

Osseitron

Osseitron





Citron



Founded in 1981 by M.Sc. Vito Felleppa, **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:

- 12 milion Euro turnover
- 1 milion Euro of corporation stock
- 70 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

### PROGRAMMABLE THERMOSTATS

|                          |        |
|--------------------------|--------|
| Programmable thermostats | pag. 1 |
| Telephone interfaces     | pag. 7 |

### THERMOSTATS / WIRING BOXES

|                                     |         |
|-------------------------------------|---------|
| Electronic room thermostats         | pag. 9  |
| Electro-mechanical room thermostats | pag. 14 |
| Wiring boxes                        | pag. 16 |

### WIRELESS SYSTEM

|              |         |
|--------------|---------|
| Radio kits   | pag. 27 |
| Transmitters | pag. 28 |
| Receivers    | pag. 31 |

### CLIMATE CONTROLLERS

|                            |         |
|----------------------------|---------|
| Climate controllers        | pag. 41 |
| DIN rail mount thermostats | pag. 44 |
| Controls for fireplaces    | pag. 45 |
| Controls for greenhouses   | pag. 46 |
| Probes and sensors         | pag. 47 |

### FAN COIL THERMOSTATS

|                           |         |
|---------------------------|---------|
| Thermostats for fan-coils | pag. 49 |
| Power Interface           | pag. 61 |

### SOLAR HEATING CONTROLLERS

|                           |         |
|---------------------------|---------|
| Solar heating controllers | pag. 65 |
| Accessories               | pag. 70 |
| Pumping station           | pag. 71 |



## RESIDENTIAL GAS DETECTORS

|                                   |         |
|-----------------------------------|---------|
| Residential gas leakage detectors | pag. 73 |
| Remote sensors                    | pag. 81 |
| Accessories                       | pag. 86 |

## INDUSTRIAL GAS DETECTORS

|                                           |          |
|-------------------------------------------|----------|
| Product selection guide                   | pag. 88  |
| Transmitters                              | pag. 90  |
| Control units                             | pag. 94  |
| Industrial gas detectors and control unit | pag. 99  |
| Electro-valves                            | pag. 103 |

## COMBUSTIONS ANALYZERS

|                            |          |
|----------------------------|----------|
| CHEMIST 100 BE GREEN       | pag. 106 |
| CHEMIST 500 / 500 BE GREEN | pag. 112 |
| CHEMIST 600 / 600 BE GREEN | pag. 124 |
| CHEMIST 900                | pag. 132 |
| Accessories                | pag. 138 |
| Gas sensors                | pag. 145 |

## PORTABLE INSTRUMENTS

|                                     |          |
|-------------------------------------|----------|
| Micromanometers                     | pag. 147 |
| Portable hydrocarbon gases detector | pag. 149 |
| Thermometer                         | pag. 150 |
| Kit for pipes tightness test        | pag. 150 |
| Accessories                         | pag. 151 |

# PRODUCTS INDEX

| COD | pag. | € |
|-----|------|---|
|-----|------|---|

|           |     |        |
|-----------|-----|--------|
| 000CCI    | 45  | 76     |
| AAAL05    | 141 | €56    |
| AACADX005 | 141 | €3     |
| AACAL04   | 141 | €40    |
| AACBF01   | 141 | 12     |
| AACCT01   | 139 | €149   |
| AACCV03   | 141 | €9     |
| AACDP02   | 143 | 371    |
| AACEX01   | 143 | 204    |
| AACFA01   | 141 | €33    |
| AACKP01   | 143 | €35    |
| AACKP02   | 143 | €18    |
| AACNI01   | 138 | €10    |
| AACPB02   | 139 | €38    |
| AACPB06   | 139 | €51    |
| AACPB07   | 139 | €50    |
| AACR03    | 139 | €144   |
| AACR09    | 140 | 127    |
| AACR10    | 140 | €149   |
| AACRC01   | 138 | €3     |
| AACSA04   | 145 | 79     |
| AACSE05   | 145 | 523    |
| AACSE06   | 145 | €568   |
| AACSE07   | 145 | 223    |
| AACSE10   | 145 | €508   |
| AACSE12   | 145 | 502    |
| AACSE13   | 145 | 812    |
| AACSE14   | 145 | 812    |
| AACSE15   | 145 | 223    |
| AACSE17   | 145 | €914   |
| AACSE18   | 145 | €914   |
| AACSE19   | 145 | 112    |
| AACSE20   | 145 | 376    |
| AACSE24   | 145 | 523    |
| AACSE25   | 145 | €599   |
| AACSE26   | 145 | €914   |
| AACSE28   | 145 | €914   |
| AACSE35   | 145 | €335   |
| AACSE39   | 145 | 467    |
| AACSE43   | 145 | 370    |
| AACSE47   | 145 | €1.005 |
| AACSE50   | 110 | 175    |
| AACSE56   | 145 | €914   |
| AACSE58   | 110 | €331   |
| AACSE60   | 110 | €360   |
| AACSF11   | 142 | 326    |
| AACSF12   | 142 | 326    |
| AACSM03   | 139 | 79     |
| AACS001   | 142 | €169   |
| AACTA03   | 141 | €43    |
| AACTA03A  | 141 | €55    |

| COD | pag. | € |
|-----|------|---|
|-----|------|---|

|             |     |        |
|-------------|-----|--------|
| AAKT04      | 143 | 275    |
| AAPB01      | 139 | €53    |
| AAPB13      | 140 | 42     |
| AAPM02      | 141 | €316   |
| AARA01      | 141 | €33    |
| AARC04      | 138 | €3     |
| AARC05      | 138 | €10    |
| AARC06      | 138 | €5     |
| AARC07      | 138 | €10    |
| AARC08      | 138 | €5     |
| AARC09      | 138 | €8     |
| AARC10      | 138 | €8     |
| AASA05      | 143 | 75     |
| AASA06      | 142 | €84    |
| AASA08      | 143 | 77     |
| AASC01      | 142 | €366   |
| AASF51A     | 142 | 250    |
| AASF62A     | 142 | 270    |
| AASF65A     | 142 | €408   |
| AASF66A     | 142 | €485   |
| AASF71A     | 142 | €180   |
| AASF72A     | 142 | €195   |
| AASG01      | 143 | 77     |
| AASI01      | 141 | 20     |
| AASL05A     | 142 | 326    |
| AASM05      | 139 | €55    |
| AASM06      | 139 | 79     |
| AASM07      | 140 | €43    |
| AASM10      | 140 | €69    |
| AASP01      | 141 | 245    |
| AAST01      | 138 | 255    |
| AASW08      | 124 | €      |
| AASW09      | 124 | €      |
| AASX01      | 142 | 296    |
| AASX02      | 142 | €1.300 |
| AATT01      | 143 | €469   |
| AATT02      | 143 | €510   |
| AAUA01      | 141 | €11    |
| AAZN01      | 139 | 279    |
| ACAD01      | 98  | €36    |
| ACAD02      | 43  | €13    |
| ACAD05      | 98  | €91    |
| ACAD06      | 98  | €136   |
| ACAN02      | 7   | €44    |
| ACCCHIAVE01 | 151 | €8     |
| ACCRELO2    | 70  | €56    |
| ACCRELO3    | 98  | 76     |
| ACCRES04    | 98  | 92     |
| ACCRIC0001  | 102 | €98    |
| ACCRK3COM   | 43  | 26     |
| ACCSGB12    | 103 | 682    |

| COD | pag. | € |
|-----|------|---|
|-----|------|---|

|                 |        |        |
|-----------------|--------|--------|
| ACCSRL220       | 103    | €163   |
| ACDS01          | 97     | 252    |
| ACIF01          | 63     | 106    |
| ACIMB1          | 98     | 75     |
| ACIR01          | 98     | 70     |
| ACIS01          | 97     | €166   |
| ACISB1          | 98     | €66    |
| ACIW01          | 70     | €60    |
| ACKB01          | 24, 39 | €9     |
| ACKB02          | 24, 39 | €9     |
| ACMC01          | 86     | 100    |
| ACMC08          | 98     | 142    |
| ACMG01          | 86     | €59    |
| ACMG02          | 98     | €113   |
| ACMG07          | 98     | 201    |
| ACMM01          | 86     | 59     |
| ACMM02          | 86, 98 | 102    |
| ACMM07          | 98     | 201    |
| ACSR01          | 103    | €188   |
| ACST02          | 138    | 420    |
| ACSW01          | 97     | -      |
| ACVM01          | 60     | €19    |
| ALC006M         | 17     | €86    |
| ALC006U         | 17     | €63    |
| ALC012M         | 18     | 170    |
| ALC012U         | 18     | €100   |
| ALCD08M02       | 21     | 211    |
| ALCD08M0M       | 20     | €169   |
| ALP01U          | 23     | 213    |
| ALP03U          | 22     | €99    |
| ALP06U          | 19     | €54    |
| CER006          | 148    | €40    |
| CER008          | 148    | €40    |
| CER009          | 149    | €40    |
| CER012          | 144    | €150   |
| CER013          | 144    | 170    |
| CER014          | 144    | 200    |
| CER015          | 144    | 200    |
| CER016          | 144    | 240    |
| CER017          | 144    | €40    |
| CHEMIST 101 BG  | 108    | €900   |
| CHEMIST 101S BG | 108    | €1.100 |
| CHEMIST 102 BG  | 108    | €1.400 |
| CHEMIST 102S BG | 108    | €1.600 |
| CHEMIST 103 BG  | 108    | €1.900 |
| CHEMIST 103S BG | 108    | 2.100  |
| CHEMIST 500X    | 114    | €3.045 |
| CHEMIST 500X BG | 120    | 2.995  |
| CHEMIST 501     | 114    | 2.640  |
| CHEMIST 502     | 114    | €3.450 |
| CHEMIST 502 BG  | 120    | €3.400 |

| COD | pag. | € |
|-----|------|---|
|-----|------|---|

|                 |     |        |
|-----------------|-----|--------|
| CHEMIST 502B    | 114 | 2.940  |
| CHEMIST 502B BG | 120 | 2.890  |
| CHEMIST 502C    | 114 | €3.855 |
| CHEMIST 502C BG | 120 | €3.805 |
| CHEMIST 503     | 114 | €3.960 |
| CHEMIST 503 BG  | 120 | €3.910 |
| CHEMIST 503B    | 114 | €3.450 |
| CHEMIST 503B BG | 120 | €3.400 |
| CHEMIST 504N    | 114 | 4.770  |
| CHEMIST 504N BG | 120 | 4.720  |
| CHEMIST 504S    | 114 | 4.770  |
| CHEMIST 504S BG | 120 | 4.720  |
| CHM088BX        | 86  | 12     |
| CIE001MD        | 45  | €80    |
| CON009          | 144 | €350   |
| CON010          | 144 | €400   |
| CON011          | 144 | 470    |
| DA0411          | 30  | 75     |
| DCD01B          | 29  | €100   |
| DCW01B          | 29  | €105   |
| DDGSM1          | 79  | 132    |
| DDMSM1          | 79  | 132    |
| DLP241M         | 35  | 102    |
| DLP441M         | 35  | €141   |
| DLP8412         | 37  | €304   |
| DLP841M         | 36  | €145   |
| DRG01M          | 79  | €89    |
| DRR01M          | 31  | €81    |
| DRR02M          | 31  | €89    |
| DTPF85BC        | 30  | €48    |
| DTPF85BCT       | 30  | €59    |
| EVGBAF1015      | 104 | 72     |
| EVGBAF1020      | 104 | 73     |
| EVGBAF1025      | 104 | €108   |
| EVGNAFM032      | 103 | €118   |
| EVGNAFM040      | 103 | €118   |
| EVGNAFM050      | 103 | 152    |
| EVGNCFM032      | 104 | €143   |
| EVGNCFM040      | 104 | €158   |
| EVGNCFM050      | 104 | 142    |
| EVGPAFM015      | 103 | €56    |
| EVGPAFM020      | 103 | €56    |
| EVGPAFM025      | 103 | 73     |
| EVGPCFM015      | 104 | €98    |
| EVGPCFM020      | 104 | €98    |
| EVGPCFM025      | 104 | €118   |
| EVGRAFM020      | 104 | 57     |
| EVGRFC1015      | 104 | 73     |
| EVGRFC1020      | 104 | 73     |
| EVGRFCM015      | 104 | €68    |
| EVGRFCM020      | 104 | 73     |

| COD | pag. | € |
|-----|------|---|
|-----|------|---|

|             |     |       |
|-------------|-----|-------|
| IFMEI1M     | 60  | €34   |
| ITPF221     | 7   | 187   |
| ITR011      | 7   | €394  |
| KCR005      | 27  | 181   |
| KCR006      | 27  | €186  |
| KCS009      | 71  | 612   |
| KDG5R00019  | 78  | €149  |
| KDG5R00020  | 78  | 201   |
| KDGPR00002  | 84  | 225   |
| KDGPR00016  | 84  | 225   |
| KDGPR00017  | 84  | 200   |
| KDGPR00018  | 84  | 261   |
| KDM5R00021  | 78  | €149  |
| KDM5R00022  | 78  | 201   |
| KDMER00008  | 84  | 225   |
| KDMER00014  | 84  | 200   |
| KDMER00015  | 84  | 261   |
| KGG001      | 38  | 221   |
| KGM001      | 38  | 221   |
| KTR004      | 27  | 171   |
| KTR005      | 27  | 151   |
| PORDPZBI    | 149 | €349  |
| PORFLU      | 151 | 42    |
| PORMDXBI    | 148 | €303  |
| PORMDZBI    | 148 | 231   |
| PORRDZBI    | 149 | 254   |
| PORVAL0109  | 150 | 1.142 |
| PORVAL0114  | 150 | 722   |
| POTK01      | 150 | 207   |
| POZ001      | 48  | €9    |
| POZ002      | 48  | €14   |
| POZ003      | 48  | 27    |
| RDADA1      | 86  | €411  |
| RDCBA1      | 77  | €160  |
| RDXSM1      | 83  | 222   |
| RGDCCK5MP1S | 77  | €154  |
| RGDCM0MP1   | 78  | 111   |
| RGDCOHMP11  | 83  | 122   |
| RGDCOKMP1   | 82  | €160  |
| RGDGP5MP1R  | 76  | 87    |
| RGDGP5MP1T  | 76  | €93   |
| RGDGPLMP1R  | 82  | 107   |
| RGDME5MP1R  | 75  | 87    |
| RGDME5MP1T  | 75  | €93   |
| RGDMETMP1R  | 80  | 107   |
| RG1000LBD   | 101 | €166  |
| RG1000MBX2  | 101 | 120   |
| RG1000MSX4  | 100 | €413  |
| RG1001MSX2  | 100 | €116  |
| RGIC00L42   | 102 | 207   |
| RGIGP1MSX2  | 99  | 172   |

| COD | pag. | € |
|-----|------|---|
|-----|------|---|

|            |        |      |
|------------|--------|------|
| RGIME1MSX2 | 99     | 172  |
| RKP01M     | 42     | 268  |
| RS0021     | 96     | 231  |
| RXA01M     | 95     | €303 |
| RXA02M     | 95     | €    |
| RYM01M     | 94     | €463 |
| SGAGPL     | 81     | €85  |
| SGAMET     | 81     | €85  |
| SGIGP1     | 102    | €103 |
| SGIGP1M    | 102    | 142  |
| SGIME1     | 102    | €103 |
| SGIME1M    | 102    | 142  |
| STAD01     | 43     | €11  |
| STANP3     | 47     | €16  |
| STAOP3     | 47     | €16  |
| STAPP3     | 47     | €14  |
| STBD01     | 47     | €48  |
| STBPS003   | 47     | €35  |
| STEDS      | 43     | €31  |
| STENS      | 47     | €45  |
| STEOS      | 47     | 22   |
| STEPS      | 47     | €35  |
| STLD01     | 43     | €9   |
| STLDEIM150 | 47, 70 | €6   |
| STLDESL150 | 47, 70 | €11  |
| STLMTIM150 | 47, 70 | €11  |
| STLMTSL150 | 47, 70 | €15  |
| STLNTSA150 | 47, 70 | €8   |
| STLOTS150  | 47, 70 | €5   |
| STLPTSA150 | 47, 70 | €6   |
| STSKC01    | 151    | 74   |
| STSKL01    | 151    | 37   |
| STSKZ      | 151    | €90  |
| SXCNO10001 | 93     | 177  |
| SXCNO10003 | 93     | 262  |
| SXCNO10004 | 93     | 216  |
| SXCNO10010 | 93     | 201  |
| SXCX111001 | 93     | €335 |
| SXCX114001 | 93     | 372  |
| SXCX11M001 | 93     | 372  |
| SXGN040001 | 91     | €153 |
| SXGN040003 | 91     | €193 |
| SXGN040004 | 91     | 207  |
| SXGN040010 | 91     | €153 |
| SXGN060001 | 91     | 236  |
| SXGN060003 | 91     | €335 |
| SXGN060004 | 91     | 276  |
| SXGN060010 | 91     | €335 |
| SXGX141001 | 91     | €316 |
| SXGX144001 | 91     | 378  |
| SXGX14M001 | 91     | 378  |

| COD | pag. | € |
|-----|------|---|
|-----|------|---|

|            |    |      |
|------------|----|------|
| SXGX161001 | 91 | 412  |
| SXGX164001 | 91 | 417  |
| SXGX16M001 | 91 | €463 |
| SXMN040001 | 90 | €184 |
| SXMN040003 | 90 | 216  |
| SXMN040004 | 90 | 231  |
| SXMN040010 | 90 | 231  |
| SXMN060001 | 90 | 281  |
| SXMN060003 | 90 | €335 |
| SXMN060004 | 90 | €308 |
| SXMN060010 | 90 | €335 |
| SXMX141001 | 90 | 302  |
| SXMX144001 | 90 | €361 |
| SXMX14M001 | 90 | €361 |
| SXMX161001 | 90 | €394 |
| SXMX164001 | 90 | €443 |
| SXMX16M001 | 90 | €443 |
| SXVN040001 | 92 | €153 |
| SXVN040003 | 92 | 216  |
| SXVN040004 | 92 | 197  |
| SXVN040010 | 92 | 231  |
| SXVN060001 | 92 | 231  |
| SXVN060003 | 92 | 281  |
| SXVN060004 | 92 | 278  |
| SXVN060010 | 92 | €335 |
| SXVX141001 | 92 | 320  |
| SXVX144001 | 92 | €361 |
| SXVX14M001 | 92 | 378  |
| SXVX161001 | 92 | €394 |
| SXVX164001 | 92 | €443 |
| SXVX16M001 | 92 | €443 |
| SYCN01B    | 95 | 219  |
| SYCN01R    | 95 | 279  |
| SYGN04B    | 94 | 210  |
| SYGN04R    | 94 | 270  |
| SYMN04B    | 94 | 210  |
| SYMN04R    | 94 | 270  |
| SYVN04B    | 94 | 210  |
| SYVN04R    | 94 | 270  |
| TAD022     | 10 | €54  |
| TAD02B     | 10 | €49  |
| TAD02M     | 10 | €54  |
| TAESE1MD   | 46 | €94  |
| TAEZN42C   | 13 | €65  |
| TAEZN4MC   | 13 | €65  |
| TAN012     | 12 | 30   |
| TAN01M     | 12 | 37   |
| TAS012     | 11 | 32   |
| TAS012T    | 11 | €33  |
| TAS01M     | 11 | €31  |
| TAS01MT    | 11 | 32   |

| COD | pag. | € |
|-----|------|---|
|-----|------|---|

|            |    |      |
|------------|----|------|
| TAS022     | 11 | 27   |
| TAS022T    | 11 | 28   |
| TAS02M     | 11 | 42   |
| TAS02MT    | 11 | €41  |
| TBM01M     | 46 | €86  |
| TCD01B     | 2  | €86  |
| TCEGIOBI03 | 3  | 76   |
| TCESETBI03 | 3  | €84  |
| TCPID0BI   | 5  | €114 |
| TCPID0BIW  | 5  | €114 |
| TCPIW0BI   | 5  | 121  |
| TCPIW0BIW  | 5  | 121  |
| TCW01B     | 4  | €99  |
| TCW02B     | 3  | 107  |
| TDST24M    | 68 | €185 |
| TFA01M     | 57 | 92   |
| TFD012     | 51 | €51  |
| TFD01M     | 51 | €55  |
| TFD042     | 52 | 70   |
| TFD04M     | 52 | €63  |
| TFEINF     | 62 | 92   |
| TFEINFM01  | 62 | €85  |
| TFEINFPO1  | 62 | 77   |
| TFF01M     | 55 | €109 |
| TFM012     | 53 | €108 |
| TFM01M     | 53 | €84  |
| TFPEI2MI   | 56 | €130 |
| TFX012     | 54 | 75   |
| TFX01M     | 54 | €80  |
| TFZ01M     | 58 | 92   |
| THW01B     | 6  | 178  |
| THW02B     | 6  | 178  |
| TM001M     | 14 | 21   |
| TM002M     | 14 | 28   |
| TM003M     | 14 | 29   |
| TM004M     | 14 | 37   |
| TPEEI0MI   | 13 | €61  |
| TPERO0MI   | 13 | 71   |
| TRD01B     | 28 | €90  |
| TRD02B     | 28 | 70   |
| TST01M     | 67 | €134 |
| TST02M     | 69 | 223  |
| TT401M     | 44 | 299  |
| TTM003MI   | 62 | 7    |

# INTERNATIONAL DISTRIBUTORS LIST

## EUROPE

|                |                                   |                                                                                                                                                                                                                             |
|----------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AUSTRIA        | LUKOTEC GMBH                      | VIKTORIAWEG, 4 - 2540 BAD VÖSLAU AT TEL. +43 664 22 47 444 office@lukotec.at www.lukotec.at                                                                                                                                 |
| BELGIUM        | TEMPOLEC SA                       | <b>Residential and Industrial Gas Detectors, Solar Heating Controllers:</b> ROUTE DE BIESME, 49 - 6530 THUIN BE TEL. +3271590039 FAX +3271590161 info@tempolec.be www.tempolec.be                                           |
|                | CSBL SA                           | <b>Combustion Analyzers:</b> Rue Feral 5, B 5190 HAM-SUR-SAMBRE BE - Tel 071-781070 Fax 071-781072 www.csbl.be csbl@tvccable.net.be                                                                                         |
| BULGARIA       | KARANA OOD                        | <b>Residential and Industrial Gas Detectors</b> KV. ORLANDOVCI UL. ROI AK 10 - 1225 SOFIA BG TEL. 00359 2 8694306 FAX 00359 2 8411059 info@karana-bg.com www.karana-bg.com                                                  |
| CROATIA        | PARTNER ELEKTIK GE D.O.O.         | FRANA FOLNEGOVICA, 10 - 10000 ZAGREB (HR) - TEL. 0038516182900 - FAX. 0038516187754 - info@pe-ge.hr www.pe-ge.hr                                                                                                            |
| CYPRUS         | TASAPRO LTD                       | 26 ENOTITOS STREET - 1041 NICOSIA CY TEL. 00357 22459770 FAX 00357 22343930 info@tasapro.com.cy www.tasapro.com.cy                                                                                                          |
| CZECH REPUBLIC | IVAR CS SPOL. S R.O.              | VELVARSKA, 9, PODHORANY - 27751 NELAHOZEVES TEL 00420 315 785211 - FAX 00420 315 785 213 info@ivarcs.cz www.ivarcs.cz                                                                                                       |
| DENMARK        | DANSK VVS IMPORT A/S              | <b>Thermostats, Wireless controls:</b> GOTLANDSVEJ, 9 - 8700 HORSSENS DK TEL. 0045-75644833 FAX 0045-75644793 salg@danskvvsimport.dk www.danskvvsimport.dk                                                                  |
|                | GOLAN PIPE SYSTEMS APS            | <b>Thermostats, Wireless controls:</b> LOLLANDSVEJ, 14 - 5500 MIDDELFART DK TEL. 004564417732 info@golan.dk www.golan.dk                                                                                                    |
| ESTONIA        | LRF PRIVATE OU                    | <b>Combustion Analyzers:</b> BETOONI, 6 - 11415 TALLINN EE TEL. 003726076244 FAX 003726076245 info@lrfprivate.ee www.lrfprivate.ee                                                                                          |
| FINLAND        | MELTEX OY PLASTICS                | <b>Thermostats, Wireless Controls:</b> TAIVALTIE, 2 - 01610 VANTAA FI TEL. 0035-8207770111 FAX 0035-8207770100 jaakko.kovanen@meltex.fi www.meltex.fi                                                                       |
| FRANCE         | DISTRAME SA                       | <b>Combustion Analyzers:</b> PARC DU GRAND TROYES - 40 RUE DE VIENNE 10300 - STE SAVINE - FR TEL. 0033325712583 - FAX 0033325712589 ph.destrieux@distrame.fr www.distrame.fr                                                |
|                | CAFRO INDUSTRIES                  | <b>Thermostats, Wireless Controls:</b> PIERRIC HANSER 59 QUAI CLAUDE BERNARD 38200 VIENNE FR Tél: 0033 (0)474 8506 73 Fax: 0033 (0)474 850734 p.hanser@cafro-industries.com www.cafro-industries.com                        |
|                | MG INSTRUMENTS                    | 28 RUE DES PUISATIERS - 31270 - FROUZINS - FR TEL. 0033561929663 - MOB. 0033670449167 - contact@mginstruments.fr www.mginstruments.fr                                                                                       |
| GERMANY        | AL-TEC SOLUTIONS GMBH             | WALTER KOLLO STR., 9 - 14516 TELTOW DE TEL. 00493328 3528666 FAX 00493328 47728109 a.althaus@al-tec-solutions.com www.seitron.de                                                                                            |
| GREAT BRITAIN  | SYXTHSENSE LTD                    | 3 TOPSHAM BUSINESS UNITS - DART BUSINESS PARK - TOPSHAM - DEVON - EX3 0QH - UK TEL. 00448448403100 FAX 00448448403200 info@syxthsense.com www.syxthsense.com                                                                |
| GREECE         | MONOTHERM V. KRESTAS & Co. O.E.   | 46 NIKODIMOU Str., CHALKIDA GR-341 31 EL TEL.00302221080801 FAX 00302221086365 monotherm@otenet.gr www.monotherm.net                                                                                                        |
|                | MATHIOUDAKIS BROS.                | 61-63 IOULIANOU STR., - 10433 ATHENS EL TEL. 00302108811100 FAX 00302108810900 mathiou@otenet.gr www.mathioudakisbros.gr                                                                                                    |
|                | TOTGAS SA                         | P.O. BOX 463 - NEOHOROUA - 54500 THESSALONIKI EL TEL. 00302310574876 FAX 00302310574877 info@totgas.gr www.totgas.gr                                                                                                        |
| HOLLAND        | 7 SOLUTIONS BV                    | <b>Combustion Analyzers, Portable Instruments:</b> HOOFDWEIG 36A 2908 LC CAPELLE AAN DEN IJSSEL, THE NETHERLANDS NL TEL. 0031(0)102799991 FAX 0031(0)104414142 info@7solutions.nl www.7solutions.nl                         |
| IRELAND        | INTELLIGENT BUILDING CONTROLS LTD | UNIT 10 BLOCK A, OAK ROAD BUSINESS PARK - OAK CLOSE - DUBLIN 12 - D12C920 - IE - TEL: 0035314575421 FAX: 0035314575420 sales@ibc.ie www.ibc.ie                                                                              |
| LATVIA         | INTRA SERVISS SIA                 | JURKALNES, 15 - 1046 RIGA LV TEL. 0037167400989 FAX 0037167400899 intra@intra.lv www.intra.lv                                                                                                                               |
| MACEDONIA      | BIMI COMPANY                      | UL. 380 BR 46 - 91000 SKOPJE MK TEL. 00389 22600125 FAX 00389 22612420 bimi@mt.net.mk                                                                                                                                       |
| MOLDOVA        | TERMOSTAL IMEX SRL                | STR. ALBA-IULIA, 75 - 2071 CHISINAU MD TEL. 373 22 744934 FAX 373 22 744608 termostal@termostal.md www.termostal.md                                                                                                         |
| NORWAY         | VV Gruppen AS avd. VVPARTS        | Larkollveien 10, 1570 DILLING NO TEL. 0047 69 26 46 50 post@vvparts.no www.vvparts.no                                                                                                                                       |
|                | TOLCON AS                         | BRYNSALLEEN 4 - 0667 OSLO NO TEL. 0047 22 66 66 70 tolcon@tolcon.no www.tolcon.no                                                                                                                                           |
|                | CANES AS                          | KALLUMVEIEN 16, 1524 MOSS NO TEL. 0047 69 23 44 00 erik@canes.no www.canes.no                                                                                                                                               |
|                | OKO AS                            | LUMBERVEIEN 13, 4621 KRISTIANSAND NO TEL. 0047 913 87 590 mail@oko-as.no www.oko-as.no                                                                                                                                      |
|                | HILLCO AGENTURER AS               | STRØMSVEIEN 346, 1081 OSLO NO TEL. 0047 23 17 52 80 post@hillco.no www.hillco.no                                                                                                                                            |
| POLAND         | SpalEko.pl                        | <b>Combustion Analyzers:</b> UL. DEKERTA 27A - 66-400 GORZÓW WLKP. Tel. 0048515661651 - 0048957377701 sklep@spaleko.pl www.spaleko.pl                                                                                       |
| PORTUGAL       | SANITOP                           | ZONA INDUSTRIAL 2ª FASE, APARTADO 538 - 4935-232 NEIVA - PT - TEL. 00351 258105400 jmanso@sanitop.pt www.sanitop.pt                                                                                                         |
| RUMANIA        | TERMOCLIMA EXIM SRL               | <b>Combustion Analyzers, Portable Instruments, Gas Detectors:</b> SOLD STELIAN MIHALE STREET, 11 SECTOR 3 - BUCURESTI RO Tel. +40 722745312; +40 745040429; termoclimaexim@gmail.com www.termoclimaexim.ro                  |
| RUSSIA         | KIPA LTD                          | IVANA SUSANINA STR, 1B-2 - 127299 MOSCOW RU TEL./FAX 007 495 795-2-795 kipa@kipa.ru www.seitron.ru                                                                                                                          |
| SLOVAKIA       | MERATEX SRO                       | POPRADSKA, 68 - 04011 KOSICE SK TEL. 00421556405118 FAX 00421556405487 demko@meratex.sk www.meratex.sk                                                                                                                      |
| SLOVENIA       | URMET MARCHIOL D.O.O.             | VELIKA POT, 25 - 5250 SOLKAN SI TEL. 00386 53308160 FAX 00386 53308155 info@vezave.si www.vezave.si                                                                                                                         |
|                |                                   | INDUSTRIJSKA CESTA 5, KROMBERK, 5000 NOVA GORICA SI TEL. 00386 5 331 31 00 gorica@marchiol.com www.marchiol.si                                                                                                              |
| SPAIN          | EURO-COBIL S.L                    | <b>Combustion Analyzers, Portable Instruments, Industrial Gas Detectors:</b> POLG. "EL CAMPILLO" 13A - 48500 ABANTO Y ZIERBANA (BIZKAIA) ES TEL. 00349-46363496 FAX 00349-46362796 - info@euro-cobil.com www.euro-cobil.com |
|                | ENERTRES                          | <b>Thermostats, Wireless Controls:</b> ESTDA. REDONDELA-PEINADOR, 49 - 36815 VILAR DE INFESTA (VIGO) ES TEL. 0034986288377 FAX 0034986288276 enertres@enertres.com www.enertres.com                                         |
|                | ALB S.A.                          | CARRER MONTMELL, 2, 43710 SANTA OLIVA, TARRAGONA ES TEL. 0034 933 77 37 46 info@alb.es http://www.alb.es                                                                                                                    |
| SWEDEN         | TETRAGONIA VVS AB                 | <b>Thermostats, Wireless Controls, Solar Heating Controllers:</b> HÖSTBRUKSVÄGEN 15 - 226 60 LUND SE TEL. 0046-46133105 info@tetragonia.se www.tetragonia.se                                                                |
| SWITZERLAND    | ORO TECHNOLOGIES                  | Z.I. PRAZ. ROUSSY, 4 - 1032 ROMANEL-SUR-LAUSANNE (CH) - TEL. 0041216347273 - FAX 0041216347163 info@oro-technologies.ch www.oro-technologies.ch                                                                             |

## UKRAINE

**RMK-ENERGOTECHNOLOGIES** **Combustion Analyzers, Portable Instruments, Residential and Industrial Gas Detectors:** MAGNITOGORSKAYA STR., 1-B OFF.413 - 02094 KIEV UA TEL.00380445595485 FAX 00380445595485 rmk@it-mark.net

## HUNGARY

**FE KOMPLEX** KISKALMAR UTCA, 3 - 7 1097 - BUDAPEST - HU - TEL. 003614590747 - FAX 003614590749 info@f2komplex.hu www.f2komplex.hu

## OCEANIA

## AUSTRALIA

**SCE SYSTEM CONTROL ENGINEERING PTY LTD** HEAD OFFICE, 5 ALFRED ST. - 3130 BLACKBURN - VICTORIA AU TEL. 0061-398773211 FAX 0061-398785337 head.office@systemcontrol.com.au www.systemcontrol.com.au

## NEW ZEALAND

**EUROTEC LIMITED** UNIT C,750 GREAT SOUTH - AUCKLAND NZ TEL. 006495791990 FAX 006495253334 sales@eurotec.co.nz www.eurotec.co.nz

## ASIA

## CHINA

**ONUEE ELECTRONICS LTD.** **Combustion Analyzers:** C3-E,TCL SCIENCE PARK, No.1001, ZHONG SHAN YUAN RD., NANSHAN, SHENZHEN - CHINA 518035 TEL. 0086-755-86183901 FAX 0086-755-86183040 info@onuee.com www.onuee.com

## INDIA

**PRISM GAS DETECTION PVT. LTD** **Combustion Analyzers, Portable Instruments and Industrial Gas Detectors:** 243, Oshiwara Indl. Centre, New Link Road, Goregaon (W) Mumbai - 400 104 IN TEL. 0091 2228761387 FAX 0091 2228766116 prism@lpgsafety.com www.lpgsafety.com  
**ARV INSTRUMENTS PVT. LTD** IWA-121 , B-7, ROHINI COMPLEX HAKARPUR 1110092 DELHI IN TEL./FAX 009111 43024544 arvdelhi@yahoo.com www.arvinstruments.com - Contact person: RAJNEESH BALUNI - MOB +91-9717434275 / 9717284556

## INDONESIA

**TWA PT. TRIMITRA WISESA ABADI** **Combustion Analyzers, Portable Instruments:** JL. LIO BARU, NR. 37/63 - 15121 TANGERANG ID TEL. 0062215527577 FAX 0062215527730 twa@cbn.net.id www.twa.co.id

## IRAN

**TAMIN TAJHIZAT GOSHAYESHGARAN FAN SANAT** UNIT.2, NO.8 - DALIRI ST. - ARASH BLVD. - FARID AFSHAR ST. - DASTGERDI ST. - SHARIATI AVE. - 19166 57965 - TEHRAN IR - TEL. 0098 2122921900-1 FAX. 0098 2122258980 - www.gfs-co.com info@gfs-co.com

## ISRAEL

**BONFIL LTD.** 45 YAKOV HOAMI ST - 50297 - MISMAR ASHIVAA - IL - TEL. 972-3-9601799 - FAX 972-3-9604003 bonfil@bonfil.co.il www.bonfil.co.il

## KUWAIT

**POWER TECH Co.** **Residential and Industrial Gas Detectors:** P.O Box :1626 Salmiya Code 22011 - KW - TEL. TEL: +965 9555 7121 Fax: +965 2491 1056 powertechkw@gmail.com

## MALAYSIA

**GME GASMECH ENGINEERING SDN BHD** NO: 52A, LORONG SENTOSA 4A, TAMAN BAYU TINGGI, 41200 KLANG SELANGOR, MY TEL. 0060333259472 FAX 0060333259467 info@gmegroup.com.my www.gmegroup.com.my

## QATAR

**GASAT ENGERNEERING** DOHA QATAR ABU HAMOUR ROAD - P.O.BOX:23216 - TEL:44316427 - FAX:44830248 - info@gasateng.com www.gasateng.com

## SAUDI ARABIA

**FIRST DIS FOR GAS CO.** **Residential and Industrial Gas Detectors:** KINGDOM OF SAUDI ARABIA - JEDDAH - ALSHORBATLI CENTER - BUILDING 1/OFFICE 11 - 21419 JEDDAH SA TEL. + 966 12 651 0884 FAX + 966 12 657 4043 info@first-gas.net www.first-gas.net

## SOUTH KOREA

**INNPITRON CO.,LTD.** RM 504 ACE HIGH-END TOWER 8TH BUILD 345-4 GASAN-DONG GUMCHUN-GU SEOUL KR - TEL.0082226343621 FAX 0082226343642 eik2015@naver.com www.innpitron.com

## TURKEY

**SISTEM DOGALGAZ LTD. STI.** **Residential and Industrial Gas Detectors:** GIRNE MAH. IRMAKLAR SOK. KUCUKYALI IS MERKEZI - A BLOK - NO:72/26A MALTEPE/ISTANBUL - TR TEL. 0090 2165185070 FAX 0090 2165185074 info@sistemdogalgaz.com www.sistemdogalgaz.com

## UAE

**FLARE TECHNICAL SERVICES LLC** W/H NO. 36 AL QUOZ INDUSTRIAL AREA. - P O BOX NO. - 282867 DUBAI UAE TEL.+971 4 2640072 FAX. +971 4 2643707 www.flaretechnical.com info@flaretechnical.com

## VIETNAM

**PHUC SANG MINH TRADE ENG. SERV. CO., LTD** **Residential and Industrial Gas Detectors:** 716 STREET 3, ZONE B, HAMLET 5, AN PHU WARD, DISTRICT 2 - HCMC, VIETNAM VN TEL. (84)0862811073 FAX (84)0862810960 tony@jpsgas.com.vn www.jpsgas.com.vn

## AMERICA

## BRASIL

**ECIL PRODUTOS E SISTEMAS DE MEDICAO** **Combustion Analyzers:** BANJAMIN DA SILVEIRA BALDY, 2001 - 18170 PIEDADE SAO PAULO BR TEL. 00551532448020 FAX 00551532441672 ecil@ecil.com.br www.ecil.com.br

## CHILE

**RECAL** BLANCO 15-I 3, LOTE0 LOS LIBERTADORE CARR. SAN MARTIN - 16500 - COLINA, SANTIAGO TEL: 005624307700 FAX 005624307701 info@recal.cl www.recal.cl

## COLOMBIA

**EQUIPOS Y MEDICIONES TÉCNICAS SAS** CALLE 124 NO. 7 - 35 OF. 601 BOGOTA, D.C., COLOMBIA TEL: (571) 7049224 comercial@equiposymediciones.com www.equiposymediciones.com

## URUGUAY

**BLASTER S.A. TECNOGAS** JOSE FIGUEIRA, 2238 - 11300 MONTEVIDEO UY TEL. 0059827116010 FAX 0059895037721 dache@adinet.com.uy

## AFRICA

## MOROCCO

**SANIBATI S.A.R.L.** **Temperature Control:** BD. OUM RABII HAY HASSANI, 98 20200 - CASABLANCA - MAROCCO TEL 00212 (0)522933607 FAX 00212 (0)522894033 hicham.laabi@sanibati.ma  
**ETAMETAL S.A.R.L** **Industrial Gas Detectors:** RUE KARATCHI, 61 20000 - CASABLANCA - MAROCCO TEL 00212 (0)522308707 FAX 00212 (0)522440003 contact@etametal.com

## SOUTH AFRICA

**LEVEGO** BUILDING R6, PINELANDS SITE - ARDEER ROAD, MODDERFONTEIN - 1645 - TEL 0027 011 608 4148 - FAX 0027 011 608 2621 info@levego.co.za www.levego.co.za

A light blue rectangular area containing 25 horizontal lines, resembling a notepad or a form for writing. The lines are evenly spaced and extend across the width of the rectangle. The rectangle is centered on a white background.



## PROGRAMMABLE THERMOSTATS

Programmable thermostats  
Telephone interfaces

pag. 1

pag. 7



## FREETIME *plus*

TCD 01B ..... € 86



### • ACCESSORIES

Room temperature probe

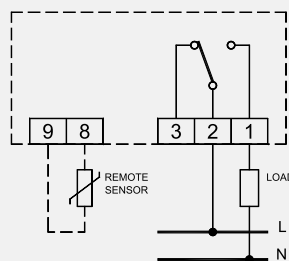
STA D01 ..... € 11

### 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 ..... € 181

DCD 01B + DRR 01M



### • ACCESSORIES

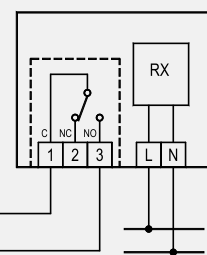
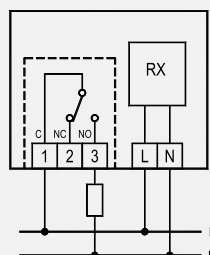
Room temperature probe

STA D01 ..... € 11

### KIT KCR 005 – SPECIAL FEATURES

for pellets boilers and floor heating systems

- Ambient temperature offset compensation,  $\pm 9,9^\circ\text{C}$ , useful to adjust possible wrong controllers positioning
- Adjustable set point hysteresis, from  $0.1^\circ\text{C}$  to  $5^\circ\text{C}$ , 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**..... € 76

Daily

**TCE SET BI 03**..... € 84

Weekly

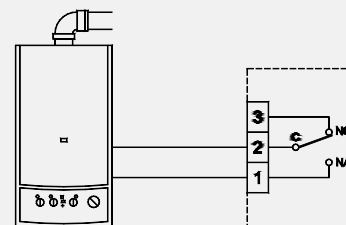
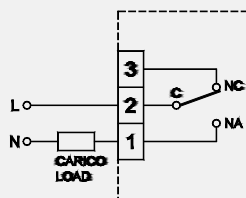


### ELECTRONIC PROGRAMMABLE THERMOSTAT

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)<br>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*

**TCW 02B**..... € 107

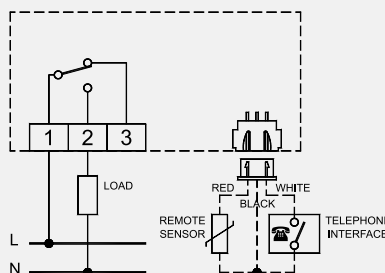


### DIGITAL PROGRAMMABLE THERMOSTAT - WEEKLY -

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*

TCW 01B ..... € 99



### • ACCESSORIES

Room temperature probe

STA D01 ..... € 11

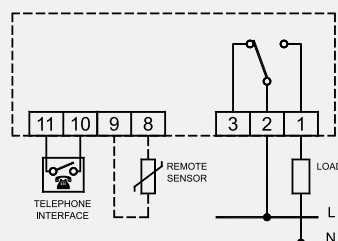
## DIGITAL PROGRAMMABLE THERMOSTAT - WEEKLY -

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 ..... € 186

DCW 01B + DRR 01M



### • ACCESSORIES

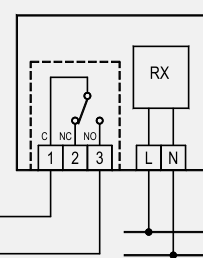
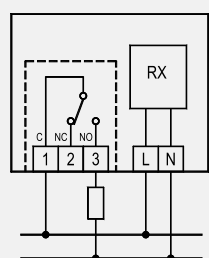
Room temperature probe

STA D01 ..... € 11

## KIT KCR 006 – SPECIAL FEATURES

for pellets boilers and floor heating systems

- Ambient temperature offset compensation,  $\pm 9,9^{\circ}\text{C}$ , useful to correct possible wrong controllers positioning
- Adjustable set point hysteresis, from  $0.1^{\circ}\text{C}$  to  $5^{\circ}\text{C}$ , 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.



DRR 01M:  
Typical wiring

## FREETIME *in*

**TCP ID0 BI** ..... € 114

Anthracite version

**TCP ID0 BIW** ..... € 114

White version

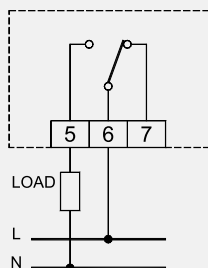


### PROGRAMMABLE THERMOSTAT FLUSH-MOUNTED - DAILY -

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

|                |          |                                                                          |
|----------------|----------|--------------------------------------------------------------------------|
| FITTING PLATES | BTICINO® | light<br>light tech<br>Living International<br>Matrix<br>Luna<br>Axolute |
|                | VIMAR®   | Idea<br>Idea Rondò<br>Piana<br>Eikon                                     |
|                | GEWISS®  | Playbus<br>Playbus Young<br>Chorus                                       |
|                | AVE®     | Banquise<br>Sistema 45<br>Noir                                           |
|                | SIEMENS® | Delta Futura                                                             |
|                | LEGRAND® | Ergo<br>Cross<br>Vela                                                    |
|                | MASTER®  | Modo<br>Mix                                                              |
|                |          |                                                                          |
|                |          |                                                                          |
|                |          |                                                                          |
|                |          |                                                                          |
|                |          |                                                                          |
|                |          |                                                                          |
|                |          |                                                                          |
|                |          |                                                                          |
|                |          |                                                                          |

## MAGICTIME *in*

**TCP IW0 BI** ..... € 121

Anthracite version

**TCP IW0 BIW** ..... € 121

White version

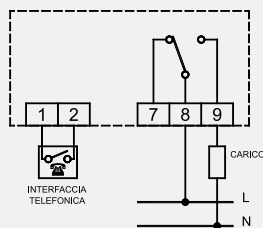


### PROGRAMMABLE THERMOSTAT FLUSH-MOUNTED - WEEKLY -

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%                           |



|               |          |                                                                          |
|---------------|----------|--------------------------------------------------------------------------|
| FITTED PLATES | BTICINO® | light<br>light tech<br>Living International<br>Matrix<br>Luna<br>Axolute |
|               | VIMAR®   | Idea<br>Idea Rondò<br>Piana<br>Eikon                                     |
|               | GEWISS®  | Playbus<br>Playbus Young<br>Chorus                                       |
|               | AVE®     | Banquise<br>Sistema 45<br>Noir                                           |
|               | SIEMENS® | Delta Futura                                                             |
|               | LEGRAND® | Ergo<br>Cross<br>Vela                                                    |
|               | MASTER®  | Modo<br>Mix                                                              |
|               |          |                                                                          |
|               |          |                                                                          |
|               |          |                                                                          |
|               |          |                                                                          |
|               |          |                                                                          |
|               |          |                                                                          |
|               |          |                                                                          |
|               |          |                                                                          |
|               |          |                                                                          |

## THYGROS

**THW 01B** ..... € 178  
Dehumidification only in cooling mode

**THW 02B** ..... € 178  
Dehumidification in heating and cooling modes



### • ACCESSORIES

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

## 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.

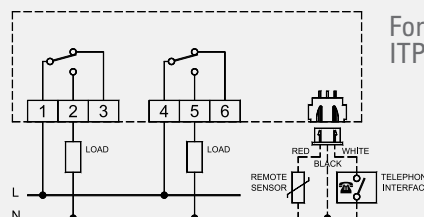
### TECHNICAL FEATURES

#### 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                      |
| 3th set-point         | Off .. 20 .. 90% RH               |
| Internal sensor       | SHT-21                            |
| Output                | 5(1)A @ 250V~ SPDT                |
| Class Reg.2013/811/EC | I = 1,0%                          |



For switching via telephone use  
ITP F22 1 or ITR 011

## 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 electric 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.

ITR 011..... € 394



ANDROID APP ON  
Google play

ITR Manager



#### • ACCESSORIES

Antenna with magnetic base

ACA N02 ..... € 44

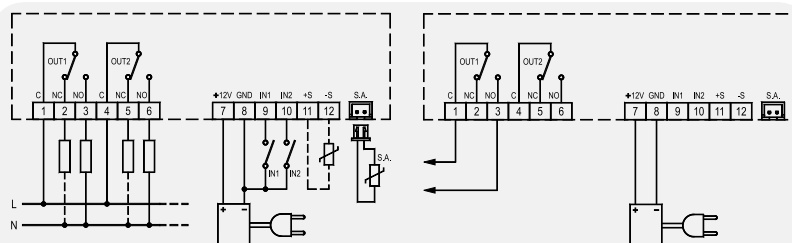
88 mm stylus with 3 m cable and SMA M connector. (Only for weak signal reception)

#### 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                   |



ITP F22 1..... € 187

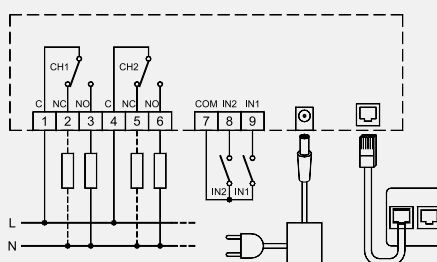


#### TELEPHONE INTERFACE FOR PSTN

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                      |







**THERMOSTATS / WIRING BOXES**

Electronic room thermostats  
Electro-mechanical room thermostats  
Wiring boxes

pag. 9  
pag. 14  
pag. 16



## TADDY

TAD 02B ..... € 49

NEW



### • ACCESSORIES

Room temperature probe

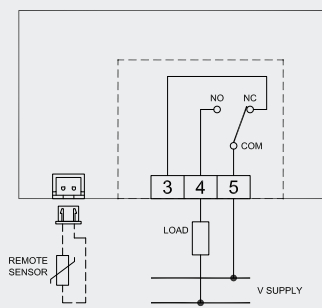
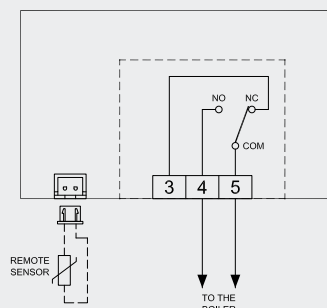
STA D01 ..... € 11

## 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 $\pm 1\%$ @ 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: | $\pm 9.9^\circ\text{C}$ (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%                                    |



## TADDY

TAD 02M ..... € 54  
230Vac

TAD 022 ..... € 54  
24Vac

NEW



### • ACCESSORIES

Room temperature probe

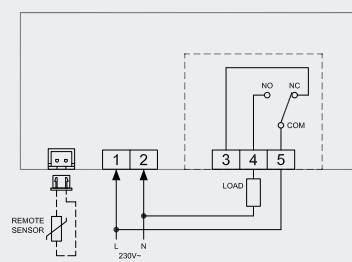
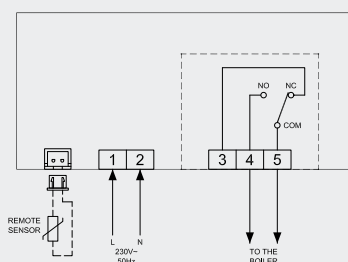
STA D01 ..... € 11

## 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<br>(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: | $\pm 9.9^\circ\text{C}$ (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%                                                      |



- TAS 01M** ..... € 31  
230Vac
- TAS 012** ..... € 32  
24Vac
- TAS 01MT** ..... € 32  
230V~ Tamperproof
- TAS 012T** ..... € 33  
24V~ Tamperproof



#### • ACCESSORIES

##### Room temperature probe

STA NP3 ..... € 16

##### Room temperature probe

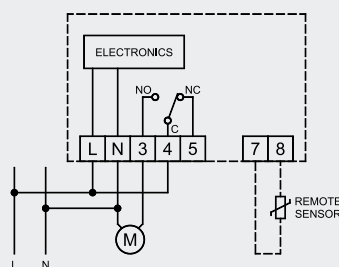
STL NTS A 150 ..... € 8

### 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          | (TAS01M) 230V~ -15/+10% 50Hz<br>(TAS012) 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%                                                    |



- TAS 02M** ..... € 42  
230Vac
- TAS 022** ..... € 27  
24Vac
- TAS 02MT** ..... € 41  
230V~ Tamperproof
- TAS 022T** ..... € 28  
24V~ Tamperproof



#### • ACCESSORIES

##### Room temperature probe

STA NP3 ..... € 16

##### Room temperature probe

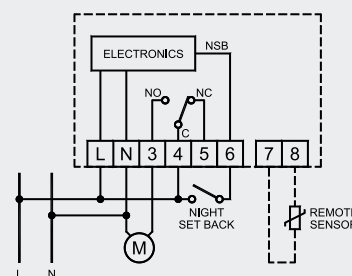
STL NTS A 150 ..... € 8

### 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          | (TAS02M) 230V~ -15/+10% 50Hz<br>(TAS022) 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%                                                    |



**TAN 01M**..... € 37  
230Vac

**TAN 012**..... € 30  
24Vac



#### • ACCESSORIES

**Room temperature probe**  
**STA NP3**..... € 16

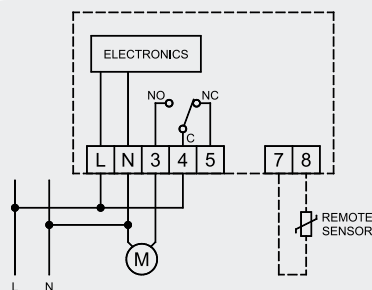
**Room temperature probe**  
**STL NTS A 150** ..... € 8

#### 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<br>(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%                                                    |



**TAE ZN4 MC**..... € 65  
230Vac

**TAE ZN4 2C**..... € 65  
24Vac



### 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.

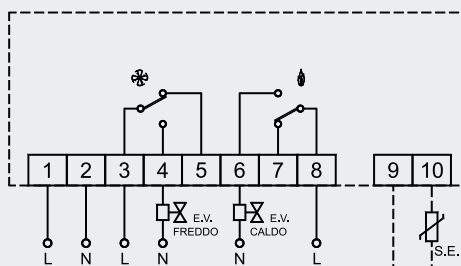
#### TECHNICAL FEATURES

|                       |                                                                 |
|-----------------------|-----------------------------------------------------------------|
| Power supply          | (TAEZN4MC) 230V~ -15/+10% 50Hz<br>(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%                                                        |

#### • ACCESSORIES

**Room temperature probe**  
**STA NP3**..... € 16

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



**TPE EIO MI**..... € 61  
Cooling/Heating

**TPE R00 MI**..... € 71  
Economy switch

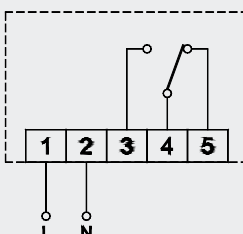


### HEATING-COOLING FLUSH MOUNT THERMOSTAT COMFORT-ECONOMY FLUSH MOUNT THERMOSTAT

Thermostat for recessed mounting (3 modules), with off/cooling/heating switch (cod. TPEEIO MI) or off/comfort/economy switch (cod. TPER00 MI). 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)<br>TPEEIO MI 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**..... € 21

**TM 002M**..... € 28  
With light indication

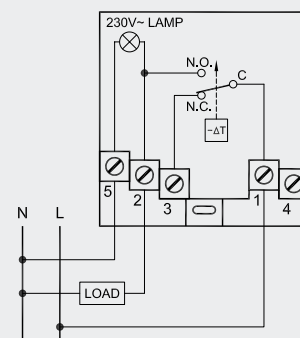
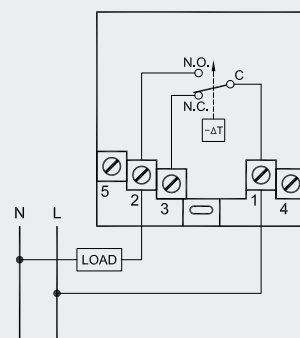


## ROOM THERMOSTAT ROOM THERMOSTAT WITH LIGHT INDICATION

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<br>TM0 02M 16A @ 250V~ SPDT |
| Dimensions            | H85 W85 D31mm                                        |
| IP rating             | IP30                                                 |
| Class Reg.2013/811/EC | I = 1,0%                                             |



**TM 003M**..... € 29  
On/off switch

**TM 004M**..... € 37  
Heating/cooling switch

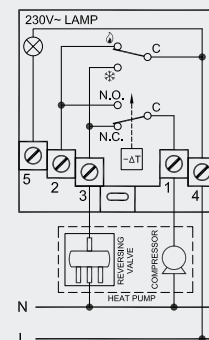
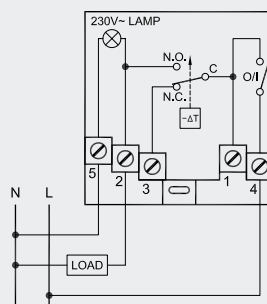


## ON/OFF THERMOSTAT HEATING/COOLING THERMOSTAT

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    | Wall           | Batteries | ✓   | On-Off             | --           | ✓                  | ✓              | --        | 1x5A   |
| TAD 02M    | Wall           | 230V      | ✓   | On-Off             | --           | ✓                  | ✓              | --        | 1x5A   |
| TAD 022    | Wall           | 24V       | ✓   | On-Off             | --           | ✓                  | --             | --        | 1x5A   |
| TAS 01 2   | Wall           | 24V       | --  | --                 | --           | ✓                  | --             | --        | 1x5A   |
| TAS0 12 T  | Wall           | 24V       | --  | --                 | ✓            | ✓                  | --             | --        | 1x5A   |
| TAS 01 M   | Wall           | 230V      | --  | --                 | --           | ✓                  | --             | --        | 1x5A   |
| TAS 01 MT  | Wall           | 230V      | --  | --                 | ✓            | ✓                  | --             | --        | 1x5A   |
| TAS 02 2   | Wall           | 24V       | --  | --                 | --           | ✓                  | ✓              | --        | 1x5A   |
| TAS 02 2T  | Wall           | 24V       | --  | --                 | ✓            | ✓                  | ✓              | --        | 1x5A   |
| TAS 02 M   | Wall           | 230V      | --  | --                 | --           | ✓                  | ✓              | --        | 1x5A   |
| TAS 02 MT  | Wall           | 230V      | --  | --                 | ✓            | ✓                  | ✓              | --        | 1x5A   |
| TAN 01 2   | Wall           | 24V       | --  | Off/risc/raff      | --           | ✓                  | --             | --        | 1x5A   |
| TAN 01 M   | Wall           | 230V      | --  | Off/risc/raff      | --           | ✓                  | --             | --        | 1x5A   |
| TAE DI4 2C | Wall           | 24V       | ✓   | Off/risc/raff      | --           | ✓                  | --             | --        | 1x5A   |
| TAE ZN4 2C | Wall           | 24V       | --  | --                 | --           | ✓                  | --             | ✓         | 2x5A   |
| TAE ZN4 MC | Wall           | 230V      | --  | --                 | --           | ✓                  | --             | ✓         | 2x5A   |
| TPE EIO MI | Flush mounting | 230V      | --  | Off/Heat./Cool.    | --           | --                 | --             | --        | 1x6A   |
| TPE R00 MI | Flush mounting | 230V      | --  | Off/comfort/riduz. | --           | --                 | ✓              | --        | 1x6A   |
| TM 001 M   | Wall           | 230V      | --  | --                 | --           | --                 | --             | --        | 1x16A  |
| TM 002 M   | Wall           | 230V      | --  | --                 | --           | --                 | --             | --        | 1x16A  |
| TM 003 M   | Wall           | 230V      | --  | On/off             | --           | --                 | --             | --        | 1x10A  |
| TM 004 M   | Wall           | 230V      | --  | Heat./Cool.        | --           | --                 | --             | --        | 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.



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

**ALC 006 M**..... € 86  
With 230V/24V transformer

**ALC 006 U**..... € 63  
Without transformer

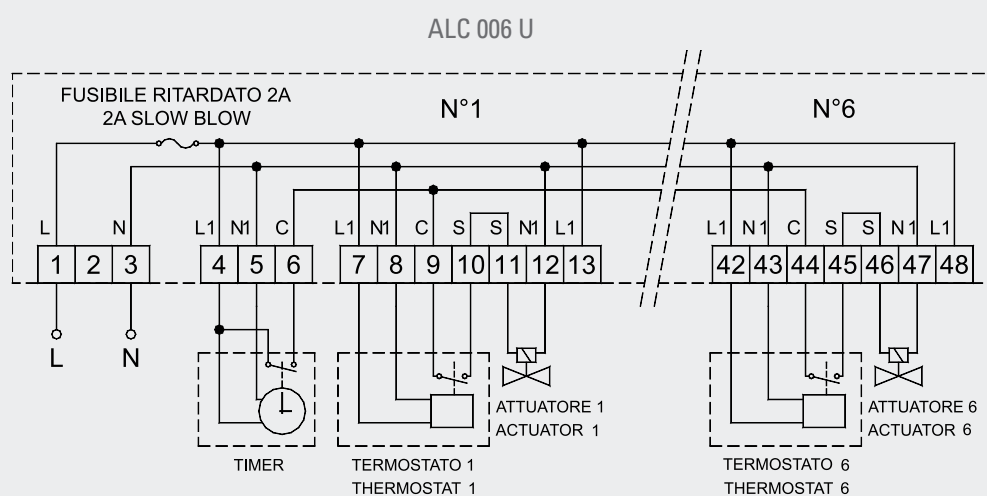
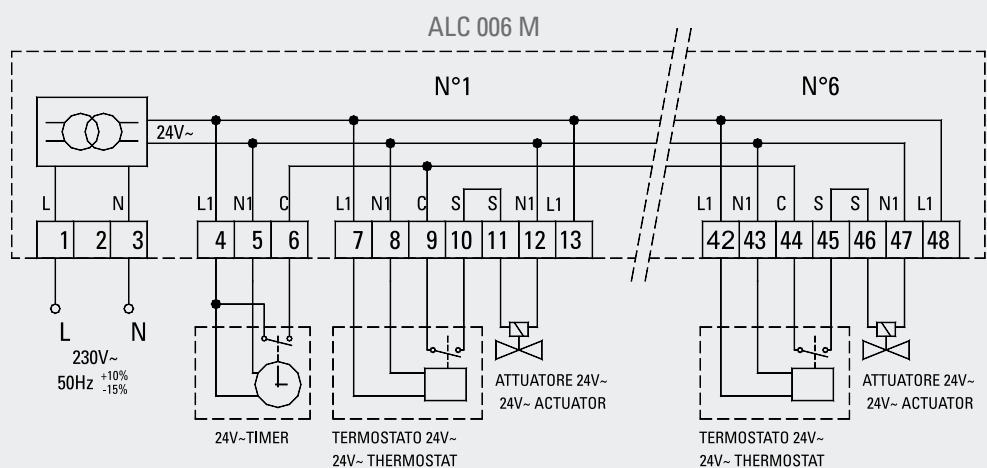


## 6 CHANNELS WIRING BOX

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<br>cod. ALC006U: Universal (24 .. 230V~)    |
| Power absorption | cod. ALC006M: 24VA                                                        |
| Max load         | cod. ALC006M: 1A @ 24V~(Tot.)<br>cod. ALC006U: 2A @ V power supply (Tot.) |
| Dimensions       | H100 W245 D60mm                                                           |
| IP rating        | IP30                                                                      |



**ALC 012 M**..... € 170

With 230V/24V transformer

**ALC 012 U**..... € 100

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.)

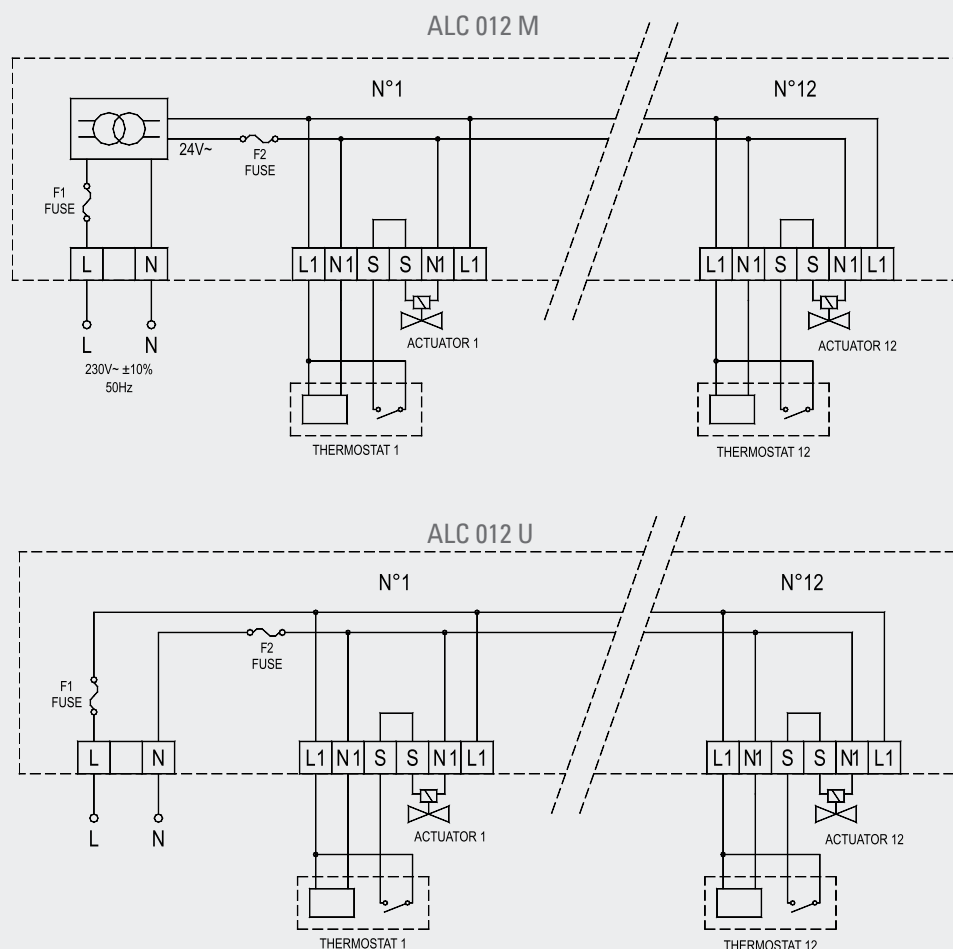
cod. ALC012U: 10A @ V power supply (Tot.)

Dimensions

H100 W245 D60mm

IP rating

IP30



ALP 06U..... € 74

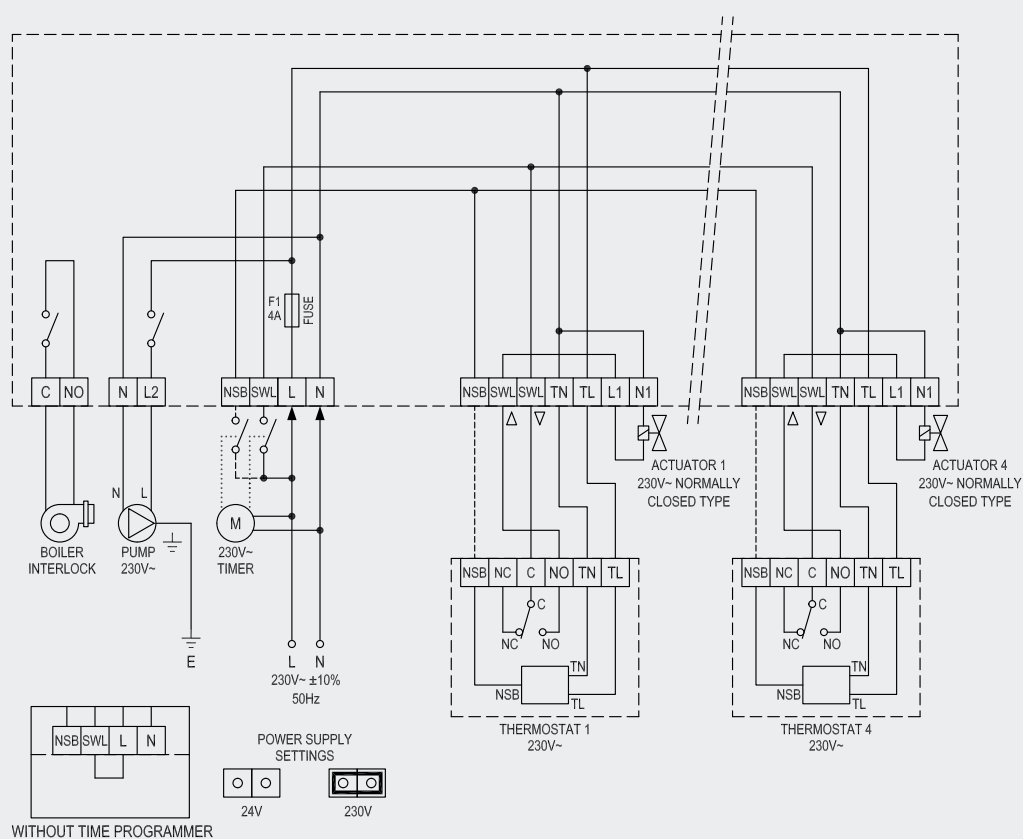


#### 4 CHANNELS WIRING BOX PUMP AND BOILER CONTROL 230V-24V

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 $\pm 10\%$ 50Hz or<br>24V $\pm 10\%$ 50Hz |
| Power absorption          | Depends on the loads connected                 |
| Output :                  |                                                |
| Pump (powered)            | 3A                                             |
| Boiler (voltage free)     | 1A                                             |
| Actuators and thermostats | max 1A each channel<br>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 ..... € 169

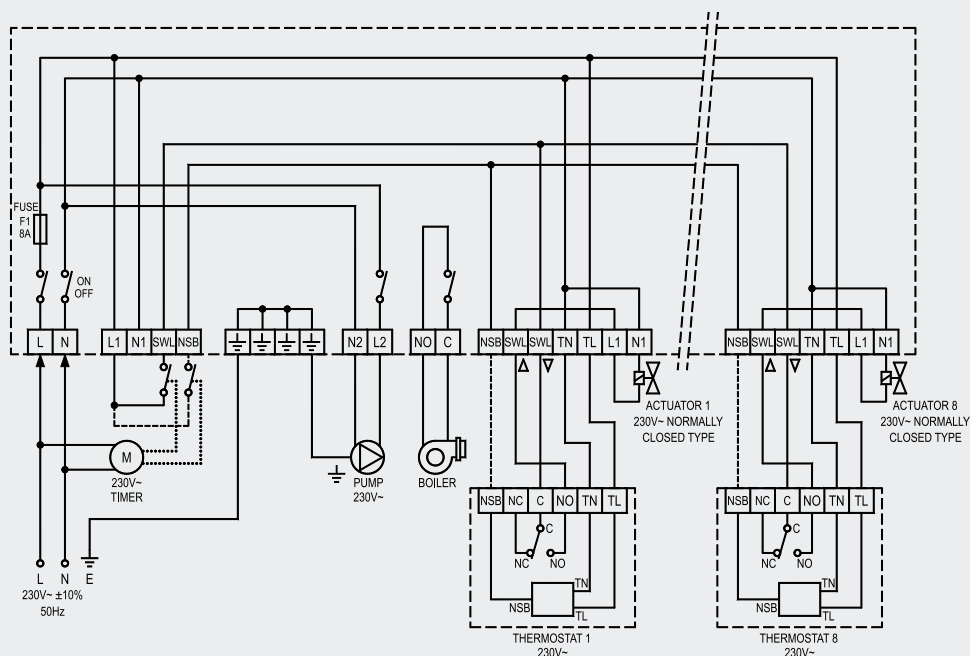


## 8 CHANNELS WIRING BOX PUMP AND BOILER CONTROL 230V

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<br>2A total |
| Dimensions                        | H125 W320 D67mm                |



ALC D08 M02..... € 211

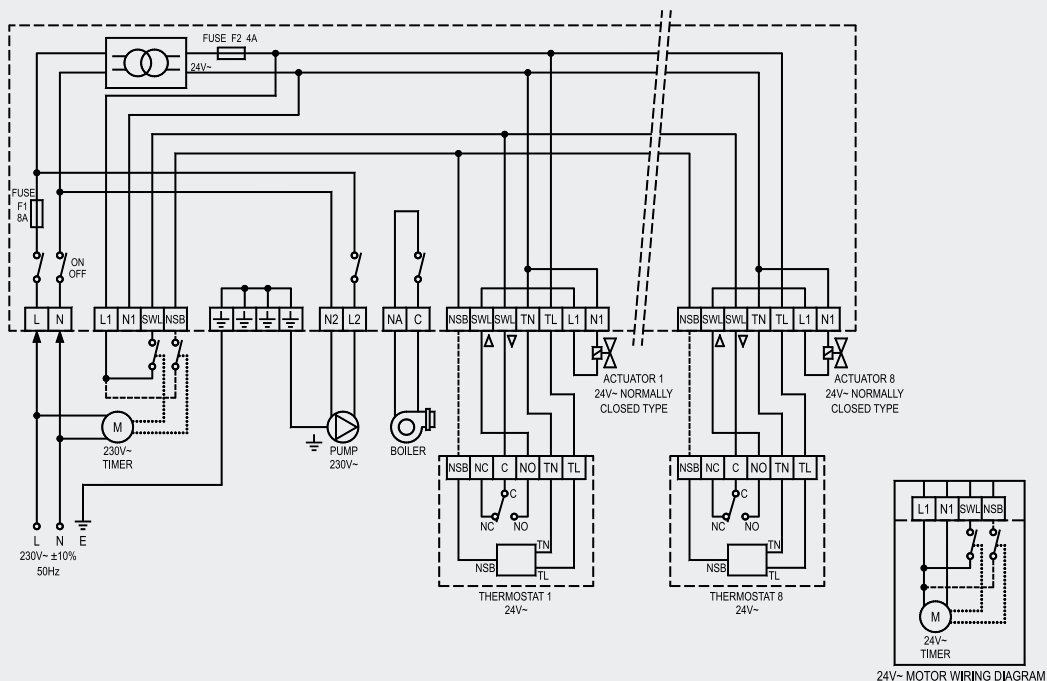


## 8 CHANNELS WIRING BOX PUMP AND BOILER CONTROL 230V-24V

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~ $\pm 10\%$ 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<br>2A total   |
| Dimensions                        | H125 W320 D67mm               |





ALP 03U..... € 99



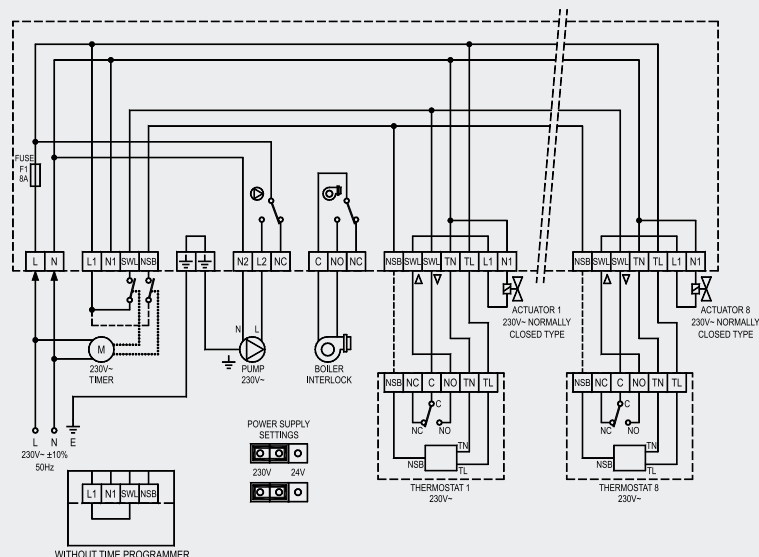
## 8 CHANNELS WIRING BOX PUMP CONTROL 230V - 24V AND BOILER

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.

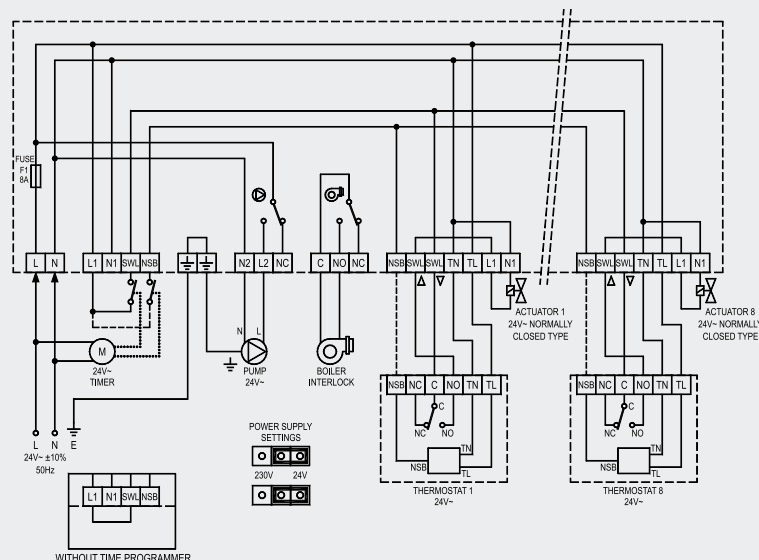
### TECHNICAL FEATURES

|                           |                                                |
|---------------------------|------------------------------------------------|
| Power supply              | 230V $\pm 10\%$ 50Hz or<br>24V $\pm 10\%$ 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..... € 213



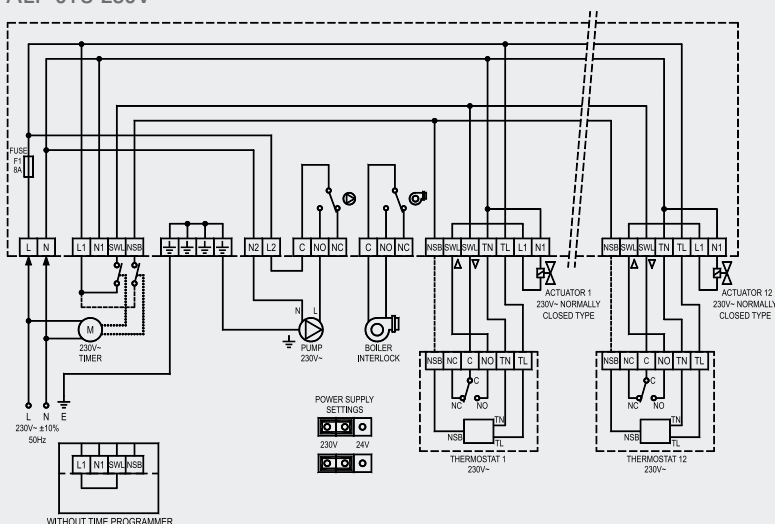
## 12 CHANNELS WIRING BOX PUMP CONTROL 230V - 24V AND BOILER

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.

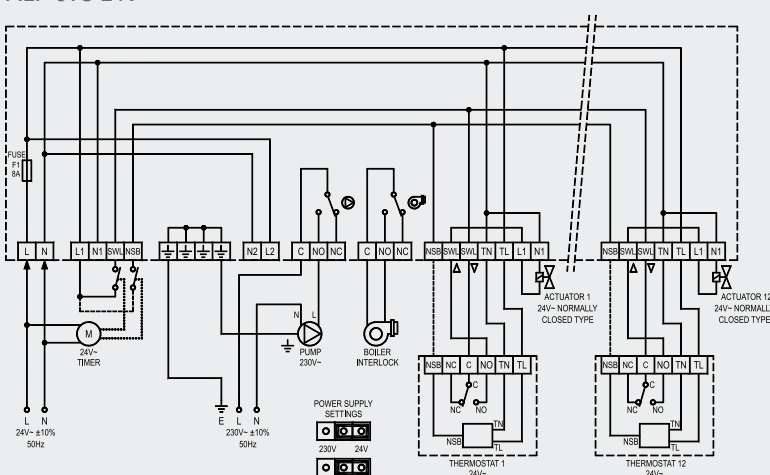
### TECHNICAL FEATURES

|                           |                                            |
|---------------------------|--------------------------------------------|
| Power supply              | 230V -15%+10% 50Hz or<br>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



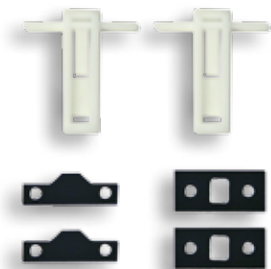
### ALP 01U 24V



## DIN RAIL MOUNTING KIT

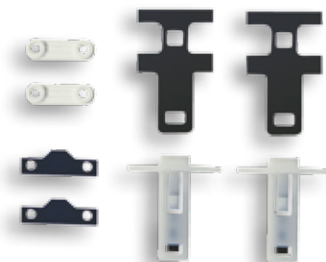
**AC KB01** ..... € 9

for: DLP241, DLP841, ALCPxx, ALPxxx



**AC KB02** ..... € 9

for: ALCDxxx



## WIRELESS SYSTEM

Kit radio  
Transmitters  
Receivers

pag. 27

pag. 28

pag. 31

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** ..... € 171  
TRD 01B + DRR 01M



#### KIT RADIO 1

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

**KTR 005** ..... € 151  
TRD 02B + DRR 01M



#### KIT RADIO 2

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

**KCR 005** ..... € 181  
DCD 01B + DRR 01M



#### KIT RADIO 3 - FREETIME *plus* VIA RADIO

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

+ special functions (pag. 2)

#### • ACCESSORIES

**Room temperature probe**

**STA D01** ..... € 11

**KCR 006** ..... € 186  
DCW 01B + DRR 01M



#### KIT RADIO 4 - MAGICTIME *plus* VIA RADIO

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

+ special functions (pag. 4)

#### • ACCESSORIES

**Room temperature probe**

**STA D01** ..... € 11

TR D01B ..... € 90



#### • ACCESSORIES

Room temperature probe

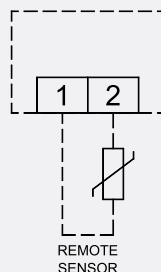
STA NP3..... € 16

### 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%                            |



TR D02B ..... € 70



#### • ACCESSORIES

Room temperature probe

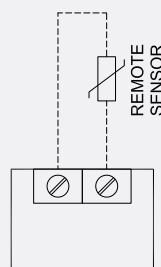
STA NP3..... € 16

### 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%                              |



## FREETIME *plus* VIA RADIO

DC D01B ..... € 100



### • ACCESSORIES

Room temperature probe

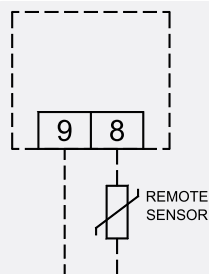
STA D01 ..... € 11

### 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..... € 105



### • ACCESSORIES

Room temperature probe

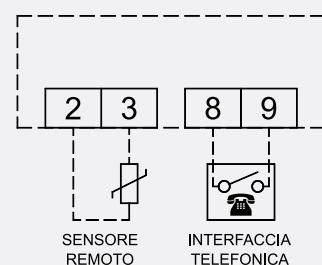
STA D01 ..... € 11

### 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..... € 48**

**DTP F85 BCT..... € 59**  
Ver. antimanomissione



#### • ACCESSORIES

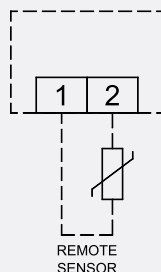
**Room temperature probe**  
**STA OP3..... € 16**

#### 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<br>(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 ..... € 75**

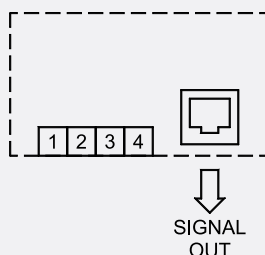


#### ACTIVE ANTENNA FOR DLP MODULES

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          |



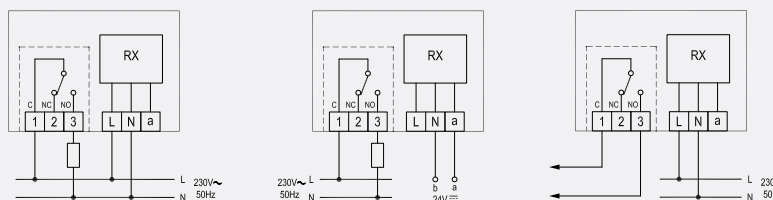
**DR R01M ..... € 81**  
 1 channel receiver

**RECEIVER 1 OUTPUT**

One channel receiver featuring an integrated antenna with 1 relay output, which can drive an actuator, a pump or directly a burner. Bicolour LED for output relay status and quality of radio link with the relevant transmitter. Self-learning function of the thermostat code. Valid solution in all those buildings where it is not convenient to lay down wires from the thermostats to the heating-cooling room.

**TECHNICAL FEATURES**

|                        |                                    |
|------------------------|------------------------------------|
| Power supply           | 230V~ ±10% 50Hz                    |
| Power absorption       | 11VA                               |
| Output (relay)         | 6A @ 250V~                         |
| Transmission frequency | 868,150 MHz                        |
| Antenna type           | Internal stylus                    |
| Bicolour LED indicator | Active relay/ transmission quality |
| IP rating              | IP3X                               |
| Dimensions             | H125 W78 D30,5mm                   |
| Class Reg.2013/811/EC  | IV = 2,0%                          |

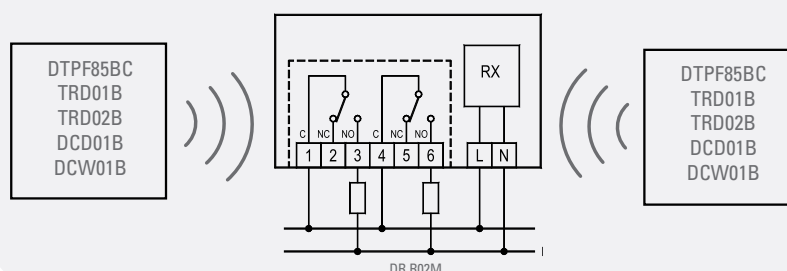

**DR R02M ..... € 89**  
 2 channels receiver

**RECEIVER 2 OUTPUT**

Two channels receiver featuring an integrated antenna with 2 relays output, which can drive an actuator, a pump or directly a burner. Bicolour LED for output relay status and quality of radio link with the relevant transmitter. Self-learning function of the thermostat code. Valid solution in all those buildings where it is not convenient to lay down wires from the thermostats to the heating-cooling room. Available also the mode heating/cooling with dead band, jumper selectable.

**TECHNICAL FEATURES**

|                        |                                    |
|------------------------|------------------------------------|
| Power supply           | 230V~ ±10% 50Hz                    |
| Power absorption       | 11VA                               |
| Output (relay)         | 2x6A @ 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%                          |

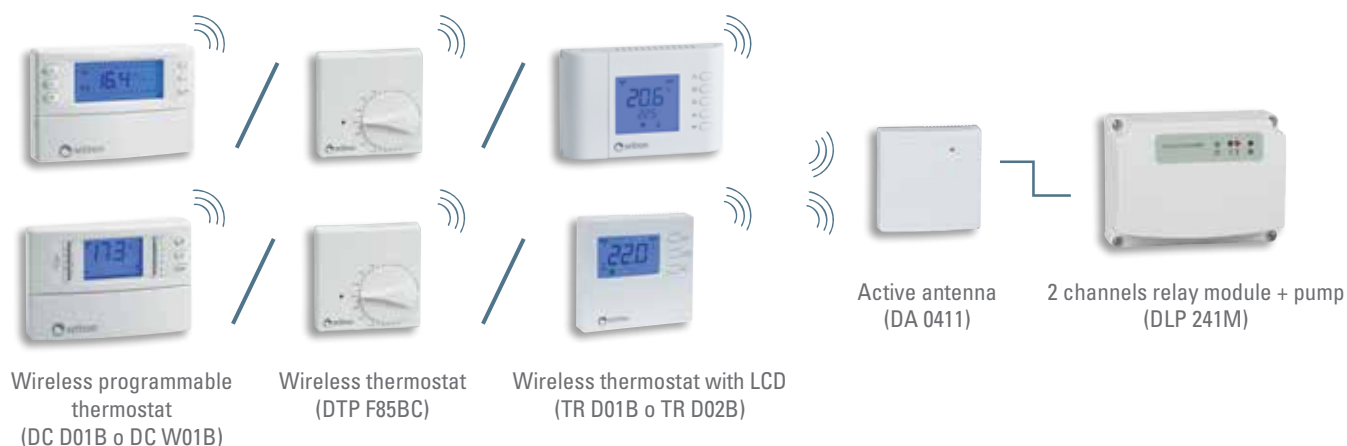


## TYPICAL WIRELESS SCHEMES

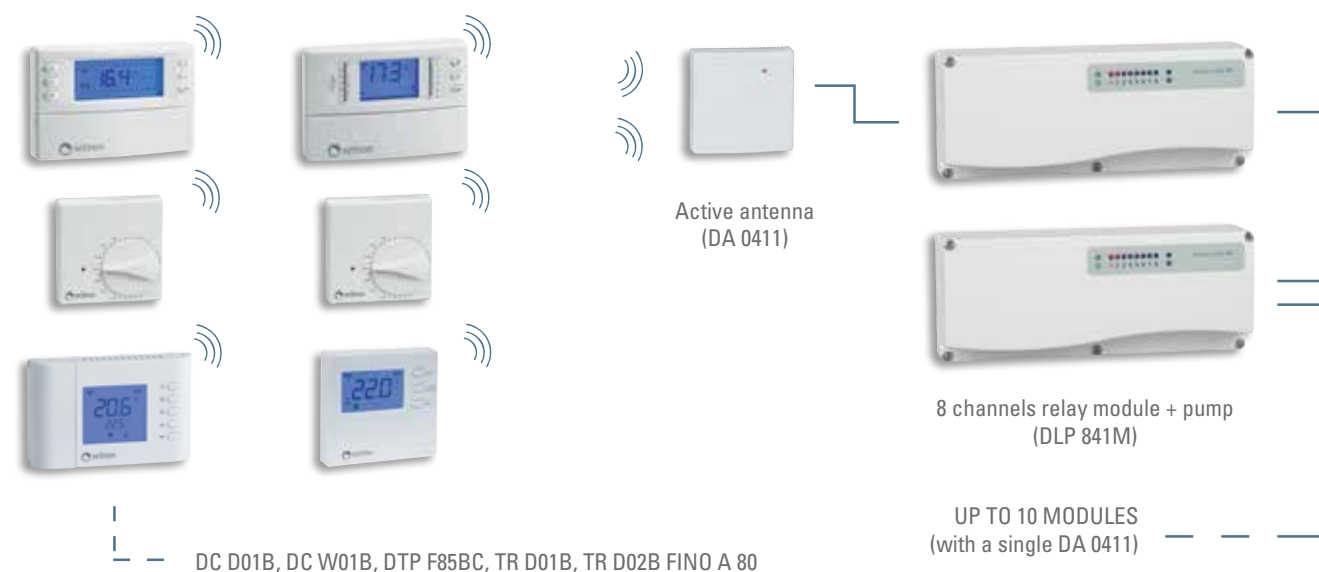
### 1 ZONE INSTALLATION WITH WIRELESS PROG. THERMOSTAT OR THERMOSTAT



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



### MULTIZONE INSTALLATION WITH WIRELESS PROG. THERMOSTAT OR THERMOSTAT FROM 8 TO 80 ZONE



**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.

## RECEIVERS



Installation example with 6 wireless thermostats, one DA 0411 active antenna and one DLP 841 2 relay module.

**DLP 241M..... € 102**

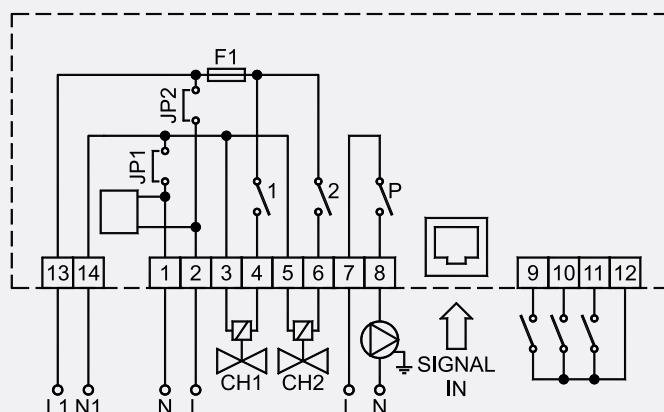


## 2 CHANNELS RELAY MODULE + PUMP OUTPUT 230V

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%            |



**DLP 441M..... € 141**

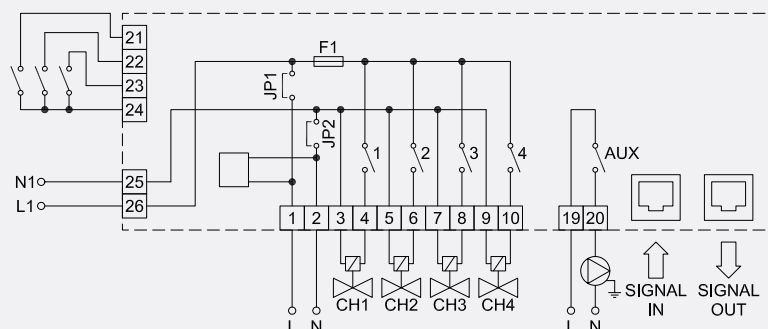


## 4 CHANNELS RELAY MODULE + PUMP OUTPUT 230V

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    |
| Maximum 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 841M..... € 145**

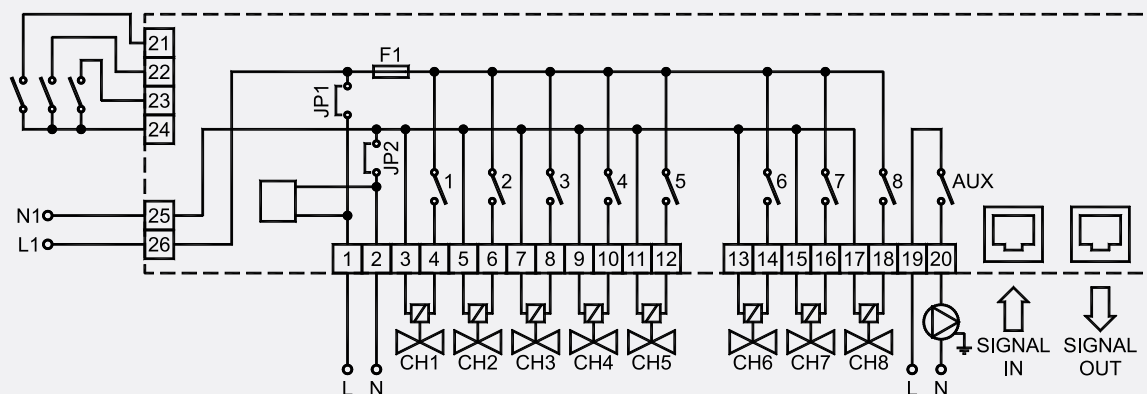


## 8 CHANNELS RELAY MODULE + PUMP OUTPUT 230V

Eight channels relay module for heating/cooling plants.

### TECHNICAL FEATURES

|                            |                         |
|----------------------------|-------------------------|
| Power supply               | 230V~ -15%+10% 50Hz     |
| Power absorption           | 4W                      |
| Relay rating               | 8x3A @ 250V~ cosfi=1    |
| Maximum 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 ..... € 304

**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.

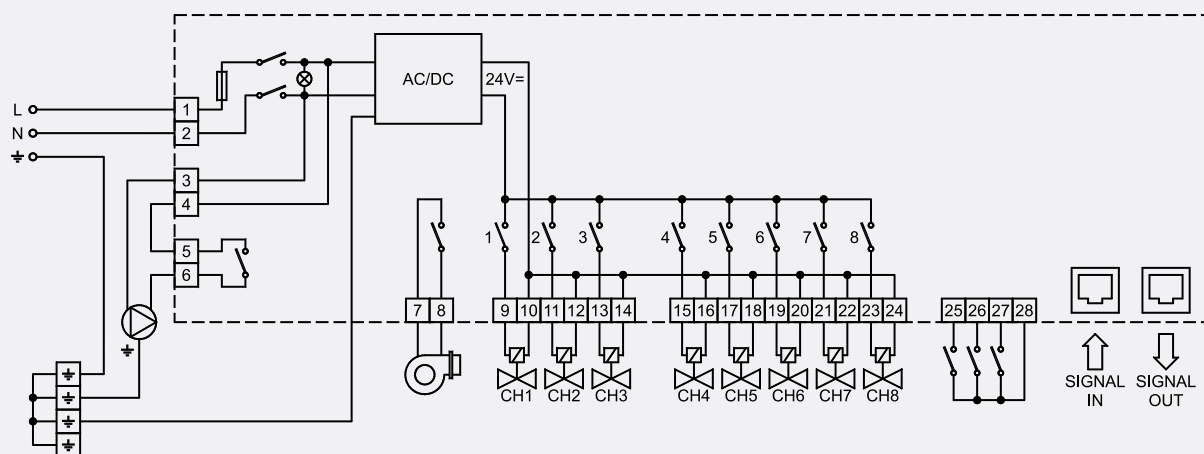
This module can drive up to 14 electrothermic actuators with 24V 4W startup absorption.

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~ cosφ=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%                  |





**KG M001**..... € 221  
Kit Segugio Methane

**KG G001**..... € 221  
Kit Segugio LPG

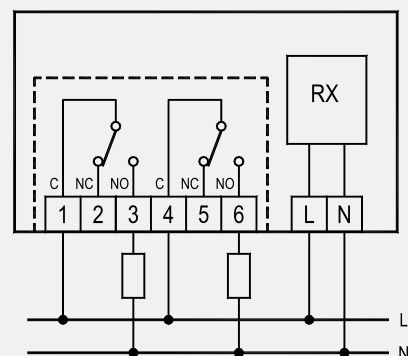
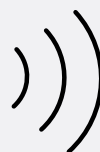
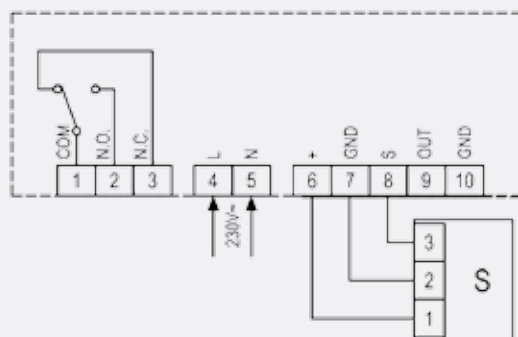


## GAS LEAKAGE DETECTOR - METHANE or LPG -

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

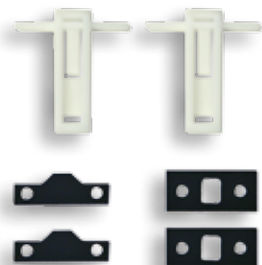
### TECHNICAL FEATURES

|                      |                                                    |
|----------------------|----------------------------------------------------|
| 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                                     |



## DIN RAIL MOUNTING KIT

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



**AC KB02** ..... € 9  
per: ALCDxxx



## SEGUGIO WIRELESS: TYPICAL WIRELESS SCHEMES



KG M001 Methane  
Gas leakage detector



KG G001 LPG  
Gas leakage detector



DR G01M  
Gas alarm receiver



Electrovalve

A large, light gray rectangular area with rounded corners, containing 25 horizontal lines for writing. The lines are evenly spaced and extend across the width of the gray area.

## CLIMATE CONTROLLERS

Climate controllers  
DIN rail mount thermostats  
Controls for fireplaces  
Controls for greenhouses  
Probes and sensors

pag. 41  
pag. 44  
pag. 45  
pag. 46  
pag. 47



RK P01M ..... € 268



## 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.

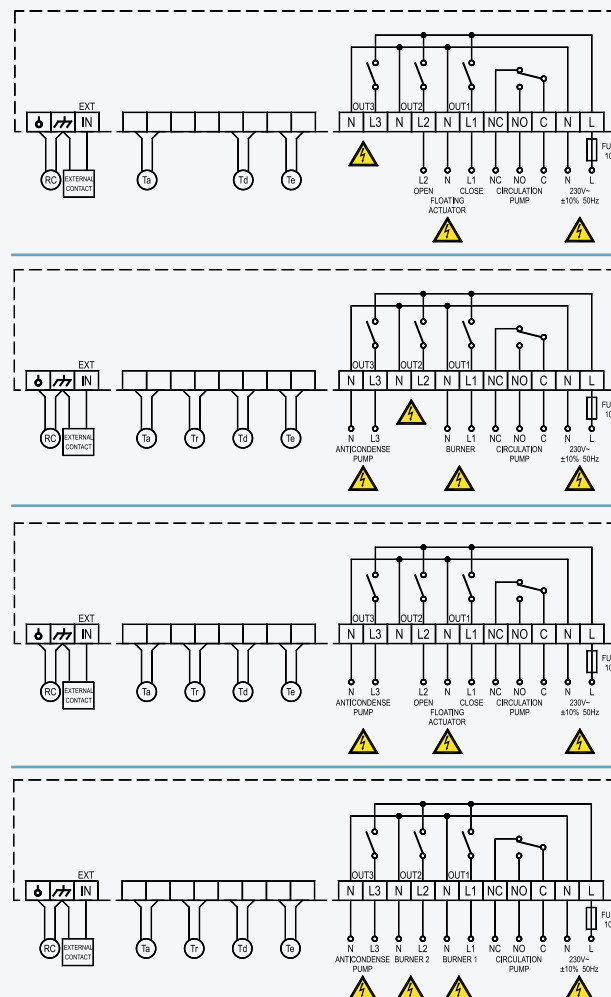
The types of plants are the following: 1) 3-way valve and circulation pump PI floating valve regulation. 2) 3-way valve and circulation pump, optional use of the recirculation pump PI floating valve regulation. 3) One-stage burner, circulation pump, optional use the recirculation pump, ON - OFF type 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<br>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%                                    |

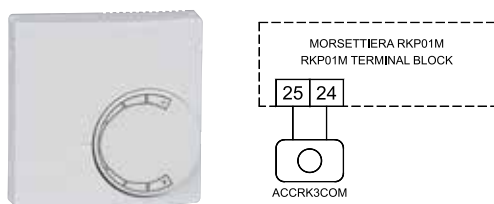
## • ACCESSORIES

Delivery water sensor, external, anti-condensate including



## RKP 01M ACCESSORIES

**ACC RK3 COM** ..... € 26  
Remote control for RKP 01M



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



## RKP 01M SPARE PARTS

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



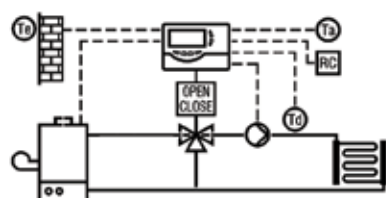
**AC AD02** ..... € 13  
Pipe clamp for supply and return probe



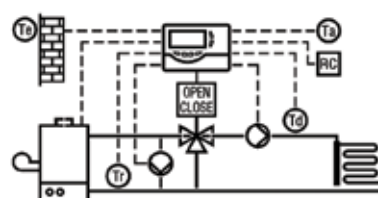
**STE DS** ..... € 31  
External temperature probe



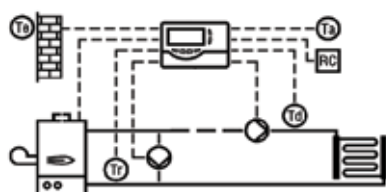
## RKP 01M CLIMATE REGULATOR: TYPICAL WIRING



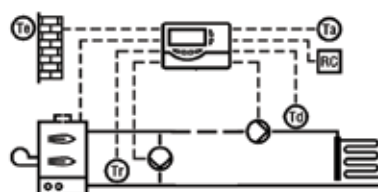
SCH 1



SCH 2



SCH 3



SCH 4

TT 401M ..... € 299



## 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<br>Reduced: -5°C .. +25°C<br>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                                                                         |

### • ACCESSORIES

**Black bulb probe**

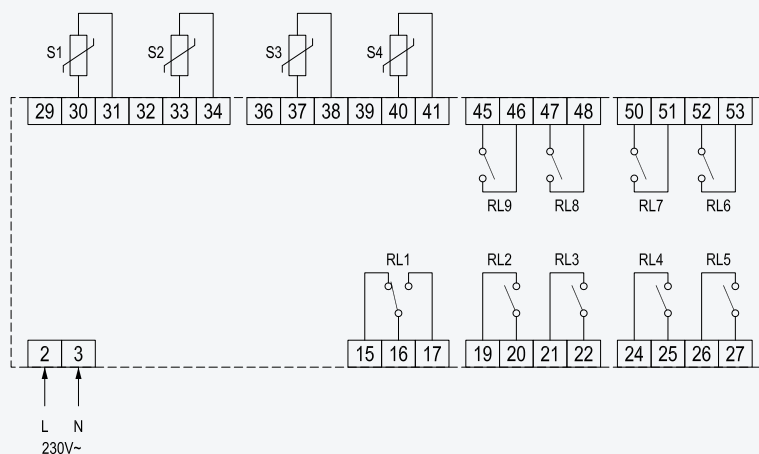
**STB D01 ..... € 48**

**Ambient Probe**

**STA D01 ..... € 11**

**4 Cannels Reset**

**ACC RES 04..... € 92**



## FUEGO

000 CCI ..... € 76

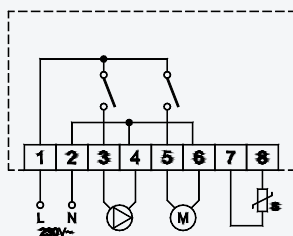


### FIREPLACE CONTROLLERS

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 ..... € 80

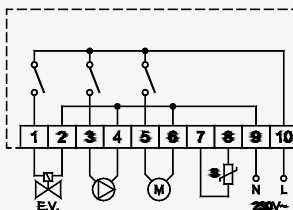


### FIREPLACE CONTROLLERS

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®



TAE SE1 MD ..... € 94

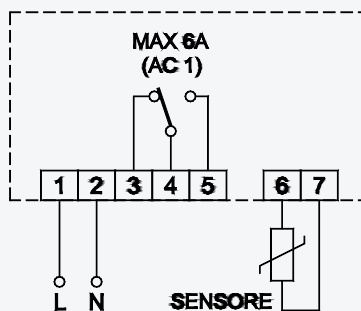


## GREENHOUSES CONTROLLER IP54

Thermostat with waterproof case for greenhouses. The interchangeable probes can be installed up to 25 m away.  
2 LED indicators, when powered the green light will be on, when temperature falls below the set-point, relay is activated.

### TECHNICAL FEATURES

|                       |                      |
|-----------------------|----------------------|
| Power supply          | 230V~ -15/+10% 50Hz  |
| Working range         | -5 .. +35°C          |
| Sensor                | NTC (4k7 0hm @ 25°C) |
| Differential          | 1°C                  |
| Output (relay)        | 6A @ 250V~ SPDT      |
| Green LED indicator   | On                   |
| Red LED indicator     | Relay active         |
| Dimensions            | H79 W150 D84mm       |
| IP rating             | IP54                 |
| Class Reg.2013/811/EC | I = 1,0%             |



Notes: Supplied with the STL NTS A150 probe.

TB M01M ..... € 86



## DIN RAIL THERMOSTAT

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

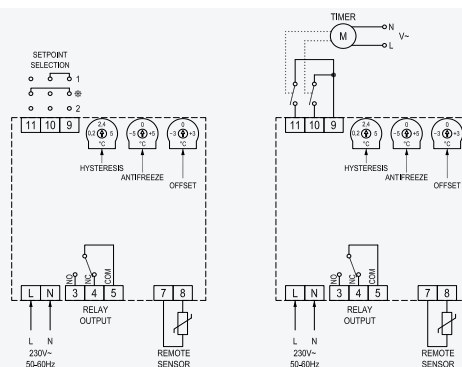
### TECHNICAL FEATURES

|                       |                          |
|-----------------------|--------------------------|
| 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 0hm @ 25°C) 1% |
| Dimensions            | H69 W53 D90mm            |
| IP rating             | IP40                     |
| Class Reg.2013/811/EC | I = 1,0%                 |

## • ACCESSORIES

Ambient probe

STL D01 ..... € 9



## 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, Protec-  
tion: IP65, Dimensions: P6xL25mm

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

**STL D01** ..... € 9  
Sensor NTC, Working Range: -25 .. +125°C,  
Resistance=10k Ohm±1% @ 25°C, Protec-  
tion: 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** ..... € 35  
Sensor PTC, Working Range: -20 .. +70°C,  
Resistance=2k Ohm @ 25°C, Protection:  
IP54, Dimensions: A154xL79xP84mm

**STB D01** ..... € 48  
Sensor NTC, Working Range: -20 .. +70°C,  
Resistance=10k Ohm @ 25°C, Protection:  
IP54, Dimensions: A154xL79xP84mm

### ROOM TEMPERATURE PROBE, WALL MOUNTING



**STA NP3**..... € 16  
Sensor NTC, Working Range: 0 .. +50°C,  
Resistance=4k7 Ohm±2% @ 25°C,  
Protection: IP30,  
Dimensions: A85xL85x P31mm

**STA OP3**..... € 16  
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 DS** ..... € 31  
Sensor NTC, Working Range: -20 .. +60°C,  
Resistance=10k Ohm±2% @ 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

## ACCESSORIES

**POZ 001 ..... € 9**

½" threaded brass thermowell with spring.  
Dim. 7 x 38,2 mm.



**POZ 002..... € 14**

1/2" threaded brass thermowell.  
Internal Diameter. 6 x 108 mm.



**POZ 003..... € 27**

1/2"-1/4" steel pocket. Dim. 8 x 120 mm.



**AC AD02..... € 13**

Pipe clamp for supply and return probe.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins or other markings visible.

## FAN COIL THERMOSTATS

Thermostats for fan-coils  
Power Interface

pag. 49

pag. 61



## 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<br>TFD012 | Wall     | 230V/24V | No  | Manual           | Manual                           | Manual               | On-Off           | 2 On-Off          | No                             |
| TFD04M<br>TFD042 | Wall     | 230V/24V | No  | Manual           | Remote                           | Manual               | On-Off           | 2 On-Off          | No                             |
| TFM01M<br>TFM012 | Wall     | 230V/24V | No  | Auto<br>Manual   | Manual                           | Manual               | On-Off           | 2 On-Off          | No                             |
| TFX01M<br>TFX012 | Wall     | 230V/24V | No  | Manual           | Auto                             | Manual               | On-Off           | 2 On-Off          | No                             |
| TFA01M           | Wall     | 230V/24V | No  | Manual           | Manual                           | Manual               | On-Off<br>0..10V | 2 On-Off          | No                             |
| TFF01M           | Wall     | 230V/24V | Yes | Auto<br>Manual   | Manual<br>Auto<br>Remote         | Manual<br>Adjustable | On-Off           | 2 On-Off<br>PWM   | Yes                            |
| TFPEI2MI         | Recessed | 230V     | No  | Auto<br>Manual   | Manual                           | Manual<br>Adjustable | On-Off           | 2 On-Off          | Yes                            |
| TFZ01M           | Wall     | 230V/24V | Yes | Auto<br>Manual   | Manual<br>Auto<br>Remote         | Manual<br>Adjustable | On-Off<br>0..10V | 2 0..10V          | Yes                            |

## DIAMOND *new line*

**TF D01M**..... € 55  
230V~

**TF D012**..... € 51  
24V~

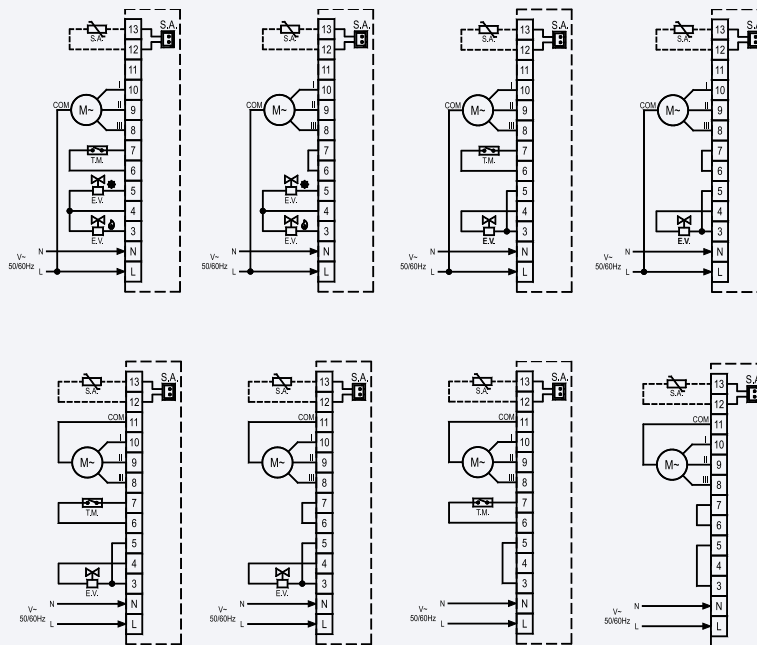


## ELECTRONIC FAN COIL THERMOSTAT

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**..... € 63  
230V~

**TF D042**..... € 70  
24V~



## 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.

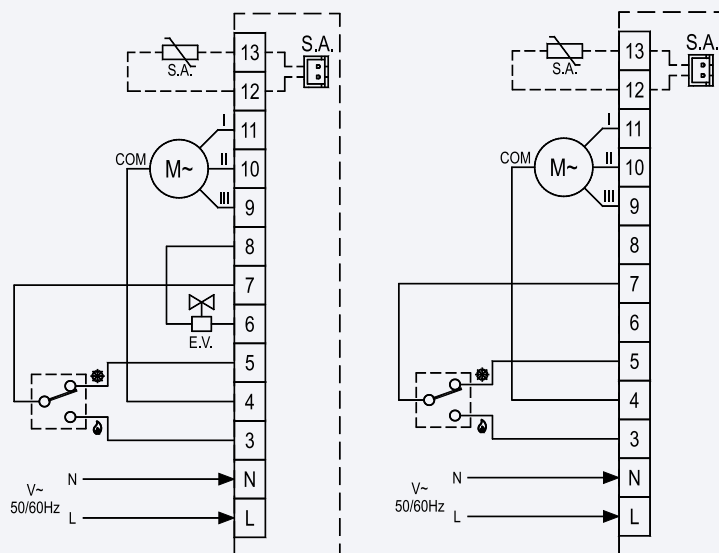
### TECHNICAL FEATURES

|                       |                                                             |
|-----------------------|-------------------------------------------------------------|
| Power supply          | 230V~ -15/+10% 50Hz (TFD04M)<br>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%                                                    |

### • 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.: STL D01).

## DIAMOND *new line*

**TF M01M**..... € 84  
230V~

**TF M012**..... € 108  
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.

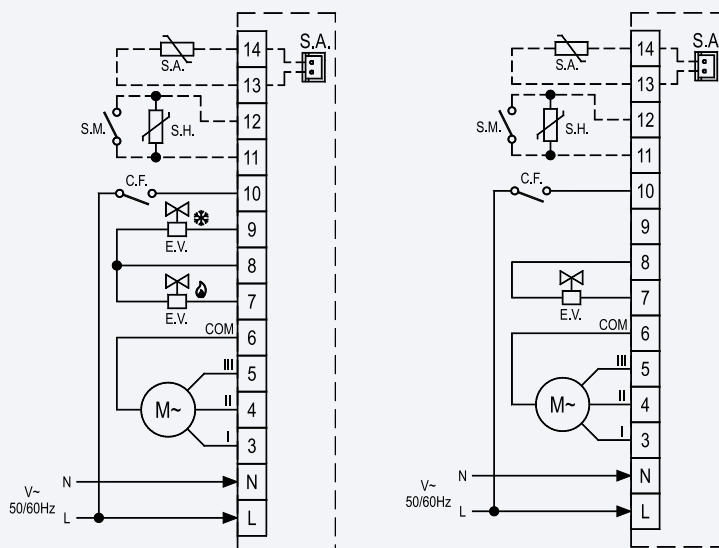
### TECHNICAL FEATURES

|                       |                                                             |
|-----------------------|-------------------------------------------------------------|
| Power supply          | 230V~ -15/+10% 50Hz (TFM01M)<br>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** ..... € 80  
230V~

**TF X012** ..... € 75  
24V~



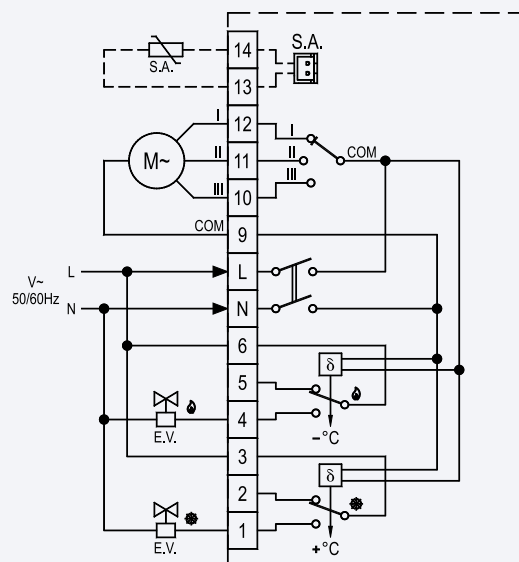
## FAN COIL ELECTRONIC THERMOSTAT WITH DEAD BAND

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)<br>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%                                                    |



### • ACCESSORIES

#### Remote sensor

**STL D01** ..... € 9

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..... € 109

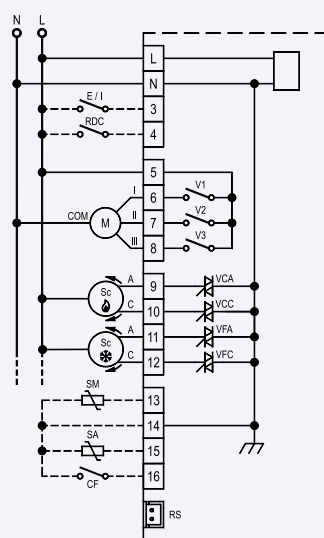


## FAN COIL DIGITAL THERMOSTAT

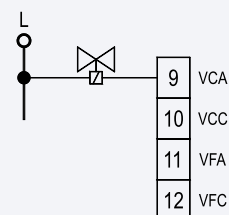
Digital configurable thermostat with automatic or manual fan speed selection. Manual, automatic or centralised heating/cooling with an external input selection; dead band function and changeover based on supply water. Possibility to control valves or fan or both. LCD showing all set functions. Suitable 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

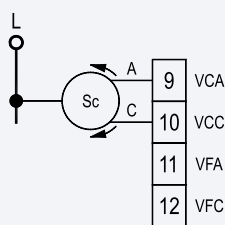
|                                                                 |                                                                       |
|-----------------------------------------------------------------|-----------------------------------------------------------------------|
| Power supply                                                    | 230V~ -15/+10% 50Hz or<br>230V~ ±10% 60Hz or<br>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%                                                              |



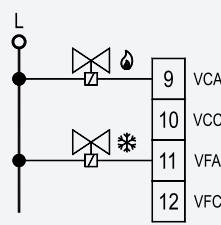
A Opens  
C Closes  
Sc Floating actuator  
SA Room sensor  
SM Supply water sensor  
EI Remote Heat/Cool



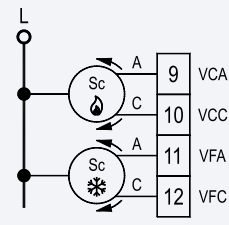
**A**



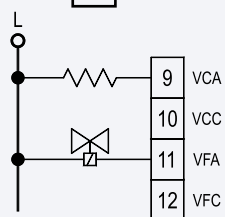
**B**



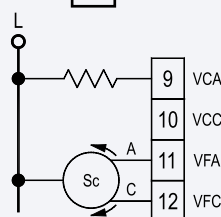
**C**



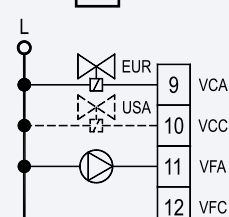
**D**



**E**



**F**



**G**

### • ACCESSORIES

Remote sensor

STL D01 ..... € 9

TFP EI2 MI ..... € 130

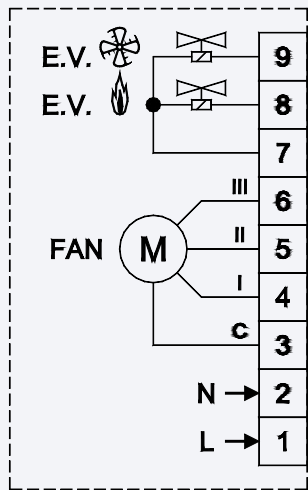


FAN COIL THERMOSTAT FLUSH-MOUNTED

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                                 | V = 3,0%             |



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..... € 92

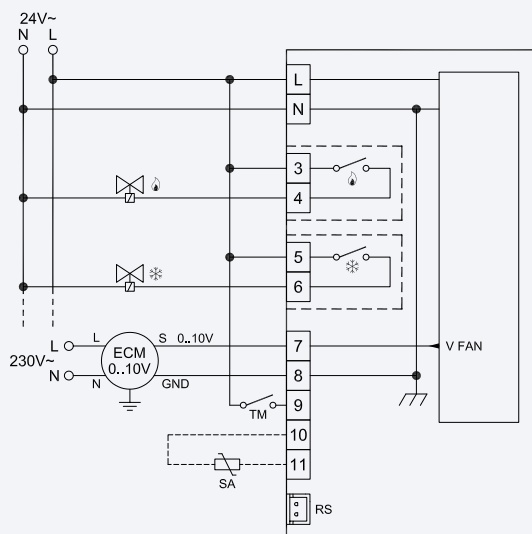
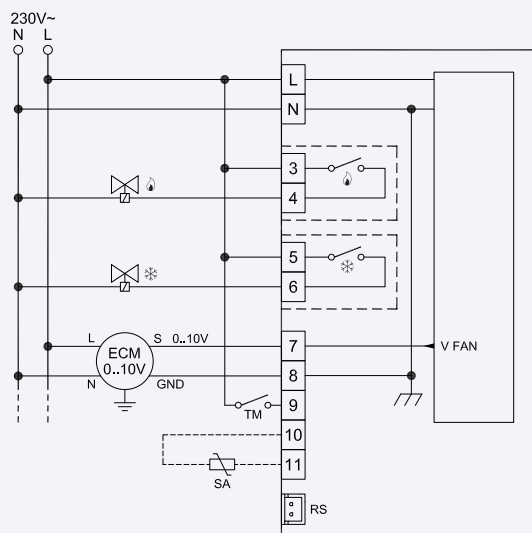


### ANALOG FAN COIL THERMOSTAT 230Vac or 24Vac

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 | I = 1,0%                        |



#### • ACCESSORIES

Remote sensor

STL D01 ..... € 9

## DIAMOND *new line*

TF Z01M ..... € 92



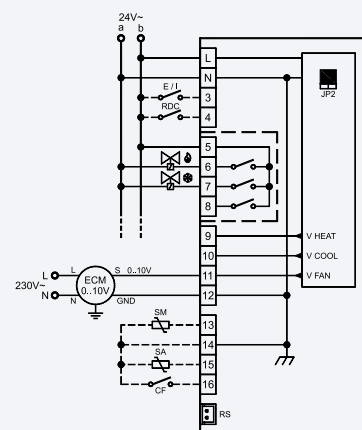
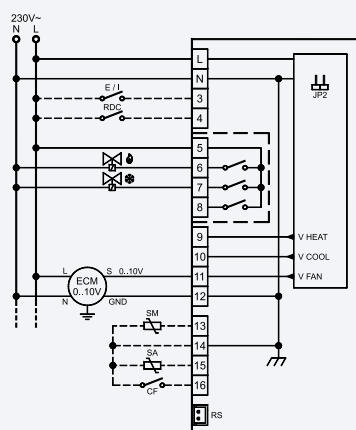
### FAN COIL DIGITAL THERMOSTAT DRIVING 0-10V FOR MOTORIZED VALVES AND FAN

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<br>230V~ ±10% 60Hz or<br>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%                                                              |

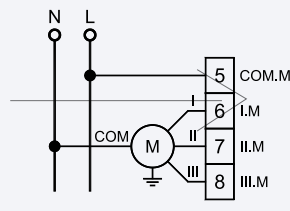
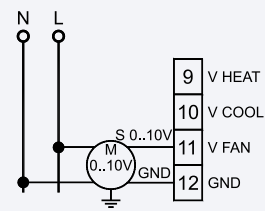
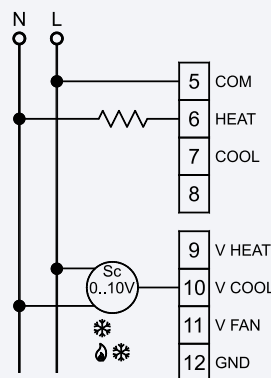
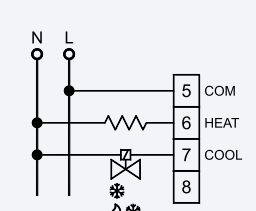
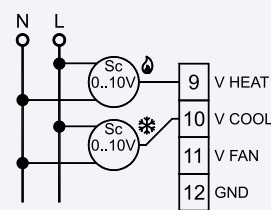
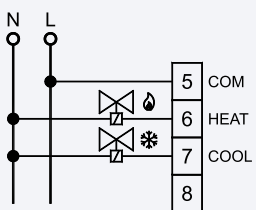
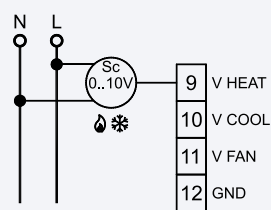
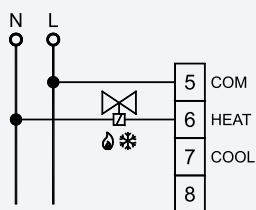
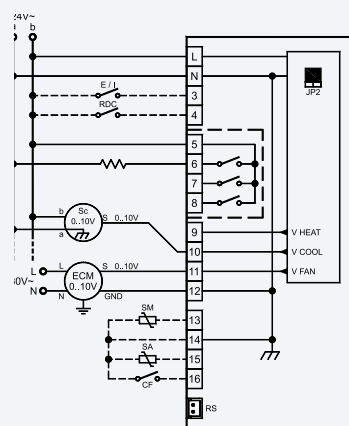
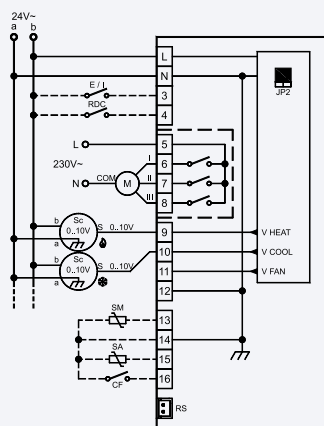
|        |                                                                                        |
|--------|----------------------------------------------------------------------------------------|
| JP2    | 230/24V~ selection                                                                     |
| 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.<br>See "Electric connections" |



#### • ACCESSORIES

##### Remote sensor

STL D01 ..... € 9



IFM EI1 M ..... € 34

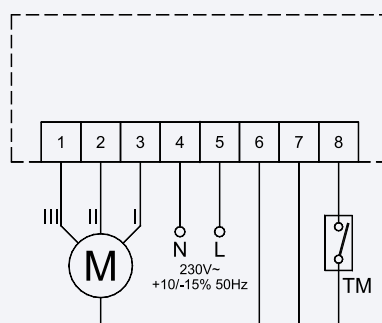


#### REMOTE CONTROL FOR FAN-COIL

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 ..... € 19

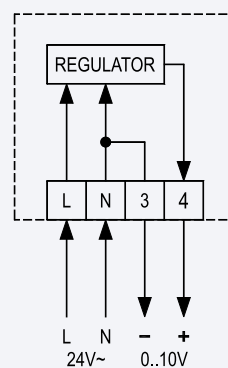


#### SPEED REGULATOR FOR FAN-COIL E.C.

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

##### TECHNICAL FEATURES

|                             |                    |
|-----------------------------|--------------------|
| Power supply                | 24V~ ±20% 50/60Hz  |
| Output                      | 0..10 Vdc          |
| Maximum 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.





**TFE INF POT** ..... € 77  
3 relays for one monophase motor 1/2 HP (16A)

**TFE INF M01** ..... € 85  
3 relays for two 10A motors

**TFE INF** ..... € 92  
3 relays for four 3A motors

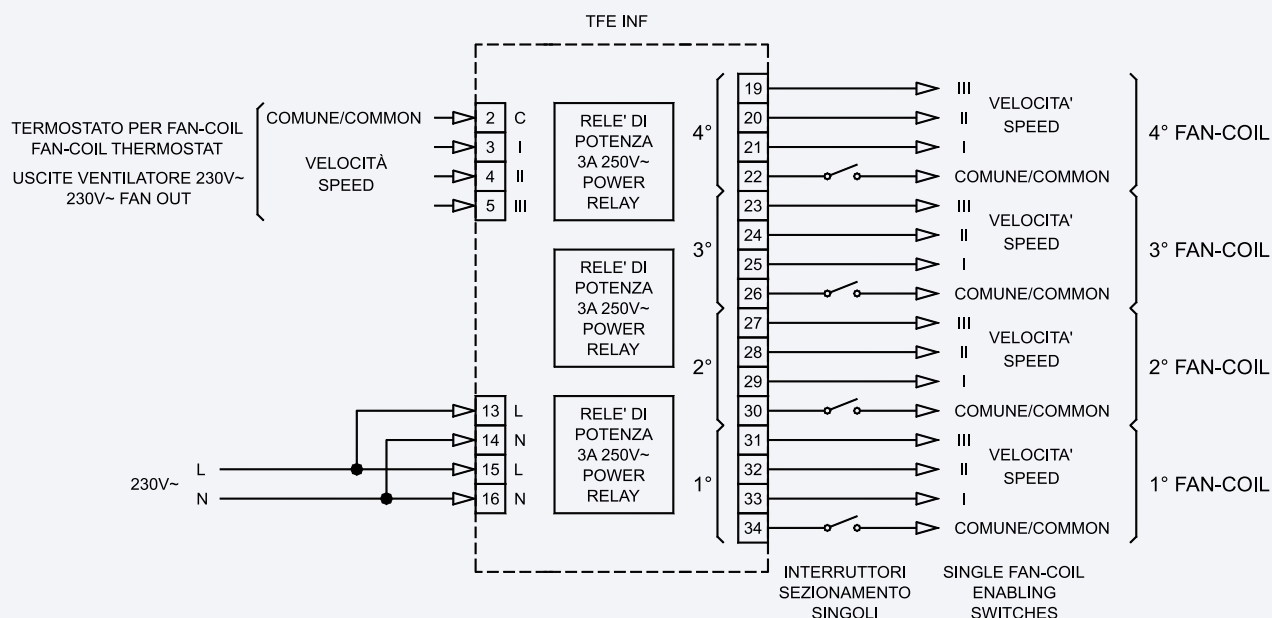


## FAN COILS POWER INTERFACE

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<br>2 x 10A @ 250V~ SPDT<br>4 x 3A @ 250V~ SPDT |
| IP rating                 | IP30                                                                |
| Dimensions                | H90 W105 D70mm                                                      |



**TTM 003 MI** ..... € 7



## STRAP-ON MICROTHERMOSTAT

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 ..... € 106

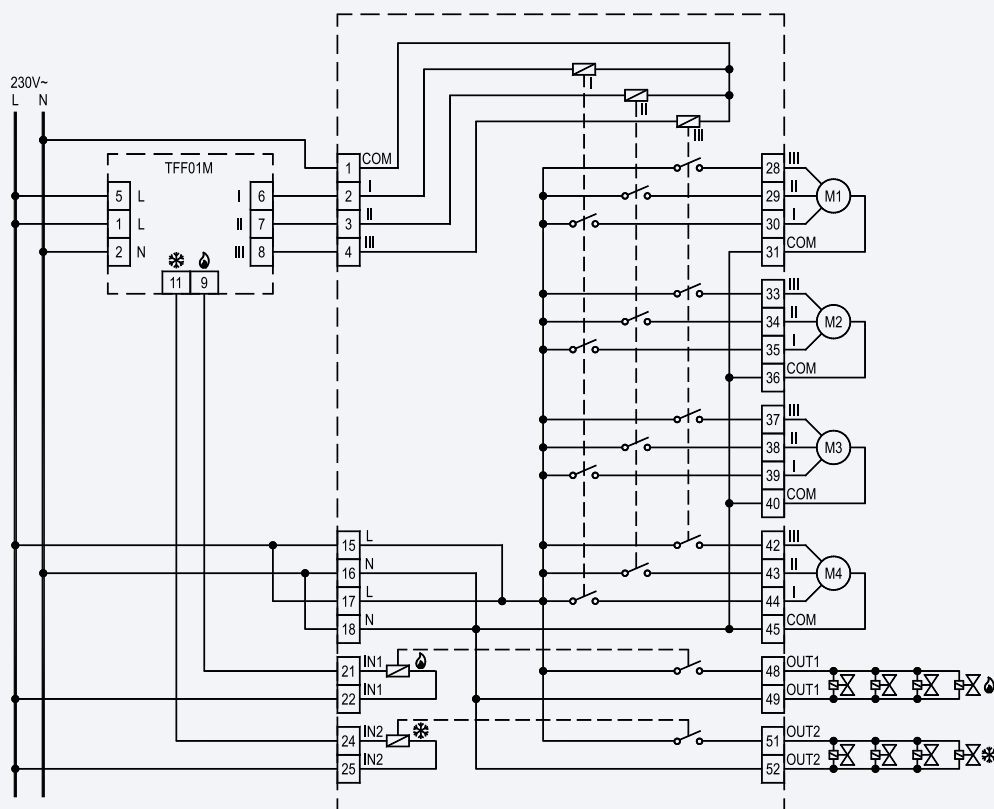


## 6 OUTPUT POWER INTERFACE

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      |



A large, light blue rectangular area with rounded corners, containing numerous horizontal lines for writing, resembling a notepad or a form for notes.

## SOLAR HEATING CONTROLLERS

Solar heating controllers

Accessories

Pumping station

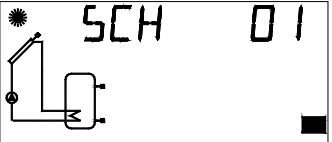
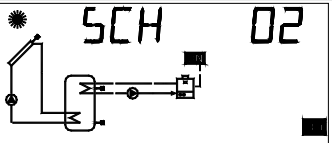
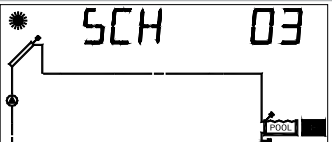
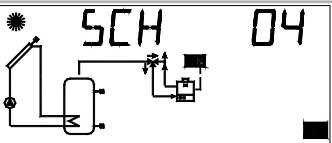
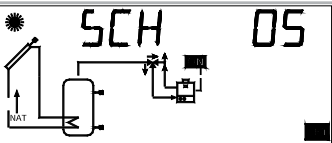
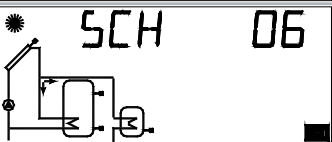
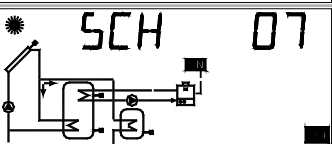
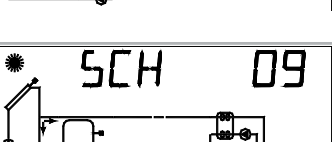
pag. 65

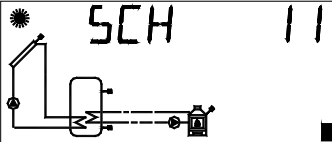
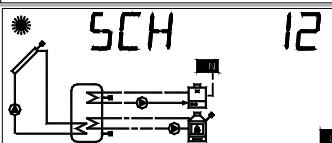
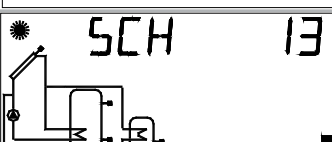
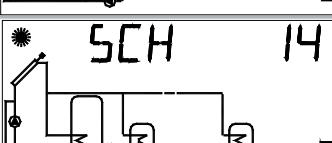
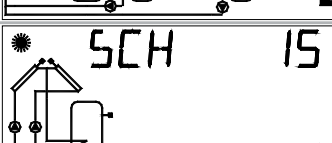
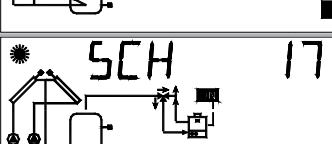
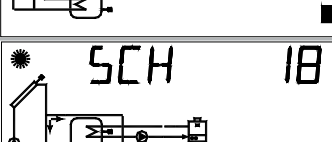
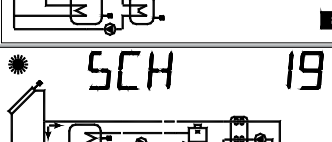
pag. 70

pag. 71



# 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**..... € 134  
Including 3 probes



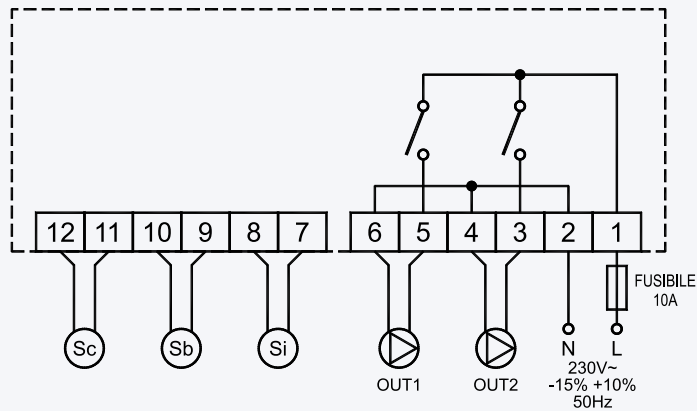
## ANALOG SOLAR CONTROLLER

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 FEATURES

|                             |                           |
|-----------------------------|---------------------------|
| 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** ..... € 185  
Including 3 probes

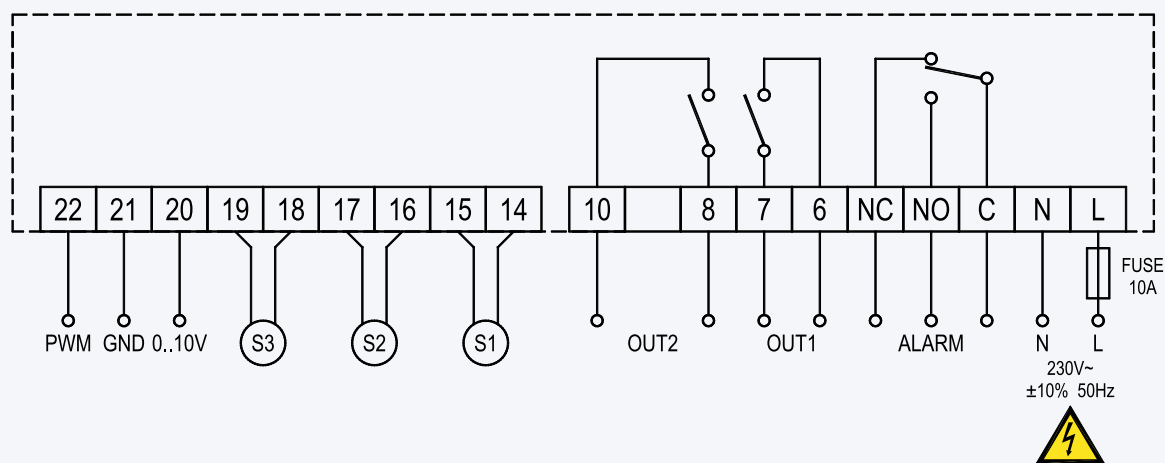


## SOLAR CONTROLLER

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 FEATURES

|                             |                                                                                              |
|-----------------------------|----------------------------------------------------------------------------------------------|
| 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)<br>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)<br>1 x 8(1)A max @ 250V~ (SPST)<br>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 T02M**..... € 223  
Including 3 probes



### SOLAR CONTROLLER

Digital differential controller for solar heating plants.

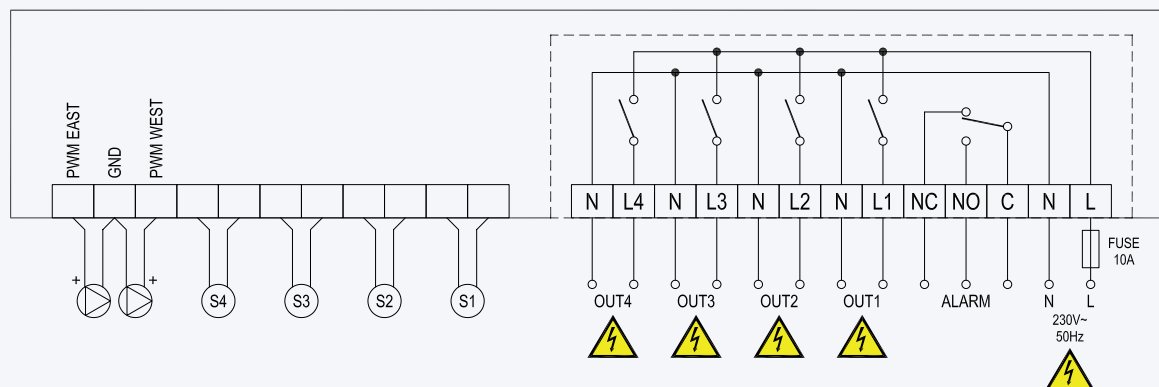
4 Pt1000 temperature inputs, 2 PWM output, 1 alarm auxiliary relay output SPDT. All temperatures are displayed. Configuration of 20 different system layouts. Self diagnostic feature, with visual and acoustic alarms. Available functions: recooling function, pump/valve kick, calorimeter.

#### TECHNICAL FEATURES

|                                     |                                                             |
|-------------------------------------|-------------------------------------------------------------|
| Power supply                        | 230V ~ 50Hz                                                 |
| Power absorption                    | 4VA                                                         |
| Inputs                              | 4 x Pt1000 Classe B DIN                                     |
| Sensor operating range              | -50 °C .. +200 °C (collector)<br>-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)<br>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           |

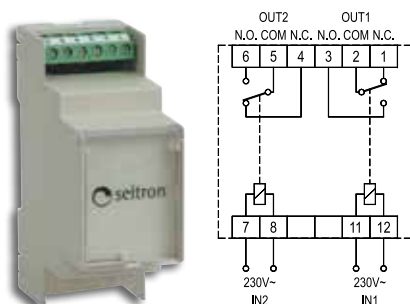




## ACCESSORIES

### ACC REL 02 ..... € 56

Accessories for free contacts: 2x230V~ inputs and 2 SPDT voltage outputs



### AC IW01 ..... € 60

Allow to convert On-Off pump output into a PWM or 0..10V output.



### STL MTS L 150 ..... € 15

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 ..... € 612



### 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).

A large, light gray rectangular area with rounded corners, containing 25 horizontal lines for writing. The lines are evenly spaced and extend across the width of the gray area.

## RESIDENTIAL GAS DETECTORS

Residential gas leakage detectors  
Remote sensors  
Accessories

pag. 73  
pag. 81  
pag. 86



## GAS LEAK DETECTORS FOR RESIDENTIAL USE BY SEITRON

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..... € 87**

**RGD ME5 MP1T..... € 93**  
with 2 m cable and plug

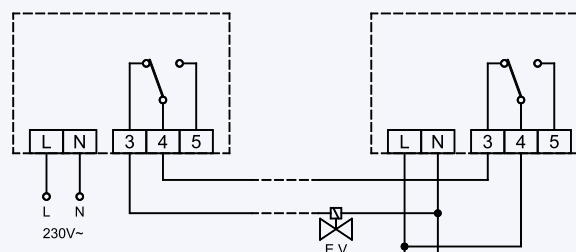
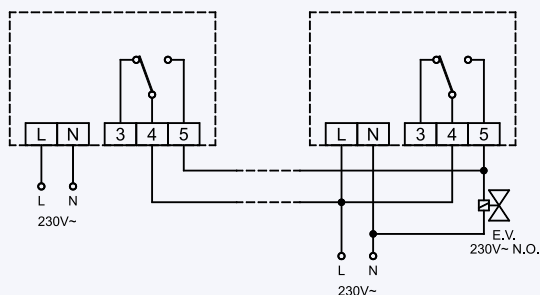
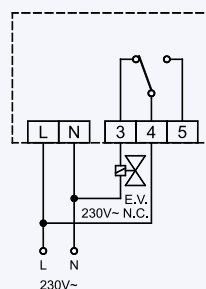
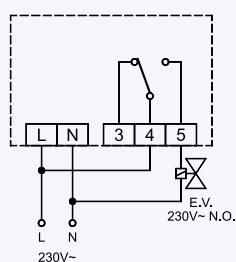
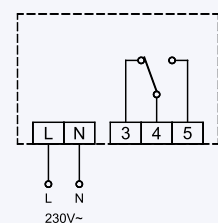


## GAS LEAKAGE DETECTOR - METHANE -

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..... € 87**

**RGD GP5 MP1T..... € 93**  
with 2 m cable and plug

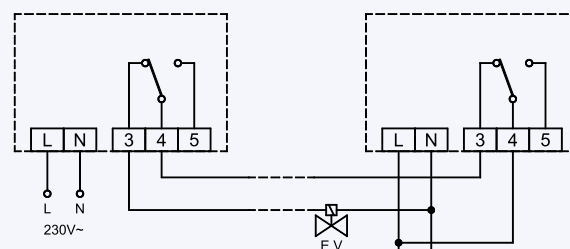
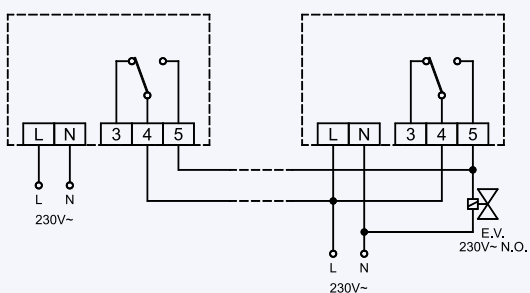
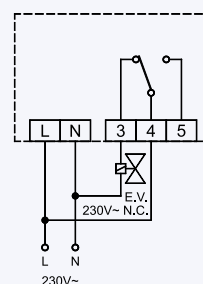
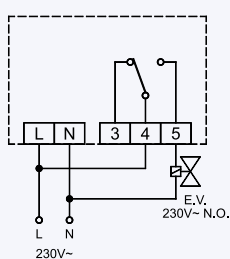
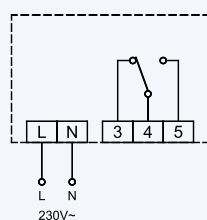


## GAS LEAKAGE DETECTOR - LPG -

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**..... € 154

**RD CBA1** ..... € 160  
with 2 m cable and plug

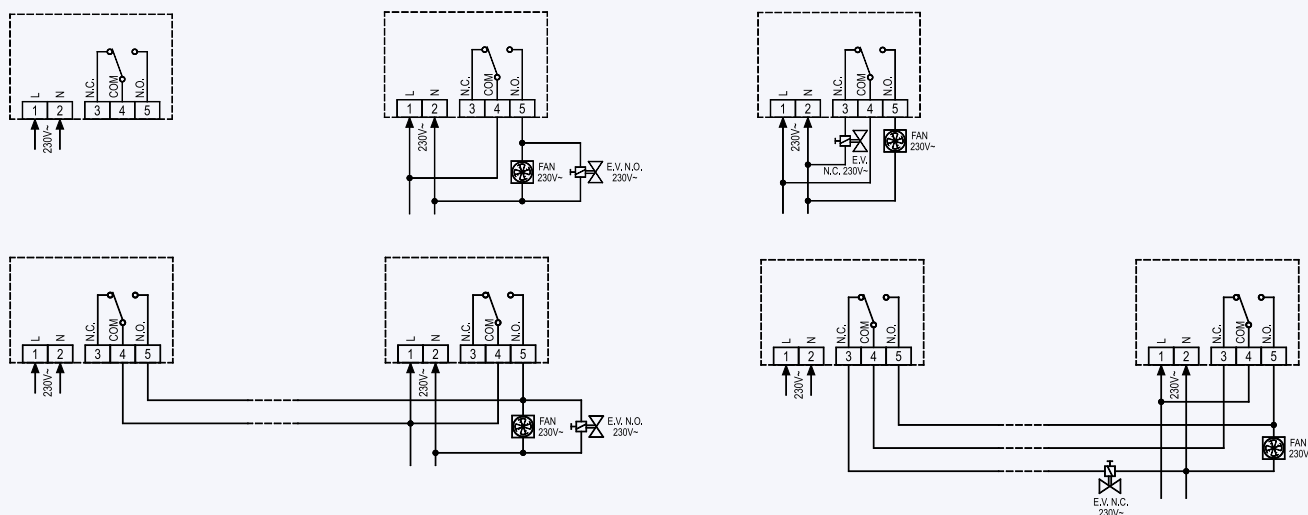


## GAS LEAKAGE DETECTOR - CO -

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** ..... € 111



### GAS LEAKAGE DETECTOR - METHANE AND CO -

Domestic methane (CH<sub>4</sub>) 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              | SnO <sub>2</sub> Semiconductor                               |
| Alarm threshold          | 10% L.E.L. CH <sub>4</sub> 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: CH <sub>4</sub> alarm - blue: CO alarm - red-blue: both |
| IP rating                | IP42                                                         |
| Dimensions               | H107 W85 D38mm                                               |

## KIT BEAGLE METHANE

**KD M5R 00021** ..... € 149

Kit with N.O. electrovalve

**KD M5R 00022** ..... € 201

Kit with N.C. electrovalve



### KIT BEAGLE - METHANE -

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 LPG

**KD G5R 00019** ..... € 149

Kit with N.O. electrovalve

**KD G5R 00020** ..... € 201

Kit with N.C. electrovalve



### KIT BEAGLE - LPG -

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.

## SEGUGIO WIRELESS

|                      |       |
|----------------------|-------|
| <b>DD MSM1</b> ..... | € 132 |
| Methane              |       |
| <b>DD GSM1</b> ..... | € 132 |
| LPG                  |       |



### 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                                               |

## KIT SEGUGIO WIRELESS Methane o LPG - pag. 38

|                      |      |
|----------------------|------|
| <b>DR G01M</b> ..... | € 89 |
|----------------------|------|

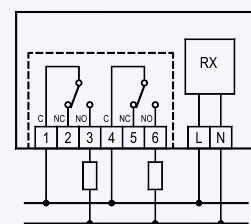
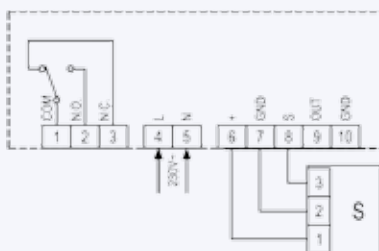


### GAS ALARM RECEIVER

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                 |



## SEGUGIO *plus* METANO

RGD MET MP1R..... € 107



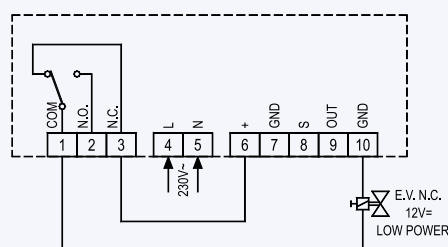
### GAS LEAKAGE DETECTOR - METHANE -

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.

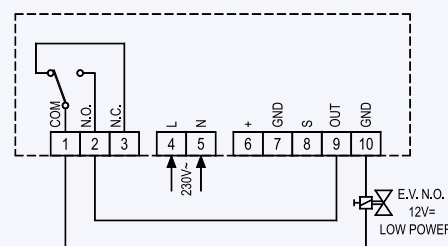
#### TECHNICAL FEATURES

|                      |                                                    |
|----------------------|----------------------------------------------------|
| Power supply         | 230V~ ±10% 50Hz                                    |
| Output (relay)       | 6(2)A @ 250V~ SPDT                                 |
| Sensor type          | SnO <sub>2</sub> 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                                                |

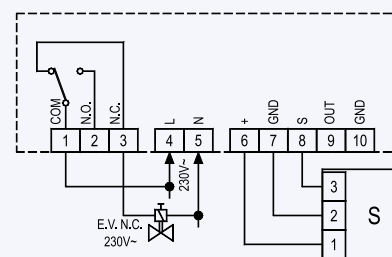
Notes: (1) Facility for a remote sensor (SGA \*\*\*), for the control of a further zone. (2) Depressed button test for one sec.: it silences the buzzer for 10 minutes; depressed for at least 5 sec.: checks all internal functions and electrovalve activation.



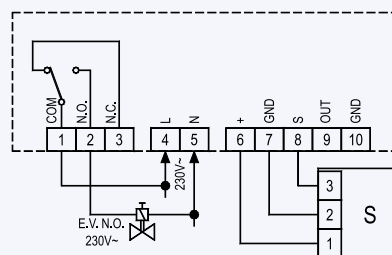
12V~/= NORMALLY  
CLOSED LOW  
CONSUMPTION  
ELECTROVALVE



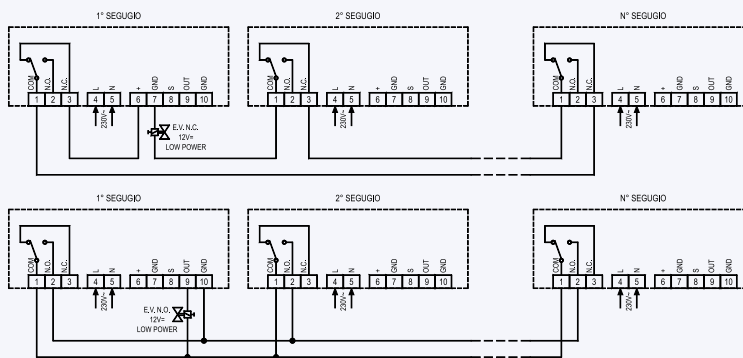
12V~/= NORMALLY  
OPEN LOW  
CONSUMPTION  
ELECTROVALVE



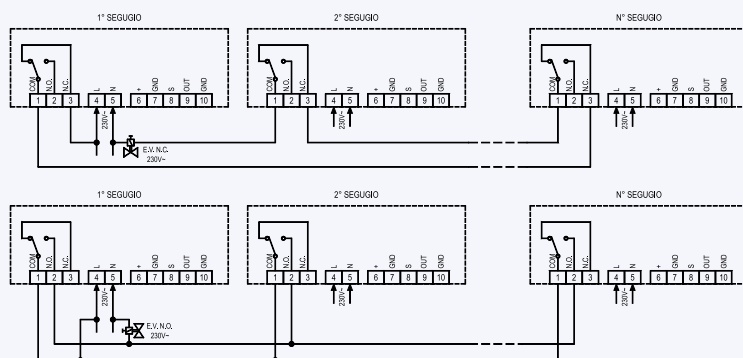
230V~ NORMALLY  
CLOSED  
ELECTROVALVE AND  
REMOTE SENSOR



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.

**SGA MET** ..... € 85  
Methane

**SGA GPL** ..... € 85  
LPG

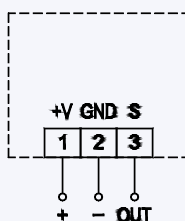


#### METHANE OR LPG REMOTE SENSOR (FOR SEGUGIO DETECTORS ONLY)

Remote sensor for methane or LPG gas leakages. Solid state sensing element. Sensor life: 5 years. IP30 case.

#### TECHNICAL FEATURES

|                  |                           |
|------------------|---------------------------|
| Power supply     | 6V= .. 12V= from detector |
| Power absorption | 1W                        |
| Output           | On/off voltage output     |
| Sensor type      | SnO2 semiconductor        |
| Sensor life      | 5 years                   |
| Detectable gas   | Methane or LPG            |
| Alarm threshold  | 10% L.E.L.                |
| IP rating        | IP30                      |
| Dimensions       | H90 W65 D30mm             |



## SEGUGIO *plus* LPG

RGD GPL MP1R..... € 107



### 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 MODE

RGD COK MP1..... € 160

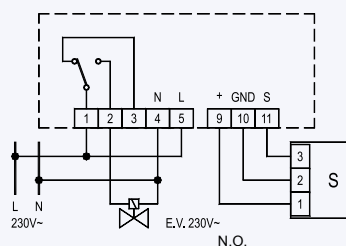


### GAS LEAKAGE DETECTOR - CO -

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..... € 222

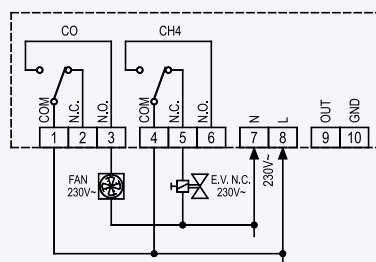


### GAS LEAKAGE DETECTOR - METHANE + CO

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 ..... € 122



### 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                 |

## KIT SEGUGIO METHANE

**KD MER 00014**..... € 200  
Kit with N.O. 230V electrovalve

**KD MER 00015**..... € 261  
Kit with N.C. 230V electrovalve

**KD MER 00008**..... € 225  
Kit with N.O. 12 V low power electrovalve



### KIT SEGUGIO - METHANE -

Kit including SEGUGIO METHANE (RGDMETMP1R) gas detector with 230V~ power supply, 1 230V~ or 12V~ cut-off valve (EVGPAFM020 N.O. 230V - EVGPCFM020 N.C. 230V - EVGBAF1020 N.O. 12V) with manual reset, 2 x 3/4" to 1/2" nipples.

## KIT SEGUGIO LPG

**KD GPR 00017**..... € 200  
Kit with N.O. 230V electrovalve

**KD GPR 00018**..... € 261  
Kit with N.C. 230V electrovalve

**KD GPR 00016**..... € 225  
Kit with N.O. 12 low power electrovalve

**KD GPR 00002**..... € 225  
Kit with N.C. 12 low power electrovalve

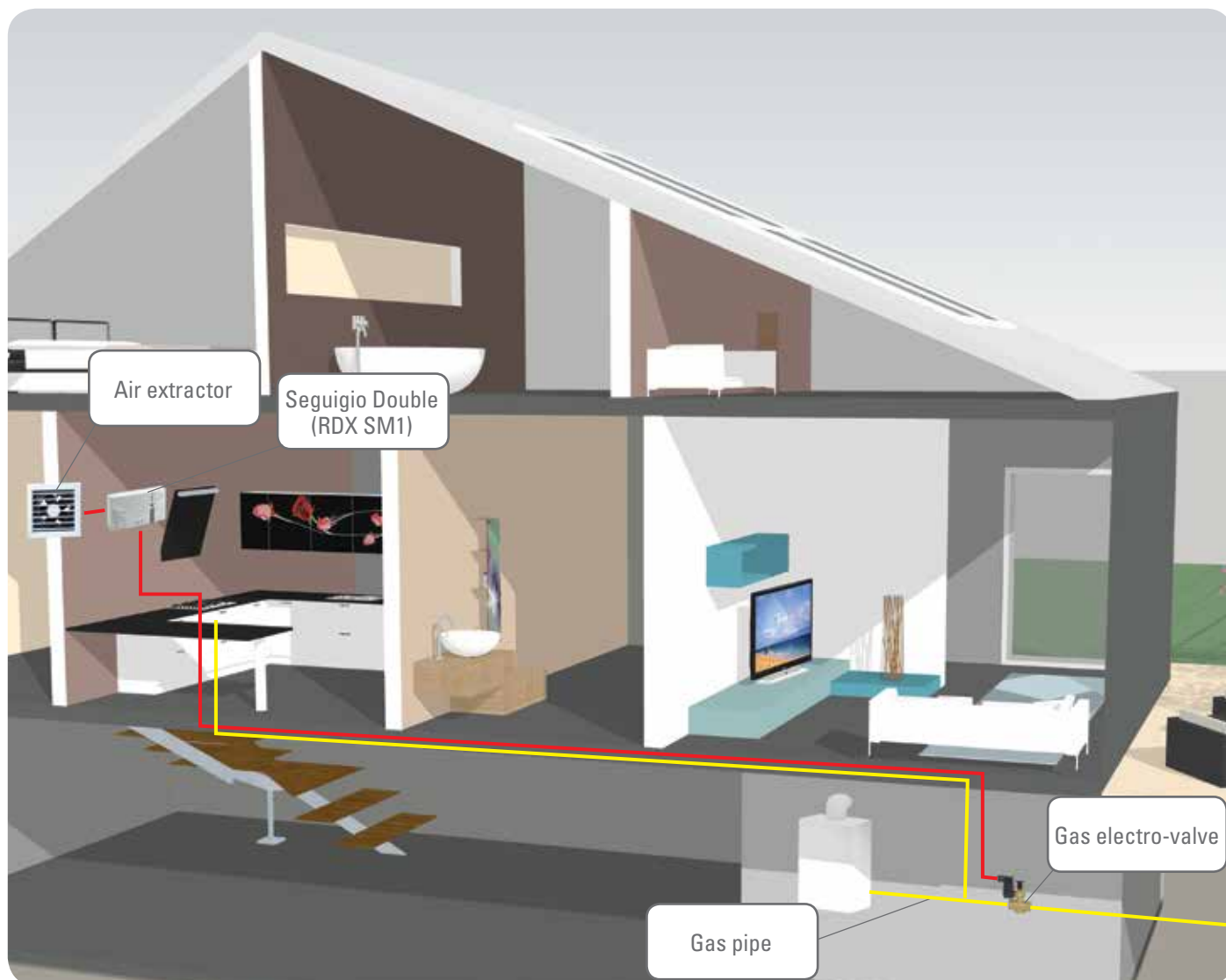


### KIT SEGUGIO - LPG -

Kit including SEGUGIO LPG (RGDGPLMP1R) gas detector with 230V~ power supply, 1 230V~ or 12V~ cut-off valve (EVGPAFM020 N.O. 230V - EVGPCFM020 N.C. 230V - EVGBAF1020 N.O. 12V - EVGRCF1020 N.C. 12V) with manual reset, 2 x 3/4" to 1/2" nipples.

## RESIDENTIAL GAS LEAKAGE DETECTORS

Installation example of SEGUGIO DOUBLE that simultaneously controls a fan for the alarm from carbon monoxide and a solenoid valve for the alarm from methane.





## AIR GUARDIAN

**RD ADA1** ..... € 411

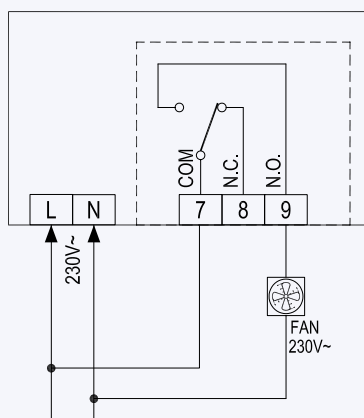


## CARBON DIOXIDE CONTROLLER (CO2)

Information, on the LCD, of the level of CO2 measured by the NDIR internal sensor. Voltage-free contact output, test function to ensure correct operation of the controller, option to change the alarm thresholds.

### TECHNICAL FEATURES

|                      |                                 |
|----------------------|---------------------------------|
| Power                | 85-264V~ 47-440Hz               |
| Absorption           | 2.0 VA max.                     |
| Detection range      | 0 .. 2000 ppm                   |
| Accuracy             | ±30ppm                          |
| Rated current        | 5(1)A 250V~ SPDT (Voltage-free) |
| Degree of protection | IP30                            |
| Operating temp       | 0°C. 40°C.                      |
| Storage temp         | - 10°C. + 50°C.                 |
| Humidity limits      | 20%. 80% RH non-condensing      |
| Dimensions           | 132 x 87 x 23.6 (LxAxP)         |



## ACCESSORIES

**AC MM01** ..... € 59

Precalibrated replaceable gas sensor for Methane gas leakage detectors. Suitable for Segugio and Beagle plus product.



**AC MG01** ..... € 59

Precalibrated replaceable gas sensor for LPG gas leakage detectors. Suitable for Segugio and Beagle plus product.



**AC MC01** ..... € 100

Precalibrated replaceable gas sensor for CO gas leakage detectors with threshold and accumulation mode. Suitable for Segugio Double and Beagle product.



**CHM 088 BX** ..... € 12

Gas-Test cylinder. Bump-Test cylinder for LPG and methane gas leakage detectors, for ca. 70 tests.



## INDUSTRIAL GAS DETECTORS

Product selection guide

Transmitters

Control units

Industrial gas detectors and control unit

Electro-valves

pag. 88

pag. 90

pag. 94

pag. 99

pag. 103



## 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. **A**)
- **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. **B**)  
LEL CH<sub>4</sub> (G20 mixture) = 4.4% v/v = 100% LEL CH<sub>4</sub> - 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).

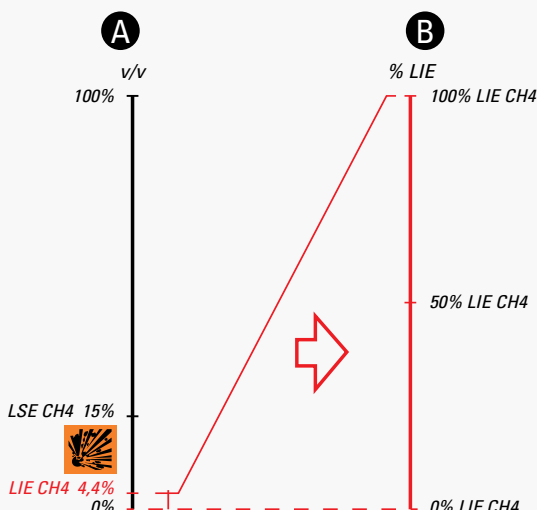
**Signal output**: Describes the type of electrical signal delivered by the device in order to communicate the measured concentration to the control device connected to it.

- **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 (CH<sub>4</sub>), 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 Explosive Limit (LEL) for methane gas (CH<sub>4</sub>). 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 $\pm$ 15% is 350 ohm.

### Relays

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

### S-Bus

|                         |                 |
|-------------------------|-----------------|
| Supply voltage:         | 12 V $\pm$ 10%. |
| Absorption:             |                 |
| Normal operation:       | 18 mA           |
| Communication protocol: | S-Bus           |

### Modbus®

|                         |                                                                            |
|-------------------------|----------------------------------------------------------------------------|
| Interface:              | RS485.                                                                     |
| Parameters:             | 19200, 8, N, 1.                                                            |
| Communication protocol: | Modbus® RTU<br>(rif.: <a href="http://www.modbus.org">www.modbus.org</a> ) |

## 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+H<sub>2</sub> T6 Gb  
Ex tb IIIC T85°C Db  
IMQ 15 ATEX 0003 X

## LABELLING

|                                                                             |                                                                                                                                                                         |                      |  |
|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--|
| Type                                                                        |                                                                                                                                                                         | Manufacturer address |  |
| Serial number                                                               |                                                                                                                                                                         | Working temperature  |  |
|                                                                             |                                                                                                                                                                         | Manufacturing year   |  |
| Via del Commercio, 9/11, 36065 - Mussolente VI - ITALY                      |                                                                                                                                                                         |                      |  |
| Type:                                                                       | Year:                                                                                                                                                                   |                      |  |
| SN:                                                                         | Tamb:                                                                                                                                                                   |                      |  |
| Ex db IIB+H <sub>2</sub> T6 Gb<br>Ex tb IIIC T85°C Db<br>IMQ 00, ATEX 000 X |                                                                                                                                                                         | Made in Italy        |  |
| Number of Notified Body responsible for the Quality System                  | ATEX marking<br>Notified Body who issued the CE Type ATEX Certificate, year of issue and relevant number<br>Marking required by the applied Cenelec standard, EPL (IEC) |                      |  |

**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 redundancy, for zone 2 or 22.

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

**IIB+H<sub>2</sub>:** Equipment of group IIB suitable for all gas substances of group IIB as well as for H<sub>2</sub> (Hydrogen). A device of group IIB + H<sub>2</sub> 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     | case    | cod            | list € | central unit |        |        |
|---------|---------------|-------------------|---------|----------------|--------|--------------|--------|--------|
|         |               |                   |         |                |        | RYM01M       | RXA01M | RS0021 |
| METHANE | 0..50% LEL    | 4..20mA           | plastic | SX MN 04 0001  | 183    | ✓            | ✓      |        |
|         |               |                   | ATEX    | SX MX 14 1 001 | 258    | ✓            | ✓      |        |
|         |               | 4..20mA + Relè    | plastic | SX MN 04 0003  | 247    | ✓            | ✓      |        |
|         |               |                   | ATEX    | non available  | -      |              |        |        |
|         |               | 4..20mA + S-Bus   | plastic | SX MN 04 0004  | 250    | ✓            | ✓      | ✓      |
|         |               |                   | ATEX    | SX MX 14 4 001 | 321    | ✓            | ✓      | ✓      |
|         |               | 4..20mA + Modbus® | plastic | SX MN 04 0010  | 250    | ✓            | ✓      |        |
|         |               |                   | ATEX    | SX MX 14 M 001 | 321    | ✓            | ✓      |        |
|         | 0..100% LEL   | 4..20mA           | plastic | SX MN 06 0001  | 250    | ✓            | ✓      |        |
|         |               |                   | ATEX    | SX MX 16 1 001 | 340    | ✓            | ✓      |        |
|         |               | 4..20mA + Relè    | plastic | SX MN 06 0003  | 309    | ✓            | ✓      |        |
|         |               |                   | ATEX    | not available  | -      |              |        |        |
|         |               | 4..20mA + S-Bus   | plastic | SX MN 06 0004  | 314    | ✓            | ✓      | ✓      |
|         |               |                   | ATEX    | SX MX 16 4 001 | 407    | ✓            | ✓      | ✓      |
|         |               | 4..20mA + Modbus® | plastic | SX MN 06 0010  | 317    | ✓            | ✓      |        |
|         |               |                   | ATEX    | SX MX 16 M 001 | 407    | ✓            | ✓      |        |

## GAS CONCENTRATION TRANSMITTERS - LPG

LPG

| working range | output signal   | case    | cod            |
|---------------|-----------------|---------|----------------|
| 0..50% LEL    | 4..20mA         | plastic | SX GN 04 0001  |
|               |                 | ATEX    | SX GX 14 1 001 |
|               | 4..20mA + Relè  | plastic | SX GN 04 0003  |
|               |                 | ATEX    | not available  |
|               | 4..20mA + S-Bus | plastic | SX GN 04 0004  |
|               |                 | ATEX    | SX GX 14 4 001 |
| 0..100% LEL   | 4..20mA         | plastic | SX GN 04 0010  |
|               |                 | ATEX    | SX GX 14 M 001 |
|               | 4..20mA + Relè  | plastic | SX GN 06 0001  |
|               |                 | ATEX    | SX GX 16 1 001 |
|               | 4..20mA + S-Bus | plastic | SX GN 06 0003  |
|               |                 | ATEX    | not available  |
| 0..100% LEL   | 4..20mA         | plastic | SX GN 06 0004  |
|               |                 | ATEX    | SX GX 16 4 001 |
|               | 4..20mA + Relè  | plastic | SX GN 06 0010  |
|               |                 | ATEX    | SX GX 16 M 001 |
|               | 4..20mA + S-Bus | plastic | SX GN 06 0004  |
|               |                 | ATEX    | SX GX 16 4 001 |

| list € | central unit |        |        |
|--------|--------------|--------|--------|
|        | RYM01M       | RXA01M | RS0021 |
| 183    | ✓            | ✓      |        |
| 258    | ✓            | ✓      |        |
| 247    | ✓            | ✓      |        |
| -      |              |        |        |
| 250    | ✓            | ✓      | ✓      |
| 321    | ✓            | ✓      | ✓      |
| 250    | ✓            | ✓      |        |
| 321    | ✓            | ✓      |        |
| 250    | ✓            | ✓      |        |
| 340    | ✓            | ✓      |        |
| 309    | ✓            | ✓      |        |
| -      |              |        |        |
| 314    | ✓            | ✓      | ✓      |
| 407    | ✓            | ✓      | ✓      |
| 317    | ✓            | ✓      |        |
| 407    | ✓            | ✓      |        |

## GAS CONCENTRATION TRANSMITTERS - PETROL VAPORS

### PETROL VAPORS

working range

output signal

case

cod

0..50%  
LEL

4..20mA

plastic

SX VN 04 0001

ATEX

SX VX 14 1 001

4..20mA  
+ Relè

plastic

SX VN 04 0003

ATEX

not available

4..20mA  
+ S-Bus

plastic

SX VN 04 0004

ATEX

SX VX 14 4 001

4..20mA  
+ Modbus®

plastic

SX VN 04 0010

ATEX

SX VX 14 M 001

0..100%  
LEL

4..20mA

plastic

SX VN 06 0001

ATEX

SX VX 16 1 001

4..20mA  
+ Relè

plastic

SX VN 06 0003

ATEX

not available

4..20mA  
+ S-Bus

plastic

SX VN 06 0004

ATEX

SX VX 16 4 001

4..20mA  
+ Modbus®

plastic

SX VN 06 0010

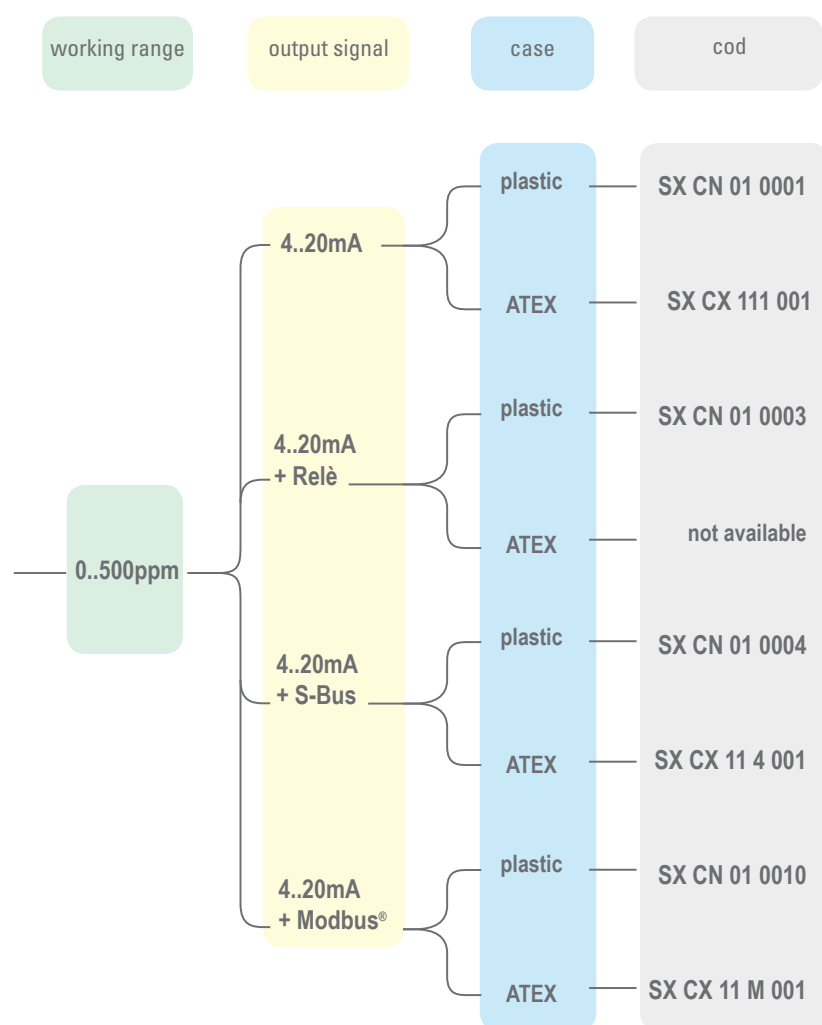
ATEX

SX VX 16 M 001

| list € | central unit |        |        |
|--------|--------------|--------|--------|
|        | RYM01M       | RXA01M | RS0021 |
| 225    | ✓            | ✓      |        |
| 299    | ✓            | ✓      |        |
| 288    | ✓            | ✓      |        |
| -      |              |        |        |
| 291    | ✓            | ✓      | ✓      |
| 363    | ✓            | ✓      | ✓      |
| 291    | ✓            | ✓      |        |
| 363    | ✓            | ✓      |        |
| 291    | ✓            | ✓      |        |
| 381    | ✓            | ✓      |        |
| 350    | ✓            | ✓      |        |
| -      |              |        |        |
| 355    | ✓            | ✓      | ✓      |
| 448    | ✓            | ✓      | ✓      |
| 358    | ✓            | ✓      |        |
| 448    | ✓            | ✓      |        |

## GAS CONCENTRATION TRANSMITTERS - CO CARBON MONOXIDE

### CO CARBON MONOXIDE



| list € | central unit |        |        |
|--------|--------------|--------|--------|
|        | RYM01M       | RXA01M | RS0021 |
| 227    | ✓            | ✓      |        |
| 288    | ✓            | ✓      |        |
| 288    | ✓            | ✓      |        |
| -      |              |        |        |
| 293    | ✓            | ✓      | ✓      |
| 354    | ✓            | ✓      | ✓      |
| 293    | ✓            | ✓      |        |
| 354    | ✓            | ✓      |        |





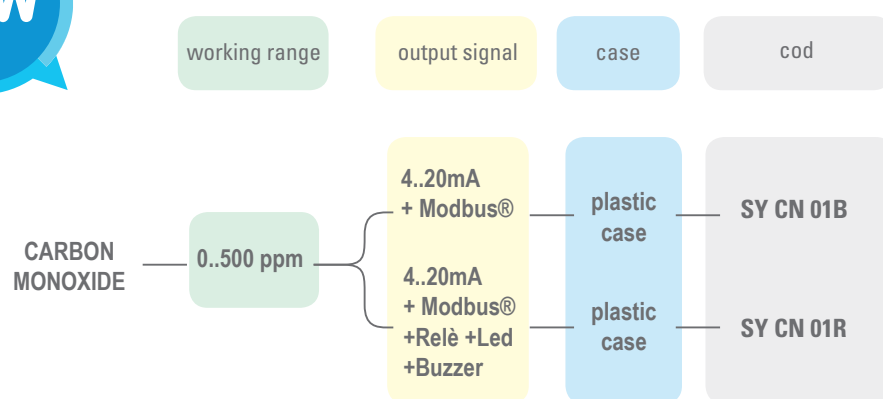
## GAS CONCENTRATION TRANSMITTERS / DETECTORS

|               |            | working range | output signal                           | case         | cod       | price € | central unit |        |
|---------------|------------|---------------|-----------------------------------------|--------------|-----------|---------|--------------|--------|
|               |            |               |                                         |              |           |         | RYM01M       | RXA01M |
| METHANE       | 0..50% LEL |               | 4..20mA + Modbus®                       | plastic case | SY MN 04B | 210€    | ✓            | ✓      |
|               |            |               | 4..20mA + Modbus® + Relè + Led + Buzzer | plastic case | SY MN 04R | 270€    | ✓            | ✓      |
| LPG           | 0..50% LEL |               | 4..20mA + Modbus®                       | plastic case | SY GN 04B | 210€    | ✓            | ✓      |
|               |            |               | 4..20mA + Modbus® + Relè + Led + Buzzer | plastic case | SY GN 04R | 270€    | ✓            | ✓      |
| PETROL VAPORS | 0..50% LEL |               | 4..20mA + Modbus®                       | plastic case | SY VN 04B | 210€    | ✓            | ✓      |
|               |            |               | 4..20mA + Modbus® + Relè + Led + Buzzer | plastic case | SY VN 04R | 270€    | ✓            | ✓      |



|              |             | working range | output signal                           | case         | cod       | price € | central unit |        |
|--------------|-------------|---------------|-----------------------------------------|--------------|-----------|---------|--------------|--------|
|              |             |               |                                         |              |           |         | RYM01M       | RXA01M |
| METHANE      | 0..100% LEL |               | 4..20mA + Modbus®                       | plastic case | SY MN 06B | (*)     | ✓            | ✓      |
|              |             |               | 4..20mA + Modbus® + Relè + Led + Buzzer | plastic case | SY MN 06R | (*)     | ✓            | ✓      |
| LPG          | 0..100% LEL |               | 4..20mA + Modbus®                       | plastic case | SY GN 06B | (*)     | ✓            | ✓      |
|              |             |               | 4..20mA + Modbus® + Relè + Led + Buzzer | plastic case | SY GN 06R | (*)     | ✓            | ✓      |
| PETROL VAPOR | 0..100% LEL |               | 4..20mA + Modbus®                       | plastic case | SY VN 06B | (*)     | ✓            | ✓      |
|              |             |               | 4..20mA + Modbus® + Relè + Led + Buzzer | plastic case | SY VN 06R | (*)     | ✓            | ✓      |

(\*) : Prezzo su richiesta



| price € | central unit |        |
|---------|--------------|--------|
|         | RYM01M       | RXA01M |
| 219     | ✓            | ✓      |
| 279     | ✓            | ✓      |

RY M01M..... € 463

NEW

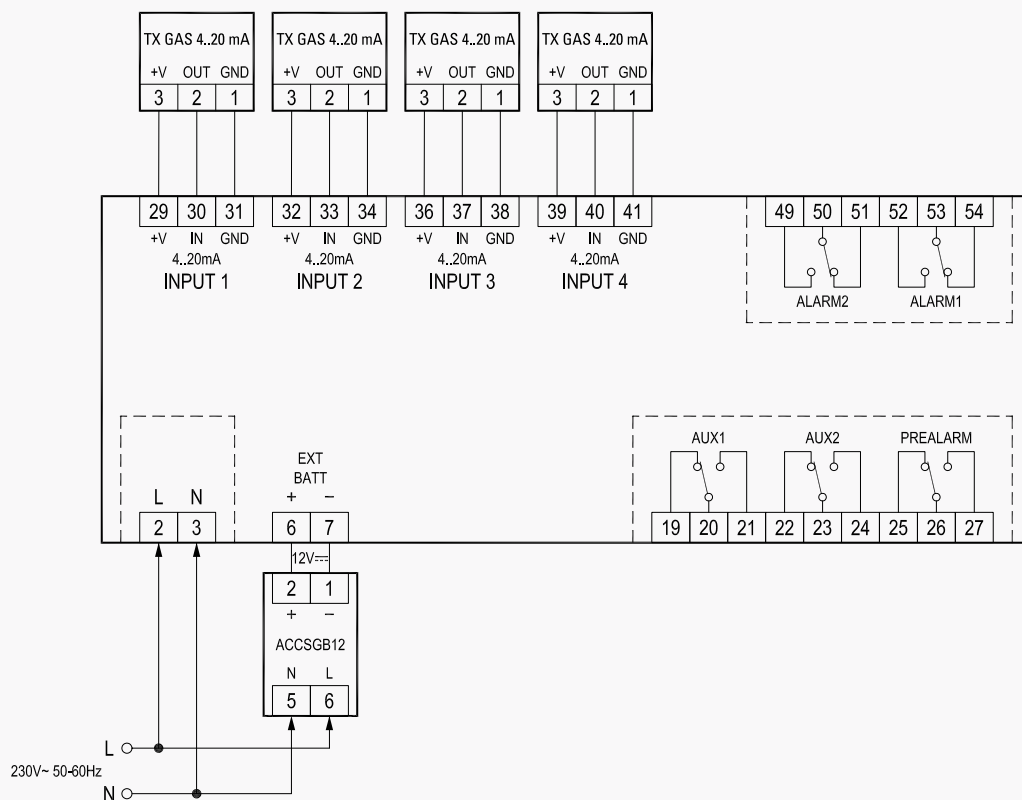


## INDUSTRIAL CONTROL UNIT WITH 4 ZONES

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<br>1 Relay Allarm 1<br>1 Relay Allarm 2<br>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<br>OFF / 1%..100% LEL<br>CO OFF / 1 .. 999 ppm                                           |
| Allarm 1 threshold range:   | Methane, L.P.G. and Petrol vapor<br>OFF / 1%..100% LEL<br>CO OFF / 1 .. 999 ppm                                           |
| Allarm 2 threshold range:   | Methane, L.P.G. and Petrol vapor<br>OFF / 1%..100% LEL<br>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                                                                                                                      |



RX A02M..... € 418

NEW

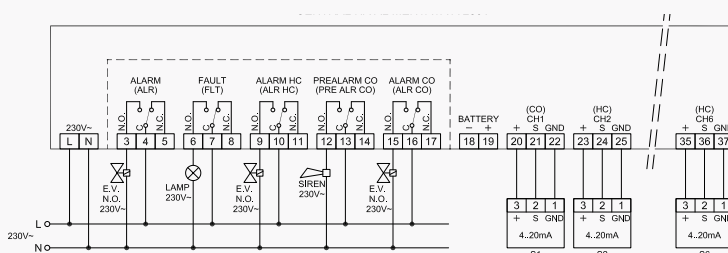


## INDUSTRIAL CONTROL UNIT FOR 6 ZONES

This device is a gas control unit featured with 5 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 flammable 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<br>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)                       |



RX A01M..... € 303

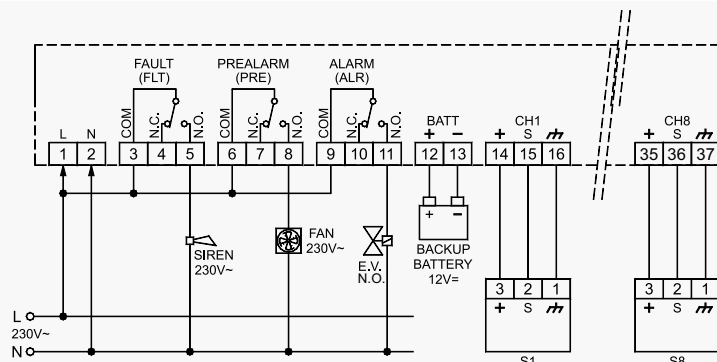


## INDUSTRIAL CONTROL UNIT FOR 8 ZONES

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                           |



RS 0021..... € 231

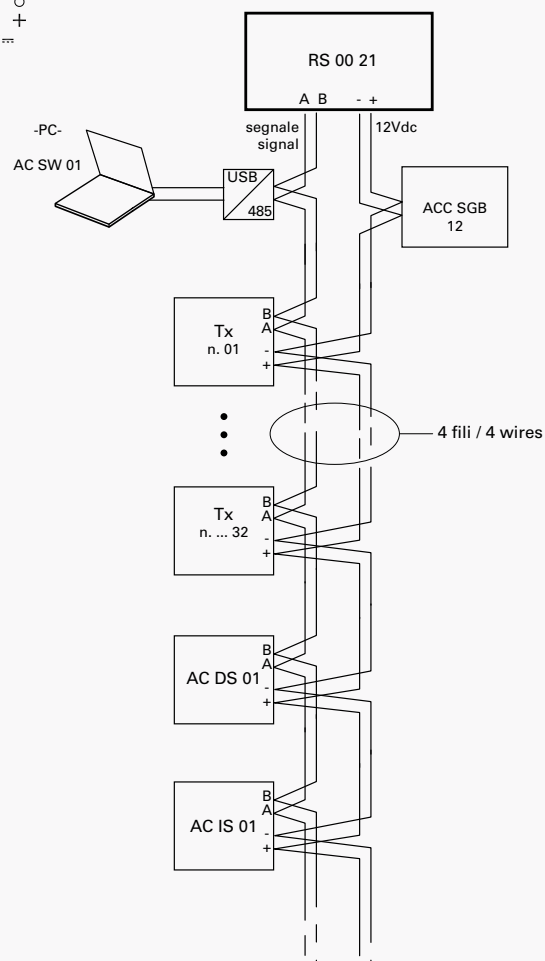
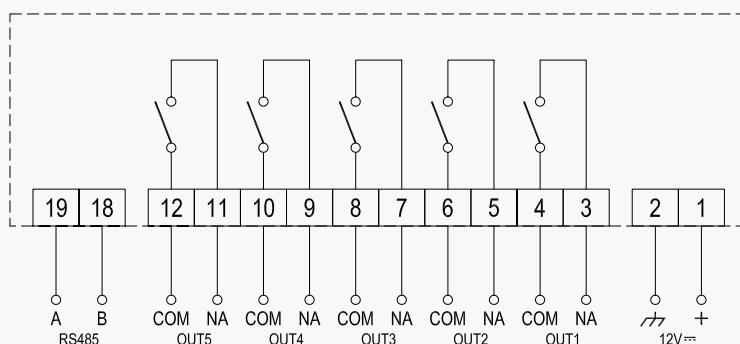


## S-BUS CONTROL UNIT

Based on the S-Bus protocol (derived from ModBus ®), this control unit can connect up to 32 peripheral devices over a Bus up to 1000 m. long. It's possible to check the state of each connected sensor on the backlit LCD. The Multigate control unit features 5 relays outputs SPST 2A@250V: 1 pre-alarm threshold, 2 alarm thresholds, 1 fault alarm and 1 auxiliary output.

## TECHNICAL FEATURES

|                |                                                            |
|----------------|------------------------------------------------------------|
| Power supply   | 12V=                                                       |
| Output (relay) | 5x2A @ 250V~ SPST                                          |
| Range          | 50% or 100% L.E.L. (combustible)<br>250 or 500 ppm (toxic) |
| Dimensions     | H108 W156 D47mm                                            |
| IP rating      | IP40                                                       |



## ACCESSORIES

### AC DS01 ..... € 252

Monitoring module displaying the status of the Multigate system, showing gas type, concentration of the sensors, input/output, control unit status and name of inputs.



### AC IS01 ..... € 166

8 input module for S-bus system, 12Vcc power supply.



### AC SW01 ..... GRATIS

PC software displaying information from the Multigate system, showing gas type, concentration of the sensors, input/output, control unit status and name of inputs.



## REPLACEABLE SENSORS FOR TRANSMITTERS IN PLASTIC CASE



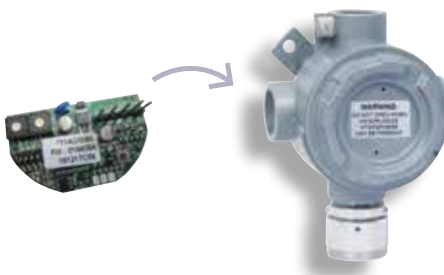
| COD            | GAS        |             |             | €          |
|----------------|------------|-------------|-------------|------------|
|                | CO         | LPG         | Methane     |            |
| <b>AC MC08</b> | 0..500 ppm | --          | --          | <b>142</b> |
| <b>AC MG02</b> | --         | 0..50% LIE  | --          | <b>113</b> |
| <b>AC MG07</b> | --         | 0..100% LIE | --          | <b>201</b> |
| <b>AC MM02</b> | --         | --          | 0..50% LIE  | <b>102</b> |
| <b>AC MM07</b> | --         | --          | 0..100% LIE | <b>201</b> |

## ADAPTER FOR TRANSMITTER CALIBRATION

| COD            | DESCRIPTION                                      | €          |
|----------------|--------------------------------------------------|------------|
| <b>AC AD01</b> | Aluminium adapter for 4..20mA ATEX transmitters  | <b>36</b>  |
| <b>AC AD05</b> | Aluminium adapter for SX-N and SY-N transmitters | <b>91</b>  |
| <b>AC AD06</b> | Aluminium adapter for ATEX SX-X transmitter      | <b>136</b> |

## INTERFACES FOR TRANSMITTERS

| COD               | DESCRIPTION                                                                                            | €         |
|-------------------|--------------------------------------------------------------------------------------------------------|-----------|
| <b>AC ISB1</b>    | Interface that converts an analog SX transmitter into a S-bus transmitter.                             | <b>66</b> |
| <b>AC IMB1</b>    | Interface that converts an analog SX transmitter into a Modbus ® transmitter.                          | <b>75</b> |
| <b>ACC REL 03</b> | Relay interface for SX transmitter, it turns the 4-20 mA outputs in relay outputs (3 x 1A@250V~ SPDT). | <b>76</b> |
| <b>AC IR01</b>    | Interface: 2 Relé, Led, Buzzer for SY transmitters                                                     | <b>70</b> |



## GAS DETECTORS AND CONTROL UNITS

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

**RGI ME1 MSX2** ..... € 172  
Methane

**RGI GP1 MSX2** ..... € 172  
LPG

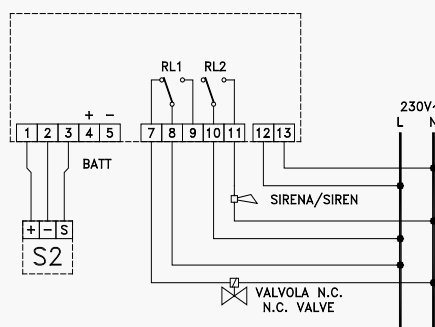


### 1 IN 2 OUT METHANE OR LPG GAS DETECTOR

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.



RGI 000 MSX4 ..... € 413

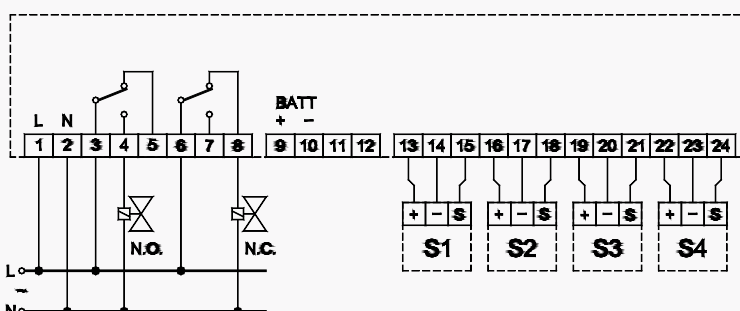


#### 4 IN 2 OUT + RESET CONTROL UNIT

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 ..... € 116

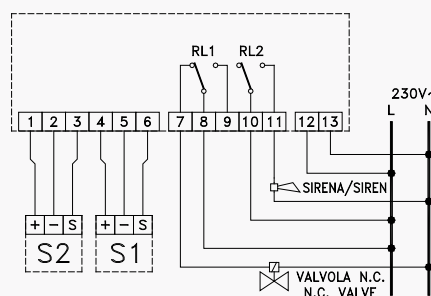


#### 2 IN 2 OUT + RESET CONTROL UNIT

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 ..... € 166**

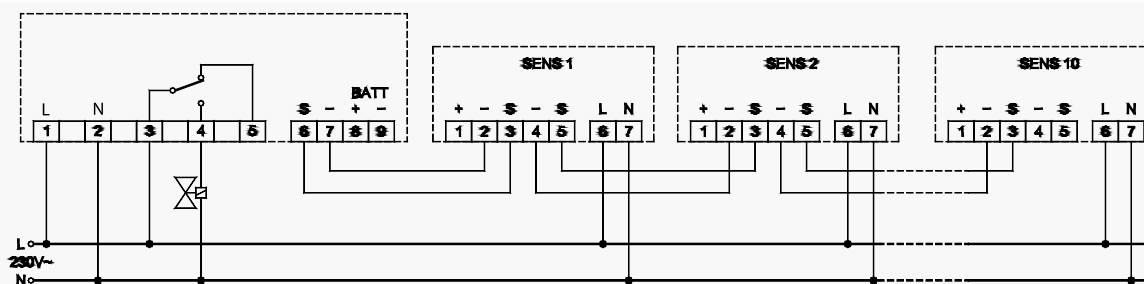


### 10 IN 1 OUT + RESET CONTROL UNIT

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 ..... € 120**

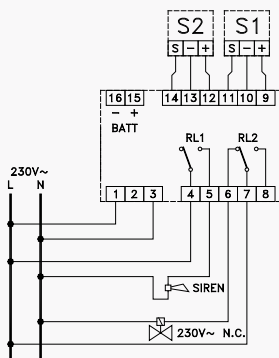


### 2 IN 2 OUT DIN RAIL MOUNT BASIC CONTROL UNIT

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** ..... € 103  
For Methane Gas

**SGI GP1** ..... € 103  
For LPG Gas



**SGI ME1 M** ..... € 142  
For Methane Gas

**SGI GP1 M** ..... € 142  
For LPG Gas



#### 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.

#### 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** ..... € 207



#### CO DETECTOR

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

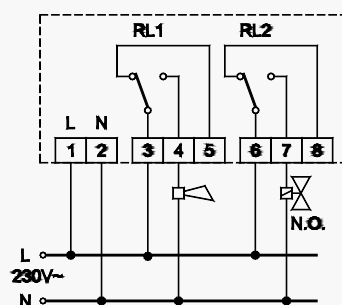
#### TECHNICAL FEATURES

|                                |                      |
|--------------------------------|----------------------|
| 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 ..... € 188

Electronic 76dB whistle with 21W flasher.  
12V-24V power supply



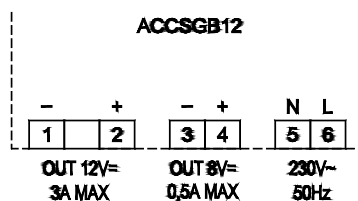
### ACC SRL 220..... € 163

Electronic 70dB whistle with 25W flasher.  
220V~power supply



### ACC SGB 12..... € 682

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 |
|---------------------|-------|--------------|--------------|---------------|
| <b>EVG PAF M015</b> | € 56  | DN15(1/2")   | 230 V~       | Threaded      |
| <b>EVG PAF M020</b> | € 56  | DN20(3/4")   | 230 V~       | Threaded      |
| <b>EVG PAF M025</b> | € 73  | DN25(1")     | 230 V~       | Threaded      |
| <b>EVG NAF M032</b> | € 118 | DN32(1 1/4") | 230 V~       | Threaded      |
| <b>EVG NAF M040</b> | € 118 | DN40(1 1/2") | 230 V~       | Threaded      |
| <b>EVG NAF M050</b> | € 152 | 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 |
|---------------------|--------------|--------------|------------|-----------|---------------|---------------|
| <b>EVG BAF 1015</b> | € <b>72</b>  |              | DN15(1/2") | N.O.      | 12 V=(2 W)    | Threaded      |
| <b>EVG BAF 1020</b> | € <b>73</b>  |              | DN20(3/4") | N.O.      | 12 V=(2 W)    | Threaded      |
| <b>EVG BAF 1025</b> | € <b>108</b> |              | DN25(1")   | N.O.      | 12 V=(2 W)    | Threaded      |
| <b>EVG RAF M020</b> | € <b>57</b>  | Compact size | DN20(3/4") | N.O.      | 230 V~ (7 VA) | Threaded      |
| <b>EVG RCF 1015</b> | € <b>73</b>  | Compact size | DN15(1/2") | N.C.      | 12 V= (6 VA)  | Threaded      |
| <b>EVG RCF 1020</b> | € <b>73</b>  | Compact size | DN20(3/4") | N.C.      | 12 V= (6 VA)  | Threaded      |
| <b>EVG RCF M015</b> | € <b>68</b>  | Compact size | DN15(1/2") | N.C.      | 230 V~ (7 VA) | Threaded      |
| <b>EVG RCF M020</b> | € <b>73</b>  | 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 continuously powered to allow the gas flow. Power consumption: 19VA. Max working pressure 500mBar.

| Cod                 | Price        |  | Coupling    | Power supply | Coupling type |
|---------------------|--------------|--|-------------|--------------|---------------|
| <b>EVG PCF M015</b> | € <b>98</b>  |  | DN15(1/2")  | 230 V~       | Threaded      |
| <b>EVG PCF M020</b> | € <b>98</b>  |  | DN20(3/4")  | 230 V~       | Threaded      |
| <b>EVG PCF M025</b> | € <b>118</b> |  | DN25(1")    | 230 V~       | Threaded      |
| <b>EVG NCF M032</b> | € <b>143</b> |  | DN32(1"1/4) | 230 V~       | Threaded      |
| <b>EVG NCF M040</b> | € <b>158</b> |  | DN40(1"1/2) | 230 V~       | Threaded      |
| <b>EVG NCF M050</b> | € <b>142</b> |  | DN50(2")    | 230 V~       | Threaded      |

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

## COMBUSTION ANALYZERS

CHEMIST 100 BE GREEN  
CHEMIST 500 / 500 BE GREEN  
CHEMIST 600 / 600 BE GREEN  
CHEMIST 900  
Accessories  
Gas sensors

pag. 106  
pag. 112  
pag. 124  
pag. 132  
pag. 138  
pag. 145







## 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

STANDARD BLUETOOTH® CONNECTIVITY

AUTOMATIC GENERATION OF QR CODE TO ACQUIRE  
ANALYSIS WITH SMARTPHONE

DRAUGHT MEASUREMENT (OPTIONAL)

TIGHTNESS TEST (OPTIONAL)



Standard Bluetooth®



**NEW**



**CHEMIST100 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

## MEASURED VALUES

- Flue gas temperature and differential temperature
- Outdoor air temperature and room temperature
- Gage and differential pressure
- O<sub>2</sub>
- CO
- Ambient CO
- NO (3 sensors version)

## CALCULATED VALUES

- CO<sub>2</sub>
- NO<sub>x</sub> (if 3rd sensor is present)
- Boiler efficiency, including condensation
- Stack loss



### KITS without printer

#### CHEMIST 101 BE GREEN

- 2 sensors (O2, CO)
- Not expandable
- No printer
- Bluetooth® module included

€ 900

#### CHEMIST 102 BE GREEN

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

€ 1400

#### CHEMIST 103 BE GREEN

- 3 sensors (O2, CO, NO)
- No printer
- High precision draught measurement
- Bluetooth® module included
- Tightness test (optional)

€ 1900

### KITS with printer

#### CHEMIST 101 S BE GREEN

- 2 sensors (O2, CO)
- Not expandable
- With Bluetooth® printer
- Bluetooth® module included

€ 1100

#### CHEMIST 102 S BE GREEN

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

€ 1600

#### CHEMIST 103 S BE GREEN

- 3 sensors (O2, CO, NO)
- With Bluetooth printer
- High precision draught measurement
- Bluetooth® module included
- Tightness test (optional)

€ 2100

#### 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

## 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                                                           |
|----------------------------------------------------------------|------------------------|---------------------|------------|--------------------------------------------------------------------|
| O <sub>2</sub>                                                 | Electrochemical sensor | 0 .. 21.0% vol      | 0.1% vol   | ±0.2% vol                                                          |
| CO high immunity H <sub>2</sub><br>with NO <sub>x</sub> filter | Electrochemical sensor | 0 .. 4000 ppm       | 1 ppm      | ±20 ppm<br>±5% measured value                                      |
| NO                                                             | Electrochemical sensor | 0 .. 2000 ppm       | 1 ppm      | ±5 ppm<br>±5% measured value<br>±10% measured value                |
| NO <sub>x</sub>                                                | Calculated             |                     |            | 0 .. 100 ppm<br>101 .. 1000 ppm<br>1001 .. 2000 ppm                |
| CO <sub>2</sub>                                                | 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<br>±1% measured value                                        |
| Pressure<br>(draught & differential)                           | Piezoelectric Sensor   | -100.0 .. 200.0 hPa | 0.01 hPa   | ±1% measured value<br>±0.02 hPa<br>±1% measured value              |
| Differential temperature                                       | Calculated             | 0 .. 800°C          | 0.1 °C     | -100.00 .. -2.01 hPa<br>-2.00 .. +2.00 hPa<br>+2.01 .. +200.00 hPa |
| 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 H <sub>2</sub><br>with NO <sub>x</sub> filter | 0...4000 ppm | AACSE58 | 331  |
| NO                                                             | 0...2000 ppm | AACSE60 | 360  |
| O <sub>2</sub>                                                 | 0...21% v/v  | AACSE50 | 175  |

This image shows a single page of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



## 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**



Standard Bluetooth®



ANDROID APP ON  
Google play

SmartFlue Mobile



**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 measurement (AA PM02)
- NO (3rd Sensor)
- Ionization current with accessory (AAC S001)

**CALCULATED VALUES**

- CO<sub>2</sub>
- NO<sub>x</sub> (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 501 € 2640

- 2 sensors (O2, CO/H2)
- Not expandable
- Integrated printer
- No dilution pump for CO
- Ready for tightness test

### CHEMIST 502 B € 2940

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

### CHEMIST 502 € 3450

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

### CHEMIST 502 C € 3855

- 2 sensors (O2, CO)
- Expandable up to 4 sensors
- Suitable for pellet and wood stoves (0-20.000 ppm CO sensor)
- Integrated printer
- With dilution pump for CO
- Ready for tightness test

### CHEMIST 503 B € 3450

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

### CHEMIST 503 € 3960

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

### CHEMIST 504 N € 4770

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

### CHEMIST 504 S € 4770

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

### CHEMIST 500 X € 3045

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                                    | 501 | 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 300 mm with 3 m cable - outdoor/indoor air temperature Probe - USB key with software - Water Trap with dust filter, stainless steel fittings and silicon hose - Power - EU plug - Hard plastic Case - Calibration Certificate - Unerasable printing paper - Differential pressure measurement kit - Quick start guide



## CHEMIST 500 TECHNICAL FEATURES

| MEASUREMENT                                      | SENSOR                 | RANGE              | RESOLUTION | ACCURACY                |                                                          |
|--------------------------------------------------|------------------------|--------------------|------------|-------------------------|----------------------------------------------------------|
| O <sub>2</sub>                                   | Electrochemical sensor | 0 .. 21.0% vol     | 0.1% vol   | ±0.2% vol               |                                                          |
| CO<br>with H <sub>2</sub> compensation           | Electrochemical sensor | 0 .. 8000 ppm      | 1 ppm      | ±10 ppm<br>±5%<br>±10%  | 0 .. 200 ppm<br>201 .. 2000 ppm<br>2001 .. 8000 ppm      |
| CO Low range<br>with H <sub>2</sub> compensation | Electrochemical sensor | 0 .. 500 ppm       | 0.1 ppm    | ±2 ppm<br>±5%           | 0 .. 40.0 ppm<br>40.1 .. 500.0 ppm                       |
| CO Mid range                                     | Electrochemical sensor | 0 .. 20000 ppm     | 1 ppm      | ±100 ppm<br>±5%<br>±10% | 0 .. 2000 ppm<br>2001 .. 4000 ppm<br>4001 .. 20000 ppm   |
| CO Hi range                                      | Electrochemical sensor | 0 .. 10.00% vol    | 0.01% vol  | ±0.1% vol<br>±5%        | 0 .. 2.00 %<br>2.01 .. 10.00 %                           |
| CO<br>H <sub>2</sub> Hi immunity                 | Electrochemical sensor | 0 .. 8000 ppm      | 1 ppm      | ±20 ppm<br>±5%<br>±10%  | 0 .. 400 ppm<br>401 .. 4000 ppm<br>4001 .. 8000 ppm      |
| NO                                               | Electrochemical sensor | 0 .. 5000 ppm      | 1 ppm      | ±5 ppm<br>±5%           | 0 .. 100 ppm<br>101 .. 5000 ppm                          |
| NO Low range                                     | Electrochemical sensor | 0 .. 500.0 ppm     | 0.1 ppm    | ±2 ppm<br>±5%           | 0 .. 40.0 ppm<br>40.1 .. 500.0 ppm                       |
| NO <sub>x</sub>                                  | Calculated             |                    |            |                         |                                                          |
| SO <sub>2</sub>                                  | Electrochemical sensor | 0 .. 5000 ppm      | 1 ppm      | ±5 ppm<br>±5%           | 0 .. 100 ppm<br>101 .. 5000 ppm                          |
| SO <sub>2</sub> Low range                        | Electrochemical sensor | 0 .. 500.0 ppm     | 0.1 ppm    | ±2 ppm<br>±5%           | 0 .. 40.0 ppm<br>40.1 .. 500.0 ppm                       |
| NO <sub>2</sub>                                  | Electrochemical sensor | 0 .. 1000 ppm      | 1 ppm      | ±5 ppm<br>±5%           | 0 .. 100 ppm<br>101 .. 1000 ppm                          |
| NO <sub>2</sub> Low range                        | Electrochemical sensor | 0 .. 500.0 ppm     | 0.1 ppm    | ±2 ppm<br>±5%           | 0 .. 40.0 ppm<br>40.1 .. 500.0 ppm                       |
| C <sub>x</sub> H <sub>y</sub>                    | Sensore Pellistore     | 0 .. 5.00% vol     | 0.01% vol  | ±0.25% vol              |                                                          |
| CO <sub>2</sub>                                  | Calculated             | 0 .. 99.9% vol     | 0.1% vol   |                         |                                                          |
| CO <sub>2</sub>                                  | Sensore NDIR           | 0 .. 50.0% vol     | 0.1% vol   | ±1%<br>±2% FS           | 0 .. 10 %<br>10 .. 50 %                                  |
| Air Temperature                                  | TcK Sensor             | -20.0 .. 1250.0 °C | 0.1 °C     | ±0.5 °C<br>±0.5%        | 0 .. 100 °C<br>101 .. 1250 °C                            |
| Smoke Temperature                                | TcK Sensor             | -20.0 .. 1250.0 °C | 0.1 °C     | ±0.5 °C<br>±0.5%        | 0 .. 100 °C<br>101 .. 1250 °C                            |
| Pressure (draught & differential)                | External instrument    | -1000 .. 20000 Pa  | 1 Pa       | ±2 Pa<br>±1%<br>±1%     | -200 .. +200 Pa<br>+201 .. +20000 Pa<br>-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             |            |                         |                                                          |

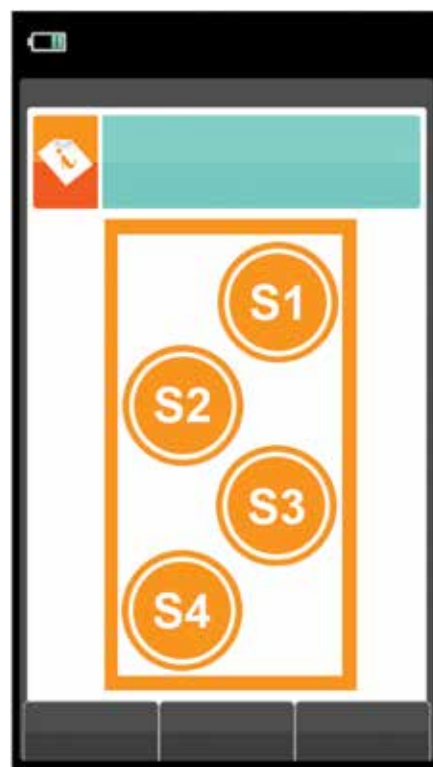
## CHEMIST 500 X : MODULAR GAS ANALYZER KIT WITH 4 SENSORS

The basic kit Chemist 500 X allows to exploit completely the expandability up to 4 gas measuring sensors of the Chemist 500 analyzers range. Chemist 500 X carries the O<sub>2</sub> gas measuring cell only: the 3 sensors which can be added to O<sub>2</sub> cell are to be chosen among 14 references, allowing to measure with different ranges, accuracies and resolution up to 6 gases: CO (carbon monoxide), NO (nitrogen monoxide), NO<sub>2</sub> (nitrogen dioxide), SO<sub>2</sub> (sulphur dioxide), C<sub>x</sub>H<sub>y</sub> (unburnt hydrocarbons), CO<sub>2</sub> (carbon dioxide). It is also available a cell with high sensitivity to Methane / LPG allowing to use flue gas probe as a sniffer probe for gas leaks.

This enormous versatility makes it possible to generate 352 different analyzers as a result of sensors combinations, thus fulfilling the needs of many different applications.

### TYPE AND POSITION SENSORS ON CHEMIST 500

| GAS SENSORS                               | COD     | S1 | S2 | S3 | S4 |
|-------------------------------------------|---------|----|----|----|----|
| Sniffer flue gas                          | AACSE19 | -- | -- | -- | ✓  |
| CO - 8000ppm alta immunità H <sub>2</sub> | AACSE20 | -- | ✓  | ✓  | ✓  |
| CO / H <sub>2</sub> - 8000ppm             | AACSE12 | -- | ✓  | -- | -- |
| CO / H <sub>2</sub> - 500.0ppm            | AACSE24 | -- | ✓  | -- | -- |
| CO - 10.00%                               | AACSE17 | -- | ✓  | ✓  | ✓  |
| CO - 20000ppm                             | AACSE18 | -- | ✓  | ✓  | ✓  |
| CO <sub>2</sub> NDIR - 50.0%              | AACSE47 | -- | -- | ✓  | ✓  |
| C <sub>x</sub> H <sub>y</sub> - 5.00%     | AACSE39 | -- | -- | ✓  | ✓  |
| NO - 5000ppm                              | AACSE10 | -- | -- | ✓  | -- |
| NO - 500.0ppm                             | AACSE25 | -- | -- | ✓  | -- |
| NO <sub>2</sub> - 1000ppm                 | AACSE14 | -- | ✓  | ✓  | ✓  |
| NO <sub>2</sub> - 500.0ppm                | AACSE26 | -- | ✓  | ✓  | ✓  |
| O <sub>2</sub> LL - 21.0% vol             | AACSE43 | ✓  | -- | -- | -- |
| SO <sub>2</sub> - 5000ppm                 | AACSE13 | -- | ✓  | ✓  | ✓  |
| SO <sub>2</sub> - 500.0ppm                | AACSE28 | -- | ✓  | ✓  | ✓  |



Screenshot with internal sensors arrangement



## 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



Standard Bluetooth®

**NEW**



5  
ANDROID APP ON  
Google play

SmartFlue Mobile



**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

## MEASURED VALUES

- Flue gas temperature and differential temperature
- Outdoor air temperature and room temperature
- Draft and differential pressure
- Ambient CO
- Bacharach pump for carbon measurement (AA PM02)
- NO (3rd Sensor)
- Ionization current with accessory (AAC S001)

## CALCULATED VALUES

- CO<sub>2</sub>
- NO<sub>x</sub> (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 (O<sub>2</sub>, CO/H<sub>2</sub>)
- Expandable up to 4 sensors
- With dilution pump for CO
- Ready for tightness test

€ 3400

### CHEMIST 502 B BE GREEN

- 2 sensors (O<sub>2</sub>, CO/H<sub>2</sub>)
- Expandable up to 4 sensors
- No dilution pump for CO
- Ready for tightness test

€ 2890

### CHEMIST 503 B BE GREEN

- 3 sensors (O<sub>2</sub>, CO/H<sub>2</sub>, NO)
- Expandable up to 4 sensors
- No dilution pump for CO
- Ready for tightness test

€ 3400

### CHEMIST 502 C BE GREEN

- 2 sensors (O<sub>2</sub>, CO)
- Expandable up to 4 sensors
- Suitable for pellet and wood stoves (0-20.000 ppm CO sensor)
- With dilution pump for CO
- Ready for tightness test

€ 3805

### CHEMIST 504 N BE GREEN

- 4 sensors (O<sub>2</sub>, CO/H<sub>2</sub>, NO, NO<sub>2</sub>)
- With dilution pump for CO
- Ready for tightness test

€ 4720

### CHEMIST 503 BE GREEN

- 3 sensors (O<sub>2</sub>, CO/H<sub>2</sub>, NO)
- Expandable up to 4 sensors
- With dilution pump for CO
- Ready for tightness test

€ 3910

### CHEMIST 500 X BE GREEN

Modular gas analyzer kit with 4 sensors. With O<sub>2</sub> 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.

€ 2995

### CHEMIST 504 S BE GREEN

- 4 sensors (O<sub>2</sub>, CO/H<sub>2</sub>, NO, SO<sub>2</sub>)
- With dilution pump for CO
- Ready for tightness test

€ 4720

**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 replaceable 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 300 mm with 3 m cable - outdoor/indoor air temperature Probe - USB key with software - Water Trap with dust filter, stainless steel fittings and silicon hose - Power - EU plug - Hard plastic Case - Calibration Certificate - Unerasable printing paper - Differential pressure measurement kit - Quick start guide

## CHEMIST 500 BE GREEN TECHNICAL FEATURES

| MEASUREMENT                                      | SENSOR                 | RANGE              | RESOLUTION | ACCURACY                |                                                          |
|--------------------------------------------------|------------------------|--------------------|------------|-------------------------|----------------------------------------------------------|
| O <sub>2</sub>                                   | Electrochemical sensor | 0 .. 21.0% vol     | 0.1% vol   | ±0.2% vol               |                                                          |
| CO<br>with H <sub>2</sub> compensation           | Electrochemical sensor | 0 .. 8000 ppm      | 1 ppm      | ±10 ppm<br>±5%<br>±10%  | 0 .. 200 ppm<br>201 .. 2000 ppm<br>2001 .. 8000 ppm      |
| CO Low range<br>with H <sub>2</sub> compensation | Electrochemical sensor | 0 .. 500 ppm       | 0.1 ppm    | ±2 ppm<br>±5%           | 0 .. 40.0 ppm<br>40.1 .. 500.0 ppm                       |
| CO Mid range                                     | Electrochemical sensor | 0 .. 20000 ppm     | 1 ppm      | ±100 ppm<br>±5%<br>±10% | 0 .. 2000 ppm<br>2001 .. 4000 ppm<br>4001 .. 20000 ppm   |
| CO Hi range                                      | Electrochemical sensor | 0 .. 10.00% vol    | 0.01% vol  | ±0.1% vol<br>±5%        | 0 .. 2.00 %<br>2.01 .. 10.00 %                           |
| CO<br>H <sub>2</sub> Hi immunity                 | Electrochemical sensor | 0 .. 8000 ppm      | 1 ppm      | ±20 ppm<br>±5%<br>±10%  | 0 .. 400 ppm<br>401 .. 4000 ppm<br>4001 .. 8000 ppm      |
| NO                                               | Electrochemical sensor | 0 .. 5000 ppm      | 1 ppm      | ±5 ppm<br>±5%           | 0 .. 100 ppm<br>101 .. 5000 ppm                          |
| NO Low range                                     | Electrochemical sensor | 0 .. 500.0 ppm     | 0.1 ppm    | ±2 ppm<br>±5%           | 0 .. 40.0 ppm<br>40.1 .. 500.0 ppm                       |
| NO <sub>x</sub>                                  | Calculated             |                    |            |                         |                                                          |
| SO <sub>2</sub>                                  | Electrochemical sensor | 0 .. 5000 ppm      | 1 ppm      | ±5 ppm<br>±5%           | 0 .. 100 ppm<br>101 .. 5000 ppm                          |
| SO <sub>2</sub> Low range                        | Electrochemical sensor | 0 .. 500.0 ppm     | 0.1 ppm    | ±2 ppm<br>±5%           | 0 .. 40.0 ppm<br>40.1 .. 500.0 ppm                       |
| NO <sub>2</sub>                                  | Electrochemical sensor | 0 .. 1000 ppm      | 1 ppm      | ±5 ppm<br>±5%           | 0 .. 100 ppm<br>101 .. 1000 ppm                          |
| NO <sub>2</sub> Low range                        | Electrochemical sensor | 0 .. 500.0 ppm     | 0.1 ppm    | ±2 ppm<br>±5%           | 0 .. 40.0 ppm<br>40.1 .. 500.0 ppm                       |
| C <sub>x</sub> H <sub>y</sub>                    | Sensore Pellistore     | 0 .. 5.00% vol     | 0.01% vol  | ±0.25% vol              |                                                          |
| CO <sub>2</sub>                                  | Calculated             | 0 .. 99.9% vol     | 0.1% vol   |                         |                                                          |
| CO <sub>2</sub>                                  | Sensore NDIR           | 0 .. 50.0% vol     | 0.1% vol   | ±1%<br>±2% FS           | 0 .. 10 %<br>10 .. 50 %                                  |
| Air Temperature                                  | TcK Sensor             | -20.0 .. 1250.0 °C | 0.1 °C     | ±0.5 °C<br>±0.5%        | 0 .. 100 °C<br>101 .. 1250 °C                            |
| Smoke Temperature                                | TcK Sensor             | -20.0 .. 1250.0 °C | 0.1 °C     | ±0.5 °C<br>±0.5%        | 0 .. 100 °C<br>101 .. 1250 °C                            |
| Pressure (draught & differential)                | External instrument    | -1000 .. 20000 Pa  | 1 Pa       | ±2 Pa<br>±1%<br>±1%     | -200 .. +200 Pa<br>+201 .. +20000 Pa<br>-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             |            |                         |                                                          |

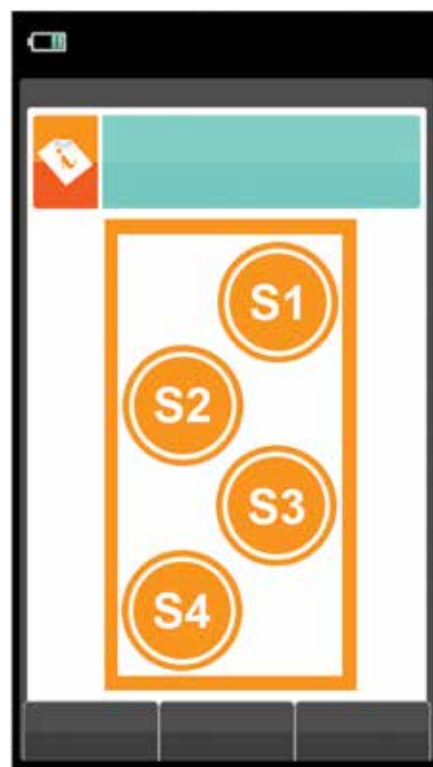
## CHEMIST 500 X BE GREEN : MODULAR GAS ANALYZER KIT WITH 4 SENSORS

The basic kit Chemist 500 X allows to exploit completely the expandability up to 4 gas measuring sensors of the Chemist 500 analyzers range. Chemist 500 X carries the O<sub>2</sub> gas measuring cell only: the 3 sensors which can be added to O<sub>2</sub> cell are to be chosen among 14 references, allowing to measure with different ranges, accuracies and resolution up to 6 gases: CO (carbon monoxide), NO (nitrogen monoxide), NO<sub>2</sub> (nitrogen dioxide), SO<sub>2</sub> (sulphur dioxide), C<sub>x</sub>H<sub>y</sub> (unburnt hydrocarbons), CO<sub>2</sub> (carbon dioxide). It is also available a cell with high sensitivity to Methane / LPG allowing to use flue gas probe as a sniffer probe for gas leaks.

This enormous versatility makes it possible to generate 352 different analyzers as a result of sensors combinations, thus fulfilling the needs of many different applications.

### TYPE AND POSITION SENSORS

| GAS SENSORS                               | COD     | S1 | S2 | S3 | S4 |
|-------------------------------------------|---------|----|----|----|----|
| Sniffer fuel gas                          | AACSE19 | -- | -- | -- | ✓  |
| CO - 8000ppm alta immunità H <sub>2</sub> | AACSE20 | -- | ✓  | ✓  | ✓  |
| CO / H <sub>2</sub> - 8000ppm             | AACSE12 | -- | ✓  | -- | -- |
| CO / H <sub>2</sub> - 500.0ppm            | AACSE24 | -- | ✓  | -- | -- |
| CO - 10.00%                               | AACSE17 | -- | ✓  | ✓  | ✓  |
| CO - 20000ppm                             | AACSE18 | -- | ✓  | ✓  | ✓  |
| CO <sub>2</sub> NDIR - 50.0%              | AACSE47 | -- | -- | ✓  | ✓  |
| C <sub>x</sub> H <sub>y</sub> - 5.00%     | AACSE39 | -- | -- | ✓  | ✓  |
| NO - 5000ppm                              | AACSE10 | -- | -- | ✓  | -- |
| NO - 500.0ppm                             | AACSE25 | -- | -- | ✓  | -- |
| NO <sub>2</sub> - 1000ppm                 | AACSE14 | -- | ✓  | ✓  | ✓  |
| NO <sub>2</sub> - 500.0ppm                | AACSE26 | -- | ✓  | ✓  | ✓  |
| O <sub>2</sub> LL - 21.0% vol             | AACSE43 | ✓  | -- | -- | -- |
| SO <sub>2</sub> - 5000ppm                 | AACSE13 | -- | ✓  | ✓  | ✓  |
| SO <sub>2</sub> - 500.0ppm                | AACSE28 | -- | ✓  | ✓  | ✓  |



Screenshot with internal sensors arrangement





## 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



Standard Bluetooth®



ANDROID APP ON  
Google play

SmartFlue Mobile



**CHEMIST 600 ANALYZERS  
WARRANTY:  
2 YEARS ON INSTRUMENT,  
GAS SENSORS AND PRINTER**





## 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 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

- O<sub>2</sub>, CO/H<sub>2</sub>, NO, NO<sub>2</sub>, SO<sub>2</sub>, H<sub>2</sub>S (electrochemical sensors)
  - C<sub>x</sub>H<sub>y</sub> (pellistor cell), CO<sub>2</sub> (Infrared NDIR).
- Several ranges and accuracies are available for several gases.

## 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 (O<sub>2</sub>, CO/H<sub>2</sub>, NO, NO<sub>2</sub>, SO<sub>2</sub>)
- Expandable up to 6 sensors
- Integrated printer
- With dilution pump for CO
- Ready for tightness test

### CHEMIST 606 HC

- 6 sensors (O<sub>2</sub>, CO/H<sub>2</sub>, NO, NO<sub>2</sub>, SO<sub>2</sub>, C<sub>x</sub>H<sub>y</sub>)
- Integrated printer
- With dilution pump for CO
- Ready for tightness test

### CHEMIST 606 CO<sub>2</sub>

- 6 sensors (O<sub>2</sub>, CO/H<sub>2</sub>, NO, NO<sub>2</sub>, SO<sub>2</sub>, CO<sub>2</sub>)
- 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 fittings and silicon hose Power - EU plug - Hard plastic Case - Calibration Certificate - Unerasable printing paper - Differential pressure measurement kit - Quick start guide

## CHEMIST 600 X : MODULAR GAS ANALYZER KIT WITH 6 SENSORS

Chemist 600 X is the basic kit allowing to exploit the expandability up to 6 gas measuring sensors of Chemist 600 range. Chemist 600 X has no gas measuring sensors, the following composition chart describes all the mounting possibilities. The 6 gas sensors can be chosen among the 15 available for the following 10 gases: O<sub>2</sub>, CO, CO/H<sub>2</sub>, NO, NO<sub>2</sub>, SO<sub>2</sub>, C<sub>x</sub>H<sub>y</sub>, H<sub>2</sub>S, CO<sub>2</sub>, NH<sub>3</sub>. The number of different gas sensors combinations is close to one thousand.

## SENSOR TYPE AND POSITION

| GAS SENSORS                               | COD     | S1 | S2 | S3 | S4 | S5 | S6 |
|-------------------------------------------|---------|----|----|----|----|----|----|
| CO / H <sub>2</sub> - 8000 ppm            | AACSE12 |    | ✓  |    |    |    |    |
| CO / H <sub>2</sub> - 500.0 ppm           | AACSE24 |    | ✓  |    |    |    |    |
| CO - 10.00%                               | AACSE17 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| CO - 20000 ppm                            | AACSE18 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| CO <sub>2</sub> NDIR - 50.0% vol          | AACSE47 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| C <sub>x</sub> H <sub>y</sub> - 5.00% vol | AACSE39 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| H <sub>2</sub> S - 500.0 ppm              | AACSE35 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| NH <sub>3</sub> - 500.0 ppm               | AACSE56 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| NO - 5000 ppm                             | AACSE10 | ✓  | ✓  | ✓  |    |    |    |
| NO - 500.0 ppm                            | AACSE25 | ✓  | ✓  | ✓  |    |    |    |
| NO <sub>2</sub> - 1000.0 ppm              | AACSE14 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| NO <sub>2</sub> - 500.0 ppm               | AACSE26 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| O <sub>2</sub> LL - 21.0%                 | AACSE43 | ✓  | ✓  | ✓  |    |    |    |
| SO <sub>2</sub> - 5000 ppm                | AACSE13 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| SO <sub>2</sub> - 500.0 ppm               | AACSE28 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |



LCD screen with internal sensors arrangement

## CHEMIST 600 TECHNICAL FEATURES

| MEASUREMENT                                      | SENSOR                 | RANGE                | RESOLUTION | ACCURACY                                                                    |                                                                   |
|--------------------------------------------------|------------------------|----------------------|------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------|
| O <sub>2</sub>                                   | Electrochemical sensor | 0 .. 21.0% vol       | 0.1% vol   | ±0.2% vol                                                                   |                                                                   |
| CO<br>with H <sub>2</sub> compensation           | Electrochemical sensor | 0 .. 8000 ppm        | 1 ppm      | ±10 ppm<br>±5%<br>±10%                                                      | 0 .. 200 ppm<br>201 .. 2000 ppm<br>2001 .. 8000 ppm               |
| CO Low range<br>with H <sub>2</sub> compensation | Electrochemical sensor | 0 .. 500.0 ppm       | 0.1 ppm    | ±2 ppm<br>±5%                                                               | 0 .. 40.0 ppm<br>40.1 .. 500.0 ppm                                |
| CO Mid range                                     | Electrochemical sensor | 0 .. 20000 ppm       | 1 ppm      | ±100 ppm<br>±5%<br>±10%                                                     | 0 .. 2000 ppm<br>2001 .. 4000 ppm<br>4001 .. 20000 ppm            |
| CO Hi range                                      | Electrochemical sensor | 0 .. 10.00% vol      | 0.01% vol  | ±0.1% vol<br>±5%                                                            | 0 .. 2.00 %<br>2.01 .. 10.00 %                                    |
| NO                                               | Electrochemical sensor | 0 .. 5000 ppm        | 1 ppm      | ±5 ppm<br>±5%                                                               | 0 .. 100 ppm<br>101 .. 5000 ppm                                   |
| NO Low range                                     | Electrochemical sensor | 0 .. 500.0 ppm       | 0.1 ppm    | ±2 ppm<br>±5%                                                               | 0 .. 40.0 ppm<br>40.1 .. 500.0 ppm                                |
| SO <sub>2</sub>                                  | Electrochemical sensor | 0 .. 5000 ppm        | 1 ppm      | ±5 ppm<br>±5%                                                               | 0 .. 100 ppm<br>101 .. 5000 ppm                                   |
| SO <sub>2</sub> Low range                        | Electrochemical sensor | 0 .. 500.0 ppm       | 0.1 ppm    | ±2 ppm<br>±5%                                                               | 0 .. 40.0 ppm<br>40.1 .. 500.0 ppm                                |
| NO <sub>2</sub>                                  | Electrochemical sensor | 0 .. 1000 ppm        | 1 ppm      | ±5 ppm<br>±5%                                                               | 0 .. 100 ppm<br>101 .. 1000 ppm                                   |
| NO <sub>2</sub> Low range                        | Electrochemical sensor | 0 .. 500.0 ppm       | 0.1 ppm    | ±2 ppm<br>±5%                                                               | 0 .. 40.0 ppm<br>40.1 .. 500.0 ppm                                |
| C <sub>x</sub> H <sub>y</sub>                    | Sensore Pellistore     | 0 .. 5.00% vol       | 0.01% vol  | ±0.25% vol                                                                  |                                                                   |
| CO <sub>2</sub>                                  | Calculated             | 0 .. 500.0 ppm       | 0.1 ppm    | ±10 ppm<br>±10%                                                             | 0 .. 100.0 ppm<br>100.1 .. 500.0 ppm                              |
| CO <sub>2</sub>                                  | NDIR Sensor            | 0 .. 99.9% vol       | 0.1% vol   |                                                                             |                                                                   |
| H <sub>2</sub> S                                 | Electrochemical sensor | 0 .. 50.0% vol       | 0.1% vol   | ±1% vol nel campo compreso tra 0,00 .. 10,00 %<br>±2% FS da 10,00% a 50,00% |                                                                   |
| NH <sub>3</sub>                                  | Electrochemical sensor | 0 .. 500.0 ppm       | 0.1 ppm    | ±5 ppm<br>±5%                                                               | 0 .. 100 ppm<br>100.1 .. 500 ppm                                  |
| Air Temperature                                  | TcK Sensor             | -20.0 .. 1250.0 °C   | 0.1 °C     | ±0.5 °C<br>±0.5%                                                            | 0 .. 100 °C<br>101 .. 1250 °C                                     |
| Smoke Temperature                                | TcK Sensor             | -20.0 .. 1250.0 °C   | 0.1 °C     | ±0.5 °C<br>±0.5%                                                            | 0 .. 100 °C<br>101 .. 1250 °C                                     |
| Pressure (draught & diffrential)                 | Piezoelectric Sensor   | -10.00 .. 200.00 hPa | 0.01 hPa   | ±1% valore misurato<br>±0.02 hPa<br>±1% valore misurato                     | -10.00 .. -2.01 hPa<br>-2.00 .. +2.00 hPa<br>+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 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

NEW



Standard Bluetooth®



ANDROID APP ON  
Google play

SmartFlue Mobile



**CHEMIST 600 ANALYZERS  
WARRANTY:  
2 YEARS ON INSTRUMENT,  
GAS SENSORS**





## 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

- O<sub>2</sub>, CO/H<sub>2</sub>, NO, NO<sub>2</sub>, SO<sub>2</sub>, H<sub>2</sub>S (electrochemical sensors) C<sub>x</sub>H<sub>y</sub> (pellistor cell), CO<sub>2</sub> (Infrared NDIR). Several ranges and accuracies are available for several gases

## 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 (O<sub>2</sub>, CO/H<sub>2</sub>, NO, NO<sub>2</sub>, SO<sub>2</sub>)
- Expandable up to 6 sensors
- With dilution pump for CO
- Ready for tightness test

### CHEMIST 606 HC BE GREEN

- 6 sensors (O<sub>2</sub>, CO/H<sub>2</sub>, NO, NO<sub>2</sub>, SO<sub>2</sub>, C<sub>x</sub>H<sub>y</sub>)
- With dilution pump for CO
- Ready for tightness test

### CHEMIST 606 CO<sub>2</sub> BE GREEN

- 6 sensors (O<sub>2</sub>, CO/H<sub>2</sub>, NO, NO<sub>2</sub>, SO<sub>2</sub>, CO<sub>2</sub>)
- 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 fittings and silicon hose Power - EU plug - Hard plastic Case - Calibration Certificate - Unerasable printing paper - Differential pressure measurement kit - Quick start guide

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

Chemist 600 X is the basic kit allowing to exploit the expandability up to 6 gas measuring sensors of Chemist 600 range. Chemist 600 X have no gas measuring sensors, the following composition chart describes all the mounting possibilities. The 6 gas sensors can be chosen from the 15 available for the following 10 gases: O<sub>2</sub>, CO, CO/H<sub>2</sub>, NO, NH<sub>3</sub>, NO<sub>2</sub>, SO<sub>2</sub>, C<sub>x</sub>H<sub>y</sub>, H<sub>2</sub>S, CO<sub>2</sub>. The number of different gas sensors combinations is close to one thousand.

## SENSOR TYPE AND POSITION

| GAS SENSORS                               | COD     | S1 | S2 | S3 | S4 | S5 | S6 |
|-------------------------------------------|---------|----|----|----|----|----|----|
| CO / H <sub>2</sub> - 8000 ppm            | AACSE12 |    | ✓  |    |    |    |    |
| CO / H <sub>2</sub> - 500.0 ppm           | AACSE24 |    | ✓  |    |    |    |    |
| CO - 10.00%                               | AACSE17 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| CO - 20000 ppm                            | AACSE18 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| CO <sub>2</sub> NDIR - 50.0% vol          | AACSE47 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| C <sub>x</sub> H <sub>y</sub> - 5.00% vol | AACSE39 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| H <sub>2</sub> S - 500.0 ppm              | AACSE35 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| NH <sub>3</sub> - 500.0 ppm               | AACSE56 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| NO - 5000 ppm                             | AACSE10 | ✓  | ✓  | ✓  |    |    |    |
| NO - 500.0 ppm                            | AACSE25 | ✓  | ✓  | ✓  |    |    |    |
| NO <sub>2</sub> - 1000.0 ppm              | AACSE14 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| NO <sub>2</sub> - 500.0 ppm               | AACSE26 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| O <sub>2</sub> LL - 21.0%                 | AACSE43 | ✓  | ✓  | ✓  |    |    |    |
| SO <sub>2</sub> - 5000 ppm                | AACSE13 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| SO <sub>2</sub> - 500.0 ppm               | AACSE28 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |



LCD screen with internal sensors arrangement

## CHEMIST 600 BE GREEN TECHNICAL FEATURES

| MEASUREMENT                                      | SENSOR                 | RANGE                | RESOLUTION | ACCURACY                                                |                                                                   |
|--------------------------------------------------|------------------------|----------------------|------------|---------------------------------------------------------|-------------------------------------------------------------------|
| O <sub>2</sub>                                   | Electrochemical sensor | 0 .. 21.0% vol       | 0.1% vol   | ±0.2% vol                                               |                                                                   |
| CO<br>with H <sub>2</sub> compensation           | Electrochemical sensor | 0 .. 8000 ppm        | 1 ppm      | ±10 ppm<br>±5%<br>±10%                                  | 0 .. 200 ppm<br>201 .. 2000 ppm<br>2001 .. 8000 ppm               |
| CO Low range<br>with H <sub>2</sub> compensation | Electrochemical sensor | 0 .. 500.0 ppm       | 0.1 ppm    | ±2 ppm<br>±5%                                           | 0 .. 40.0 ppm<br>40.1 .. 500.0 ppm                                |
| CO Mid range                                     | Electrochemical sensor | 0 .. 20000 ppm       | 1 ppm      | ±100 ppm<br>±5%<br>±10%                                 | 0 .. 2000 ppm<br>2001 .. 4000 ppm<br>4001 .. 20000 ppm            |
| CO Hi range                                      | Electrochemical sensor | 0 .. 10.00% vol      | 0.01% vol  | ±0.1% vol<br>±5%                                        | 0 .. 2.00 %<br>2.01 .. 10.00 %                                    |
| NO                                               | Electrochemical sensor | 0 .. 5000 ppm        | 1 ppm      | ±5 ppm<br>±5%                                           | 0 .. 100 ppm<br>101 .. 5000 ppm                                   |
| NO Low range                                     | Electrochemical sensor | 0 .. 500.0 ppm       | 0.1 ppm    | ±2 ppm<br>±5%                                           | 0 .. 40.0 ppm<br>40.1 .. 500.0 ppm                                |
| SO <sub>2</sub>                                  | Electrochemical sensor | 0 .. 5000 ppm        | 1 ppm      | ±5 ppm<br>±5%                                           | 0 .. 100 ppm<br>101 .. 5000 ppm                                   |
| SO <sub>2</sub> Low range                        | Electrochemical sensor | 0 .. 500 ppm         | 0.1 ppm    | ±2 ppm<br>±5%                                           | 0 .. 40.0 ppm<br>40.1 .. 500.0 ppm                                |
| NO <sub>2</sub>                                  | Electrochemical sensor | 0 .. 1000 ppm        | 1 ppm      | ±5 ppm<br>±5%                                           | 0 .. 100 ppm<br>101 .. 1000 ppm                                   |
| NO <sub>2</sub> Low range                        | Electrochemical sensor | 0 .. 500.0 ppm       | 0.1 ppm    | ±2 ppm<br>±5%                                           | 0 .. 40.0 ppm<br>40.1 .. 500.0 ppm                                |
| C <sub>x</sub> H <sub>y</sub>                    | Sensore Pellistore     | 0 .. 5.00% vol       | 0.01% vol  | ±0.25% vol                                              |                                                                   |
| CO <sub>2</sub>                                  | Calculated             | 0 .. 99.9% vol       | 0.1% vol   |                                                         |                                                                   |
| CO <sub>2</sub>                                  | NDIR Sensor            | 0 .. 50.0% vol       | 0.1% vol   | ±1% vol<br>±2% FS                                       | 0,00 .. 10,00 %<br>10,0% a 50,0%                                  |
| H <sub>2</sub> S                                 | Electrochemical sensor | 0 .. 500.0 ppm       | 0.1 ppm    | ±5 ppm<br>±5%                                           | 0 .. 100.0 ppm<br>100.1 .. 500 ppm                                |
| NH <sub>3</sub>                                  | Electrochemical sensor | 0 .. 500.0 ppm       | 0.1 ppm    | ±10 ppm<br>±10%                                         | 0 .. 100.0 ppm<br>100.1 .. 500.0 ppm                              |
| Air Temperature                                  | TcK Sensor             | -20.0 .. 1250.0 °C   | 0.1 °C     | ±0.5 °C<br>±0.5%                                        | 0 .. 100 °C<br>101 .. 1250 °C                                     |
| Smoke Temperature                                | TcK Sensor             | -20.0 .. 1250.0 °C   | 0.1 °C     | ±0.5 °C<br>±0.5%                                        | 0 .. 100 °C<br>101 .. 1250 °C                                     |
| Pressure (draught & diffrential)                 | Piezoelectric Sensor   | -10.00 .. 200.00 hPa | 0.01 hPa   | ±1% valore misurato<br>±0.02 hPa<br>±1% valore misurato | -10.00 .. -2.01 hPa<br>-2.00 .. +2.00 hPa<br>+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 .



Standard Bluetooth® connectivity

**PRICE ON REQUEST**



ANDROID APP ON  
Google play  
SmartFlue Mobile



**CHEMIST 900 ANALYZERS  
WARRANTY:  
2 YEARS ON INSTRUMENT,  
GAS SENSORS**



## 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/CO<sub>2</sub>/CH<sub>4</sub>.
- Measurable gases: O<sub>2</sub>, CO, CO<sub>2</sub>, C<sub>x</sub>H<sub>y</sub>, NO, NO<sub>2</sub>, SO<sub>2</sub>, H<sub>2</sub>S 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 (CO <sub>2</sub> /CO/C <sub>x</sub> H <sub>y</sub> ) | Anti condensation cyclone cooler with Peltier cell | Anti condensation trap |
|------------------------|--------------------------|-----------------------------------------------------------------|----------------------------------------------------|------------------------|
| <b>Chemist 901</b>     | ✓                        | -                                                               | -                                                  | ✓                      |
| <b>Chemist 901 IR3</b> | ✓                        | ✓                                                               | -                                                  | ✓                      |
| <b>Chemist 902</b>     | ✓                        | -                                                               | ✓                                                  | -                      |
| <b>Chemist 902 IR3</b> | ✓                        | ✓                                                               | ✓                                                  | -                      |

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 NO<sub>2</sub> and SO<sub>2</sub>. 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 NO<sub>2</sub> and SO<sub>2</sub> 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

|                 |                                                                                                                       |
|-----------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>AAC CV01</b> | Schuko plug cable.                                                                                                    |
| <b>AAC CV04</b> | European plug cable.                                                                                                  |
| <b>AAC DP02</b> | Draught gauge for draught measurement.                                                                                |
| <b>AAC SA04</b> | 100mm Auxiliary temperature sensor PT100 4W, with 3m cable.                                                           |
| <b>AA SA08</b>  | Combustion air temperature sensor, 200 mm distance, with 3m cable.                                                    |
| <b>AA SP01</b>  | Schermo di protezione dal calore per sonde prelievo fumi.                                                             |
| <b>AA TT01</b>  | Tubo di Pitot a "L"(senza Termocoppia Tc-K): Lunghezza 300mm - ø esterno 6 mm. Completo di 2 tubi in silicone da 2 m. |
| <b>AA TT02</b>  | Tubo di Pitot a "L"(senza Termocoppia Tc-K): Lunghezza 800mm - ø esterno 6 mm. Completo di 2 tubi in silicone da 2 m. |
| <b>AAC KP01</b> | Kit misura pressione differenziale.                                                                                   |
| <b>AA KT04</b>  | Kit prova di tenuta.                                                                                                  |
| <b>AA PM02</b>  | Kit pompa manuale per misura nerofumo.                                                                                |
| <b>AA SW08</b>  | Software di configurazione su chiavetta USB.                                                                          |
| <b>AA UA03</b>  | Cavo adattatore USB-A / USB-B.                                                                                        |
| <b>AA EB01</b>  | Estensione bauletto.                                                                                                  |
| <b>AA TY01</b>  | Trolley per bauletto.                                                                                                 |

## CHEMIST 900 - GAS PROBES

|                  |                                                                                                           |
|------------------|-----------------------------------------------------------------------------------------------------------|
| <b>AA SF31</b>   | 180 mm gas sampling probe, extended temperature range to 400°C, with 3m cable.                            |
| <b>AA SF32</b>   | 300 mm gas sampling probe, extended temperature range to 600°C, with 3m cable.                            |
| <b>AA SF35</b>   | 750 mm gas sampling probe, extended temperature range to 800°C, with 3m cable.                            |
| <b>AA SF36</b>   | 1000 mm gas sampling probe, extended temperature range to 1100°C, with 3m cable.                          |
| <b>AA SX03</b>   | 750mm smoke sampling sensor for industrial motors with 3m cable.                                          |
| <b>AA SX04</b>   | 300mm smoke sampling sensor with 3.5 m cable.                                                             |
| <b>AA SX05</b>   | 750mm smoke sampling sensor with 3.5 m cable.                                                             |
| <b>AAC EX02S</b> | 3m extension cable for smoke sampling sensors.                                                            |
| <b>AA SR03</b>   | Smoke sampling sensor with heated head, 300mm tip and electrically heated 3m tube (with thermocoupling).  |
| <b>AA SR04</b>   | Smoke sampling sensor with heated head, 1000mm tip and electrically heated 3m tube (with thermocoupling). |

## CHEMIST 900 - SPARE PARTS

|                   |                                                                 |
|-------------------|-----------------------------------------------------------------|
| <b>AA PB12</b>    | Li-Ion battery pack 11.1V 6.2 Ah                                |
| <b>AA RC08</b>    | Printer thermal paper roll, h=57mm, diameter =30mm              |
| <b>AA RC09</b>    | Printer thermal paper roll (unerasable), h=57mm, diameter =30mm |
| <b>AAC ADX005</b> | Dummy sensor                                                    |
| <b>AA FS01</b>    | Inox filter for heated head                                     |
| <b>AA FA02</b>    | Anti dust filter (2 pcs)                                        |

## CHEMIST 900 - TECHNICAL FEATURES

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

|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Carbon black:</b>                    | Using a manual external pump; the smoke index can be input and printed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Tightness test (where required):</b> | Tube gas tightness test with separate receipt printing, using AAKT04 accessory, subject to UNI 7129 (new installations) and UNI 11137: 2012 (existing installations), with automatic calculation of the tube volume.                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Condensing boiler efficiency :</b>   | Automatic assessment of the condensing boiler, with calculation and printing of the boiler efficiency.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Ambient gases:</b>                   | Separate measurement and printing of the ambient CO concentration.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Draught test:</b>                    | Draught test execution: using external probe (AACDP02).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Working temperature:</b>             | -5°C .. +45°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Storage temperature:</b>             | -20°C .. +50°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Humidity limit:</b>                  | 20% .. 80% RH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Protection level:</b>                | IP21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>External dimensions:</b>             | 50 x 36 x 20 cm (W x H x D).<br>50 x 46 x 13 cm (W x H x D) with intermediate drawer for heated head and sensor transportation.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Weight:</b>                          | ~ 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).<br>~ 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).<br>~ 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:

- O<sub>2</sub>
- CO average
- NO
- SO<sub>2</sub>
- Temperature (flue gas)
- Temperature (combustion air)
- Pressure (draught)
- Pressure (differential)





## Measurement ranges and accuracies

| MEASUREMENT                                   | GAS SENSOR             | MEASUREMENT RANGE | RESOLUTION | ACCURACY                                                                                               |
|-----------------------------------------------|------------------------|-------------------|------------|--------------------------------------------------------------------------------------------------------|
| O <sub>2</sub>                                | Sensor Electrochemical | 0 .. 21.0% vol    | 0.1% vol   | ±0.2% vol                                                                                              |
| CO with H <sub>2</sub> compensation           | Sensor Electrochemical | 0 .. 8000 ppm     | 1 ppm      | ±10 ppm 0 .. 200 ppm<br>±5% measured value 201 .. 2000 ppm<br>±10% measured value 2001 .. 8000 ppm     |
| CO with active dilution                       | Sensor Electrochemical | 0 .. 100000 ppm   | 100 ppm    | ±20% measured value                                                                                    |
| CO Low range with H <sub>2</sub> compensation | Sensor Electrochemical | 0 .. 500.0 ppm    | 0.1 ppm    | ±2 ppm 0 .. 40.0 ppm<br>±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<br>±5% measured value 2001 .. 4000 ppm<br>±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 %<br>±5% measured value 2.01 .. 10.00 %                                |
| NH <sub>3</sub>                               | Sensor Electrochemical | 0 .. 5000 ppm     | 0.1 ppm    | ±10 ppm 0 .. 100 ppm<br>±10% valore misurato 101 .. 500.0 ppm                                          |
| NO                                            | Sensor Electrochemical | 0 .. 5000 ppm     | 1 ppm      | ±5 ppm 0 .. 100 ppm<br>±5% measured value 101 .. 5000 ppm                                              |
| NO Low range                                  | Sensor Electrochemical | 0 .. 500.0 ppm    | 0.1 ppm    | ±2 ppm 0 .. 40.0 ppm<br>±5% measured value 40.1 .. 500.0 ppm                                           |
| NO <sub>x</sub>                               | Calculated             |                   |            |                                                                                                        |
| SO <sub>2</sub>                               | Sensor Electrochemical | 0 .. 5000 ppm     | 1 ppm      | ±5 ppm 0 .. 100 ppm<br>±5% measured value 101 .. 5000 ppm                                              |
| SO <sub>2</sub> Low range                     | Sensor Electrochemical | 0 .. 500.0 ppm    | 0.1 ppm    | ±2 ppm 0 .. 40.0 ppm<br>±5% measured value 40.1 .. 500.0 ppm                                           |
| NO <sub>2</sub>                               | Sensor Electrochemical | 0 .. 1000 ppm     | 1 ppm      | ±5 ppm 0 .. 100 ppm<br>±5% measured value 101 .. 1000 ppm                                              |
| NO <sub>2</sub> Low range                     | Sensor Electrochemical | 0 .. 500.0 ppm    | 0.1 ppm    | ±2 ppm 0 .. 40.0 ppm<br>±5% measured value 40.1 .. 500.0 ppm                                           |
| C <sub>x</sub> H <sub>y</sub>                 | Sensor Pellistor       | 0 .. 5.00% vol    | 0.01% vol  | ±0.25% vol                                                                                             |
| H <sub>2</sub> S                              | Sensor Electrochemical | 0 .. 500.0 ppm    | 0.1 ppm    | ±5 ppm 0 .. 100.0 ppm<br>±5% measured value 100.1 .. 500.0 ppm                                         |
| CO <sub>2</sub>                               | Calculated             | 0 .. 99.9% vol    | 0.1% vol   |                                                                                                        |
| CO <sub>2</sub>                               | NDIR sensor            | 0 .. 50.0% vol    | 0.01% vol  | ±1% Vol 0.00 .. 10.00 %<br>±2% Fondo scala 10.01 .. 50.00 %                                            |
| CO <sub>2</sub> *                             | NDIR bench             | 0 .. 50.0% vol    | 0.1% vol   | ±0.3% vol 0.00 .. 8.00 %<br>±5% measured value 8.01 .. 40.00 %<br>±10% measured value 40.01 .. 50.00 % |
| CO% *                                         | NDIR bench             | 0 .. 150000 ppm   | 100 ppm    | ±0.03% vol 0.0 .. 10.0 %<br>±5% measured value 10.1 .. 15 %                                            |
| CH <sub>4</sub> *                             | NDIR bench             | 0 .. 50000 ppm    | 1 ppm      | ±50 ppm 0 .. 200 ppm<br>±2% measured value 201 .. 50000 ppm                                            |

| MEASUREMENT                         | GAS SENSOR            | MEASUREMENT RANGE    | RESOLUTION | ACCURACY                                                                                                   |
|-------------------------------------|-----------------------|----------------------|------------|------------------------------------------------------------------------------------------------------------|
| 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<br>±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<br>±2 hPa -200 .. 200 hPa<br>±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





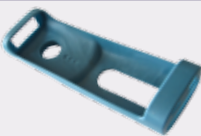
## ACCESORIES AND SPARE PARTS

### PRINTERS AND CONSUMABLES

| COD.     | PHOTO                                                                               | DESCRIPTION                                                                              | EURO | CHEMIST 2/300 | CHEMIST 400 | CASPER | CHEMIST 100 BG | CHEMIST 500/500 BG | CHEMIST 600/600 BG |
|----------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------|---------------|-------------|--------|----------------|--------------------|--------------------|
| AAC NI01 |    | Ribbon ink cartridge for printer                                                         | 10   | ✓             | ✓           |        |                |                    |                    |
| AAC RC01 |    | Plain paper roll                                                                         | 3    | ✓             | ✓           |        |                |                    |                    |
| AA RC05  |    | Unerasable printing polyester roll for Chemist 500 printer                               | 10   |               |             |        |                | ✓                  | ✓                  |
| AA RC06  |   | Plain thermal paper roll for Chemist 500 / 600                                           | 5    |               |             |        |                | ✓                  | ✓                  |
| AA RC08  |  | Plain thermal paper roll (AA ST01)<br>A=57 mm Diam.=30 mm                                | 5    |               |             | ✓      | ✓              |                    |                    |
| AA RC09  |  | Plain thermal paper roll uneraseble for Bluetooth printer<br>(AAS01) A=57 mm Diam.=30 mm | 8    |               |             | ✓      | ✓              |                    |                    |
| AARC10   |  | Plain thermal paper roll inalterabile for Chemist 500 / 600                              | 8    |               |             |        |                | ✓                  | ✓                  |
| AA ST01  |  | Thermal printer with Bluetooth connection                                                | 255  |               |             | ✓      | ✓              | ✓                  | ✓                  |
| AC ST02  |  | Infrared (IR) thermal printer                                                            | 420  |               |             | ✓      | ✓              |                    |                    |

## CASE, HOLSTER AND ACCESSORIES

| COD      | PHOTO                                                                               | DESCRIZIONE                                         | EURO | CHEMIST 2/300 | CHEMIST 400 | CASPER | CHEMIST 100 BG | CHEMIST 500/500 BG | CHEMIST 600/600 BG |
|----------|-------------------------------------------------------------------------------------|-----------------------------------------------------|------|---------------|-------------|--------|----------------|--------------------|--------------------|
| AAC CT01 |    | Borsa in tessuto a tracolla                         | 149  | ✓             | ✓           |        |                | ✓                  | ✓                  |
| AAC PB02 |    | Batteria ricaricabile Ni-MH, 6 V, 1800 mAh          | 38   | ✓             |             |        |                |                    |                    |
| AAC PB06 |    | Batteria ricaricabile Lilon, 7,2 V, 2,4 Ah          | 51   |               | ✓           |        |                |                    |                    |
| AAC PB07 |   | Batteria ricaricabile Ni-MH, 7,4 V, 1800 mAh        | 50   |               |             | ✓      |                |                    |                    |
| AAC R03  |  | Valigia in plastica rigida                          | 144  |               |             | ✓      |                |                    |                    |
| AACSM03  |  | Custodia protettiva in EVA con magneti di fissaggio | 79   | ✓             | ✓           |        |                |                    |                    |
| AA PB01  |  | Batteria ricaricabile Lilon, 3,7 V, 4,8 Ah          | 53   |               |             |        |                | ✓                  | ✓                  |
| AA SM05  |  | Custodia protettiva in EVA con magneti di fissaggio | 55   |               |             | ✓      |                |                    |                    |
| AA SM06  |  | Custodia protettiva in EVA                          | 79   |               |             |        |                | CHEMIST 500/600    | CHEMIST 500/600    |
| AA ZN01  |  | Borsa in tessuto a tracolla / zaino                 | 279  |               |             |        |                | ✓                  | ✓                  |

| COD.    | PHOTO                                                                               | DESCRIPTION                                 | EURO | CHEMIST 2/300 | CHEMIST 400 | CASPER | CHEMIST 100 BG | CHEMIST 500/600 BG | CHEMIST 600/600 BG |
|---------|-------------------------------------------------------------------------------------|---------------------------------------------|------|---------------|-------------|--------|----------------|--------------------|--------------------|
| AAC R10 |    | Hard plastic kit case                       | 149  |               |             |        |                | ✓                  | ✓                  |
| AA SM10 |    | Rubber holster                              | 69   |               |             |        |                | CHEMIST 500/600 BG | CHEMIST 600/600 BG |
| AA PB13 |    | Rechargeable Ni-MH battery, 7,4 V, 1800 mAh | 42   |               |             |        | ✓              |                    |                    |
| AAC R09 |    | Hard plastic kit case                       | 127  |               |             |        | ✓              |                    |                    |
| AA SM07 |   | Rubber holster                              | 43   |               |             |        | ✓              |                    |                    |
| AA SP01 |  | Guard shield for lue gas probe              | 245  |               |             |        |                | ✓                  | ✓                  |
| AA UA01 |  | USB A / USB B cable, 2 m lenght             | 11   |               |             |        |                | ✓                  | ✓                  |

## ACCESSORIES

| COD        | PHOTO                                                                               | DESCRIPTION                                                                                                  | EURO | CHEMIST 2/300 | CHEMIST 400 | CASPER | CHEMIST 100 BG | CHEMIST 500/500 BG | CHEMIST 600/600 BG |
|------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|------|---------------|-------------|--------|----------------|--------------------|--------------------|
| AA AL05    |    | 90÷264V~ / 5V= Power adapter with USB output and interchangeable AC connector                                | 56   |               |             |        |                | ✓                  | ✓                  |
| AAC ADX005 |    | Dummy sensor (replaces not installed gas sensors)                                                            | 3    |               |             | ✓      | ✓              | ✓                  | ✓                  |
| AAC BF01   |    | Mounting adapter for sensor                                                                                  | 12   | ✓             |             |        |                |                    |                    |
| AAC CV03   |    | Cable with Italy plug                                                                                        | 9    | ✓             | ✓           | ✓      | ✓              |                    |                    |
| AAC AL04   |                                                                                     | 230V / 12V Power adapter                                                                                     | 40   | ✓             | ✓           | ✓      | ✓              |                    |                    |
| AAC FA01   |   | Fine dust filters for AACTA03 (5 pcs. package)                                                               | 33   | ✓             | ✓           | ✓      | ✓              | ✓                  | ✓                  |
| AAC TA03   |  | Water trap with dust filter without stainless steel fittings and silicon hose                                | 43   | ✓             | ✓           | ✓      | ✓              | ✓                  | ✓                  |
| AAC TA03A  |  | Water trap with dust filter, stainless steel fittings and silicon hose suitable for all combustion analyzers | 55   | ✓             | ✓           | ✓      | ✓              | ✓                  | ✓                  |
| AA PM02    |  | Bacharach hand pump for carbon measurements                                                                  | 316  | ✓             |             |        |                | ✓                  | ✓                  |
| AA RA01    |  | Threaded 9 mm diameter fitting, 1/4" gas coupling, 1/4" to 1/8" gas nipple (for tightness test)              | 33   |               |             |        |                | ✓                  | ✓                  |
| AA SI01    |  | Italy/EU plug adapter                                                                                        | 20   |               |             |        |                | ✓                  | ✓                  |
| AA FA03    |  | HDPE filter for industrial engine probe (2PCS)                                                               | 80   |               |             |        |                | ✓                  | ✓                  |
| AA FS01    |  | Inox filter for industrial engine probe                                                                      | 250  |               |             |        |                | ✓                  | ✓                  |

## PROBES

| COD      | PHOTO                                                                               | DESCRIPTION                                                                                                                   | EURO | CHEMIST 2/300 | CHEMIST 400 | CASPER | CHEMIST 100 BG | CHEMIST 500/500 BG | CHEMIST 600/600 BG |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|------|---------------|-------------|--------|----------------|--------------------|--------------------|
| AAC S001 |    | Ionization current probe.<br>Range: $\pm 100 \mu A$ . Accuracy: $\pm 2 \mu A$                                                 | 169  |               |             |        |                | ✓                  | ✓                  |
| AA SA06  |    | Outdoor air temperature Pt100 probe with 200 mm tip (4 wire + conical stopper)                                                | 84   | ✓             | ✓           |        |                |                    |                    |
| AA SF51A |    | 180 mm flue gas probe with 2 m cable                                                                                          | 250  |               | ✓           | ✓      | ✓              | ✓                  | ✓                  |
| AA SF62A |    | 300 mm flue gas probe with 2 m cable                                                                                          | 270  |               | ✓           | ✓      | ✓              | ✓                  | ✓                  |
| AA SF65A |   | 750 mm flue gas probe with 3 m cable                                                                                          | 408  |               | ✓           |        |                | ✓                  | ✓                  |
| AA SF66A |  | 1000 mm flue gas probe with 3 m cable                                                                                         | 485  |               | ✓           |        |                | ✓                  | ✓                  |
| AA SF71A |  | 180 mm flue gas probe with 1,6 m cable                                                                                        | 180  |               |             |        | ✓              |                    |                    |
| AA SF72A |  | 300 mm flexible flue gas probe with 1,6 m cable                                                                               | 195  |               |             |        | ✓              |                    |                    |
| AA SL05A |  | 300 mm flexible flue gas probe with 2 m cable                                                                                 | 326  |               | ✓           | ✓      | ✓              | ✓                  | ✓                  |
| AA SX01  |  | 300 mm CO gas probe, with 2 m cable                                                                                           | 296  |               |             |        |                | ✓                  | ✓                  |
| AA SX02  |  | 750 mm industrial motors probe with 3 m cable                                                                                 | 1300 |               |             |        |                | ✓                  | ✓                  |
| AA SC01  |  | CO ambient probe<br>Range: 0 .. 500.0ppm<br>Accuracy: $\pm 5$ ppm up to 100.0 ppm<br>$\pm 5\%$ measured value up to 500.0 ppm | 366  |               |             |        |                | ✓                  |                    |

## 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<br>Range: <b>±250 Pa</b><br>Accuracy: <b>±0.5 Pa -10.0 .. +10.0 Pa</b><br><b>±2 Pa elsewhere</b> | <b>371</b> |               | ✓           |        |                | ✓                  | ✓                  |
| AAC EX01 |    | 3 m extension cable for flue gas probe<br>(cod. AASFXXA)                                                                                                                   | <b>204</b> |               | ✓           |        |                | ✓                  | ✓                  |
| AAC KP01 |    | Differential pressure measurement kit.<br>2 x 1 m hoses + fittings                                                                                                         | <b>35</b>  |               |             |        |                | ✓                  | ✓                  |
| AAC KP02 |    | Differential pressure measurement kit.<br>1 m hose + fitting                                                                                                               | <b>18</b>  | ✓             |             | ✓      | ✓              | ✓                  | ✓                  |
| AAC SA04 |   | Outdoor air temperature 100 mm Pt100 probe with 3 m cable                                                                                                                  | <b>79</b>  | ✓             | ✓           |        |                |                    |                    |
| AA KT04  |  | Kit for tightness test with 4 ways manifold, manual pump, 100 ml syringe, hoses, 2 silicone conical fittings                                                               | <b>275</b> | ✓             |             | ✓      | ✓              | ✓                  | ✓                  |
| AA SA05  |  | Outdoor air temperature 100 mm Pt100 probe with 1,8 m cable                                                                                                                | <b>75</b>  |               |             | ✓      | ✓              |                    |                    |
| AA SA08  |  | Outdoor air temperature 200 mm TcK probe, with 2 m cable                                                                                                                   | <b>77</b>  |               |             |        |                | ✓                  | ✓                  |
| AA SG01  |  | Gas sniffer probe for Chemist 500 analyzers da 1 m + raccordo                                                                                                              | <b>77</b>  |               |             |        |                | ✓                  | ✓                  |
| AA TT01  |  | "L" shaped Pitot tube. 300 mm length, 6 mm external diameter. Without thermocouple                                                                                         | <b>469</b> |               |             |        |                | ✓                  | ✓                  |
| AA TT02  |  | "L" shaped Pitot tube. 800 mm length, 6 mm external diameter. Without thermocouple                                                                                         | <b>510</b> |               |             |        |                | ✓                  | ✓                  |

## CERTIFICATES, GUARANTEE AND MAINTENANCE

| COD            | DESCRIPTION                                                                                                                                                                                                       | EURO           | CASPER | CHEMIST 100 BG | CHEMIST 500 / 500 BG | CHEMIST 600 / 600 BG |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------|----------------|----------------------|----------------------|
| <b>CER 012</b> | ISO 9001 calibration certificate for 2 sensors analyzers:<br>Casper 201, 201S, 202, 202S - Chemist 100 BE GREEN 101, 101S, 102, 102S<br>Chemist 501, 501B, 502, 502B, 502C - Chemist 500 BE GREEN 502, 502B, 502C | <b>150 (*)</b> | ✓      | ✓              | ✓                    |                      |
| <b>CER 013</b> | ISO 9001 calibration certificate for 3 sensors analyzers:<br>Casper a 3 celle 301, 301S - Chemist 100 BE GREEN 103, 103S<br>Chemist 503, 503B - Chemist 500 BE GREEN 503, 503B                                    | <b>170 (*)</b> | ✓      | ✓              | ✓                    |                      |
| <b>CER 014</b> | ISO 9001 calibration certificate for 4 sensors analyzers:<br>Chemist 504N - Chemist 504N BE GREEN                                                                                                                 | <b>200 (*)</b> |        |                | ✓                    |                      |
| <b>CER 015</b> | ISO 9001 calibration certificate for 4 sensors analyzers:<br>Chemist 504S - Chemist 504S BE GREEN                                                                                                                 | <b>200 (*)</b> |        |                | ✓                    |                      |
| <b>CER 016</b> | ISO 9001 calibration certificate for Chemist 500X - Chemist 500X BE GREEN:<br>(O <sub>2</sub> , CO, + 2 sensori a scelta)                                                                                         | <b>240 (*)</b> |        |                | ✓                    |                      |
| <b>CON 009</b> | Annual maintenance contract for 2 sensors analyzers:<br>Casper 201, 201 S, 202, 202 S<br>Chemist 501, 501B, 502, 502B, 502C, 401, 402                                                                             | <b>350 (*)</b> | ✓      |                | ✓                    |                      |
| <b>CON 010</b> | Annual maintenance contract for 3 sensors analyzers:<br>Casper 301, 301S<br>Chemist 503, 403                                                                                                                      | <b>400 (*)</b> | ✓      |                | ✓                    |                      |
| <b>CON 011</b> | Annual maintenance contract for 4 sensors analyzers:<br>Chemist 504N, 504S, 404N, 404S                                                                                                                            | <b>470 (*)</b> |        |                | ✓                    |                      |

(\*) : net, non-discountable

## GAS SENSORS

| GAS              | RANGE                           | COD      | EURO | Chemist<br>200-300 | Chemist<br>400 | Casper | Chemist<br>100 BG | Chemist<br>500/500<br>BG | Chemist<br>600/600<br>BG | Chemist<br>900 |
|------------------|---------------------------------|----------|------|--------------------|----------------|--------|-------------------|--------------------------|--------------------------|----------------|
| CH4              | 0...10000 ppm CH4               | AAC SE19 | 112  |                    |                |        |                   | ✓                        |                          |                |
| CO               | 0...8000 ppm                    | AAC SE20 | 376  |                    |                | ✓      | ✓                 |                          |                          |                |
| CO / H2          | 0...8000 ppm                    | AAC SE05 | 523  | ✓                  |                |        |                   |                          |                          |                |
| CO / H2          | 0...8000 ppm                    | AAC SE12 | 502  |                    | ✓              |        |                   | ✓                        | ✓                        | ✓              |
| CO / H2 Lo Range | 0...500,0 ppm                   | AAC SE24 | 523  |                    |                |        |                   | ✓                        | ✓                        | ✓              |
| CO Hi Range      | 0...10.00% Vol<br>(100.000 ppm) | AAC SE17 | 914  |                    |                |        |                   | ✓                        | ✓                        | ✓              |
| CO Mid Range     | 0...20000 ppm                   | AAC SE18 | 914  |                    |                |        |                   | ✓                        | ✓                        | ✓              |
| CO2              | 0...50% v/v                     | AAC SE47 | 1005 |                    |                |        |                   | ✓                        | ✓                        | ✓              |
| CxHy             | 0...5.00% Vol CH4               | AAC SE39 | 467  |                    |                |        |                   | ✓                        | ✓                        | ✓              |
| H2S              | 0...500,0 ppm                   | AAC SE35 | 335  |                    |                |        |                   | ✓                        | ✓                        | ✓              |
| NH3              | 0...500,0 ppm                   | AAC SE56 | 914  |                    |                |        |                   |                          | ✓                        | ✓              |
| NO               | 0...5000 ppm                    | AAC SE06 | 568  | ✓                  |                |        |                   |                          |                          |                |
| NO               | 0...5000 ppm                    | AAC SE10 | 508  |                    | ✓              | ✓      | ✓                 | ✓                        | ✓                        | ✓              |
| NO Lo Range      | 0...500 ppm                     | AAC SE25 | 599  |                    |                |        |                   | ✓                        | ✓                        | ✓              |
| NO2              | 0...1000 ppm                    | AAC SE14 | 812  |                    |                |        |                   | ✓                        | ✓                        | ✓              |
| NO2 Lo Range     | 0...500 ppm                     | AAC SE26 | 914  |                    |                |        |                   | ✓                        | ✓                        | ✓              |
| O2               | 0...25% v/v                     | AAC SE07 | 223  | ✓                  |                |        |                   |                          |                          |                |
| O2               | 0...21% v/v                     | AAC SE15 | 223  |                    | ✓              | ✓      | ✓                 | ✓                        |                          |                |
| O2 Long Life     | 0...21% v/v                     | AAC SE43 | 370  |                    |                |        |                   | ✓                        | ✓                        | ✓              |
| SO2              | 0...5000 ppm                    | AAC SE13 | 812  |                    |                |        |                   | ✓                        | ✓                        | ✓              |
| SO2 Lo Range     | 0...500 ppm                     | AAC SE28 | 914  |                    |                |        |                   | ✓                        | ✓                        | ✓              |



A large, light gray rectangular area with rounded corners, containing 25 horizontal lines for writing. The lines are evenly spaced and extend across the width of the gray area.

## PORTABLE INSTRUMENTS

Micromanometers

Portable hydrocarbon gases detector

Thermometer

Kit for pipes tightness test

Accessories

pag. 147

pag. 149

pag. 150

pag. 150

pag. 151



## PRESSOTEST 100

POR MDZ BI..... € 231

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



**WARRANTY**  
**2 YEARS**

### 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                                                                 |

## PRESSOTEST 200

POR MDX BI..... € 303

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



**WARRANTY**  
**2 YEARS**

### 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                                                                 |

## PRESSOTEST 300

POR DPZ BI ..... € 349

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;<br>-1Pa -100Pa < P < +100Pa;<br>-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 ..... € 254



**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. Consequently it's supplied with a test certificate and not with a calibration certificate.

**PO TK01**..... € 207  
Including 2 STS KX 01 probes

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



**WARRANTY**  
**2 YEARS**

## THERMOMETER 2 TC K 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                     |

**POR VAL 0109**..... € 1142  
Kit for the pipes tightness test, with printer

**POR VAL 0114**..... € 722  
Kit for the pipes tightness test, without printer



**WARRANTY**  
**2 YEARS**

## KIT FOR PIPES TIGHTNESS TEST

Kit for the pipes tightness test by pressure decay in gas plants. Supplied with a practical rigid bag, with the PRESSOTEST 200 micromanometer, developed for performing of the tightness tests in compliance with the UNI 7129 norms concerning the new plants and the UNI 11137 ones concerning the pre-existent plants, with infrared printer for printing of the receipts of the test results, power adaptor and rechargeable batteries, plastic pipes with taps, stoppers in many diameters, metallic couplings, rubber pump.

## ACCESSORIES

**STS KZ**..... € 90  
Clamp thermocouple K type probe



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



**STS KL 01**..... € 37  
Thermocouple K type probe for liquids



**STS KC 01** ..... € 74  
Thermocouple K type probe for contact



**POR FLU**..... € 42  
Glass fluxmeter



**AC ST02**..... € 420  
Infrared thermal printer





## 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.

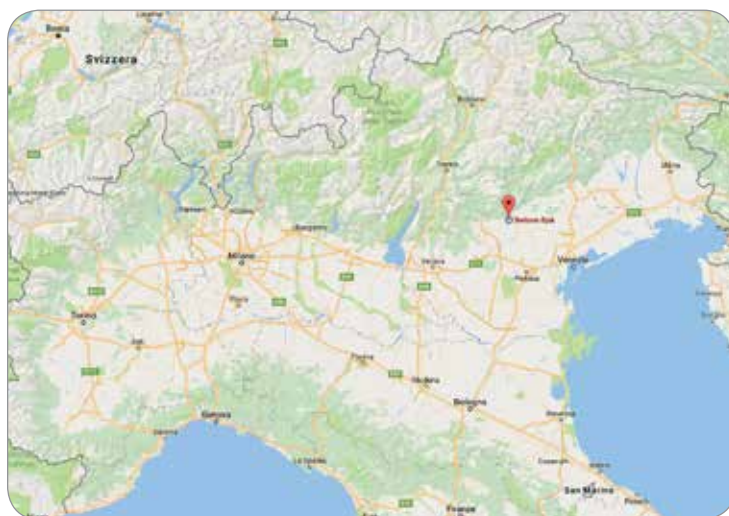
### WARRANTY PERIOD

This warranty is valid for a period of 36 months starting from the date of production (see label on the product), except where explicitly 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](http://www.seitron.it)

## WHERE WE ARE



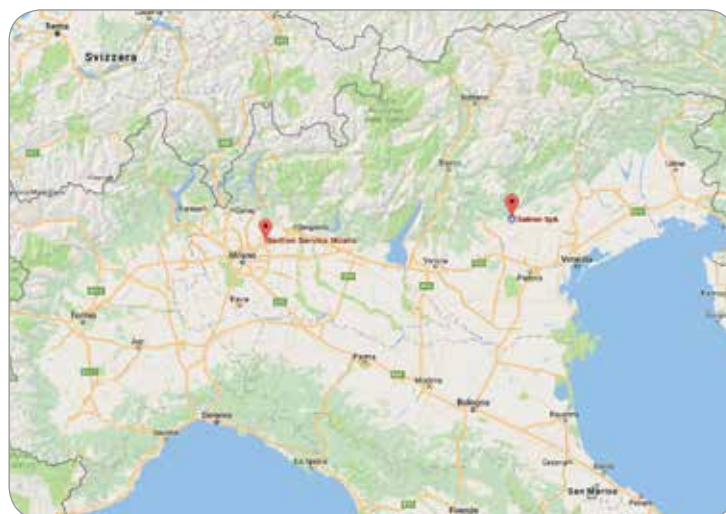
### SEITRON S.p.A. a Socio Unico

36065 - Mussolente (VI) - ITALY  
Via del Commercio, 9/11  
Tel. +39 0424.567.842 - Fax. +39 0424.567.849  
[info@seitron.it](mailto:info@seitron.it) - [www.seitron.it](http://www.seitron.it)  
P.IVA (VAT) IT00775330244



### SEITRON SERVICE MILANO

20090 - Segrate (MI) - ITALY  
Via Leonardo Da Vinci, 1  
Tel. +39 02.836.476.71  
[service.milano@seitron.it](mailto:service.milano@seitron.it)  
[www.seitron.it](http://www.seitron.it)





Citron





36065 - Casoni di Mussolente (Vicenza) Italy

Via del Commercio, 9/11

tel. +39 0424 567842 - Fax +39 0424 567849

[www.seitron.it](http://www.seitron.it) - [info@seitron.it](mailto:info@seitron.it)

