MULTICLUSTER-BOXES FOR SUNNY ISLAND



Flexible
- Capacities from 20 kW to 300 kW
- For stand-alone grids
- MC-Box 12.3-20 also grid-connected for optimum self-consumption and battery backup

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

Safe
- Automatic bypass for the generator
- Active anti-islanding
- Reverse current monitoring

Robust
- High protection classes
- 5-year SMA warranty

Multicluster-Boxes for SUNNY ISLAND

Easy creation of powerful on- and off-grid applications

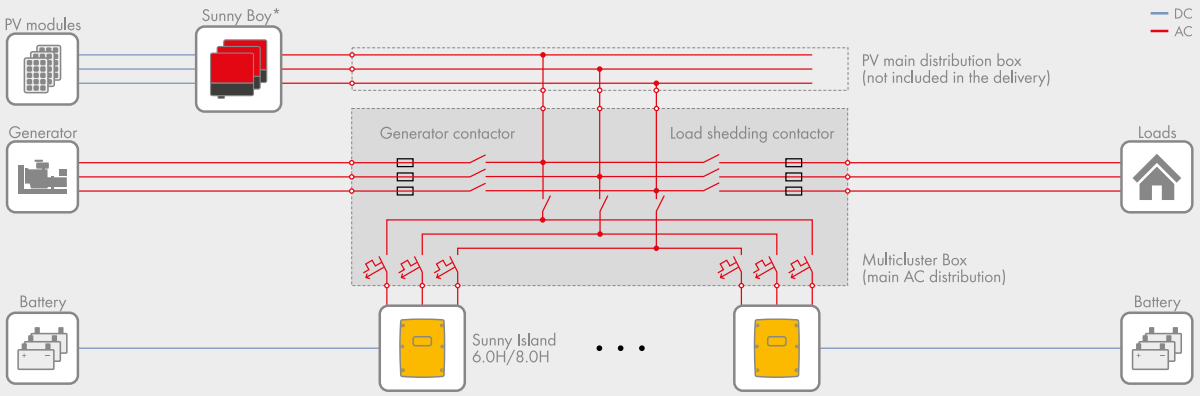
With the SMA Multicluster-Boxes for the Sunny Island battery inverter, both off-grid systems and grid-connected PV systems can be configured easily and cost-efficiently. In rural regions without grid access, high-performance off-grid and hybrid systems with 2 to 12 three-phase clusters, each consisting of 3 Sunny Island inverters with up to 360 kW of connectable PV power, can be implemented.

For systems connected to the utility grid, self-consumption and battery backup applications with up to 138 kilowatt-peaks can be achieved. To simplify installation, all Multicluster-Boxes are completely wired at the factory and have a main connector for generators, the load distribution and PV or wind turbine systems.

The Multicluster-Boxes are ideal for use in businesses and to supply electricity to rural regions – with or without grid access.

Multicluster-Boxes for SUNNY ISLAND

Technical Data	Multicluster-Box 6	Multicluster-Box 12
Load connection		
Rated voltage	230 V (L, N), 400 V (L1, L2)	230 V (L, N), 400 V (L1, L2)
AC voltage range	172.5 V to 250 V 300 V to 433 V	172.5 V to 265 V 300 V to 433 V
Rated frequency / frequency range	50 Hz / 40 Hz to 70 Hz	50 Hz, 60 Hz / 45 Hz to 65 Hz
Quantity	1 (three-phase)	1 (three-phase)
Rated power	55 kW	138 kW
AC current at rated values	3 x 80 A (AC1)	3 x 200 A (AC1)
Fuses	LV/HRC size 00	LV/HRC size 1
Sunny Island connections		
Maximum number of devices	6	12
AC rated power / AC current at rated values	36 kW / 3 x 52 A	72 kW / 12 x 26 A
AC power at 45°C / AC current at 45°C	32 kW / 3 x 46 A	65 kW / 3 x 94 A
AC power (25°C, 30 min)	48 kW	96 kW
AC power (25°C, 5 min)	55 kW	110 kW
Fuses	6 x circuit breaker C40 A	12 x circuit breaker C40A
Generator connection		
Quantity	1 (three-phase)	1 (three-phase)
Rated grid input power	55 kW	138 kW
AC input current	3 x 80 A	3 x 200 A
Fuses	LV/HRC size 00	LV/HRC size 1
PV system connection		
Quantity	1 (three-phase)	1 (three-phase)
PV rated power	55 kW	138 kW
AC current at rated values	3 x 80 A	3 x 200 A
Fuses	–	–
General data		
Number of phases	Three-phase	Three-phase
Permitted grid configuration	TN-S	TN-S, TN-C-S and TT
Dimensions (W / H / D)	760 / 760 / 210 mm	1200 / 1600 / 435 mm
Mounting type	Suspended	Base mounted
Weight	55 kg	200 kg
Ambient temperature	-25°C to +50°C	-25°C to +60°C
Degree of protection (as per IEC 60529)	IP65	IP55
Maximum permissible value for relative humidity (non-condensing)	0% to 100%	0% to 100%
Warranty (5 years)	●	●
Data cables	●	●
Certificates	CE	CE
Connection to the utility grid (optimized self-consumption and battery-backup function) NA-BOX / GRID-BOX required	–	●
● Standard feature ○ Optional feature – Not available		
Type designation	MC-Box-6.3-11	MC-Box-12.3-20



*Also possible with Sunny Tripower

Technical Data	Multicluster-Box 36	
Load connection		
Rated voltage	230 V (L, N), 400 V (L1, L2)	
AC voltage range	172.5 V to 250 V 300 V to 433 V	
Rated frequency / frequency range	50 Hz / 40 Hz to 70 Hz	
Quantity	1 (three-phase)	
Rated power	300 kW	
AC current at rated values	3 x 435 A (AC1)	
Fuses	LV/HRC size 3	
Sunny Island connections		
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	36 x circuit breaker C40 A	
Generator connection		
Quantity	1 (three-phase)	
Rated grid input power	300 kW	
AC input current	3 x 435 A (AC1)	
Fuses	LV/HRC size 3	
PV system connection		
Quantity	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 grid configuration	TN-S	
Dimensions (W / H / D)	1200 / 2000 / 800 mm	
Mounting type	Base mounted	
Weight	400 kg	
Ambient temperature	-25°C to +60°C	
Degree of protection (as per IEC 60529)	IP54	
Maximum permissible value for relative humidity (non-condensing)	0% to 100%	
Warranty (5 years)	●	
Data cables	●	
Certificates	CE	
Connection to the utility grid (optimized self-consumption and battery-backup function) NA-BOX / GRID-BOX required	–	
● Standard feature ○ Optional feature – Not available		
Type designation	MC-Box-36.3-11	



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