

# SMART SOLAR SENTINEL

Enclosed solution – Plug & play

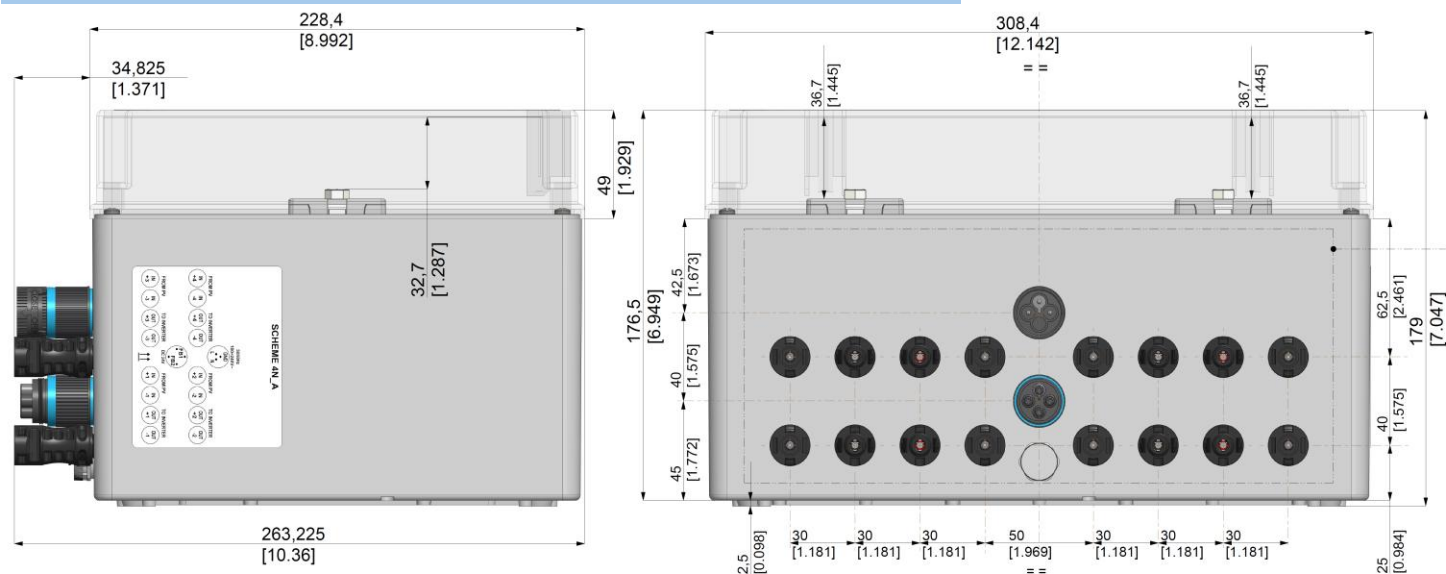
edizione 11 : data 13/01/2026



Bremas Erscse S.p.A.  
Via Castellazzo 9 – 20040 Cambiago (MI)  
Tel +39 02 95651611 Fax +39 02 95651639  
www.bremas.it info@bremas.it  
ISO 9001 Certified Quality System

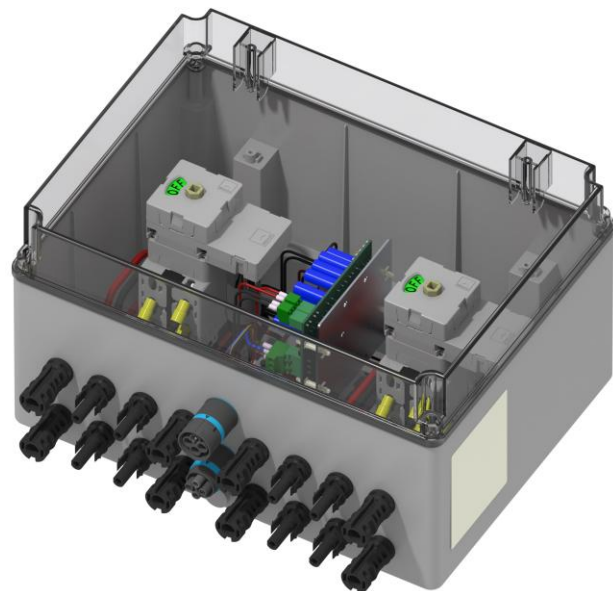
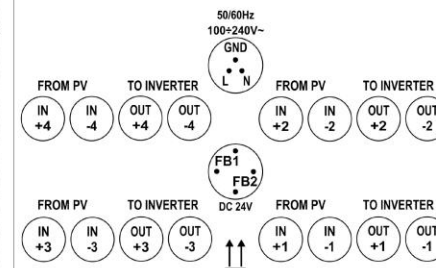


## FB150304NUA2MC

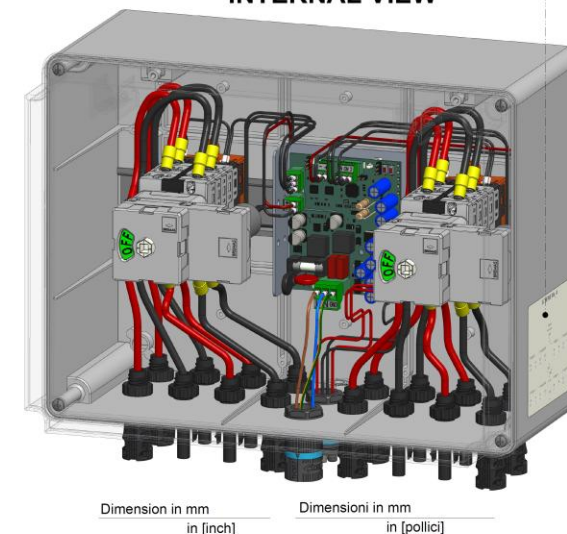


## ELECTRICAL CONNECTION INDICATIONS LABEL

### SCHEME 4N\_A



## INTERNAL VIEW



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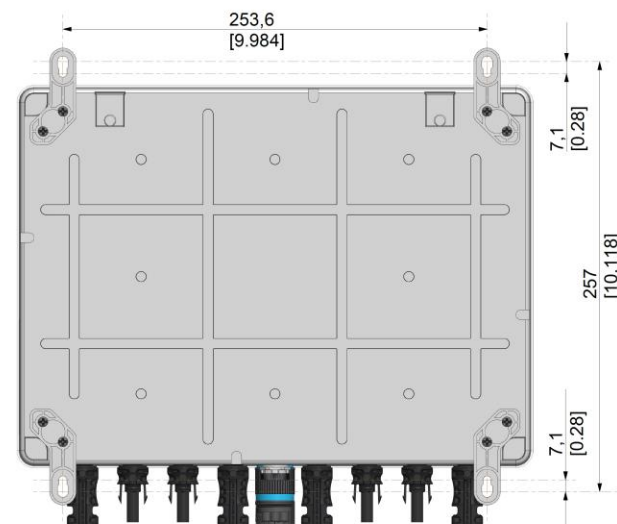
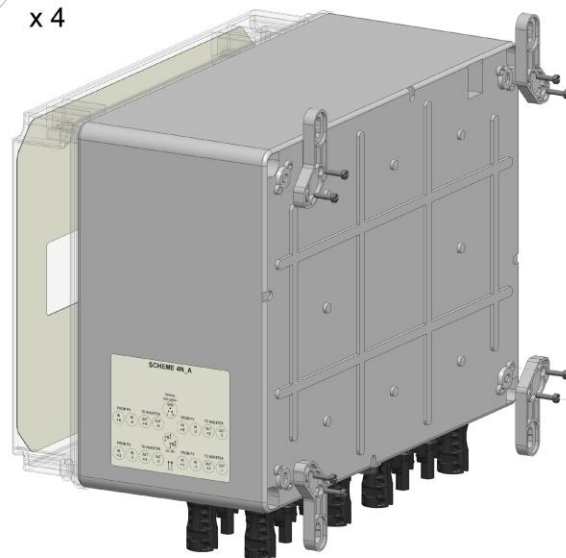
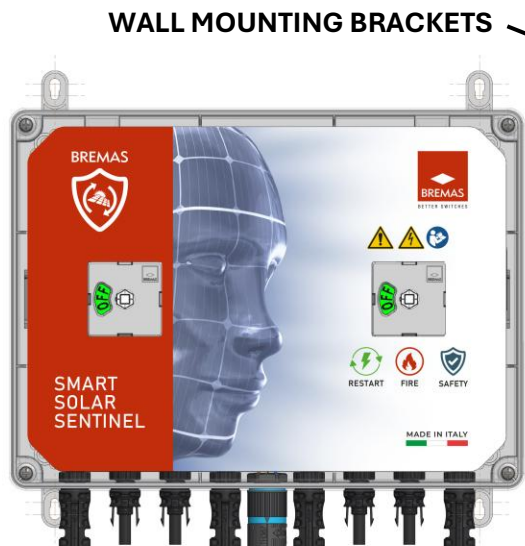


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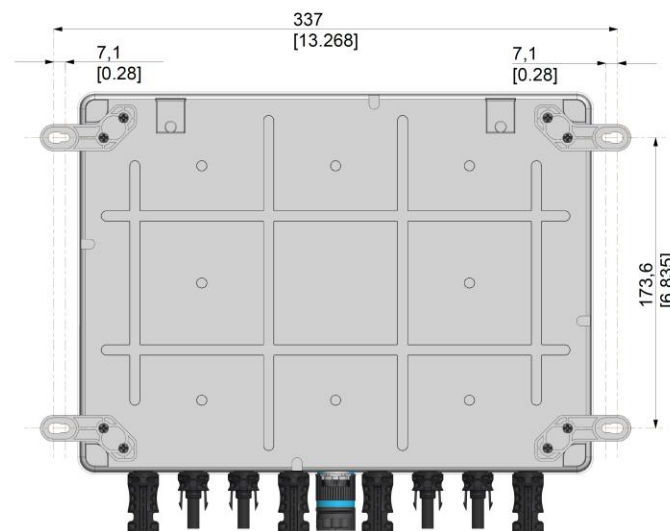
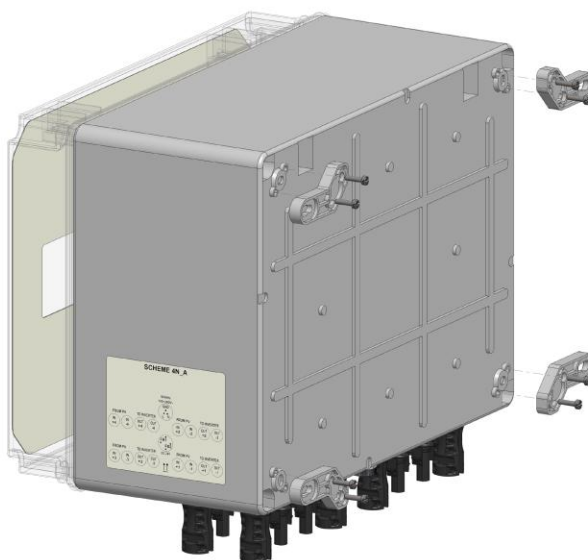
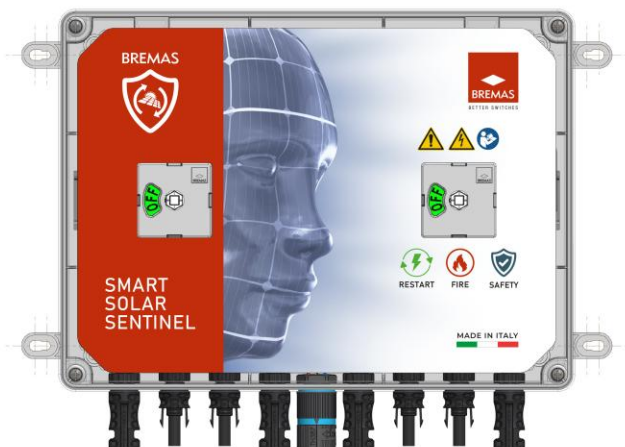


FB150304NUA2MC

## WALL MOUNTING BRACKETS



## WALL FIXING HOLES FOR VERTICAL BRACKETS



## WALL FIXING HOLES FOR HORIZONTAL BRACKETS

Dimension in mm  
in [inch]

Dimensioni in mm  
in [pollici]

## FB150304NUA2MC

### Smart Solar Sentinel Technical Data IEC EN 60947-3

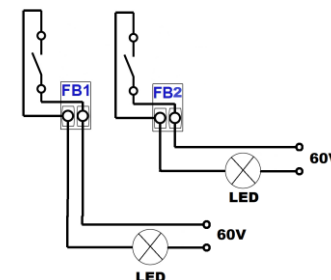
|                                                                                  |          |        |                 |
|----------------------------------------------------------------------------------|----------|--------|-----------------|
| Rated isolation voltage                                                          | Ui       | V      | 1500            |
| Rated impulse withstand voltage                                                  | Uimp     | kV     | 8               |
| Rated thermal current                                                            | Ith      | A      | 50              |
| <b>DC inputs</b>                                                                 |          |        |                 |
| Number of inputs                                                                 | Da ... a |        | 1 ... 6         |
| Utilization category                                                             | Ie       | A      | PV1 PV2         |
| Rated operational current at 1500 V (input)                                      | Ie       | A      | 20 8            |
| Rated operational current at 1300 V (input)                                      | Ie       | A      | 25 10           |
| Rated operational current at 1250 V (input)                                      | Ie       | A      | 30 12           |
| Rated operational current at 1000 V (input)                                      | Ie       | A      | 50 20           |
| Rated operational current at 800 V (input)                                       | Ie       | A      | - 30            |
| Rated operational current at 700 V (input)                                       | Ie       | A      | - 40            |
| <b>Over temperature shutdown</b>                                                 |          |        |                 |
| Temperature for automatic shutdown                                               |          | °C     | +100            |
| <b>Short circuit protection</b>                                                  |          |        |                 |
| Rated conditional short-circuit current                                          |          | kA     | 5               |
| Max fuse size for short-circuit protection                                       | gPV      | A      | 50              |
| Size of the fuse inserted for short-circuit protection                           | gPV      | A      | 1               |
| Rated short-time withstand current (1s)                                          | Icw      | A      | 780             |
| Rated short-circuit making capacity                                              | Icm      | kA     | 1,4             |
| <b>Mechanical and electrical feature</b>                                         |          |        |                 |
| Mechanical endurance                                                             | cycle    | Nr     | 9.700           |
| Electrical endurance                                                             | cycle    | Nr     | 300             |
| Stand-by power consumption                                                       |          | W      | 2,5             |
| Peak consumption                                                                 |          | W      | 8               |
| <b>Panel connectors mounted on the Smart Solar Sentinel</b>                      |          |        |                 |
| MC4 plug-in connectors Stäubli evo2                                              |          | Female | 32.0346P0001    |
| MC4 plug-in connectors Stäubli evo2                                              |          | Male   | 32.0347P0001    |
| <b>Coupler connectors recommended (not included in the Smart Solar Guardian)</b> |          |        |                 |
| MC4 plug-in connectors Stäubli evo2 6 mm²                                        |          | Female | 32.0318P0001    |
| MC4 plug-in connectors Stäubli evo2 6 mm²                                        |          | Male   | 32.0319P0001    |
| MC4 plug-in connectors Stäubli evo210 mm²                                        |          | Female | 32.0324P0001    |
| MC4 plug-in connectors Stäubli evo2 10 mm²                                       |          | Male   | 32.0325P0001    |
| <b>Protection degree IEC EN 61439-2</b>                                          |          |        |                 |
| Smart Solar Sentinel                                                             |          |        | IP56            |
| <b>Ambient condition</b>                                                         |          |        |                 |
| Pollution degree                                                                 |          |        | 2               |
| Operational ambient temperature                                                  |          | °C     | -30 + +55       |
| Storage ambient temperature                                                      |          | °C     | -30 + +85       |
| Damp heat test IEC 60068-2-30                                                    |          | °C     | 90-100% a +55°C |

### Technical specification of auxiliary connectors

|                                          |         |        |              |
|------------------------------------------|---------|--------|--------------|
| <b>L-N-GND connector (AC main power)</b> |         |        |              |
| Rated operational voltage                | Ui      | Vac    | 500          |
| Working frequency                        |         | Hz     | 50 ÷ 60      |
| Rated impulse withstand voltage          | Uimp    | kV     | 4            |
| Rated operational current                | Ie      | A      | 17,5         |
| Nominal operating voltage*               | Un      | Vac    | 100 + 240    |
| Nominal power dissipation*               | Max     | W      | 10           |
| Nominal current*                         | In      | mA     | 40 (at 230V) |
| Degree of protection                     |         |        | IP68         |
| Connection type                          |         |        | M3 screws    |
| Tightening torque                        | Max     | Nm     | 0,8          |
| Cross-section of flexible/solid wires    | Min-Max | mm²    | 0,5 ... 4    |
| Cable diameter                           | Min-Max | mm     | 7 ... 12     |
| Operational ambient temperature          | Tamb    | °C     | -40 + +125   |
| <b>FB connector (feedback FB1 e FB2)</b> |         |        |              |
| Rated operational voltage                | Ui      | Vac/dc | 500          |
| Working frequency                        |         | Hz     | 50 ÷ 60      |
| Rated impulse withstand voltage          | Uimp    | kV     | 4            |
| Rated operational current                | Ie      | A      | 17,5         |
| Nominal operating voltage of contact*    | Un max  | Vac/dc | 60           |
| Nominal external power of contact*       | Max     | W      | 60           |
| Nominal current of contact*              | In max  | A      | 1            |
| Degree of protection                     |         |        | IP68         |
| Connection type                          |         |        | M3 screws    |
| Tightening torque                        | Max     | Nm     | 0,8          |
| Cross-section of flexible/solid wires    | Min-Max | mm²    | 0,5 ... 4    |
| Cable diameter                           | Min-Max | mm     | 7 ... 12     |
| Operational ambient temperature          | Tamb    | °C     | -40 + +125   |

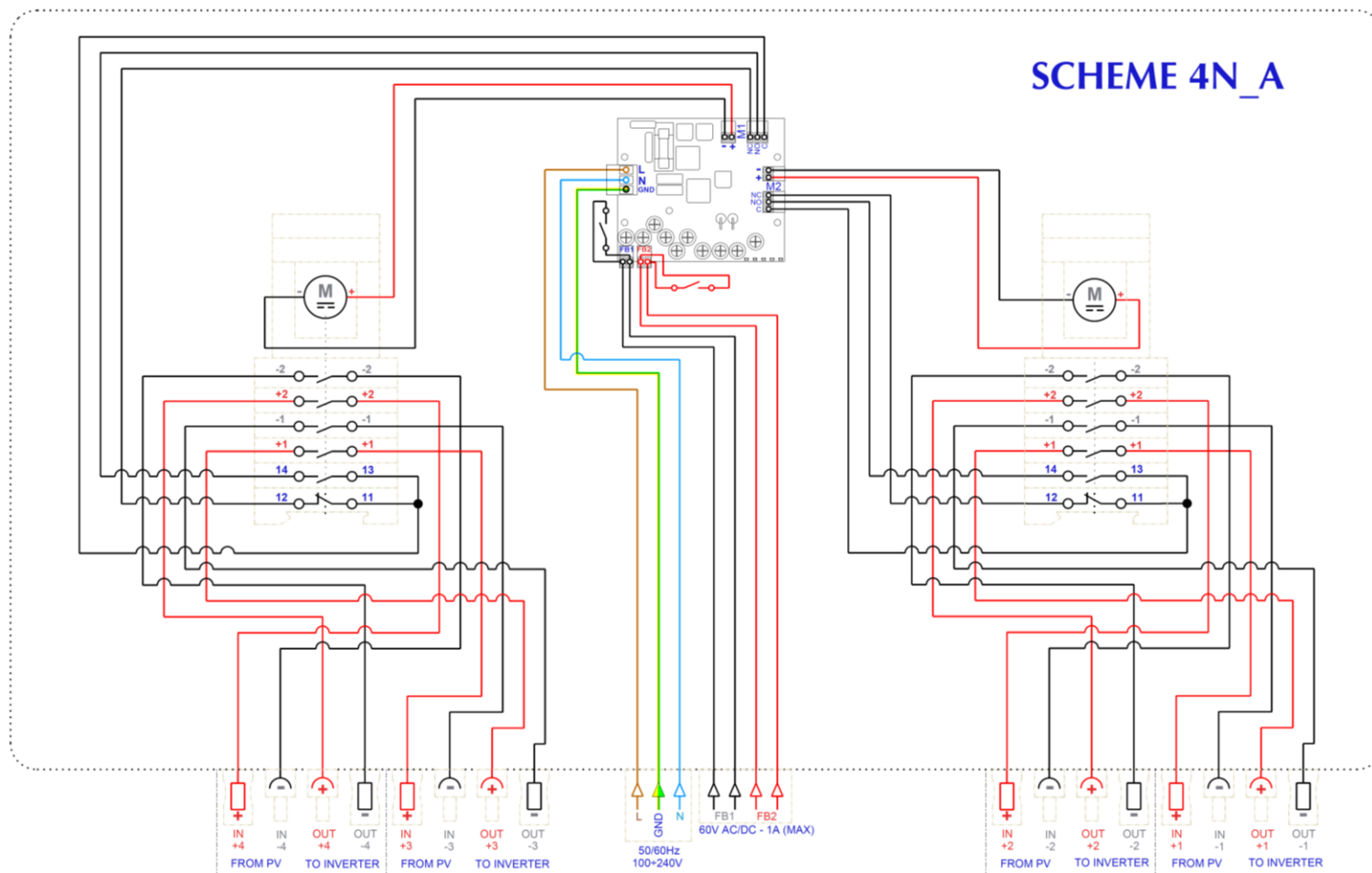
\* Data referring to the Smart Solar Sentinel

### FB1 – FB2 Example of connection:



FB150304NUA2MC

## SCHEME 4N\_A



### WIRING DIAGRAM

### SERIAL NUMBER