

SMART SOLAR SENTINEL

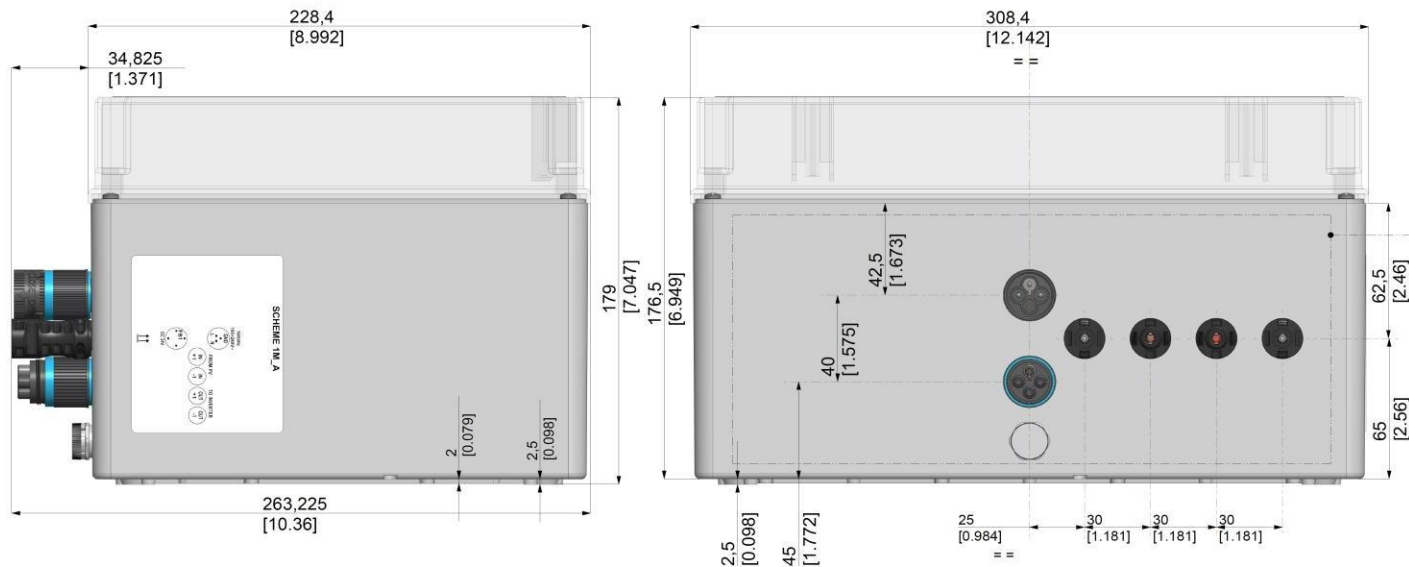
Enclosed solution – Plug & play

edizione 11 : data 13/01/2022



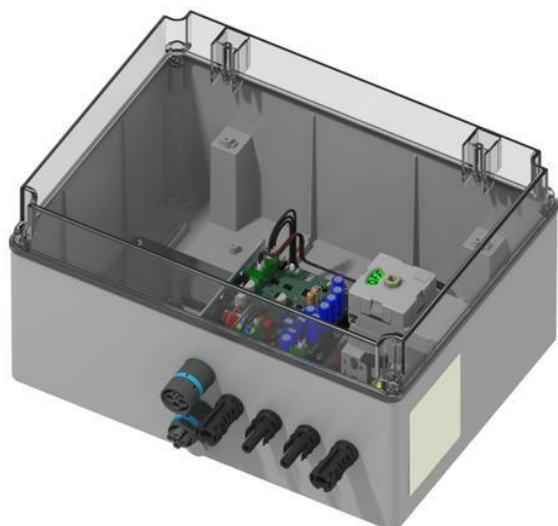
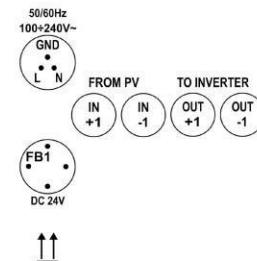
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ISO 9001 Certified Quality System

FB150301MUA2MC

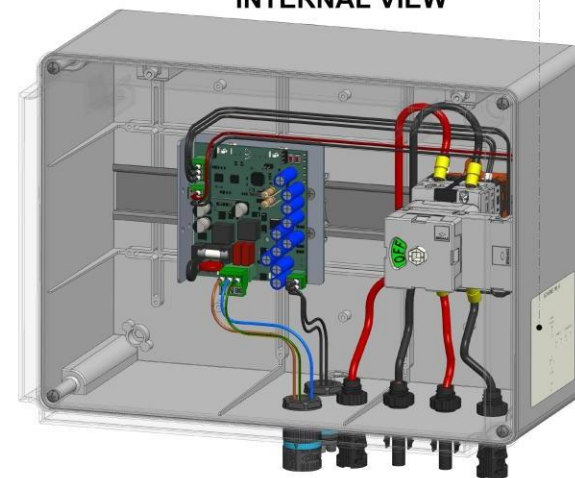


ELECTRICAL CONNECTION INDICATIONS LABEL

SCHEME 1M_A



INTERNAL VIEW



Dimension in mm
in [inch]

Dimensioni in mm
in [pollici]

SMART SOLAR SENTINEL

Enclosed solution – Plug & play

edizione 11 : data 13/01/202c

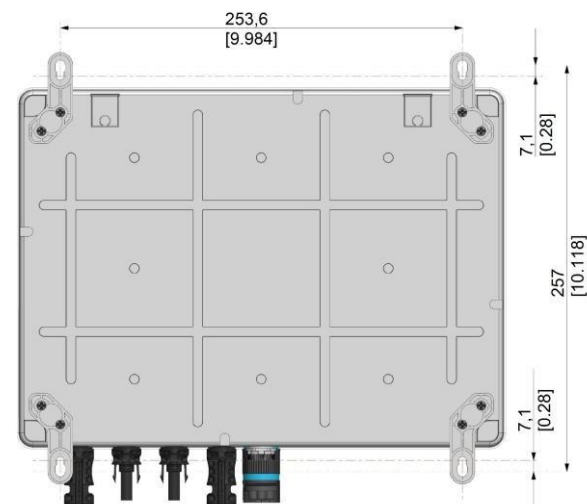
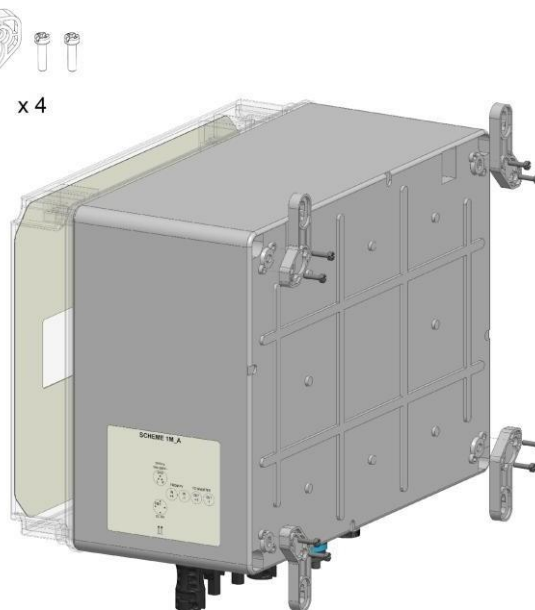
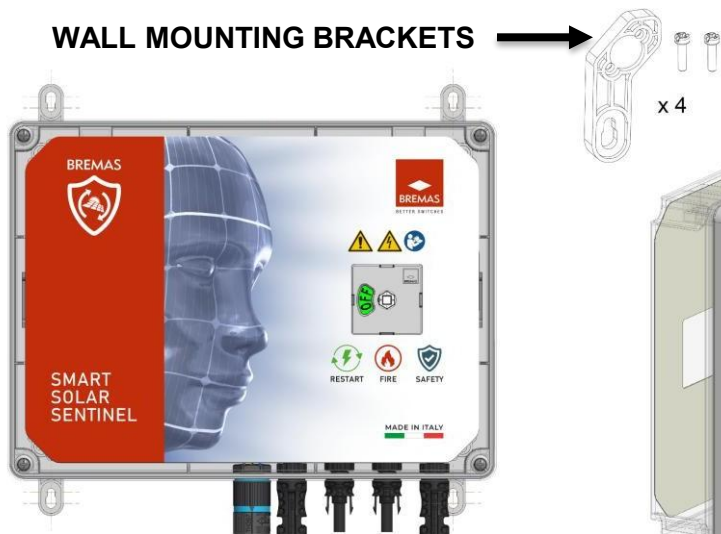


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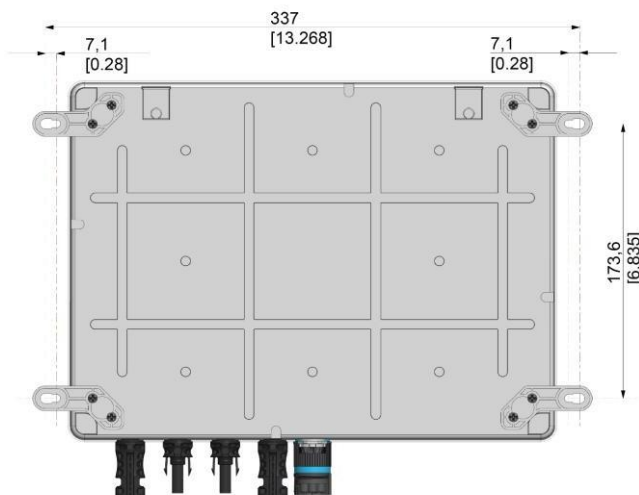
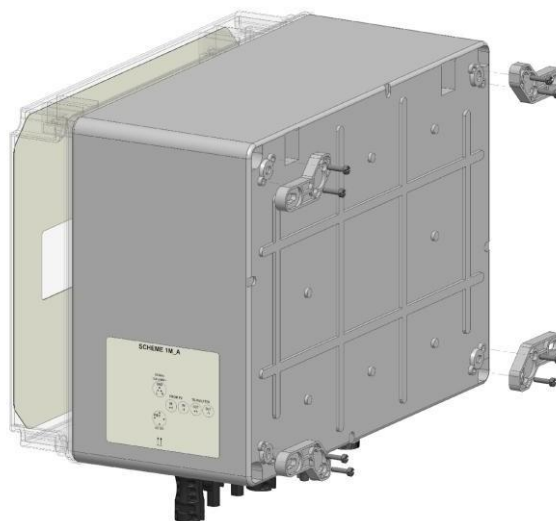
FB150301MUA2MC



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]

FB150301MUA2MC

Smart Solar Sentinel Technical Data IEC EN 60947-3

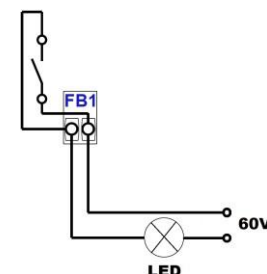
Rated isolation voltage	Ui	V	1500
Rated impulse withstand voltage	Uimp	kV	8
Rated thermal current	Ith	A	50
DC inputs			
Number of inputs	Da ... a		1 ... 6
Utilization category	Ie	A	PV1 PV2
Rated operational current at 1500 V (input)	Ie	A	20 8
Rated operational current at 1300 V (input)	Ie	A	25 10
Rated 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
Over temperature shutdown			
Temperature for automatic shutdown		°C	+100
Short circuit protection			
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
Mechanical and electrical feature			
Mechanical endurance	cycle	Nr	9.700
Electrical endurance	cycle	Nr	300
Stand-by power consumption		W	2,5
Peak consumption		W	8
Panel connectors mounted on the Smart Solar Sentinel			
MC4 plug-in connectors Stäubli evo2		Female	32.0346P0001
MC4 plug-in connectors Stäubli evo2		Male	32.0347P0001
Coupler connectors recommended (not included in the Smart Solar Guardian)			
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 evo2 10 mm²		Female	32.0324P0001
MC4 plug-in connectors Stäubli evo2 10 mm²		Male	32.0325P0001
Protection degree IEC EN 61439-2			
Smart Solar Sentinel			IP56
Ambient condition			
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

L-N-GND connector (AC main power)			
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
FB connector (feedback FB1 e FB2)			
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

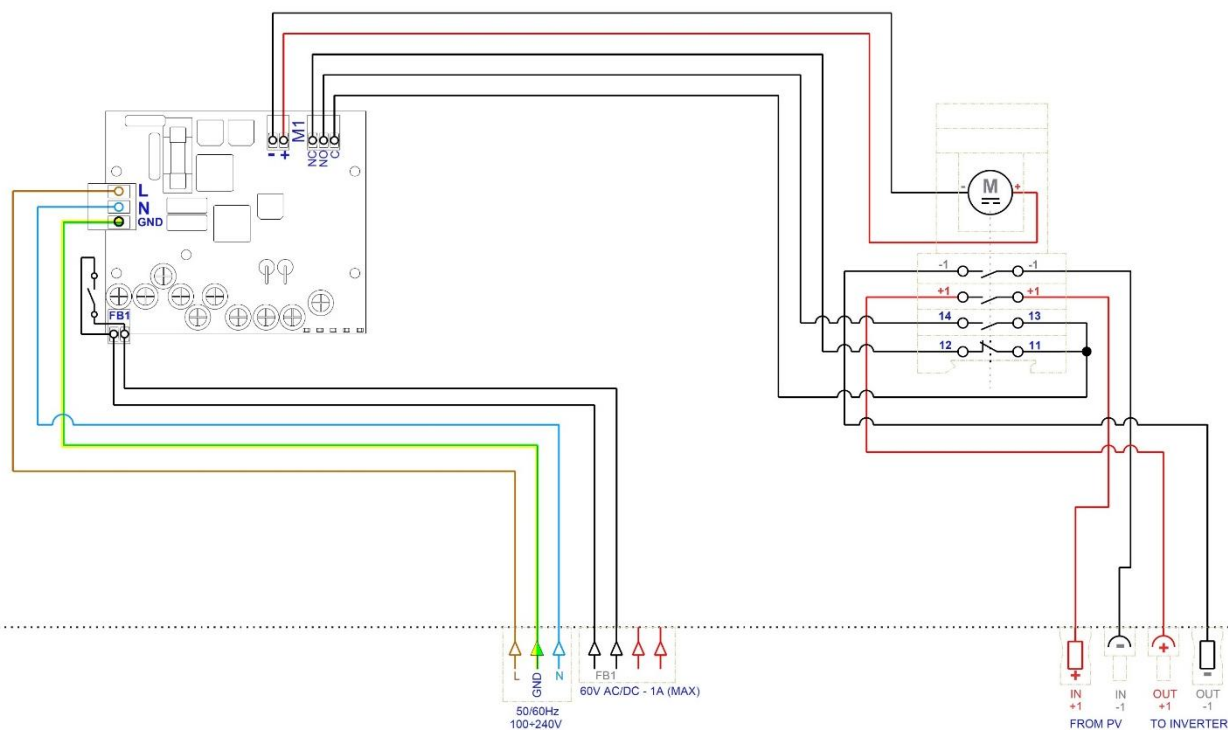
* Data referring to the Smart Solar Sentinel

FB1 – Example of connection:



FB150301MUA2MC

SCHEME 1M_A



WIRING DIAGRAM

SERIAL NUMBER