless. It is also slightly less dense than air, so it tends to accumulate slowly in the upper part of the rooms. Its most dangerous characteristic is that humans cannot notice his presence. The most insidious fatal cases concern people who fall asleep with a slight headache and never wake up again. This should make clear to all the usefulness of CO alarms.

BEAGLE & SEGUGIO COMPARISON CHART

FEATURES	BEAGLE	SEGUGIO
Zone Number	1	2
Natural Gas	Si	Si
LPG	Si	Si
CO	Si	Si
Kit With 3/4" Gas Electrovalve (NO/NC)	Si	Si
Power Supply	230 V~	230 V~
Acoustic Alarm	Si	Si
Output for 230V~ Gas Ev	Si	Si
Output for 12V= Gas Ev	No	Si
Sensor Life	5 Years	5 Years
Precalibrated replaceable sensor	Si	Si
Instrument Warranty	3 Years	3 Years
Alarm Test Button	Si	Si
Yellow LED for Fault Alarm	Si	Si
Red LED for Gas Alarm	Si	Si
Green LED for Working Unit	Si	Si
Dimensions	W85 x H107 x D38 mm	W148 x H84 x D40 mm

BEAGLE *plus* METANO

RGD ME5 MP1R.................... € **90**

RGD ME5 MP1T.................... € **96**
with 2 m cable and plug

GAS LEAKAGE DETECTOR - METHANE -

Domestic methane gas detector with output for driving 230V~ cut-off valves. Test button. In compliance with CEI-EN 50194-1 standard.
IMQ quality mark and compliance with CEI-EN 50194-1 certify the absolute reliability and efficiency of the device. Precalibrated sensor, directly replaceable by user.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz
Sensor type	SnO2 Semiconductor
	Precalibrated sensor, directly replaceable by user
Alarm threshold	10% L.E.L.
Output (relay)	5(2)A @ 250V~ SPDT
Sensor life	5 years
Green LED indicator	Detector active
Yellow LED indicator	Detector failure
Red LED indicator	Alarm
IP rating	IP42
Dimensions	H107 W85 D38mm

BEAGLE *plus* GPL

RGD GP5 MP1R..................... € **90**

RGD GP5 MP1T...................... € **96**
with 2 m cable and plug

GAS LEAKAGE DETECTOR - LPG -

Domestic LPG gas detector with output for driving 230V~ cut-off valves. Test button. In compliance with CEI-EN 50194-1 standard. IMQ quality mark and compliance with CEI-EN 50194-1 certify the absolute reliability and efficiency of the device. Precalibrated sensor, directly replaceable by user.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz
Sensor type	SnO2 Semiconductor
	Precalibrated sensor, directly
	replaceable by user
Alarm threshold	10% L.E.L.
Output (relay)	5(2)A @ 250V~ SPDT
Sensor life	5 years
Green LED indicator	Detector active
Yellow LED indicator	Detector failure
Red LED indicator	Alarm
IP rating	IP42
Dimensions	H107 W85 D38mm

BEAGLE CO AD ACCUMULO

RGD CK5 MP1S.....................€ **159**

RD CBA1 ....€ **165**
with 2 m cable and plug

GAS LEAKAGE DETECTOR - CO -

Microprocessor based domestic carbon monoxide detector with output for cut-off valves, fans or any other electrical actuators with 230V power supply. Carbon monoxide detection with accumulation mode: it simulates the gas accumulation in the human body according to standard EN 50291-1.

TECHNICAL FEATURES

Power supply	230V~ -±10% 50Hz
Internal sensor	Precalibrated chemical cell on module, directly replaceable by user
First alarm threshold	~30ppm CO lasting for >120 minutes
Output (relay)	5(2)A @ 250V~ SPDT
Button	Test/Alarm reset
Alarm Buzzer	Buzzer 85dB(A)@ 1m
Green LED indicator	Detector active
Yellow LED indicator	Detector failure
Red LED indicator	Alarm
IP rating	IP42
Dimensions	H107 W85 D38mm
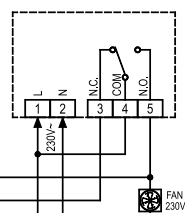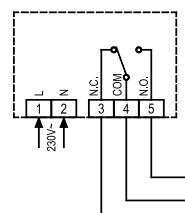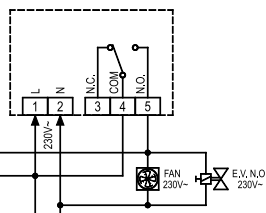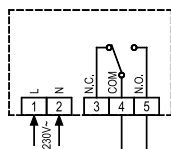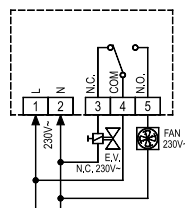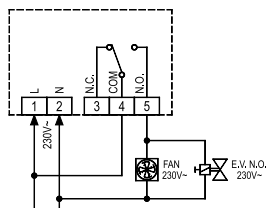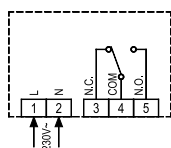
BEAGLE DOUBLE

RGD CM0 MP1 .... € 114

GAS LEAKAGE DETECTOR - METHANE AND CO -

Domestic methane (CH4) gas and carbon monoxide (CO) detector with facility for driving 230V~ cut-off valves or fans. Test button. Not compliant with EN 50291.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz
Sensor type	SnO2 Semiconductor
Alarm threshold	10% L.E.L. CH4 80ppm CO
Output (relay)	5A @ 250V~ SPDT
Sensor life	5 years
Green LED indicator	Detector active
Yellow LED indicator	Detector failure
Multicolor LED indicator	red: CH4 alarm - blue: CO alarm - red-blue: both
IP rating	IP42
Dimensions	H107 W85 D38mm

KIT BEAGLE METANO

KD M5R 00021 .... € 154
Kit with N.O. electrovalve
KD M5R 00022 .... € 211
Kit with N.C. electrovalve

Kit including 1 BEAGLE METHANE (RGDME5MP1R) gas detector with 230V~ power supply, 1 230V~ cut-off valve (EVGPAFM020 N.O. - EVGPCFM020 N.C.) with manual reset, 2 x 3/4" to 1/2" nipples.
Precalibrated sensor, directly replaceable by user.

KIT BEAGLE GPL

KD G5R 00019 .... € 154
Kit with N.O. electrovalve
KD G5R 00020 .... € 211
Kit with N.C. electrovalve

Kit including 1 BEAGLE LPG (RGDGP5MP1R) gas detector with 230V~ power supply, 1 230V~ cut-off valve with manual reset (EVGPAFM020 N.O. - EVGPCFM020 N.C.), 2 x 3/4" to 1/2" nipples.
Precalibrated sensor, directly replaceable by user.

WIRE RESIDENTIAL DETECTION SYSTEM

This system uses the Beagle or Segugio wire version gas detectors.
The gas detectors installed in each apartment are connected to one or more concentrators positioned on the floor.
Each concentrator can receive eight different alarms. Each concentrator, can be connected with the MOD BUS system (2 wires) to the next, and all the concentrators can transmit the alarms received from the single apartment to a control unit (normally located in a service room on the ground floor) The control unit can be connected to 32 concentrators for a total of 256 apartments or 4 zones of up to 8 concentrators each.
Each zone is combined at a relay that closes the gas solenoid valve of that area if an alarm go on (each zone could refer to a building scale).
On the control unit display it is possible to display:

- Gas leak alarm;
- Failure;
- Lack of tension

For each of these events it is possible to identify the detector that generated the alarm (therefore the apartment number), the concentrator to which it is connected, the time and the date on which the alarm occurred.

AC IM01 .... € 154

NEW

CONCENTRATOR MODULE 8 INPUTS
FOR GAS DETECTION SYSTEM

Modbus® interface module with 8 optoisolated inputs.
230Vac power supply The inputs are able to accept voltages in the range indicated in Technical Specifications. Setting of the address of the module from 01 to 32 by means of rotary switches.

TECHNICAL FEATURES

Power supply:	230Vac 50/60 Hz
Inputs:	8 optoisolated
Range Vin:	10.8V .. 26.4V
Physical layer:	RS485
Settings:	9600, 8, N, 1
Communication protocol:	Modbus ® RTU

RY B01M .... € 246

NEW
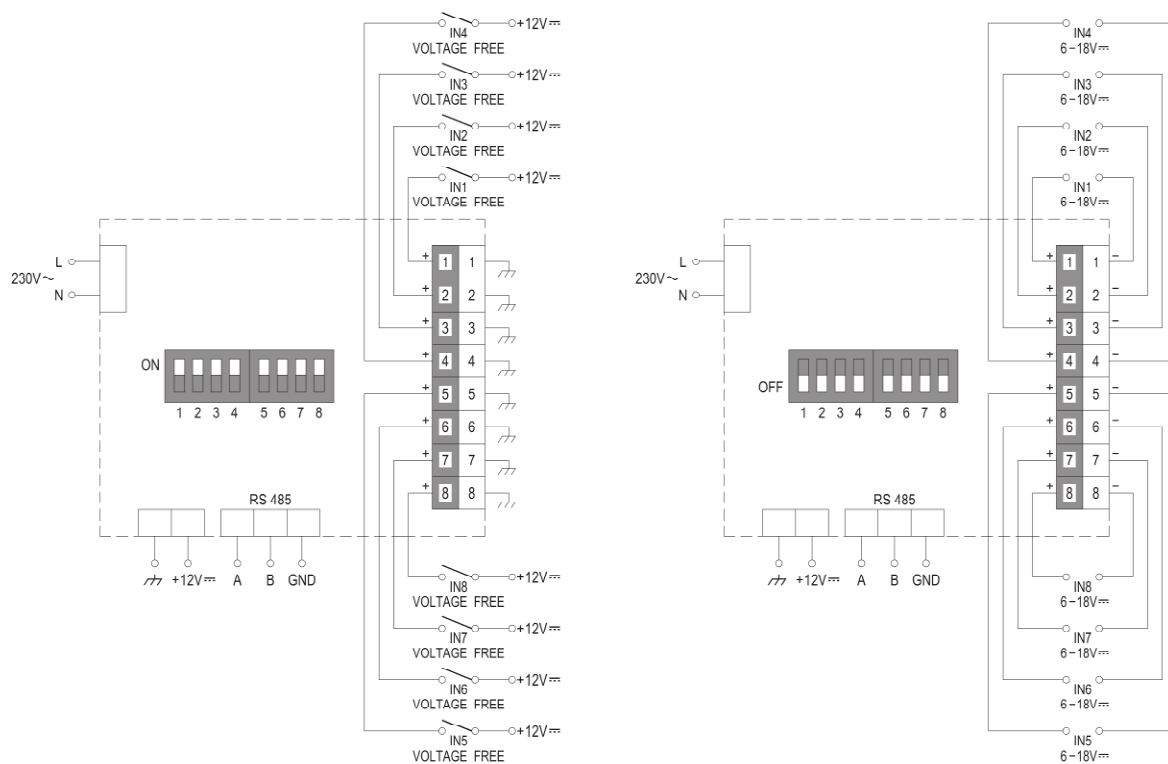
MODBUS® CONTROL UNIT
4 ZONES AND UP TO 256 INPUTS

Central Unit for gas detection system in apartment buildings.
The unit, which interfaces with the ACIM01 concentrator modules via Modbus® is able to acquire the status of n. output relay contacts of domestic gas detectors. Microcontroller circuit and backlit LCD display 16x2 characters.
DIN rail mounting 8 modules. It allows to control up to 32 concentrators type ACIM01. 4 + 1 output relays with "column" management. Installer parameter management protected by password.

TECHNICAL FEATURES

Power supply:	230Vac 50/60 Hz
Outputs:	5 x 8 A @ 250V SPDT
	1 ..4: Column gas shut-off valve control
	5: Common auxiliary function
Physical layer:	RS485
Settings:	9600, 8, N, 1
Communication protocol:	Modbus® RTU
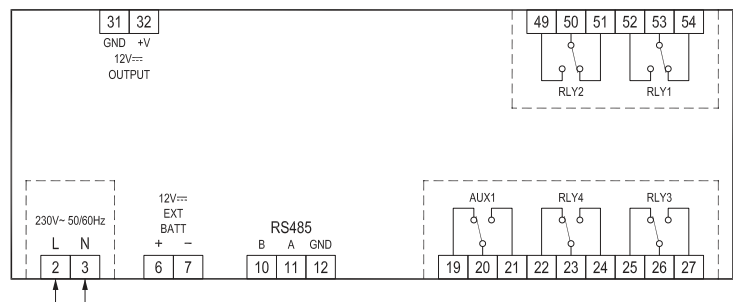
SEGUGIO *plus* METANO

RGD MET MP1R.................... € 110

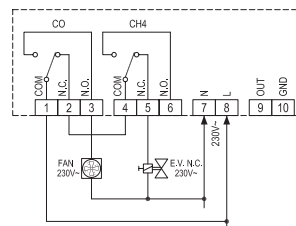## GAS LEAKAGE DETECTOR - METHANE -

Microprocessor based domestic methane gas detector with output for both 230V~ and 12V~/= cut-off valves. Test function. Precalibrated sensor, directly replaceable by user.IMQ quality mark and compliance with CEI-EN 50194-1 certify the absolute reliability and efficiency of the device.

TECHNICAL FEATURES

Power supply	230V~ ±10% 50Hz
Output (relay)	6(2)A @ 250V~ SPDT
Sensor type	SnO2 Semiconductor
	Precalibrated sensor, directly replaceable by user
Sensor life	5 years
Alarm threshold	10% L.E.L.
Green LED indicator	Detector active
Yellow LED indicator	Detector failure
Red LED indicator	Alarm
Alarm buzzer	85dB (A) @ 1m
IP rating	IP42
Dimensions	H84 W148 D40mm
Product mark	IMQ

Notes: (1) Facility for a remote sensor (SGA ***), for the control of a further zone.   (2) Depressed button test for one sec.: it silences the buzzer for 10 minutes; depressed for at least 5 sec.: checks all internal functions and electrovalve activation.
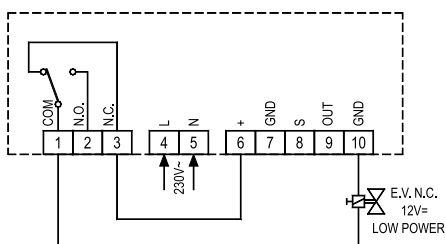
12V~/= NORMALLY CLOSED LOW CONSUMPTION ELECTROVALVE
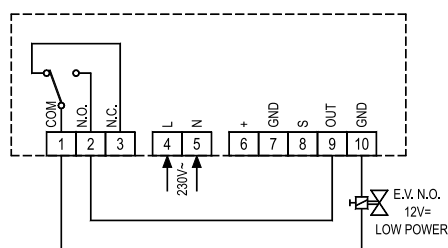
12V~/= NORMALLY OPEN LOW CONSUMPTION ELECTROVALVE
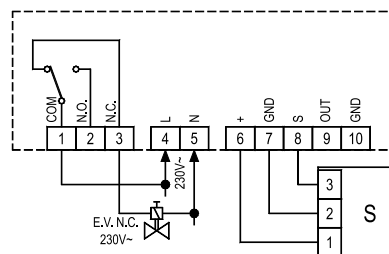
230V~ NORMALLY CLOSED ELECTROVALVE AND REMOTE SENSOR
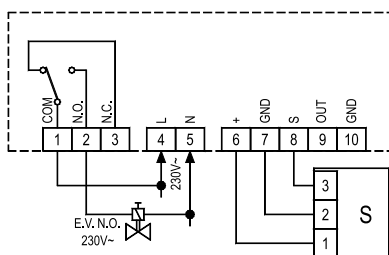
230V~ NORMALLY OPEN ELECTROVALVE AND REMOTE SENSOR
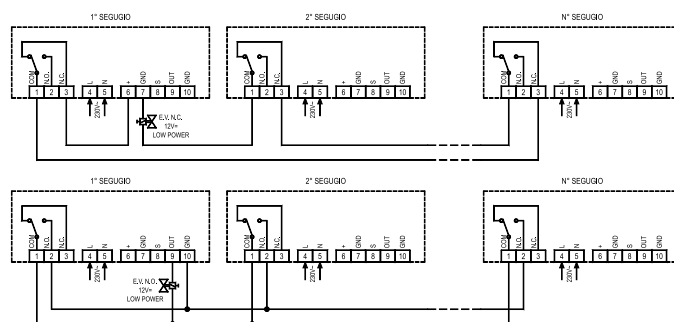
EXAMPLES OF WIRING DIAGRAM WITH SEVERAL SEGUGIO
DETECTORS AND ONE SINGLE 12 V ELECTROVALVE
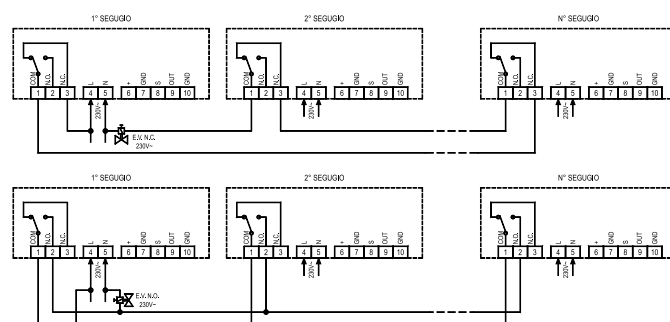
EXAMPLES OF WIRING DIAGRAM WITH SEVERAL SEGUGIO
DETECTORS AND ONE SINGLE 230V~ ELECTROVALVE

Notes: (1) The remote sensors to be used are: SGA MET, SGA GPL.

SEGUGIO *plus* GPL

RGD GPL MP1R..................... € 110

GAS LEAKAGE DETECTOR - LPG -

Microprocessor based domestic LPG gas detector with output for both 230V~ and 12V~/= cut-off valves. Test function. Precalibrated sensor, directly replaceable by user. IMQ quality mark and compliance with CEI-EN 50194-1 certify the absolute reliability and efficiency of the device.

TECHNICAL FEATURES

Power supply	230V~ ±10% 50Hz
Output (relay)	6(2)A @ 250V~ SPDT
Sensor type	SnO2 semiconductor
	Precalibrated sensor, directly replaceable by user
Sensor life	5 years
Alarm threshold	10% L.E.L.
Green LED indicator	Detector active
Yellow LED indicator	Detector failure
Red LED indicator	Alarm
Alarm buzzer	85dB (A) @ 1m
IP rating	IP42
Dimensions	H84 W148 D40mm

Notes: (1) Facility for a remote sensor (SGA ***), for the control of a further zone. (2) Depressed button test for one sec.: it silences the buzzer for 10 minutes; depressed for at least 5 sec.: checks all internal functions and electrovalve activation. (3) Back-up battery: ACC SGB 6A.

SEGUGIO CO ACCUMULATION

RGD COK MP1....................... € 165

GAS LEAKAGE DETECTOR - CO -

Microprocessor based domestic carbon monoxide detector with output for cut-off valves, fans or any other electrical actuators with 230V~ power supply. Carbon monoxide detection with accumulation mode: it simulates the gas accumulation in the human body according to standard EN50291.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz
Output (tight relay)	6(2)A @ 250V~ SPDT
Internal sensor(1)	Electrochemical cell
Button	Alarm Test-Reset
Alarm	Buzzer 85dB(A) @ 1m
Green LED indicator	Detector active
Yellow LED indicator	Detector failure
Red LED indicator	Alarm
Dimensions	H84 W148 D40mm
IP rating	IP42
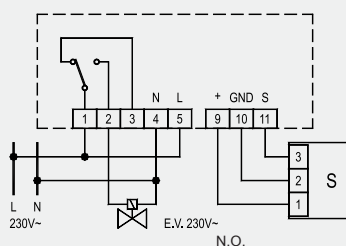
Notes: (1) Facility for a remote sensor (SGA ***), for the control of a further zone. (2) Depressed button test for one sec.: it silences the buzzer for 10 minutes; depressed for at least 5 sec.: checks all internal functions and electrovalve activation. (3) The remote sensor to be used are: SGA MET, SGA GPL.

SEGUGIO DOUBLE

RD XSM1............................. € **229**

GAS LEAKAGE DETECTOR - METHANE + CO

Microprocessor based domestic methane and carbon monoxide detector equipped with two separated output relays with output for driving 230V~ cut-off valves. Sensors assembled on precalibrated modules replaceable by user. Carbon monoxide detection with accumulation mode: it simulates the gas accumulation in the human body according to standard EN 50291-1. Methane detection according to standard EN 50194-1.

TECHNICAL FEATURES

Power supply	230V~ ±10% 50Hz
CH4 sensor type	SnO2 semiconductor. Precalib. sensor, directly replaceable by user
CO sensor type	Precalibrated sensor on module replaceable by user
CH4 Alarm threshold	10% L.E.L.
First CO alarm threshold	~30ppm CO lasting for >120 minutes
Output (relay)	5(2)A @ 250V~ SPDT
CH4 sensor life	5 years
Alarm	Buzzer 85dB(A)@ 1m
Green LED indicator	Detector active
Yellow LED indicator	Detector failure
Red LED indicator	Alarm
IP rating	IP42
Dimensions	H84 W148 D40mm
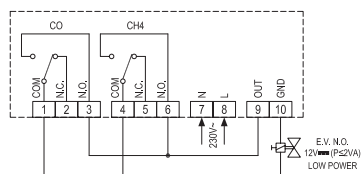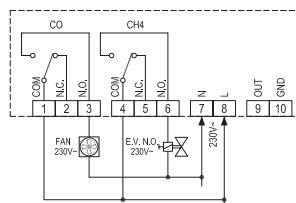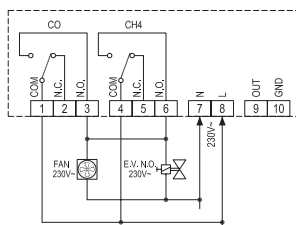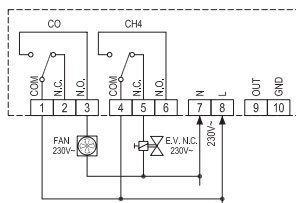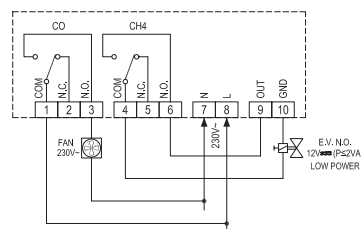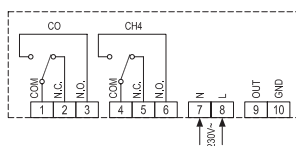
THRESHOLD SEGUGIO CO

RGD COH MP11 .... € 125

GAS LEAKAGE DETECTOR - CO -

Microprocessor based domestic carbon monoxide detector with output for cut-off valves, fans or any other electrical actuators with 230V~ power supply. Carbon monoxide detection with threshold mode. Not compliant with EN 50291.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz
Output (tight relay)	6(2)A @ 250V~ SPDT
Internal sensor(1)	Electrochemical cell
Button	Alarm Test-Reset
Alarm	Buzzer 85dB(A) @ 1m
Pre alarm threshold	16ppm
Alarm threshold	80ppm
Green LED indicator	Detector active
Yellow LED indicator	Detector failure
Red LED indicator	Alarm
Dimensions	H84 W148 D40mm
IP rating	IP42

GAS DETECTORS FOR RESIDENTIAL USE

Example of installation of the SEGUGIO DOUBLE that simultaneously controls a fan for the carbon monoxide alarm and a solenoid valve for the methane alarm.
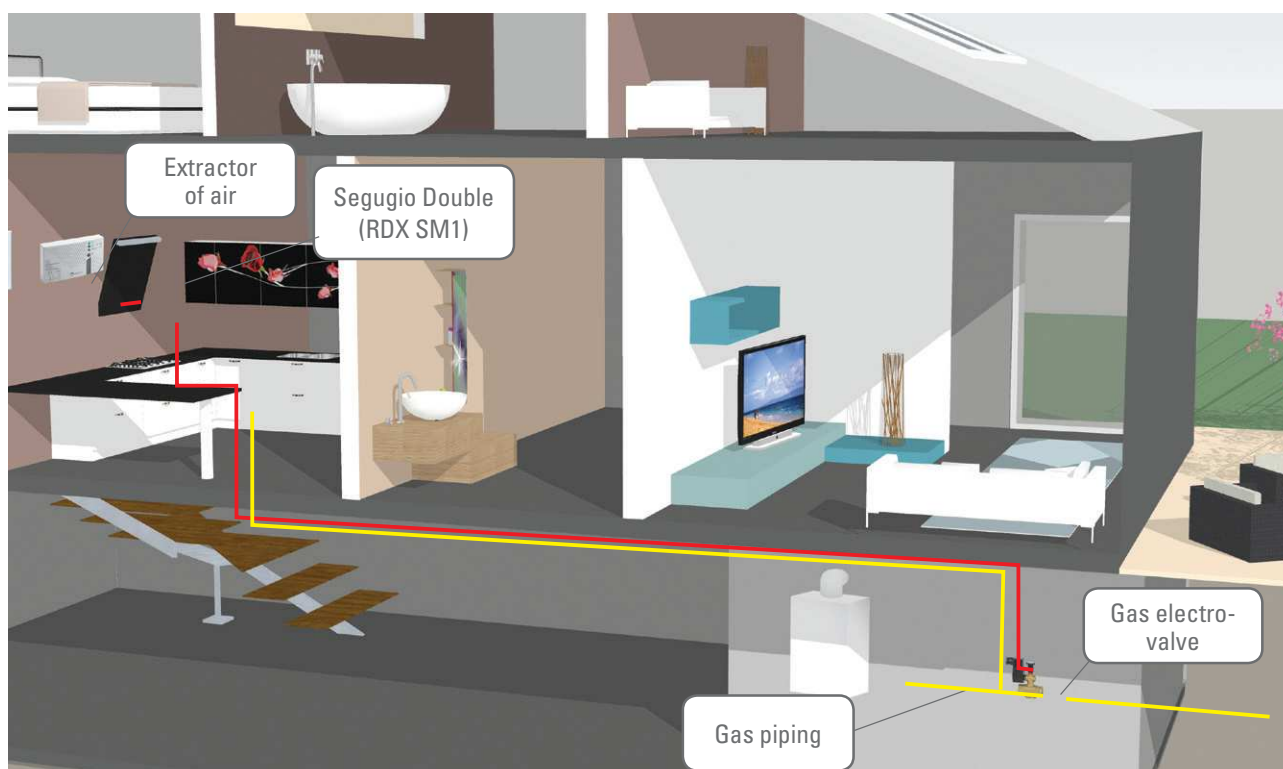
WIRELESS RESIDENTIAL DETECTION SYSTEM

The DR G02M can receive the alarm signal from up to 100 detectors, each installed in a different apartment.
The receiver, in the presence of a gas leak intercepted by one of the detectors installed, commands a solenoid valve that will block the gas supply. However, the number of detectors that can transmit the signal to a receiver depends on the distance (maximum 50 meters) and how the structure of the building was built.
The cement and iron present in the constructions have a decisive influence on the transmission distance and therefore on the number of detectors that can be connected to a single receiver. We recommend installing one receiver every 2 floors.
In any case, the display can show the signal intensity, a feature that is extremely useful for correctly positioning the receiver and deciding how many detectors can be associated with a single receiver. The receiver, thanks to the combination of the 2 keys on the front and the 3-digit display, allows you to program and / or view the following functions:

RADIO TRANSMISSION
- Intensity of the received signal
- Analysis of received commands
- Signaling of malfunction in reception
- Possibility to display alarms or faults related to a specific apartment

ADDRESSES
- Possibility of associating a 3-digit address to each detector / transmitter that can indicate the building plan and the apartment number
- Ability to delete a learned address

DIAGNOSTICS
- Display of the channels (apartments) in which an alarm or fault has occurred, which will remain stored even in the absence of electricity
- Possibility to check the most common causes of receiver malfunction

SEGUGIO WIRELESS

DD MSM1 .... € **136**
Metano

DD GSM1 .... € **136**
GPL

WIRELESS ENABLED GAS LEAKAGE DETECTOR METHANE or LPG

Version of SEGUGIO plus METANO/GPL equipped with a wireless radio transmitter. Microprocessor based domestic methane gas detector with output for both 230V~ and 12V~/= cut-off valves. Mute and test functions. Precalibrated sensor, directly replaceable by user. Compliance with CEI-EN 50194-1 certify the absolute reliability and efficiency of the device. The wireless transmitter module allows to transmit "failure" and "alarm" states to the receiver for gas alarm DRG01M.

TECHNICAL FEATURES

Power supply	230V~ 50Hz
Output (relay)	6(2)A @ 250V~ SPDT
Sensor type	SnO2 Semiconductor
	Precalibrated sensor, directly replaceable by user
Sensor life	5 years
Alarm threshold	10% L.E.L.
Green LED indicator	Detector active
Yellow LED indicator	Detector failure
Red LED indicator	Alarm
Alarm buzzer	85dB (A) @ 1m
IP rating	IP42
Dimensions	H84 W148 D40mm
Transmission frequency	868,150 MHz
Max distance receiver	50 m
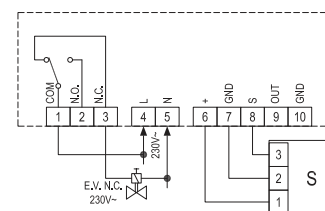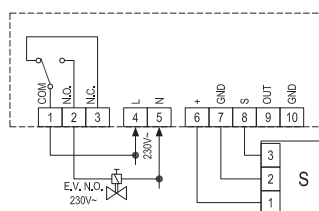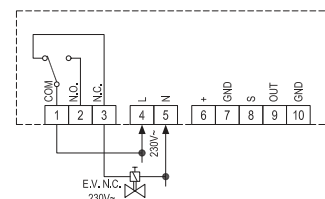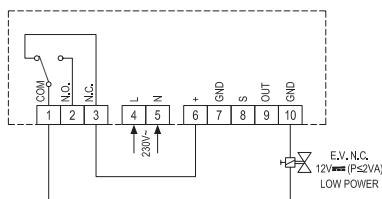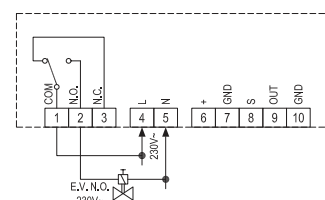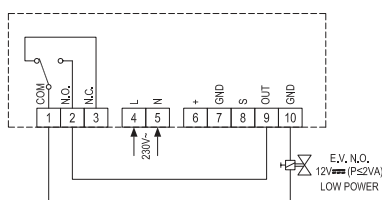
DR G01M.............................. € 92

1 OUTPUT GAS ALARM RECEIVER

Wireless receiver for SEGUGIO WIRELESS, it features two SPDT relay outputs to activate a load in the event of a gas alarm and in the event of a sensor failure or other failure. Two multicolor LEDs provide "alarm" and "fault" status display as well as quality of radio communication display. The DRG01M can be associated by means of the self-learning procedure to more than one SEGUGIO WIRELESS, up to a maximum of 12.

TECHNICAL FEATURES

Power supply	230V~ 50Hz
Power absorption	11VA
Output (relay)	2x6A 250V~
Transmission frequency	868,150 MHz
Antenna type	Internal stylus
Bicolour LED indicators	Gas status/ transmission quality
IP rating	IP4X
Dimensions	H125 W78 D30,5mm
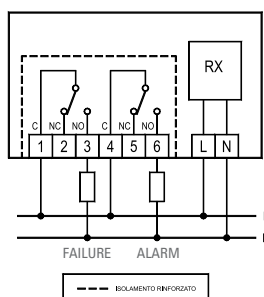
DR G02M.............................. € 145
100 channels Receiver

NEW

2 OUTPUT GAS ALARM RECEIVER

This device is a receiver equipped with an OLED display, designed for the activation of loads (specifically solenoid valves and / or acoustic signalers) in gas detection systems via radio for domestic environments. The receiver is able to manage up to 100 channels each of which is associated with a gas detector via radio. Furthermore the receiver has two relays: an alarm relay and a fault relay. Operating on the 868.150 MHz (LPD) frequency, it provides the user with all the advantages of this band such as greater freedom from interference and greater efficiency in signal propagation.

TECHNICAL FEATURES

Alimentazione	230V~ 50Hz
Potenza assorbita	11VA
Uscita (relè)	2x6A 250V~
Frequenza di trasmissione	868,150 MHz
Tipo di antenna	Stilo interno
Indicatori LED bicolore	Stato gas/qualità trasmissione
Grado di protezione	IP4X
Dimensioni	A125 L78 P30,5mm
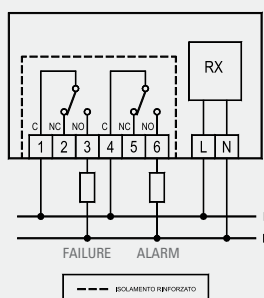
KIT SEGUGIO METANO

KD MER 00014........................€ **206**
Kit with 230V N.O. electrovalve

KD MER 00015........................€ **269**
Kit with 230V N.C. electrovalve

KD MER 00008........................€ **232**
Kit with 230V N.O. electrovalve (low
consumption)

KIT SEGUGIO METHANE

Kit including a SEGUGIO METHANE detector (RGDMETMP1R) powered at 230V ~, a electro-valve (EVGPAFM020 NA 230V - EVGPCFM020 NC 230V - EVGBAF1020 NA 12V) with 3/4 "230V ~ or 12V ~ manual reset and two 3/4" reductions

KIT SEGUGIO LPG

KD GPR 00017........................€ **206**
Kit with 230V N.O. electrovalve

KD GPR 00018........................€ **269**
Kit with 230V N.C. electrovalve

KD GPR 00016........................€ **232**
Kit with 230V N.O. electrovalve (low
consumption)

KD GPR 00002........................€ **232**
Kit with 230V N.C. electrovalve (low
consumption)

KIT SEGUGIO LPG

Kit including a SEGUGIO GPL Detector (RGDGPLMP1R) powered at 230V ~, a solenoid valve (EVGPAFM020 NA 230V - EVGPCFM020 NC 230V - EVGBAF1020 NA 12V - EVGRCF1020 NC 12V) with 3/4 "manual reset 230V ~ or 12V ~ and two reductions from 3/4 "to 1/2".

AIR GUARDIAN

RD ADA1 .... € **423**

CARBON DIOXIDE REGULATOR (CO2)

Possibility of displaying, on LCD display, the CO2 level detected by the internal NDIR sensor. Output with voltage-free contacts, Test function for checking the good functioning of the regulator, possibility to change the intervention thresholds.

TECHNICAL FEATURES

Power supply	85-264V ~ 47-440Hz
Absorption	2.0 VA max.
Reading range	0 .. 2000 ppm
Accuracy	± 30ppm
Contact capacity	5 (1) A 250V ~ SPDT (Free from voltage)
Degree of protection	IP30
Operating temperature	0 ° C .. 40 ° C.
Storage temp.	- 10 ° C .. + 50 ° C.
Humidity limits	20% .. 80% RH (non-condensing)
Dimensions	132L x 87A x 23.6Pmm
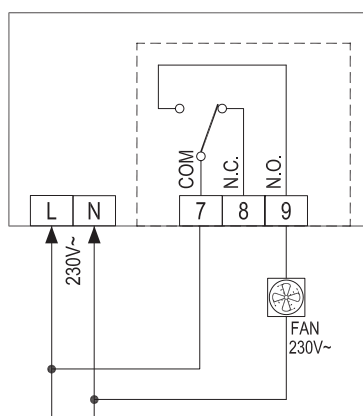
SGA MET .... € **88**
Methane

SGA GPL .... € **88**
LPG

METHANEor LPG REMOTE SENSOR (ONLY FOR SEGUGIO)

Remote sensor for natural gas or LPG leaks. Semiconductor sensitive element. Sensor life: 5 years. IP30 container.

TECHNICAL FEATURES

Power supply	6V = .. 12V = from the control unit
Power consumption	1W
Output Signal voltage	on / off
	SnO2 semiconductor sensor type
Sensor life	5 years
Detectable gas	Methane or LPG
Sensitivity set	10% L.I.E.
Degree of protection	IP30
Dimensions	A90 L65 P30mm
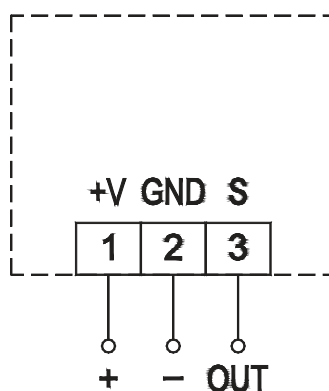
ACCESSORIES

AC MM01 .... € **61**
Replaceable pre-calibrated sensor for Methane gas detectors. Suitable for Segugio and Beagle plus.
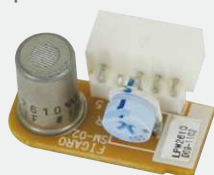
AC MG01 .... € **61**
Replaceable pre-calibrated sensor for LPG gas detectors. Suitable for Segugio and Beagle plus.
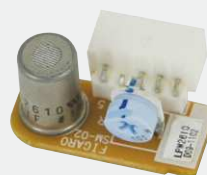
AC MC01 .... € **103**
Replaceable pre-calibrated sensor for accumulation and threshold CO detectors. Suitable for Segugio Double and Beagle plus.
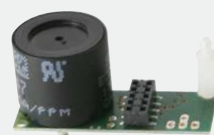
CHM 158 0001 .... € **12**
Test for checking the operation of LPG and methane gas detectors, with untitrated gas, for approx. 70 tests.

INDUSTRIAL GAS DETECTORS

INDUSTRIAL GAS DETECTORS

Seitron designs and manufactures detectors for methane gas, LPG, gas vapours and CO (Carbon Monoxide) for use in the commercial premises and process industry.

Definitions

- **v/v**: Is a way to express the concentration of a gas as a percentage of gas volume with respect to the total volume occupied by the mixture. Example: 1 liter of gas in 1 cubic meter (1000 liters) has a concentration of 1/1000 = 0.001 = 0.1% v/v (see fig. Ⓐ)
- **LEL** (Lower Explosive Limit): Is the gas concentration value below which the mixture cannot explode due to physical reasons. Since the gas concentration transmitters and gas detectors are designed for use in a concentration range which is LOWER than the LEL, their measuring range is usually expressed as a percentage of the LEL (see fig.   )
  LEL CH4 (G20 mixture) = 4.4% v/v = 100% LEL CH4   -   LEL LPG (G30 mixture) = 1.35% v/v = 100% LEL LPG
- **ppm** (parts per million): is a way to express the gas concentration as a fraction of the total volume occupied by the mixture (in 1 cubic meter 1 ppm is equivalent to 1 cm cube).

Full Range: Is the maximum concentration of gas measured by the device. It is usually expressed either in %LEL or in ppm (parts per million)
- **50% LEL**: for use in commercial premises or in thermal power plants, where such concentration is unlikely to occur.
- **100% LEL**: for use in industrial process plants, often even in ATEX classified areas.
- **500 ppm**: is the usual measurement range for toxic gases such as CO (Carbon Monoxide).

Signal output: Describes the type of electrical signal delivered by the device in order to communicate the measured concentration to the control device connected to it.
- **4..20 mA**: Is an analog standard widely used in industrial devices. The device sets on the output 'loop' a current value that ranges from 4 mA (0% of the Full Range) to 20 mA (100% of the Full Range). Other current values set in the loop may have different meanings (eg .: 2 mA = Fault Device). The advantages of this system are mainly:
  - Great immunity to electrical noise
  - Possibility to detect the status of interrupted 'loop' (equivalent to 0 mA).
- **Modbus** ®: Is a digital standard for transmitting data simple and easily adaptable to any control systems based on PLC or PC. The measured values are available in special 'registers' that are polled in 'master-slave' fashion by the PLC or PC.
- **S-Bus**: Is a digital protocol like Modbus ® yet with a different arrangement of registers and different protocol. It is a Seitron proprietary system, but still 'open', meaning that the communication protocol is available and public.

Housing: Describes the material and the features of the device housing.
- **Plastic**: Polycarbonate (PC) housing for industrial use. Suitable for commercial or light industrial premises where no ATEX classified areas are present.
- **ATEX**: Assembly featuring both the container and the 'nose' as ATEX Certified and therefore are provided with the proper certificate that allows installation in ATEX classified areas (usually Zone 1). Even the production is subject to specific controls and surveillance acted by a certified body (IMQ in case of Seitron).

This picture shows the concentration of gas in % v/v (volume over volume), with highlighted the concentration range within which the explosion might happen.
For gas methane (CH4), this range is from 4.4% v/v (LEL) to 15.0% v/v (UEL – Upper Explosive Limit)
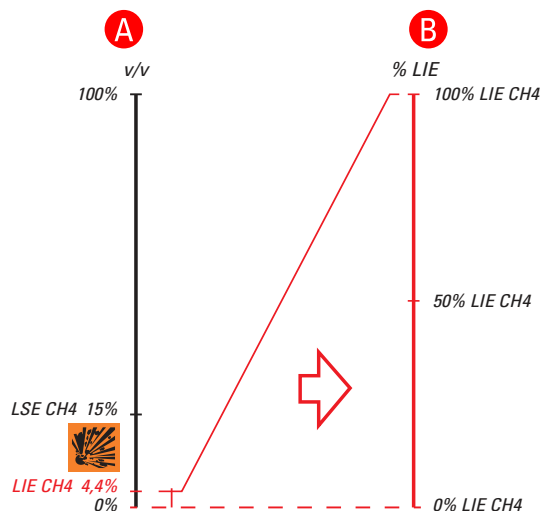
The picture in red highlights, zooming it to 100%, only the range of gas concentration below the Lower Esplosive Limit (LEL) for methane gas (CH4).
This scale is normally used for gas detectors because it focuses only to the range of concentration to be monitored for the purpose of the explosion hazard control.

INTERFACES

4..20mA

Fault in current loop:	0.0 mA
Sensor fault:	2.0 mA
Full range:	20.0 mA
Over Range:	22.0 mA

Maximum resistance applicable as load at current loop output (4..20 mA) when supply voltage is 12V= -15% is 350 ohm.

S-Bus

Supply voltage:	12 V= ±10%.
Absorption:	
Normal operation:	18 mA
Communication protocol:	S-Bus

Relays

Supply voltage:	12 Vdc
Maximum absorption:	80 mA @ 12 Vdc
Contact rating:	3 x 2 A 250 V~
	(voltage free)

Modbus ®

Interface:	RS485.
Parameters:	19200, 8, N, 1.
Communication protocol:	Modbus® RTU
	(rif.: www.modbus.org)

CASE

PLASTIC HOUSING

Filter:	Sinterised PE
Dimensions:	W134 H124 D67mm
Protection rating:	IP54

ATEX CERTIFIED HOUSING

Filter:	Sinterised stainless steel
Dimensions:	W165 H117 D90mm

CE 0051

⟨Ex⟩ II 2GD

Ex db IIB+H₂ T6 Gb
Ex tb IIIC T85°C Db
IMQ 15 ATEX 0003 X

LABELLING

0051: Number of the Notified Body responsible for the Quality System (IMQ).

II 2GD: Equipment for surface plants (II) with the presence of gas (G) or dust (D) of Category 2 suitable for zone 1 or 21 and, with redundance, for zone 2 or 22.

Ex d: Equipment with ATEX Ex d protection mode (flameproof housing).

IIB+H2: Equipment of group IIB suitable for all gas substances of group IIB as well as for H2 (Hydrogen). A device of group IIB + H2 is also suitable for areas with gas of group IIA and IIB.

T6: Temperature class of equipment (maximum surface temperature 85° C). A device with temperature class T6 is also suitable for substances with higher temperature class (T5 .. T1).

Gb: EPL: Equipment Protection Level according to IEC. 'Gb' stands for 'high protection level (b) for areas with Gas (G)'.

Ex tb: Equipment with ATEX Ex tb's type of protection for dusts (with housing - high level of protection).

IIIC: Equipment suitable for the use in presence of conductive powder of the group IIIC.

85°C: Temperature class of the equipment for use with powders: maximum surface temperature: 85 ° C.

Db: EPL: Equipment Protection Level. 'Db' stands for 'high level of protection (b) for areas with dust (D)'.

IMQ 00: Notified Body that issued the Certificate of Compliance of the Type (IMQ) and year of issuance.

ATEX 0000: Number of certificate in the year of issue.

X: Special conditions of use (see Safety Instructions).

GAS CONCENTRATION TRANSMITTERS - **METHANE**

Working Range	Output signal	Certificate	Case	Codice	Euro	Control Unit		
						RYM01M	RYM03M	RYK01M
50% L.I.E.	4..20mA + Modbus	-	gray plastic	SY MN 24B	225	x	x	x
	4..20mA + Modbus	IMQ 15 ATEX 003 X	metallic	SX MX 14M1Y	389	x	x	x
	4..20mA + Modbus + Relè + Buzzer + LED	-	trasparent platic	SY MN 04R	278	x	x	x
100% L.I.E.	4..20mA + Modbus	-	gray plastic	SY MN 26B	308	x	x	x
	4..20mA + Modbus	IMQ 15 ATEX 003 X	metallic	SX MX 16M1Y	477	x	x	x
	4..20mA + Modbus + Relè + Buzzer + LED	-	trasparent platic	SY MN 06R	320	x	x	x

GAS CONCENTRATION TRANSMITTERS - **LPG**

Working Range	Output signal	Certificate	Case	Codice	Euro	Control Unit		
						RYM01M	RYM03M	RYK01M
50% L.I.E.	4..20mA + Modbus	-	gray plastic	SY GN 24B	225	x	x	x
	4..20mA + Modbus	IMQ 15 ATEX 003 X	metallic	SX GX 14M1Y	389	x	x	x
	4..20mA + Modbus + Relè + Buzzer + LED	-	trasparent platic	SY GN 04R	278	x	x	x
100% L.I.E.	4..20mA + Modbus	-	gray plastic	SY GN 26B	308	x	x	x
	4..20mA + Modbus	IMQ 15 ATEX 003 X	metallic	SX GX 16M1Y	477	x	x	x
	4..20mA + Modbus + Relè + Buzzer + LED	-	trasparent platic	SY GN 06R	320	x	x	x

GAS CONCENTRATION TRANSMITTERS - **PETROL VAPORS**

Working Range	Output signal	Certificate	Case	Codice	Euro	Control Unit		
						RYM01M	RYM03M	RYK01M
50% L.I.E.	4..20mA + Modbus	-	gray plastic	SY VN 24B	**225**	x	x	x
	4..20mA + Modbus	IMQ 15 ATEX 003 X	metallic	SX VX 14M1Y	**389**	x	x	x
	4..20mA + Modbus + Relè + Buzzer + LED	-	trasparent platic	SY VN 04R	**278**	x	x	x
100% L.I.E.	4..20mA + Modbus	-	gray plastic	SY VN 26B	**308**	x	x	x
	4..20mA + Modbus	IMQ 15 ATEX 003 X	metallic	SX VX 16M1Y	**477**	x	x	x
	4..20mA + Modbus + Relè + Buzzer + LED	-	trasparent platic	SY VN 06R	**320**	x	x	x

GAS CONCENTRATION TRANSMITTERS - **CO**

Working Range	Output signal	Certificate	Case	Codice	Euro	Control Unit		
						RYM01M	RYM03M	RYK01M
0 .. 500 ppm	4..20mA + Modbus	-	gray plastic	SY CN 21B	**220**	x	x	x
	4..20mA + Modbus	IMQ 15 ATEX 003 X	metallic	SX CX 11M1Y	**372**	x	x	x
	4..20mA + Modbus + Relè + Buzzer + LED	-	trasparent platic	SY CN 01R	**255**	x	x	x

RY M01M .... € **477**

INDUSTRIAL CONTROL UNIT WITH 4 ZONES

Industrial control unit for gas detection with 4 zones fit in a 9 module DIN case capable of monitoring gas concentration up to maximum 4 zones. Possibility of connecting a 4 .. 20 mA transmitter in each zone for the detection of GPL, methane or carbon monoxide (CO).

TECHNICAL FEATURES

|	
Power supply	230V~ 50/60 Hz
Outputs	1 Relay Pre-allarm
	1 Relay Allarm 1
	1 Relay Allarm 2
	2 Relays auxiliary (Configurabili dall'utente sugli eventi)
Contacts rating:	5 x 8A 250V~ cosϕ =1
Events:	Open, Fault, Pre-allarm, Allarm 1, Allarm 2
Pre-allarm threshold range:	Methane, L.P.G. and Petrol vapor
	OFF / 1%..100% LEL
	CO OFF / 1 .. 999 ppm
Allarm 1 threshold range:	Methane, L.P.G. and Petrol vapor
	OFF /1%..100% LEL
	CO OFF / 1 .. 999 ppm
Allarm 2 threshold range:	Methane, L.P.G. and Petrol vapor
	OFF / 1%..100% LEL
	CO OFF / 1 .. 999 ppm
Fault:	activate the buzzer and the yellow blinking.
Pre-allarm:	activate the buzzer, the yellow and red blinking leds.
Allarm 1:	activate the buzzer, the yellow and red fix light leds.
Allarm 2:	activate the buzzer, the yellow and red fix light leds.
Dimensions:	158L x 90A x 71Pmm
Protection grade:	IP20

RY M03M .... € 258

NEW

• **ACCESSORIES**
  AC AL10................................. € 46
  100-240V

INDUSTRIAL CONTROL UNIT WITH 8 ZONES

Microcontroller control unit able to monitor the gas concentration up to 8 different zones: for each of these it is possible to connect a 4 .. 20 mA transmitter for the measurement of LPG, Methane, Vapor gasoline or Carbon Monoxide (CO) .

TECHNICAL FEATURES

Power supply	12V .. 24V
Outputs	1 Relay Pre-allarme
	1 Relay Allarme 1
	1 Relay Allarme 2
	2 Relays ausiliari (Configurabili dall'utente sugli eventi)
Contacts rating:	5 x 8A 250V~ $\cos\phi$ =1
Events	Open, Fault, Preallarme, Allarme1, Allarme2
Pre-allarm threshold range:	Metano, G.P.L. e Vapori di benzina
	OFF / 1%..100% LEL
	CO OFF / 1 .. 999 ppm
Allarm 1 threshold range:	Metano, G.P.L. e Vapori di benzina
	OFF /1%..100% LEL
	CO OFF / 1 .. 999 ppm
Allarm 2 threshold range:	Metano, G.P.L. e Vapori di benzina
	OFF / 1%..100% LEL
	CO OFF / 1 .. 999 ppm
Fault:	activate the buzzer and the yellow blinking.
Pre-allarm:	activate the buzzer, the yellow and red blinking leds.
Allarm 1:	activate the buzzer, the yellow and red fix light leds.
Allarm 2:	activate the buzzer, the yellow and red fix light leds.
Dimensions:	158L x 90A x 71Pmm
Protection grade:	IP20

RY K01M .... € 246

INDUSTRIAL CONTROL UNIT WITH 32 ZONES

This device is a "MASTER" control unit for detecting gas leaks with MODBUS® RTU communication protocol. Up to 32 transmitters (slaves) can be connected to the control unit. Each transmitter is able to detect a specific gas and can communicate its status via the appropriate MODBUS® registers.

TECHNICAL FEATURES

Power supply	230V~ 50/60 Hz
Outputs	1 Relay Pre-allarm
	1 Relay Allarm 1
	1 Relay Allarm 2
	2 Relays auxiliary (Configurabili dall'utente sugli eventi)
Contacts rating:	5 x 8A 250V~ $\cos\phi =1$
Events:	Open, Fault, Pre-allarm, Allarm 1, Allarm 2
Pre-allarm threshold range:	Methane, L.P.G. and Petrol vapor
	OFF / 1%..100% LEL
	CO OFF / 1 .. 999 ppm
Allarm 1 threshold range:	Methane, L.P.G. and Petrol vapor
	OFF /1%..100% LEL
	CO OFF / 1 .. 999 ppm
Allarm 2 threshold range:	Methane, L.P.G. and Petrol vapor
	OFF / 1%..100% LEL
	CO OFF / 1 .. 999 ppm
Fault:	activate the buzzer and the yellow blinking.
Pre-allarm:	activate the buzzer, the yellow and red blinking leds.
Allarm 1:	activate the buzzer, the yellow and red fix light leds.
Allarm 2:	activate the buzzer, the yellow and red fix light leds.
Dimensions:	158L x 90A x 71Pmm
Protection grade:	IP20

• **ACCESSORIES**
  AC AL10.................................. € 46
  100-240V

RX A01M .... € 312

INDUSTRIAL CONTROL UNIT FOR 8 ZONES

Industrial control unit for gas detection with 8 zones fit in IP44 capable of monitoring gas concentration up to maximum 8 zones. Possibility of connecting a 4 .. 20 mA transmitter in each zone for the detection of LPG, methane, carbon monoxide (CO) or petrol vapours.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50 .. 60Hz
Pre alarm threshold	2% .. 32% L.E.L. (step 2% L.E.L.)
Alarm threshold	Preal.+2% .. 32% L.E.L. (step 2% L.E.L.)
Yellow LED indicator	Failure
Red LED indicator	Pre alarm/Alarm/Channel status
Green LED indicator	Power/Battery/Ready
Dimensions	H125 W320 D67mm
IP rating	IP44
Compliant with the following standards	
Performances:	EN 60079-29-1: 2000
Electromagnetic Compatibility (EMC):	EN 50270: 2000
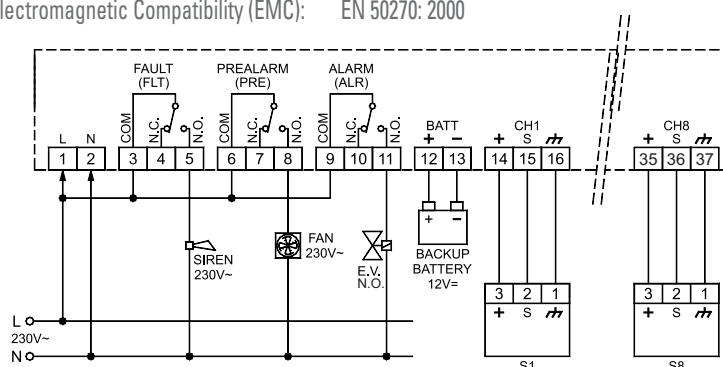
RX A02M .... € 431

INDUSTRIAL CONTROL UNIT FOR 6 ZONES

This device is a gas control unit featured with 6 outputs with contacts in exchange (pre-alarm, alarm and fault relays) able to configure and manage 1 toxic gas concentration transmitter (CO) and up to 5 flamable gas transmitters (HC), with 4..20mA output.

TECHNICAL FEATURES

Power supply:	230V~ 50/60 Hz or 12Vdc with backup battery
Absorption:	15W max.
Activation time:	60 s.
Input (4..20mA):	1 for toxic gases
	5 for flammable gases
Contacts rating:	5x3(1)A 250V~ SPDT
Protection rating:	IP 30 (acc. EN 60529)
Humidity limit:	20% .. 80% RH (non condensing)
Dimensions:	245x100x60 mm (LxHxD)
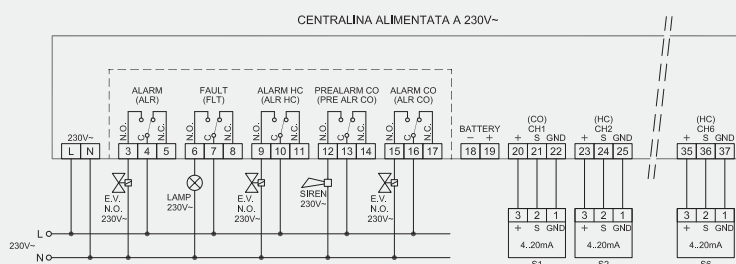
REPLACEABLE SENSORS FOR TRASMITTERS IN PLASTIC CASE

CODICE	GAS			€
	CO	GPL	Metano	
AC MC08	0..500 ppm	--	--	146
AC MG02	--	0..50% LIE	--	116
AC MG07	--	0..100% LIE	--	207
AC MM02	--	--	0..50% LIE	105
AC MM07	--	--	0..100% LIE	207

ADAPTER FOR TRANSMITTER CALIBRATION

AC AD01   AC AD05

AC AD06

CODICE	DESCRIPTION	€
AC AD01	Aluminium adapter for 4..20mA ATEX transmitters	37
AC AD05	Aluminium adapter for SX-N and SY-N transmitters	94
AC AD06	Aluminium adapter for ATEX SX-X transmitter	140

INTERFACES FOR TRASMITTERS
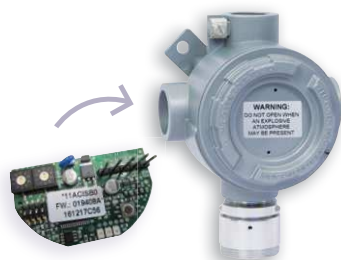
CODICE	DESCRIPTION	€
AC ISB1	Interface that converts an analog SX transmitter into a S-bus transmitter.	68
AC IMB1	Interface that converts an analog SX transmitter into a Modbus ® transmitter.	77
ACC REL 03	Relay interface for SX transmitter, it turns the 4-20 mA outputs in relay outputs (3 x 1A@250V~ SPDT).	78
AC IR01	Interface: 2 Relé, Led, Buzzer for SY transmitters	72

GAS DETECTORS AND CONTROL UNITS

Cod	Gas	Integrated gas sensor	External gas sensor	Alarm outputs	Reset	SGI ME1 - CH4 SGI GP1 - GPL	SGI ME1 M - CH4 SGI GPI1 M - GPL
RGI 000 MBX2	**CH4/GPL**	-	2x CH4/GPL	2	✓	✓	✓
RGI ME1 MSX2	**CH4**	1x CH4	1x CH4/GPL	2	✓	✓	✓
RGI GP1 MSX2	**GPL**	1x GPL	1x CH4/GPL	2	✓	✓	✓
RGI 001 MSX2	**CH4/GPL**	-	2x CH4/GPL	2	✓	✓	✓
RGI 000 MSX4	**CH4/GPL**	-	4x CH4/GPL	2	✓	✓	✓
RGI 000 LBXD	**CH4/GPL**	-	10x CH4/GPL	1	✓	✓	✓
RGI CO0 L42	**CO**	1	-	2	✓	-	-

RGI ME1 MSX2 .... € **177**
Methane

RGI GP1 MSX2 .... € **177**
LPG

1 IN 2 OUT METHANE OR LPG GAS DETECTOR

Detector for methane or LPG gas leakages with two relay outputs, internal sensor and facility for a second remote sensor (1) and for back-up battery (ACCSGB12). Reset button. IP54 case.
For Non-classified ATEX zones.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz
Output 1 (relay x e.v.)	4(2)A @ 250V~ SPDT
Output 2 (relay x alarm)	4(2)A @ 250V~ SPST
Internal sensor	Semiconductor for natural gas
Alarm threshold	13% L.E.L.
Indicators: active/alarm1/alarm2	Green/red/red LED
Push button	Reset
Delay on e.v. relay	~15 sec.
IP rating	IP54
Dimensions	H79 W134 D62mm
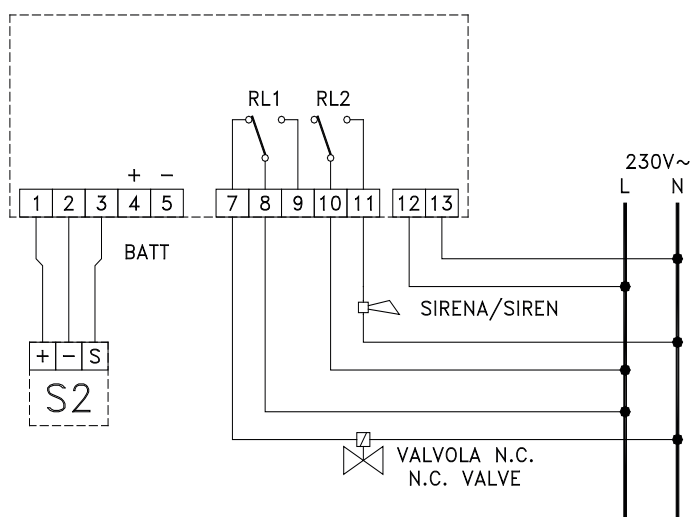
Notes:
(1) The remote sensor to be used are: SGA MET, SGA GPL, SGI ME1, SGI GP1, SGI ME1 M, SGI GP1 M
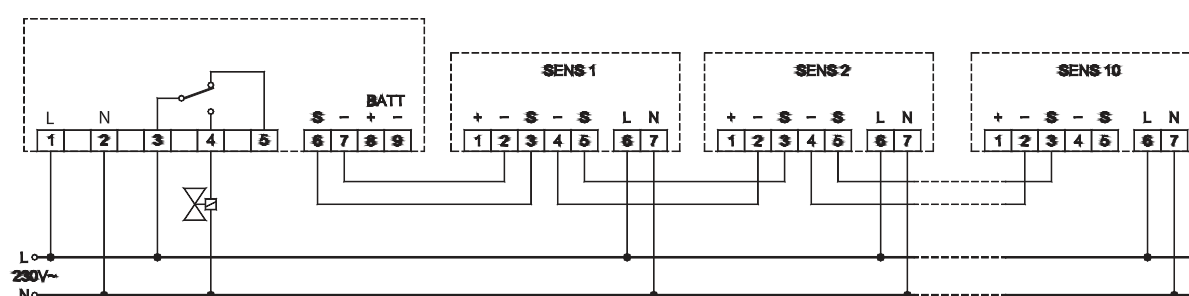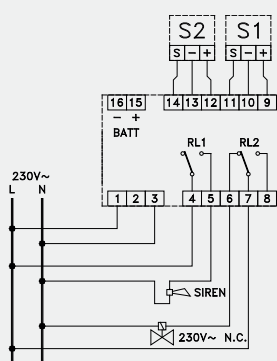(2) The back-up battery to be used is ACCSGB12.

RI M01RM.............................€ **219**

Methane

RI G01RM.............................€ **219**

LPG

NEW

GAS DETECTOR FOR MULTI-POINT SYSTEMS

This gas detector is able to detect different gases:
the RI G01RM version is LPG-sensitive while the RI M01RM version detects Methane (CH4); it is also possible to connect up to 10 detectors in cascade via the 3 dedicated terminals.
The device is able to signal gas concentrations far below the hazard thresholds and other conditions relating to the state, via 4 LEDs and an internal buzzer.
Possibility to connect one or more external buttons for the activation of a manual alarm.
Possibility to connect one or more external buttons for system reset after an alarm.

TECHNICAL FEATURES

Power supply:	100 - 240V ~ 50/60 Hz
Power consumption:	3 VA
Sensor Type:	Catalytic
Contact rating:	Pre-alarm relay: 3 (2) A 250V ~ SPDT
	Relay Alarm: 3 (2) A 250V ~ SPDT
Gas detected:	RIG01M: LPG
	RIM01M: Methane
Degree of protection:	IP 54
Dimensions (including cable glands):	134 x 100 x 62 mm (L x H x D)
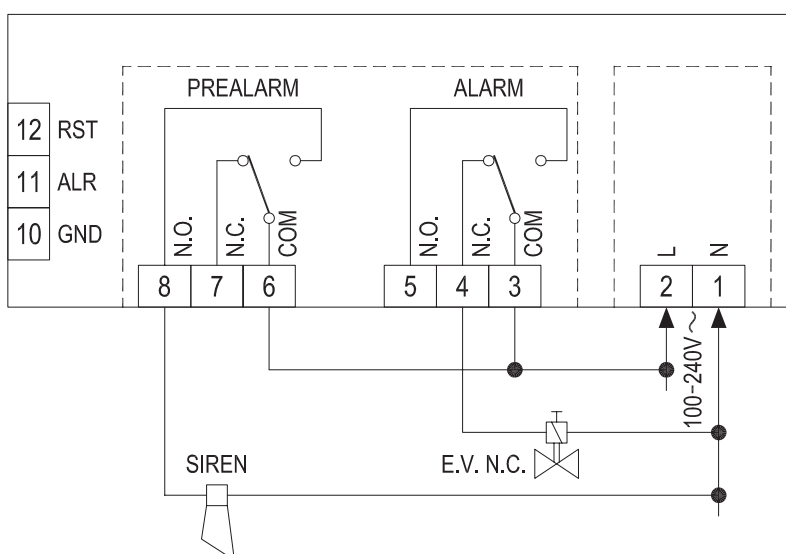
RGI 000 MSX4 .... € **425**

4 IN 2 OUT + RESET CONTROL UNIT

Control unit for gas leakage sensors; input for up to 4 remote sensors (1). Reset and test pushbuttons. Memory of the alarm state. 2 relay outputs.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz
Output (relay)	2x6(2)A @ 250V~ SPDT
Indicators:	
active/fault/alarm	4 Green LEDs/blinking LED/4 red LEDs
Delay on e.v. relay	1 .. 90 sec.
Button 1	Test
Button 2	Reset
IP rating	IP54
Dimensions	H188 W230 D114mm
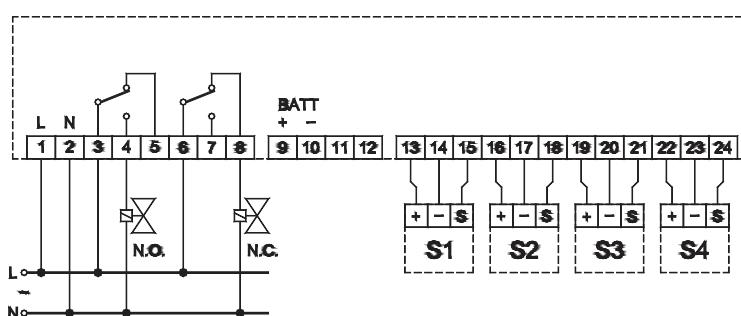
Notes: (1) The remote sensor used are: SGA MET, SGA GPL, SGI ME1, SGI GP1, SGI ME1 M, SGI GP1 M. (2) The back-up battery to be used is ACCSGB12.

RGI 001 MSX2 .... € **120**

2 IN 2 OUT + RESET CONTROL UNIT

Control unit for gas leakage sensors with two relay outputs, inputs for 2 remote sensors (1). Reset button. IP54 case. For Non-classified ATEX zones.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz
Output 1 (relay x e.v.)	4(2)A @ 250V~ SPDT
Output 2 (relay x alarm)	4(2)A @ 250V~ SPST
Indicators: active/alarm1/alarm2	Green/red/red LED
Delay on e.v. relay	~15 sec.
Push button	Reset
Dimensions	H79 W134 D62mm
IP rating	IP 54
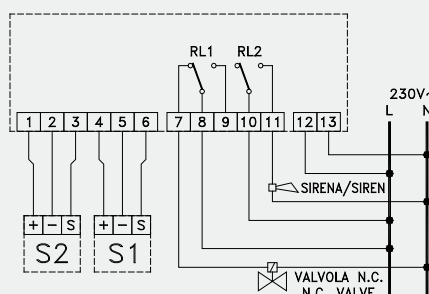
Notes: (1) The remote sensor used are: SGA MET, SGA GPL, SGI ME1, SGI GP1, SGI ME1 M, SGI GP1 M. (2) The back-up battery to be used is ACCSGB12.

RGI 000 LBXD .... € **171**
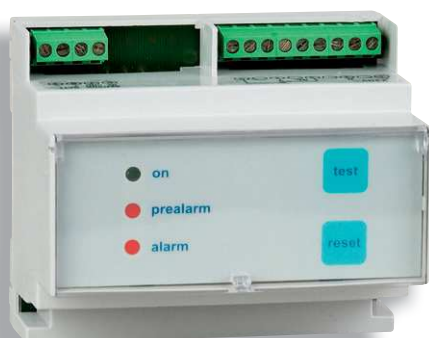
10 IN 1 OUT + RESET CONTROL UNIT

Control unit for gas leakage sensors with alarm buzzer ; input for up to 10 remote 230V~ powered sensors (1). Reset and test pushbuttons and acoustic alarm. For non-classified ATEX zones.

TECHNICAL FEATURES

Power supply	230V~ ±10% 50Hz
Battery	12V ±10%
Output (relay)	5(1)A @ 250V~ SPDT
active/prealarm/alarm	Green/red/red LED
Delay on e.v. relay	>20 sec.
Button 1	Test
Button 2	Reset
Case	6 modules for DIN-rail
IP rating	IP54
Dimensions	H90 W105 D70mm

Notes: (1) The remote sensor used are: SGA MET, SGA GPL, SGI ME1, SGI GP1, SGI ME1 M, SGI GP1 M.
(2) The back-up battery to be used is ACCSGB12.

RGI 000 MBX2 .... € **124**

2 IN 2 OUT DIN RAIL MOUNT BASIC CONTROL UNIT

Control unit for gas leakage sensors in 3 module DIN-rail case, with two relay outputs, inputs for 2 remote sensors (1) and for back-up battery (ACCSGB12). Test and reset buttons. For Non-classified ATEX zones.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz
Output 1 (relay x e.v.)	4(2)A @ 250V~ SPDT
Output 2 (relay x alarm)	4(2)A @ 250V~ SPST
Indicators: active/alarm1/alarm2	Green/red/red LED
Delay on e.v. relay	~15 sec.
Push buttons	Test/reset
Case	3 modules for DIN-rail
IP rating	IP30
Dimensions	H96 W53 D73mm

Notes: (1) The remote sensor used are: SGA MET, SGA GPL, SGI ME1, SGI GP1, SGI ME1 M, SGI GP1 M. (2) The back-up battery to be used is ACCSGB12.

SGI ME1 .... € **106**
Methane

SGI GP1 .... € **106**
LPG

REMOTE SENSOR

Remote sensor for methane or LPG gas leakages. Semiconductor sensing element. Alarm threshold: 10% L.E.L. . Sensor life: 5 years. IP 54 case. Powered by control unit.

SGI ME1 M .... € **146**
Methane

SGI GP1 M .... € **146**
LPG

REMOTE SENSOR

Remote sensor for methane or LPG gas leakages. Semiconductor sensing element. Alarm threshold: 10% L.E.L. . Sensor life: 5 years. IP 54 case. 230V~ power supply.

RGI CO0 L42 .... € **213**

CO DETECTOR

Detector for carbone monoxide leakages with two relay outputs and internal sensor. Test and reset button. IP40 case.

TECHNICAL FEATURES

Power supply	230V~ ±10% 50Hz
Output 1 (relay x alarm)	6(2)A @ 250V~ SPDT
Output 2(relay x e.v.)	6(2)A @ 250V~ SPDT
Prealarm threshold	16ppm ±4ppm CO
Alarm threshold	80ppm ±4ppm CO
Indicators: active/fault/alarm	Green/yellow/red LED
IP rating	IP40
Dimensions	H100 W130 D62mm

• **ACCESSORIES**

   Precalibrated sensor
   ACC RIC 0001 .... € **98**
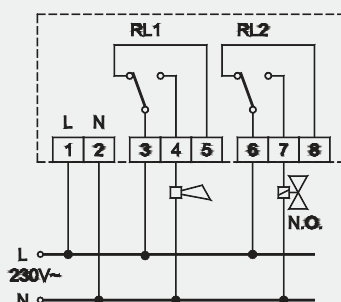
ACCESSORIES

AC SR01 .... € **195**
Electronic 76dB whistle with 21W flasher.
12V-24V power supply

ACC SRL 220.......................... € **168**
Electronic 70dB whistle with 25W flasher.
220V~power supply

ACC SGB 12........................... € **703**
Back-up battery for RGY 000 MBP4, RXA 01M, RS 00 21, RGI 000 MSX4, RGI 000 LBXD, RGI 000 MBX2, RGI 001
MSX2. 8V-12V outputs. Battery autonomy ~3 hours (depending on the loads connected).
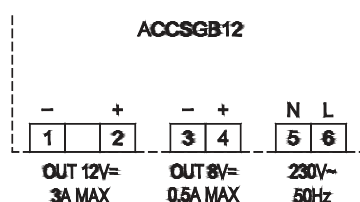
N.O. ELECTRO-VALVES

Cut-off electro-valves for gas with manual reset. Normally open. During
normal operation there is no electrical consumption. Power consumption:
19VA. Max working pressure 500mBar.

Cod	Price	Coupling	Power supply	Coupling type
EVG PAF M015	€ **58**	DN15(1/2")	230 V~	Threaded
EVG PAF M020	€ **58**	DN20(3 /4")	230 V~	Threaded
EVG PAF M025	€ **75**	DN25(1")	230 V~	Threaded
EVG NAF M032	€ **122**	DN32(1"1/4)	230 V~	Threaded
EVG NAF M040	€ **122**	DN40(1"1/2)	230 V~	Threaded
EVG NAF M050	€ **157**	DN50(2")	230 V~	Threaded

Notes: ALSO AVAILABLE FOR 12V POWER SUPPLY +3 €

LOW ELECTRICAL CONSUMPTION ELECTRO-VALVES

Cut-off electro-valve for gas with manual reset. Low electrical consumption (2 W) or compact size. Normally open (BA, RA) and normally closed (RC). Max working pressure 500mBar.

Cod	Price		Coupling	N.O./N.C.	Power supply	Coupling type
EVG BAF 1015	€ 74		DN15(1/2")	N.A.	12 V=(2 W)	Threaded
EVG BAF 1020	€ 75		DN20(3/4")	N.A.	12 V=(2 W)	Threaded
EVG BAF 1025	€ 111		DN25(1")	N.A.	12 V=(2 W)	Threaded
EVG RAF M020	€ 59	Compact size	DN20(3/4")	N.A.	230 V~ (7 VA)	Threaded
EVG RCF 1015	€ 75	Compact size	DN15(1/2")	N.C.	12 V= (6 VA)	Threaded
EVG RCF 1020	€ 75	Compact size	DN20(3/4")	N.C.	12 V= (6 VA)	Threaded
EVG RCF M015	€ 70	Compact size	DN15(1/2")	N.C.	230 V~ (7 VA)	Threaded
EVG RCF M020	€ 75	Compact size	DN20(3/4")	N.C.	230 V~ (7 VA)	Threaded

Notes: ALSO AVAILABLE FOR 12V POWER SUPPLY +3 €

N.C. ELECTRO-VALVES

Cut-off electro-valves for gas with manual reset. Normally closed: must be continuosly powered to allow the gas flow. Power consumption: 19VA. Max working pressure 500mBar.

Codice	Prezzo	Attacco da	Alimentazione	Tipo attacco
EVG PCF M015	€ 101	DN15(1/2")	230 V~	Threaded
EVG PCF M020	€ 101	DN20(3/4")	230 V~	Threaded
EVG PCF M025	€ 122	DN25(1")	230 V~	Threaded
EVG NCF M032	€ 147	DN32(1"1/4)	230 V~	Threaded
EVG NCF M040	€ 163	DN40(1"1/2)	230 V~	Threaded
EVG NCF M050	€ 154	DN50(2")	230 V~	Threaded

Notes: ALSO AVAILABLE FOR 12V POWER SUPPLY +3 €

SOLAR HEATING CONTROLLERS
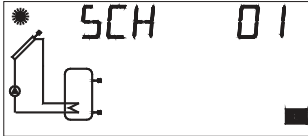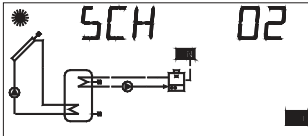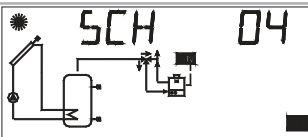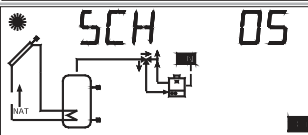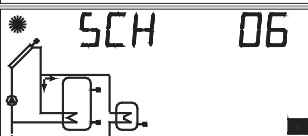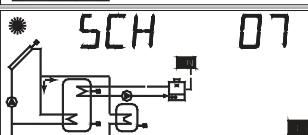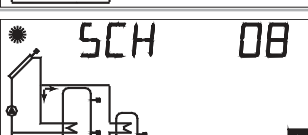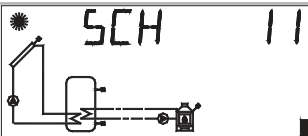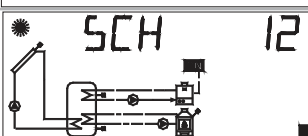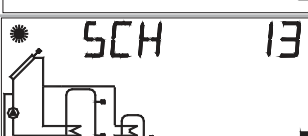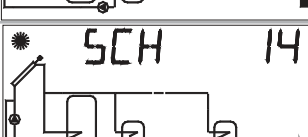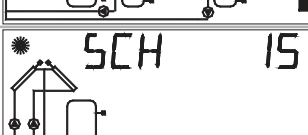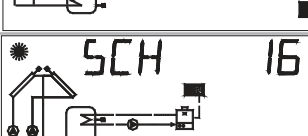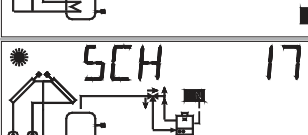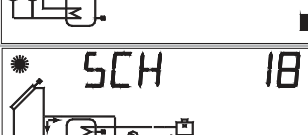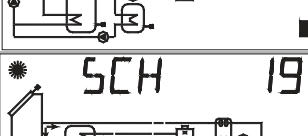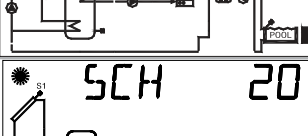
ELIOS - CONFIGURATION SYSTEM LAYOUTS

	ELIOS BASIC	ELIOS MIDI	ELIOS 25 STD
SCH 01	✓	✓	✓
SCH 02	✓	✓	✓
SCH 03	✓	✓	✓
SCH 04	✓	✓	✓
SCH 05	✓	✓	✓
SCH 06	--	--	✓
SCH 07	--	--	✓
SCH 08	--	--	✓
SCH 09	--	--	✓
SCH 10	--	--	✓

	ELIOS BASIC	ELIOS MIDI	ELIOS 25 STD
SCH 11	--	--	✓
SCH 12	--	--	✓
SCH 13	--	--	✓
SCH 14	--	--	✓
SCH 15	--	--	✓
SCH 16	--	--	✓
SCH 17	--	--	✓
SCH 18	--	--	✓
SCH 19	--	--	✓
SCH 20	--	✓	✓

ELIOS BASIC

TS T01M................................ € **138**
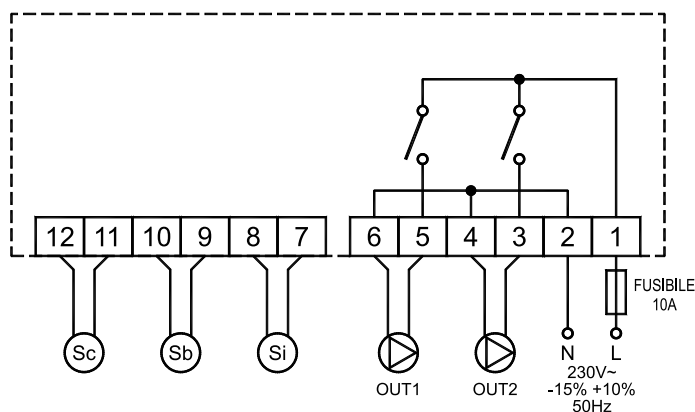Including 3 probes

ANALOG SOLAR CONTROLLER

Analog differential controller for solar heating plants. Three temperature inputs from NTC sensors and 2 on-off relay outputs SPST.
Additional thermostat for driving auxiliary heat source. LEDs show presence of power and pump activity. Configuration of 5 different system layouts. Adjustable antifrost function. Only for 230Vac Live + Neutral powered circulators (doesn't feature any PWM or 0..10V output) . In case of circulators with either PWM or 0..10V input please use accessory ACIW01.

TECHNICAL FETAURES

Power supply	230V ~ -15% +10% 50Hz
Sensor	NTC 10k Ohm @25°C ±1%
Power absorption	2,3VA
Pump output	5(1)A@250V~(powered)
Integration output	5(1)A@250V~(powered)
Accuracy	±1,5°C
Green LED indicator	Power supply
Red LED indicator	Pump active
IP rating	IP30
Operating temperature range	0°C .. 40°C
Storage temperature range	-10°C .. +50°C
Humidity limits	20% .. 80% non-condensing
Case	ABS VO self-extinguishing
Dimensions	H87 W132 D37mm

ELIOS MIDI

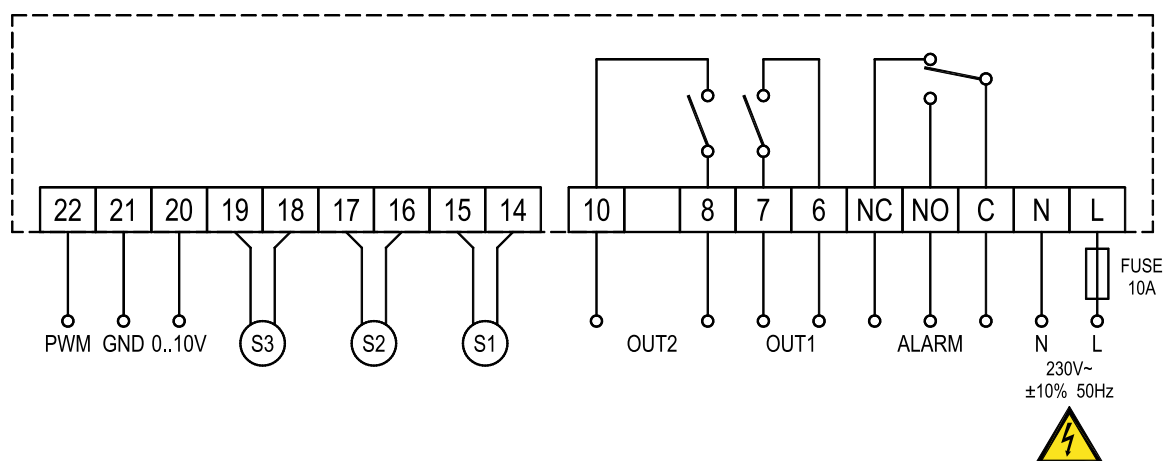**TDS T24 M .... € 191**
Including 3 probes

SOLAR CONTROLLER

Digital differential controller for solar heating plants.Three temperature inputs from NTC sensors and 2 on-off relay outputs + 1 NO/NC auxiliary output for alarm, 1 PWM output and 1 0..10V output. Additional thermostats for driving auxiliary heat sources. All temperatures are displayed. Configuration of 6 different system layouts. Self diagnostic feature, with visual and acoustic alarms.

TECHNICAL FETAURES

Power supply	230V ~ ±10% 50Hz
Power absorption	<2 VA
Inputs	3 x NTC 10k Ohm @ 25°C
Sensor operating range	2NTC 10K (-50°C÷110°C)
	1NTC 10K (-50°C÷200°C)
Temperature reading range	-20°C .. 180°C
Accuracy	±2°C
Resolution	0,1°C up to 99,9°C/ -20 +144,1°C up to 145 ÷180°C
Offset adjustment	on S1, S2, S3: ±5°C
Acoustic signal	On/Off (default On)
Back light timing	20 sec. from last keypress
Contacts rating	1 x 2(1)A max @ 250V~ (SPST)
(voltage free)	1 x 8(1)A max @ 250V~ (SPST)
	1 x 4(1)A max @ 250V~ (SPDT)
Outputs	PWM, 0..10V
IP rating	IP40
Operating temperature range	0°C .. 40°C
Storage temperature range	-10°C .. +50°C
Humidity limits	20% .. 80% non-condensing
Case	ABS VO self-extinguishing
Dimensions	H108 W156 D47mm

ELIOS 25 STANDARD

**TS T12M**................................. € **230**
Including 3 probes

SOLAR CONTROLLER

Digital differential controller for solar heating plants.
4 Pt1000 temperature inputs, 2 PWM output, 1 alarm auxiliary relay output SPDT. All temperatures are displayed. Configuration of 20 different system layouts. Self diagnostic feature, with visual and acoustic alarms. Available functions: recooling function, pump/valve kick, calorimeter.

TECHNICAL FETAURES

Power supply	230V ~ 50Hz
Power absorption	4VA
Inputs	4 x Pt1000 Classe B DIN
Sensor operating range	-50 °C .. +200 °C (collector)
	-50 °C .. +110 °C (Boiler)
Offset; adjustable on S1,S2,S3,S4 :	±5.0°C
Output relay contacts rating	
OUT1 - OUT2 - OUT3 - OUT4:	4x2(1)A max 230V~(SPST)
	Contacts powered
Alarm relay contacts rating:	4(1)A max 230V~(SPDT)
Output Signals:	PWM: Ampiezza: 10V ±15%
IP Rating:	IP 40
Action type:	1
Pollution Rating:	2
Operating temperature range:	0°C .. 40°C
Storage temperature range:	-10°C .. +50°C
Dimensions:	H156 W108 D47
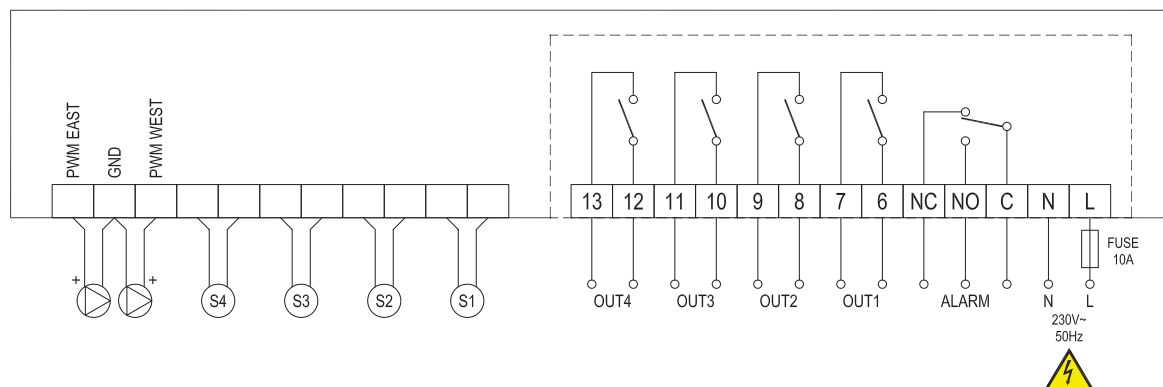
ACCESSORIES

ACC REL 02 .... € **58**
Accessories for free contacts: 2x230V~ inputs and 2 SPDT voltage outputs
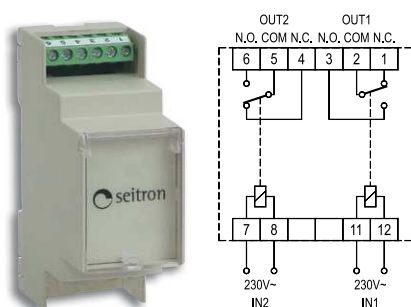
AC IW01 .... € **62**
Allow to convert On-Off pump output into a PWM or 0..10V output.

STL MTS L 150 .... € **16**
Pt1000 probe -50°C .. +200°C B DIN class

STL MTI M 150 .... € **11**
Pt1000 probe -50°C .. +110°C B DIN class

STL DES L 150 .... € **11**
NTC probe: 10K 1% -50°C .. +200°C

STL DEI M 150 .... € **6**
NTC probe: 10K 1% -50°C .. +110°C

POZ 001 .... € **9**
Brass termowell 1/2" 7x38,2mm with spring

STL PTS A 150 .... € **6**
PTC probe for solar controller (TDS005M, out of production). PTC 2k Ohm @25°C Working range - 25°C + 125°C

ELIOS GPS 9

## KC S009 .... € 630

PUMP STATIONS

Two pipes solar kit (supply/return), preassembled and leak tested module for solar plants with thermal insulation case.
High efficiency pump (Erp-2015).

TECHNICAL FEATURES

The solar kit features:

- Return valve with thermometer (0÷160°C)
- Manual air vent
- Flowmeter (2-12l/min)
- Fill /Drain valve
- Solar pump 15/75, dedicated to solar plants
- Safety group: Pressure Gauge (0 ÷ 10 bar), G Connector ¾" for connection to the expansion vessel, safety valve (6 bar Rp ¾")
- Supply valve with thermometer (0÷160°C)
- Thermoinsulating case

It is possible to install in the thermal insulation case the following Seitron solar controllers: ELIOS EASY, ELIOS MIDI, ELIOS 25, ELIOS 25 VARIO, ELIOS 25 VARIOPLUS, ELIOS 25 SUPER (not included).
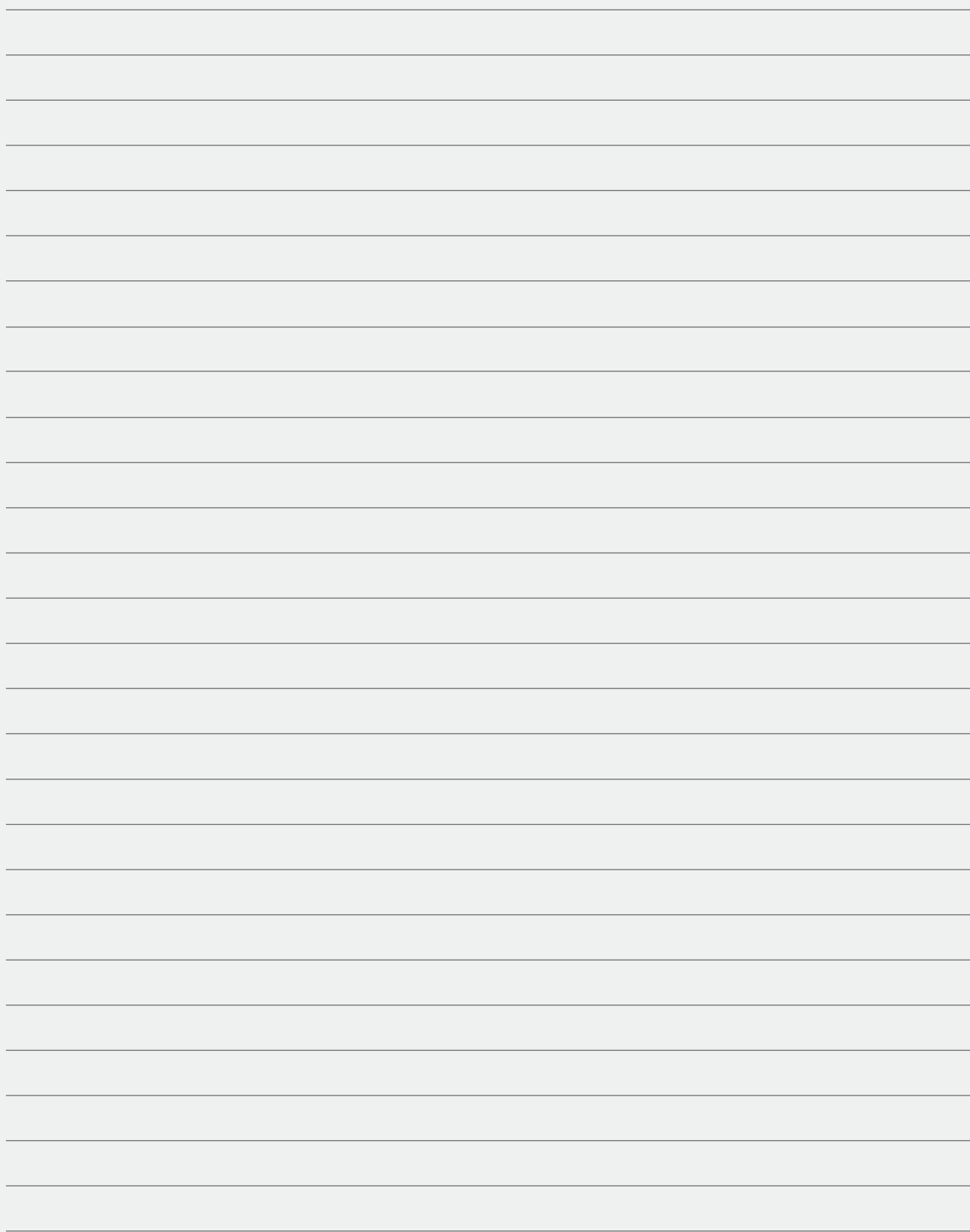
CLIMATE CONTROLLERS

RK P01M .... € **276**

CLIMATE REGULATOR

Climate regulator for systems with traditional heating and / or floor heating. It allows to manage 3 outputs (3 + 1 Relays) and 4 inputs Probes, 1 input for the thermostat environment and input 1 for the Remote Controller.

After selecting a plant, the climate regulator automatically manages the inputs and outputs used in the plant chosen.

The types of plants are the following: 1) 3-way valve and circulation pump PI floating valve regulation. 2) 3-way valve and circulation pump, optional use of the recirculation pump PI floating valve regulation. 3) One-stage burner, circulation pump, optional use the recirculation pump, ON - OFF type of management, 2-point control. 4) Two-stages burner and circulation pump, optional use the recirculation pump, type of management ON - OFF, 2-point control.

TECHNICAL FEATURES

Power supply	230V~ ±10% 50/60Hz
Output (relay)	3x2(1)A @ 250V~ SPST
	1x2(1)A @ 250V~ SPDT
Working range	-20 .. +120°C
Working curves	0.5 .. 4 T mand./T est.
LCD display	Backlit
Type of regulation	Comfort/Economy/Antifrost/Off
3 sensors included	3xNTC (10k Ohm @ 25°C)
Sensor input	4
Programming clock	Hourly / Weekly
Dimensions	H108 W156 D47mm
IP rating	IP40
Class Reg.2013/811/EC	VI = 4,0%
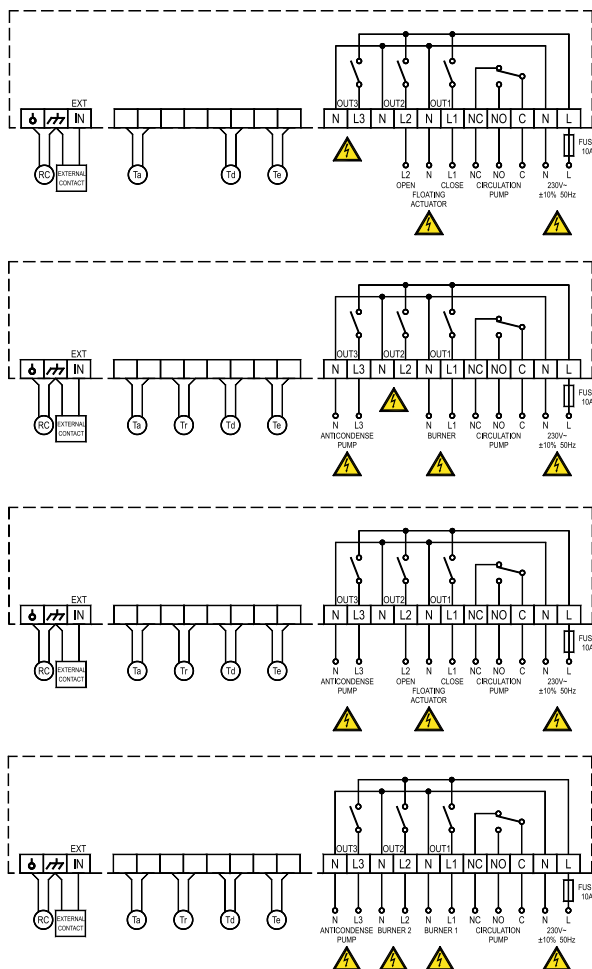
- **ACCESSORIES**

  Delivery water sensor, external, anti-condensate including

RKP 01M ACCESSORIES

ACC RK3 COM........................ € **27**
Remote control for RKP 01M

MORSETTIERA RKP01M
RKP01M TERMINAL BLOCK

| 25 | 24 |

ACCRK3COM
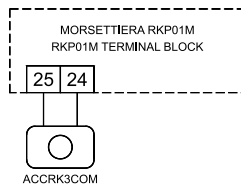
STA D01 .... € **11**
Room temperature probe

RKP 01M SPARE PARTS

STL D01 .... € **9**
Temperature probe for liquid and air 10k Ohm,
2 m cable

AC AD02................................. € **13**
Pipe clamp for supply and return probe

STE D01................................. € **31**
External temperature probe

RKP 01M CLIMATE REGULATOR: TYPICAL WIRING
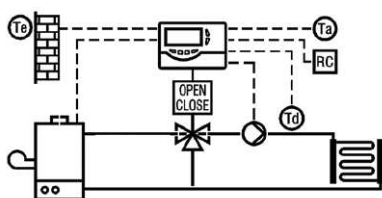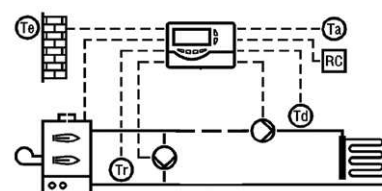
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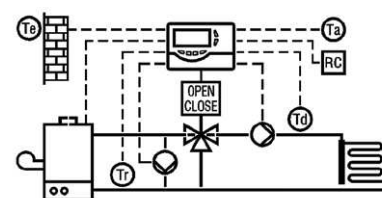
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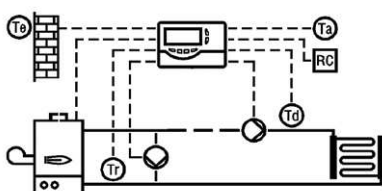
SCH 3

SCH 4

TT 401M .... € 308

MULTIZONES PROGRAMMABLE THERMOSTAT CONTROL FOR RADIANT TUBES UP TO 4 ZONES 8 TUBES IN DIN CASE

Digital microcontroller based regulator for radiant tubes for DIN rail mount: controls up to 8 radiant tubes by regulating according to the temperature acquired from the sensors (zones). Programmable thermostat over 4 adjustable temperature levels (off, antifrost, economy, comfort) and weekly programs up to 7 daily sets. Manual operation allowed for each temperature level.

TECHNICAL FEATURES

Power supply	230V~ -15% +10% 50Hz
Electrical absorption	< 3.2VA
Sensore	NTC (10K Ohm@25°C)
Regulation range	Comfort: +5°C .. +35°C
	Reduced: -5°C .. +25°C
	Antifreeze: -5°C .. +15°C
Accuracy	± 1° C
Resolution	0.2°C
Hysteresis	0.2°C
Contacts rating	8 x 8 (1) A @ 250V~ SPST
Protection grade	IP 30 mounted in frame
Operating temperature	0°C .. 40°C
Storage temperature	-10°C .. +50°C
Humidity limits	20% .. 80% RH non condensing
Size	157 x 90 x 71 mm (W x H x D)
Weight	685 g
Class Reg.2013/811/EC	I = 1,0%

• **ACCESSORIES**

Black bulb probe
STB D01 .... € 49

Ambient Probe
STA D01 .... € 11

4 Cannels Reset
ACC RES 04 .... € 95
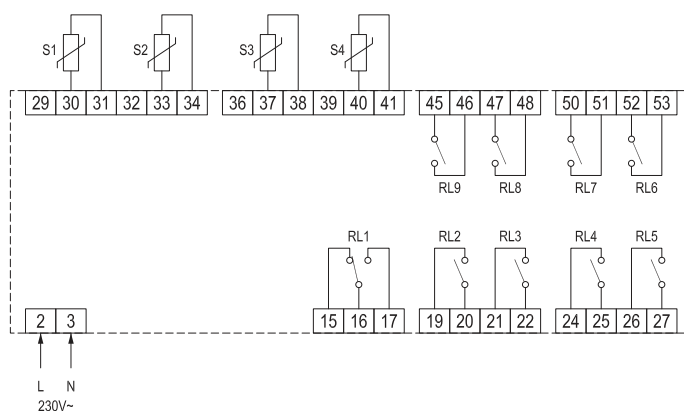
ACCESSORIES

POZ 001 .... € 9
½" threaded brass thermowell with spring.
Dim. 7 x 38,2 mm.

POZ 002 .... € 14
½" threaded brass thermowell.
Internal Diameter. 6 x 108 mm.

POZ 003 .... € 28
½"-1/4" steel pocket. Dim. 8 x 120 mm.

AC AD02 .... € 13
Pipe clamp for supply and return probe.
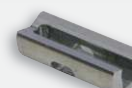
FUEGO

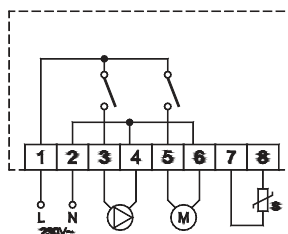**000 CCI** .... € **76**

FIREPLACE CONTROLLERS

Fireplace control for 3 modules junction boxes. Water temperature adjustment with knob. LED indication and acoustic alarm for water overtemperature. Relay outputs driving a circulation pump and a grill. Plastic colour: RAL 7016.

TECHNICAL FEATURES

Power supply	230V~ -15/+10% 50Hz
Output (relay)	5A @ 250V~ SPST (max. tot.)
Sensor	NTC (4k7 0hm @ 25°C)
Working range	30 .. 90°C
Red LED indicator	Pump active
Green LED indicator	Grill on
8 LED thermometer 20 .. 90°C	Water temperature
Buzzer alarm	Temp. H2O>90°C
Anti-frost	5°C
Slide switch	Off/on/grill
IP rating	IP20
Dimensions	H110 W60 D56mm
Class Reg.2013/811/EC	I = 1,0%

Notes: (2) Delivered with NTC probe with 1,5 m of cable (STL NTS A 150) and POZ 001 pocket.

NON FITTING PLATES:
(B-TICINO)

FITTING PLATES
BRAND
BTICINO®
VIMAR®
AVE®

FUEGO 2

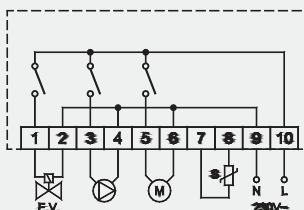**CIE 001 MD** .... € **82**

FIREPLACE CONTROLLERS

Fireplace control for 3 modules junction boxes. Heating and sanitary water temperature adjustment with two knobs. LED indication and acoustic alarm for water overtemperature. Relay outputs driving a circulation pump, a valve and a grill. Plastic colour: RAL 7016.

TECHNICAL FEATURES

Power supply	230V~ ±10% 50..60Hz
Output (relay)	2x 5A @ 250V~ SPST (max. tot.)
Sensor	NTC (4k7 0hm@25°C)
Working range:	
heating/sanitary water	30 .. 90°C/50 .. 70°C
Red LED indicator	Pump active
Green LED indicator	Grill on
Red LED indicator	Valve open
7 LED thermometer 20 .. 90°C	Water temperature
Buzzer alarm	Temp. H2O>90°C
Slide switch	Off/on/grill
Dimensions	H110 W60 D56mm
IP rating	IP20
Class Reg.2013/811/EC	I = 1,0%

Notes: (2) Delivered with NTC probe with 1,5 m of cable (STL NTS A 150) and POZ 001 pocket.

NON FITTING PLATES:
(B-TICINO)

FITTING PLATES:
MARCA
BTICINO®
VIMAR®
AVE®

**TA G02M** .... € **135**

WEEKLY DIGITAL CHRONOTHERMOSTAT IP54

230V wall-mounted digital weekly thermostat in IP54 version, with 3-level temperature adjustment (Comfort, Reduced, Off / Antifreeze). Large backlit display. Remote probe. Reset circuit for burners with blocking signal and Reset button electrically separated from the thermostat. 2 relay outputs in sequence plus one fan relay output.
Typical application for greenhouse.

TECHNICAL FEATURES

Power supply	230V ~ -15 / + 10% 50Hz
Working range	0 .. + 40 ° C
Contacts (relays)	3 x 5 (1) A @ 250V ~ SPST
NTC	sensor (10K0 0hm @ 25 ° C Beta 3977)
Differential	1 ° C
Indication	red LED Burner block
Degree of protection	IP54
Class Reg.2013 / 811 / CE	I = 1.0%

TB M01M .... € **89**
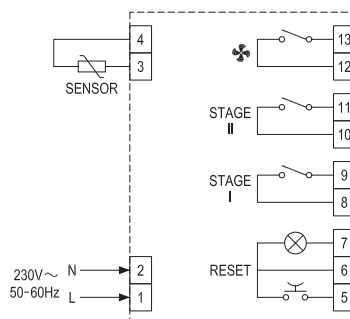
• **ACCESSORIES**
  Ambient probe
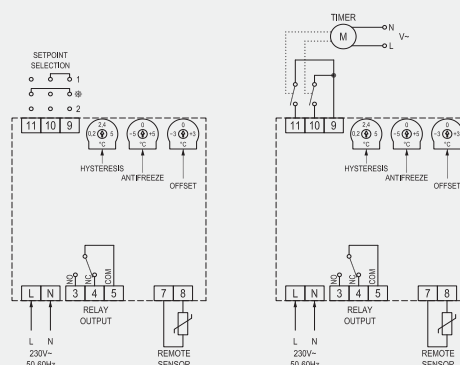 **STL D01** .... € **9**

DIN RAIL THERMOSTAT

One stage thermostat with three set-points (comfort, economy, anti-frost) selectable with an external signal. Relay output. Sensor not included.

TECHNICAL FEATURES

Power supply	230V~ 50-60Hz
Output (relay)	8(2)A @ 250V~ SPDT
Operating temperature	0 .. 60°C
Set-point Comfort	Adjustable 5 .. 40°C
Economy	Adjustable 5 .. 40°C
Anti-frost	Adjustable -5 .. +5°C
Hysteresis	Adjustable 0.2 .. +5°C
Offset	Regolabile -3 .. +3 °C
External sensor	NTC (10 k Ohm @ 25°C) 1%
Dimensions	H69 W53 D90mm
IP rating	IP40
Class Reg.2013/811/EC	I = 1,0%

PROBES

TEMPERATURE PROBES FOR LIQUIDS AND AIR

STL NTS A 150 .... € **8**
Sensor NTC, Working Range: -25 .. +125°C, Resistance=4k7 Ohm±2% @ 25°C, Protection: IP65, Dimensions: P6xL25mm

STL OTS A 150 .... € **5**
Sensor NTC, Working Range: -25 .. +125°C, Resistance=R=100k Ohm±1% @ 25°C, Protection: IP65, Dimensions: P6xL25mm

STL D01 .... € **9**
Sensor NTC, Working Range: -25 .. +125°C, Resistance=10k Ohm±1% @ 25°C, Protection: IP65, Dimensions: P6xL25mm

STL PTS A 150 .... € **6**
Sensor PTC, Working Range: -25 .. +125°C, Resistance=R=2k Ohm @ 25°C, Protection: IP65, Dimensions: P6xL25mm

BLACK BULB PROBE, WALL MOUNTING

STB PS 003 .... € **36**
Sensor PTC, Working Range: -20 .. +70°C, Resistance=2k Ohm @ 25°C, Protection: IP54, Dimensions: A154xL79xP84mm

STB D01 .... € **49**
Sensor NTC, Working Range: -20 .. +70°C, Resistance=10k Ohm @ 25°C, Protection: IP54, Dimensions: A154xL79xP84mm

ROOM TEMPERATURE PROBE, WALL MOUNTING

STA NP3 .... € **17**
Sensor NTC, Working Range: 0 .. +50°C, Resistance=4k7 Ohm±2% @ 25°C, Protection: IP30, Dimensions: A85xL85x P31mm

STA OP3 .... € **17**
Sensor NTC, Working Range: 0 .. +50°C, Resistance=R=100k Ohm±1% @ 25°C, Protection: IP30, Dimensions: A85xL85x P31mm

STA D01 .... € **11**
Sensor NTC, Working Range: 0 .. +50°C, Resistance=10k Ohm±2% @ 25°C, Protection: IP30, Dimensions: A85xL85x P31mm

STA PP3 .... € **14**
Sensor PTC, Working Range: 0 .. +50°C, Resistance=R=2k Ohm @ 25°C, Protection: IP30, Dimensions: A85xL85x P31mm

OUTDOOR TEMPERATURE PROBE

STE NS .... € **45**
Sensor NTC, Working Range: -20 .. +60°C, Resistance=4k7 Ohm±2% @ 25°C, Protection: IP65, Dimensions: A50xL52xP35mm

STE OS .... € **22**
Sensor NTC, Working Range: -20 .. +60°C, Resistance=100k Ohm±1% @ 25°C, Protection: IP65, Dimensions: A50xL52xP35mm

STE PS .... € **35**
Sensor PTC, Working Range: -20 .. +60°C, Resistance=2k Ohm @ 25°C, Protection: IP65, Dimensions: A50xL52xP35mm

DOCUMENTATION available on su www.seitron.com

CERTIFICATIONS available on www.seitron.com
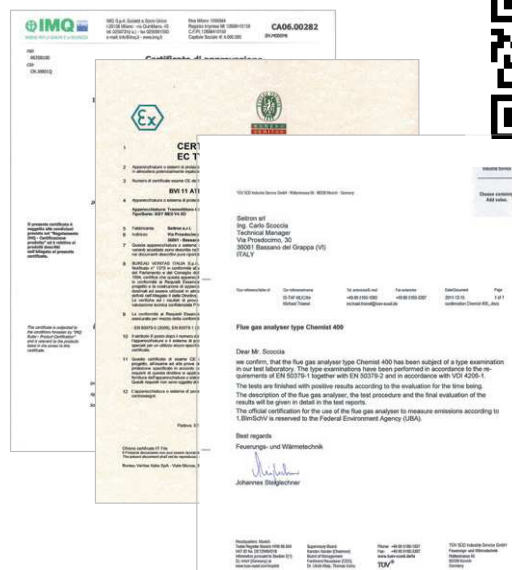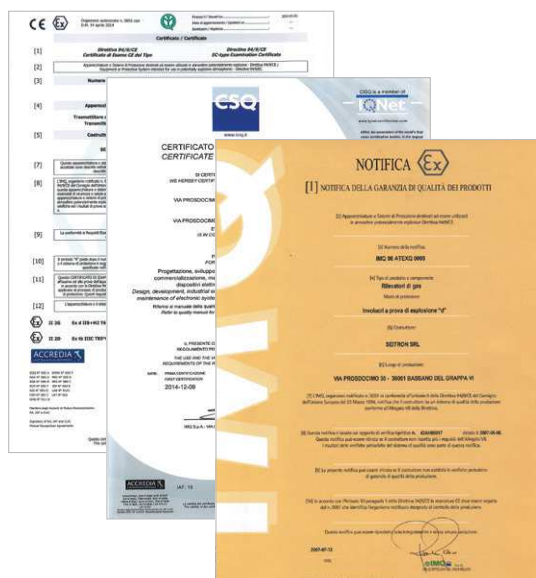
WARRANTY

WARRANTY CONDITIONS

Seitron repair or replace those parts found to be defective within the warranty period. The defective units must anyway arrive at Seitron in Italy free of charge. This warranty doesn't cover all damages caused by accidental breakages, natural events, incorrect transportation or any use different from the instruction of the product. Any repairs, incorrect handling or changes to the product without authorization from Seitron invalidate this warranty.

WARRANTY PERIOD

This warranty is valid for a period of 36 months starting from the date of production (see label on the product), exept where explicity indicated.

PRODUCT RETURN AUTHORIZATION

The Customer needs an authorization number to return a defective product. In order to obtain the authorization number please communicate the manufacturing date to Seitron, together with number of the invoice or number of document of transportation and defect found. In the view of a constant development of their products, Seitron reserves the right of changing technical data and features without prior notice.

We suggest you to check out the latest version of technical documentation at seitron website: www.seitron.it
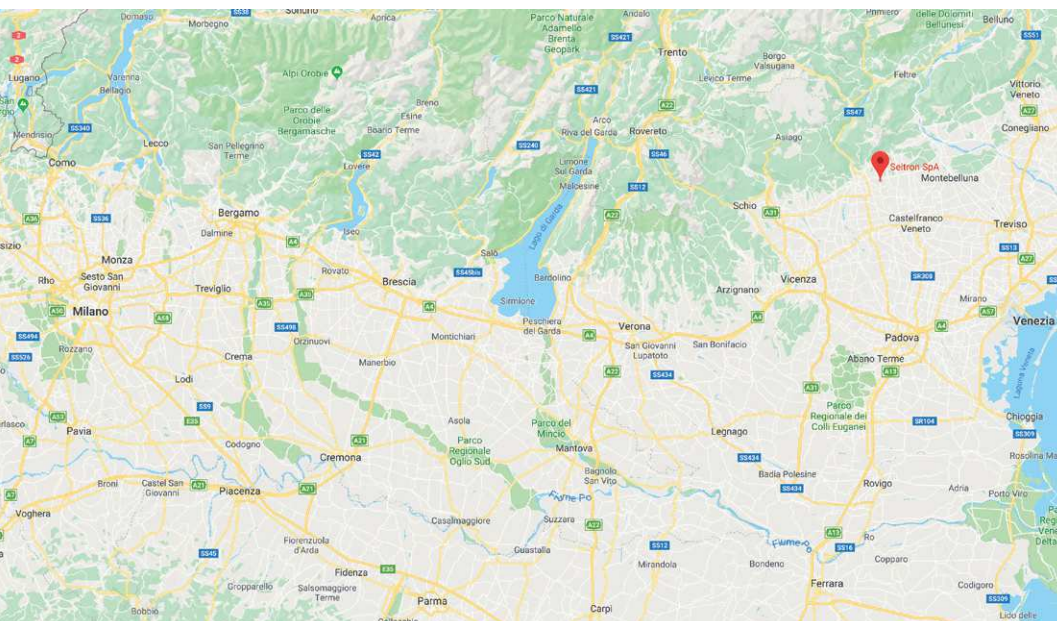
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