

MULTICLUSTER-BOXES for SUNNY ISLAND 5048



Flexible

- Three different power ranges from 30 kW to 300 kW
- Different generators, PV and load magnitudes

Simple

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

Reliable

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

Durable

- High protection class IP65
- 5-year SMA warranty

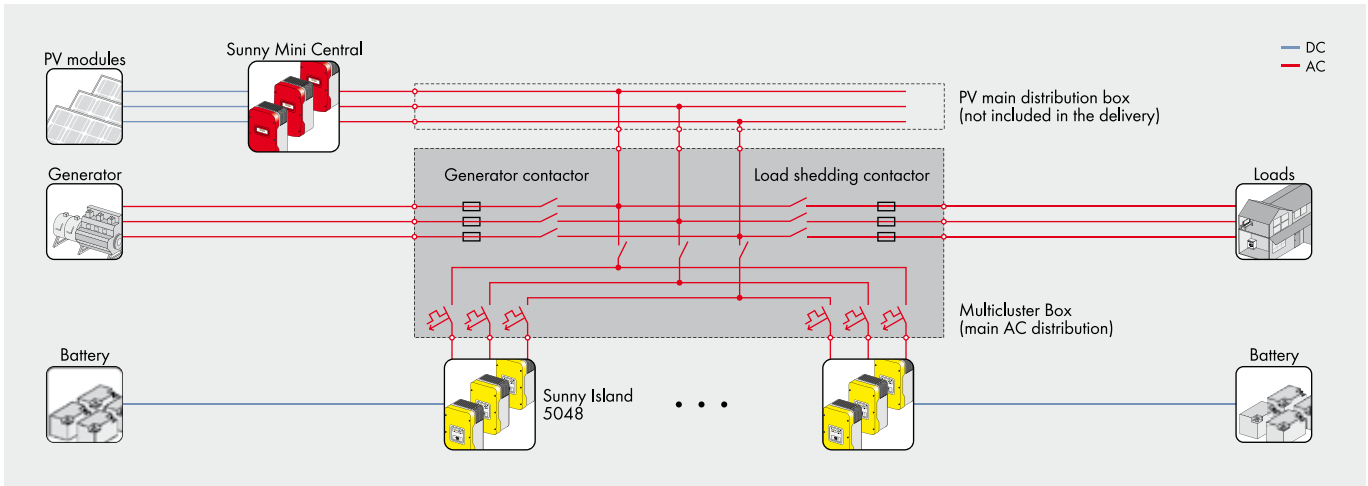
Multicuster Boxes for SUNNY ISLAND 5048

For Easy Set-Up of Stand-Alone and Hybrid Systems

The Multicuster Boxes for Sunny Island 5048 enable the formation of off-grid and hybrid systems with a capacity of between 30 and 300 kW. As the main AC distribution for the connection of generators and to supply loads of up to 300 kW, between two and 12 three-phase clusters, each consisting of three Sunny Island inverters, can be connected in parallel using the Multicuster Box. To simplify installation, all Multicuster Boxes are completely wired and fitted at the factory and have a main connector for PV plants or wind turbine systems. All communication cables required for the installation are included in the delivery.

MULTICLUSTER BOXES for SUNNY ISLAND 5048

Technical Data	SUNNY ISLAND 5048 Multiclustler Box 6	SUNNY ISLAND 5048 Multiclustler Box 12
General		
Phase number	3-phase	3-phase
Nominal AC voltage	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
Nominal AC frequency / range	50 Hz / 40 Hz ... 70 Hz	50 Hz / 40 Hz ... 70 Hz
Reliable grid configuration	TN	TN
Dimensions (W / H / D)	760 / 760 / 210 mm	1000 / 1400 / 300 mm
Assembly type	Suspended	Standing on base
Weight	60 kg	140 kg
Terminals for Sunny Island		
Maximum number of devices	6	12
Nominal AC power / nominal AC current at 25 °C	30 kW / 3 x 44 A	60 kW / 3 x 87 A
Nominal AC power / nominal AC current at 45 °C	24 kW / 3 x 35 A	48 kW / 3 x 70 A
AC power (25 °C, 30 minutes)	40 kW	80 kW
AC power (25 °C, 1 minute)	50 kW	100 kW
Fuses	Miniature circuit-breaker C 32A	Miniature circuit-breaker C 32A
Load connection		
Number	1 (3-phase)	1 (3-phase)
Nominal AC power (25 °C, unlimited)	55 kW	110 kW
Nominal AC current (25 °C)	3 x 80 A	3 x 160 A
Fuses	LV / HRC (size 00)	LV / HRC (size 00)
PV plant connection		
Number	1 (3-phase)	1 (3-phase)
Nominal AC power (25 °C, unlimited)	55 kW	110 kW
Nominal AC current (25 °C)	3 x 80 A	3 x 160 A
Fuses	–	–
Generator connection		
Number	1 (3-phase)	1 (3-phase)
Nominal AC power (25 °C, unlimited)	55 kW	110 kW
Nominal AC current (25 °C)	3 x 80 A	3 x 160 A
Fuses	LV / HRC (size 00)	LV / HRC (size 00)
Features		
Warranty (5 / 10 / 15 / 20 / 25 years)	● / ○ / ○ / ○ / ○	● / ○ / ○ / ○ / ○
Certificates	CE	CE
Ambient conditions		
Ambient temperature	-25 °C ... +50 °C	-25 °C ... +50 °C
Degree of protection (according to IEC 60529)	IP65	IP65
Humidity	0 % ... 100 %	0 % ... 100 %
Accessories		
Communication lines	●	●
Multiclustler Piggy-Back	○	○
● Standard features ○ Optional – Not available		
Type designation	MC-BOX-6.3	MC-BOX-12.3



Technical Data	SUNNY ISLAND 5048 Multicluster Box 36	
General		
Phase number	3-phase	
Nominal AC voltage	230 V (L, N), 400 V (L1, L2)	
AC voltage range	172.5 V - 250 V 300 V - 433 V	
Nominal AC frequency / range	50 Hz / 40 Hz ... 70 Hz	
Reliable grid configuration	TN	
Dimensions (W / H / D)	1200 / 2000 / 800 mm	
Assembly type	Standing on base	
Weight	400 kg	
Terminals for Sunny Island		
Maximum number of devices	36	
Nominal AC power / nominal AC current at 25 °C	180 kW / 3 x 260 A	
Nominal AC power / nominal AC current at 45 °C	144 kW / 3 x 209 A	
AC power (25 °C, 30 minutes)	234 kW / 3 x 340 A	
AC power (25 °C, 1 minute)	300 kW / 3 x 440 A	
Fuses	Miniature circuit-breaker C 32A	
Load connection		
Number	1 (3-phase)	
Nominal AC power (25 °C, unlimited)	300 kW	
Nominal AC current (25 °C)	3 x 435 A (AC1)	
Fuses	LV / HRC (size 3)	
PV plant connection		
Number	1 (3-phase)	
Nominal AC power (25 °C, unlimited)	300 kW	
Nominal AC current (25 °C)	3 x 435 A (AC1)	
Fuses	—	
Generator connection		
Number	1 (3-phase)	
Nominal AC power (25 °C, unlimited)	300 kW	
Nominal AC current (25 °C)	3 x 435 A (AC1)	
Fuses	LV / HRC (size 3)	
Features		
Warranty (5 / 10 / 15 / 20 / 25 years)	● / ○ / ○ / ○ / ○	
Certificates	CE	
Ambient conditions		
Ambient temperature	-25 °C ... +60 °C	
Degree of protection (according to IEC 60529)	IP54	
Humidity	0 % ... 100 %	
Accessories		
Communication lines	●	
Multicluster Piggy-Back	○	
● Standard features ○ Optional – Not available		
Type designation	MC-BOX-36.3	

SMA OFF-GRID CONFIGURATOR

Design and Simulation Program for Off-Grid Systems

