

MULTICLUSTER-BOXES for SUNNY ISLAND 5048



MC-BOX-6.3 / MC-BOX-12.3 / MC-BOX-36.3

Similar to figure

Flexible

- 3 different sizes from 30 to 300 kW
- Different generator, PV and load sizes

Simple

- Integrated AC distribution for Sunny Island, generator, PV
- Integrated load-shedding contactor

Reliability

- Active Anti-Islanding
- Reverse current monitoring
- Automatic bypass for the generator

Durable

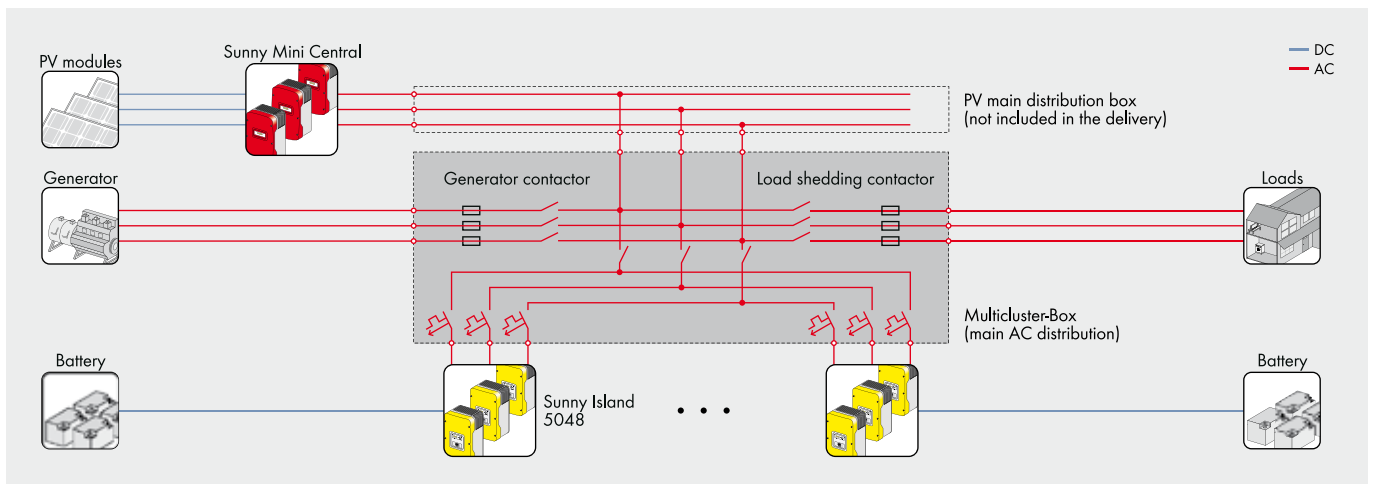
- IP65 high protection class
- 5-year SMA Warranty

MULTICLUSTER BOXES for SUNNY ISLAND 5048

For easy set-up of stand-alone and hybrid systems

Large off-grid systems with minimum effort: the new Multicuster-Boxes for the Sunny Island 5048 are the ideal solution for the easy installation of island and hybrid systems from 30 up to 300 kW. For this, 2 to 12 three-phase clusters, each consisting of 3 Sunny Island inverters, are connected in parallel. We designed the Multicuster Box as an AC distribution center for connecting generators and to supply loads up to 300 kW especially for these systems. To simplify installation, all Multicuster Boxes are completely wired and fitted at the factory with a main connector for PV or wind generators. All communication cables required for the installation are included in the delivery.

Technical data	Multicluste r-Box 6	Multicluste r-Box 12	Multicluste r-Box 36
General			
Number of phases	3-phase	3-phase	3-phase
Nominal AC voltage	230 V (L,N), 400 V (L1, L2)	230 V (L,N), 400 V (L1, L2)	230 V (L,N), 400 V (L1, L2)
AC voltage range	172.5 V - 265 V, 300 V - 433 V	172.5 V - 265 V, 300 V - 433 V	172.5 V - 250 V, 300 V - 433 V
Nominal AC frequency (range)	50 Hz (40 Hz - 70 Hz)	50 Hz (40 Hz - 70 Hz)	50 Hz (40 Hz - 70 Hz)
Permitted grid structure	TN	TN	TN
Dimensions (W / H / D) in mm	760 / 760 / 210	1000 / 1400 / 300	1200 / 2000 / 850
Mounting type	suspended	standing on a plinth	standing on a plinth
Weight	60 kg	140 kg	300 kg
Connections for Sunny Island			
Number of devices max.	6	12	36
Continuous AC power / AC current at 25 °C	30 kW / 3 x 44 A	60 kW / 3 x 87 A	180 kW / 3 x 260 A
Continuous AC power / AC current at 45 °C	24 kW / 3 x 35 A	48 kW / 3 x 70 A	144 kW / 3 x 209 A
AC power / AC current for 30 min.	40 kW	80 kW	234 kW / 3 x 340 A
AC power / AC current for 1 min.	50 kW	100 kW	300 kW / 3 x 440 A
Fuses	circuit breaker C32A	circuit breaker C32A	circuit breaker C32A
PV system connection			
Quantity	1 (three-phase)	1 (three-phase)	1 (three-phase)
Continuous AC power PV / continuous AC current PV at 25 °C	55 kW / 3 x 80A	110 kW / 3 x 160 A	300 kW / 3 x 435 A (AC1)
Fuses	-	-	-
Load connection			
Quantity	1 (three-phase)	1 (three-phase)	1 (three-phase)
Nominal power / current at 25 °C	55 kW / 3 x 80A	110 kW / 3 x 160 A	300 kW / 3 x 435 A (AC1)
Fuses	NH00	NH00	NH03
Generator connection			
Quantity	1 (three-phase)	1 (three-phase)	1 (three-phase)
Nominal generator power / current at 25 °C	55 kW / 3 x 80A	110 kW / 3 x 160 A	300 kW / 3 x 435 A (AC1)
Fuses	NH00	NH00	NH03
Features / function			
Warranty (5 / 10 / 15 / 20 / 25 years)	●/○/○/○/○	●/○/○/○/○	●/○/○/○/○
Certificates and permits	CE	CE	CE
Ambient Conditions			
Ambient temperature	-25 °C ... +50 °C	-25 °C ... +50 °C	-25 °C ... +60 °C
Protection class (according IEC 60529)	IP65	IP65	IP55
Air humidity	0 % ... 100 %	0 % ... 100 %	0 % ... 100 %
Accessories			
Communication cables	●	●	●
Multicluste r Piggy-Back	○	○	○
● Standard features ○ Optional features - not available			
Dated May 2010			
Type designation	MC-BOX-6.3	MC-BOX-12.3	MC-Box-36.3



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