

# STRING BOXES WIRED

String boxes

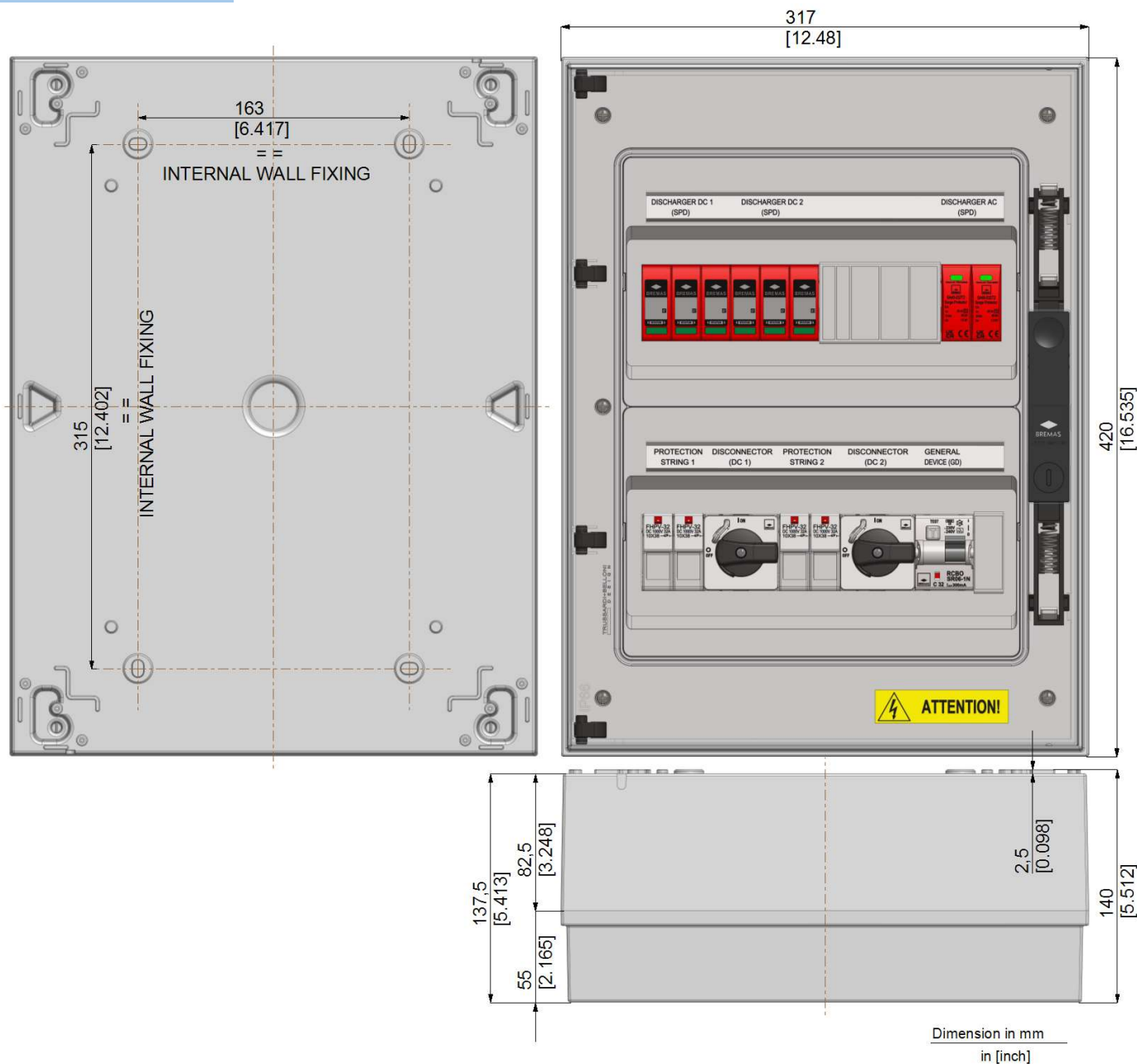
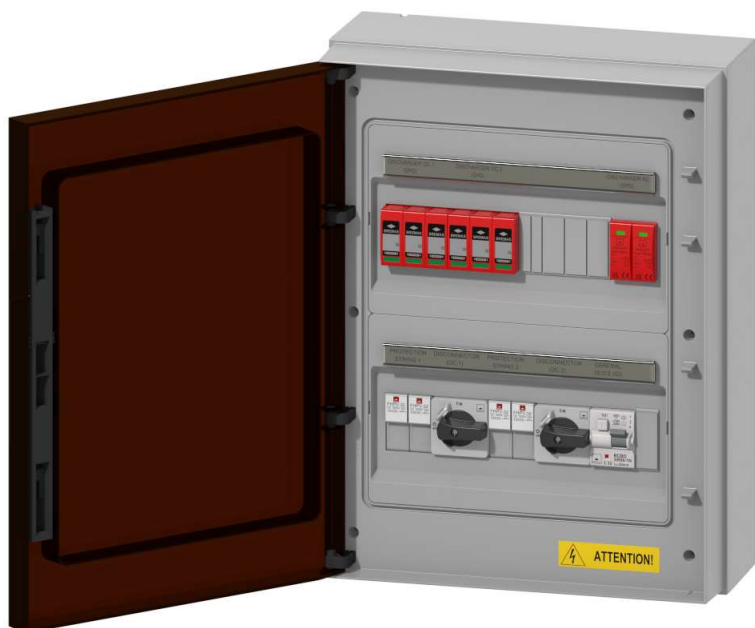
edition 01 : data 14/05/2025



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ISO 9001 Certified Quality System



**MBX10A22T2F20M32**



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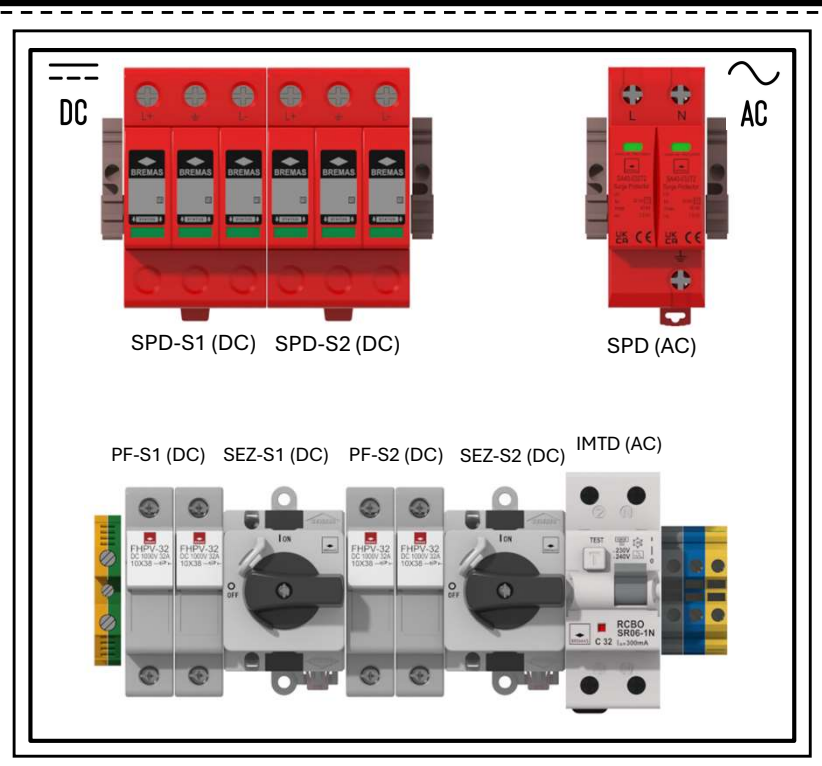
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## BREMAS ERSCE SPA

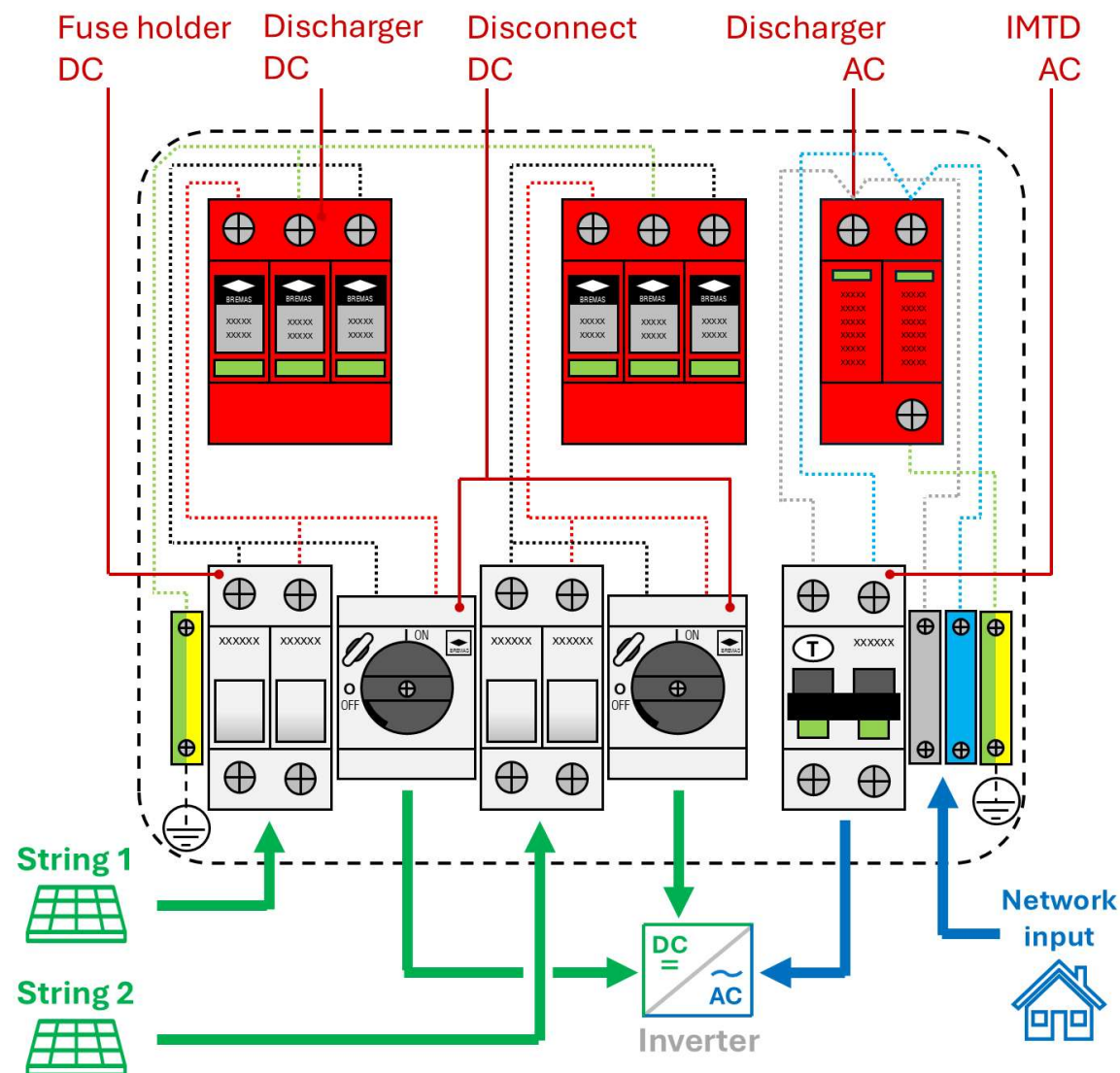
Declares that the electrical panel shown complies with the provisions of the Community directives including the latest amendments, and with the relevant national implementing legislation «Low Voltage Directive 2006/95/EC» and that the following national and international harmonised and technical standards have been applied – CEI 17-13/1, EN IEC 61439-1/2, CEI 82-25.



## INSERTION SCHEME

MBX10A22T2F20M32

AC/DC Panel - 1 Single Phase 32 A - 2 single string 1000 Vdc



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## ELECTRICAL CHARACTERISTICS

### DC SECTION

Rated values				DC
Rated operating voltage	Udc	V	1000	
Rated operating current	Idc	A	20	
Nr. of inputs		Nr	2	
Nr. of independent MPPT inputs		Nr	2	
Load disconnection				
Rated thermal current	Ith	A	50	
Utilization category			PV1	
Rated operating current at 600V	Ie	A	32	
Protection against overload and short circuit				
Nr. Poles		Nr	2	
Rated voltage	Udc	V	1000	
Rated operating current (fuses)	Ie	A	20	
Fuse size		mm	10x38	
Class of operation			gPV	
Breaking capacity		kA	30	
Overvoltage protection				
Test class acc. to EN61643-11 / Type			II/C	
Maximum continuous operating voltage	Ucpv	V	1000	
Nominal discharge current (8/20 µs)	In	kA	20	
Maximum discharge current (8/20 µs)	I <sub>max</sub>	kA	40	
Impulse current (10/350 µs)	I <sub>imp</sub>	kA	-	

### AC SECTION

Rated values				AC
Rated operating voltage	Uac	V	230	
Rated operating current	Iac	A	32	
Rated frequency	Fn	Hz	50	
Rated short - time withstand current for 1«	Icp	kA	6	
Protection against overload, short circuit and earth leakage				
Nr. Poles		Nr	2	
Tripping characteristics		Type	C	
Rated residual current	IΔn	mA	300	
Residual current tripping characteristic		Tipo Type	A	
Rated short-circuit capacity		kA	6	
Overvoltage protection				
Test class acc. to EN61643-11 / Type			II/C	
Maximum continuous operating voltage	Uc	V	320	
Nominal discharge current (8/20 µs)	In (L-N)	kA	20	
	In (N-PE)	kA	20	
	I <sub>imp</sub> (L-N)	kA	40	
	I <sub>imp</sub> (N-PE)	kA	40	
Maximum discharge current (8/20 µs)	I <sub>imp</sub>	kA	40	
Impulse current (10/350 µs)	I <sub>imp</sub>	kA	-	

### WIRING CHARACTERISTICS

Circuit	Cable type	Colour	Min. section
Main DC circ. (+)	STYLE 10269 AWG10 105°C 1000V UL	Red	6 mmq
Main DC circ. (-)	STYLE 10269 AWG10 105°C 1000V UL	Black	6 mmq
Earth	FS17	Yellow/Green	6 mmq
Main AC circ. (phases)	FS17	Black	6 mmq
Main AC circ. (neutral)	FS17	Blue	6 mmq
Aux 230V	FS17	Black / Blue	1,5 mmq
Aux 24V / 12V	FS17	Red / White	1,5 mmq
Construction characteristics			
Form of separation (IEC 439-1)		Form	1
Protection degree (enclosure)		IP	65
Protection class (enclosure)			II
Material (enclosure)			Polycarbonate
Operational ambient temperature		°C	-25 ÷ +50
Storage ambient temperature		°C	-40 ÷ +85
Humidity – Permitted range			
Colour (enclosure)			RAL 7035
Accessibility			from the front
Cables entry and exit			through the bottom

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