MULTICLUSTER BOXES FOR SUNNY ISLAND

MC-BOX-6.3 / MC-BOX-12.3 / MC-BOX-36.3-11

Similar to figure

Flexible

- Three different power classes, from 20 kW to 300 kW
- Different generators, PV and load magnitudes

Simple

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

Safe

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

Robust

- High protection class IP65 (MC-Box-6.3-11)
- High protection class IP54 (MC-Box-12.3 / MC-Box-36.3-11)
- 5-year SMA warranty

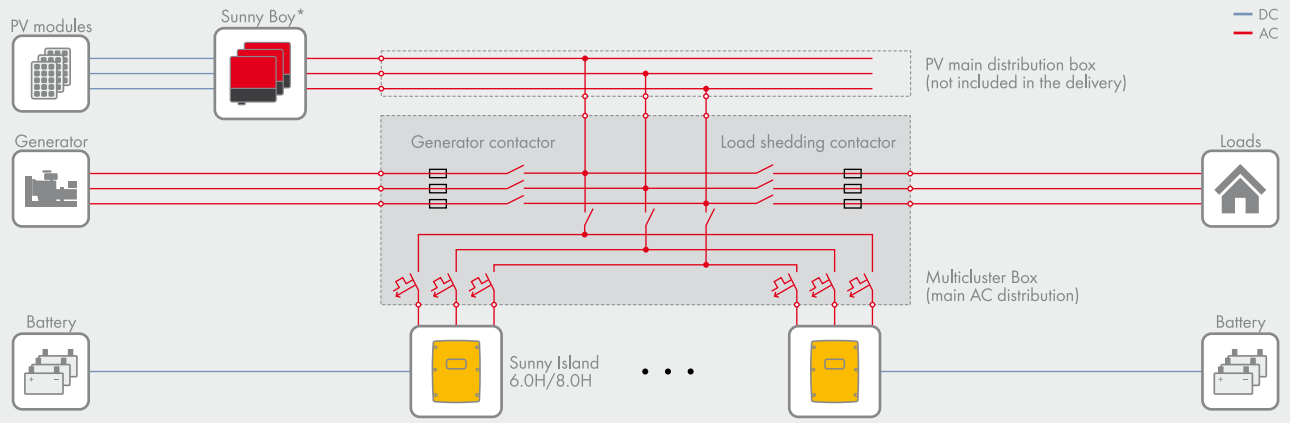
Multicluster Boxes for SUNNY ISLAND

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

The power of the AC main distribution unit for Sunny Island systems has been increased by 20 %. This allows off-grid and hybrid systems in the power ranges of 20 to 300 kW to be implemented even more cost-effectively. The specific costs for the overall system are being reduced thanks to a maximum PV output of 360 kW and the flexible design capability of the Sunny Island 6.0H / 8.0H. Based on proven technology, 2 to 12 three-phase clusters, each consisting of 3 Sunny Island inverters, can be connected in parallel. To simplify installation, all Multicluster Boxes are completely wired and fitted at the factory and have a main connector for generators, the load distribution and PV or wind turbine systems. All data cables required for the installation are included in the delivery. With the Multicluster solution for Sunny Island, you really have thought of everything. Even complex energy supply solutions are easy to implement.

Multicluster Boxes for SUNNY ISLAND

Technical data	Multicluster-Box 6	Multicluster-Box 12
Load Connection		
Rated voltage	230 V (LN), 400 V (L1, L2)	230 V (LN), 400 V (L1, L2)
AC voltage range	172.5 V – 250 V 300 V – 433 V	172,5 V – 265 V 300 V – 433 V
Rated frequency / frequency range	50 Hz / 40 Hz ... 70 Hz	50 Hz / 40 Hz ... 70 Hz
Number	1 (three-phase)	1 (three-phase)
Rated power	55 kW	110 kW
AC current at rated values	3 x 80 A	3 x 160 A
Fuses	LV/HRC size 00	LV/HRC size 00
Connections for Sunny Island		
Maximum number of devices	6	12
AC rated power / AC current at rated values	36 kW / 3 x 52 A	72 kW / 3 x 104 A
AC power at 45 °C / AC current at 45 °C	32 kW / 3 x 46 A	48 kW / 3 x 70 A
AC power (25 °C, 30 min)	48 kW	96 kW
AC power (25 °C, 5 min)	55 kW	110 kW
Fuses	Miniature circuit-breaker C40A	Miniature circuit-breaker C32A
Turbine connection		
Number	1 (three-phase)	1 (three-phase)
Rated grid input power	55 kW	110 kW
AC input current	3 x 80 A	3 x 160 A
Fuses	NH00	NH00
PV plant connection		
Number	1 (three-phase)	1 (three-phase)
PV rated power	55 kW	110 kW
AC current at rated values	3 x 80 A	3 x 160 A
Fuses	–	–
General data		
Number of phases	3-phasig	3-phasig
Permitted grounding system	TN-S	TN
Dimensions (W / H / D)	760 / 760 / 210 mm	1000 / 1400 / 300 mm
Mounting type	suspended	Standing on a base
Priority	55 kg	140 kg
Ambient temperature	-25 °C ... +50 °C	-25 °C ... +50 °C
Degree of protection (according to IEC 60529)	IP65	IP54
Maximum permissible value for relative humidity (non-condensing)	0 % ... 100 %	0 % ... 100 %
Warranty (5 years)	●	●
Certificates:	CE	CE
Communication cables	●	●
● Standard features ○ Optional features – Not available		
Type designation	MC-Box-6.3-11	MC-Box-12.3



Can also be used with Sunny Tripower.

Technical data	Multicluster-Box 36	
Load Connection		
Rated voltage	230 V (LN), 400 V (L1, L2)	
AC voltage range	172.5 V – 250 V 300 V – 433 V	
Rated frequency / frequency range	50 Hz / 40 Hz ... 70 Hz	
Number	1 (three-phase)	
Rated power	300 kW	
AC current at rated values	3 x 435 A (AC1)	
Fuses	LV/HRC size 3	
Connections for Sunny Island		
Maximum number of devices	36	
AC rated power / AC current at rated values	216 kW / 3 x 313 A	
AC power at 45 °C / AC current at 45 °C	195 kW / 3 x 283 A	
AC power (25 °C, 30 min)	288 kW	
AC power (25 °C, 5 min)	328 kW	
Fuses	Miniature circuit-breaker C40A	
Turbine connection		
Number	1 (three-phase)	
Rated grid input power	300 kW	
AC input current	3 x 435 A (AC1)	
Fuses	LV/HRC size 3	
PV plant connection		
Number	1 (three-phase)	
PV rated power	360 kW	
AC current at rated values	3 x 522 A (AC1)	
Fuses	–	
General data		
Number of phases	three-phase	
Permitted grounding system	TN	
Dimensions (W / H / D)	1200 / 2000 / 800 mm	
Mounting type	Standing on a base	
Priority	400 kg	
Ambient temperature	-25 °C ... +60 °C	
Degree of protection (according to IEC 60529)	IP54	
Maximum permissible value for relative humidity (non-condensing)	0 % ... 100 %	
Warranty (5 years)	●	
Certificates:	CE	
Communication cables	●	
● Standard features ○ Optional features – Not available		
Type designation	MC-Box-36.3-11	

SMA Off-Grid Configurator

Design and simulation program for off-grid systems

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