

DC-CMB-U10-16 / DC-CMB-U10-24 / DC-CMB-U10-32 /
DC-CMB-U15-16 / DC-CMB-U15-24 / DC-CMB-U15-32



Robust

- Stable housing made of glass-fiber-reinforced polyester
- Indoor and outdoor installation possible thanks to IP54 degree of protection

- Can be operated at ambient temperatures of -25°C to 60°C and at altitudes of up to 4,000 m above MSL

Easy to Use

- Easy to install thanks to its compact structure and low weight
- Integrated DC load-break switch for ultra-high safety

Versatile

- For PV array voltages of 1,000 V and 1,500 V
- Collection and safeguarding of 16, 24 or 32 strings for flexibility during the system design phase

SMA STRING-COMBINER

For safe collection of all strings in the PV field

The boxes can be installed quickly, safely and easily both indoors and outdoors thanks to their compact dimensions, while their robust enclosure guarantees durability and reliable safety in the PV field. The SMA String-Combiners with 24 and 32 string inlets are fitted with two cable outlets per pole as standard and cover – just like the Combiner with 16 string inlets – a sealing range of 17 to 38.5 millimeters. Cables with cross-sections of 70 to 400 mm² can be inserted.

SMA STRING-COMBINER

for 1,000 V_{DC} systems

Technical Data	DC-CMB-U10-16	DC-CMB-U10-24	DC-CMB-U10-32
Input (DC)			
Rated voltage	1,000 V	1,000 V	1,000 V
Altitude derating (rated voltage)	2,001 m to 3,000 m above MSL = reduction by 1.0% per 100 m 3,001 m to 4,000 m above MSL = reduction by 1.2% per 100 m		
Number of string inputs / fuse holders per pole	16	24	32
Rated current	12.5 A	12.5 A	12.5 A
Fuse type*	10.3 x 38 - 1,000 VDC - gPV		
String connection	Connection to the fuse holder		
Sealing range of cable gland	5 mm to 8 mm		
Output (DC)			
Rated current	220 A	300 A	360 A
Temperature derating (rated current)	>50°C operating temperature = reduction by 1% per K		
DC switch (load-break switch)	250 A / 1,000 V	400 A / 1,000 V	400 A / 1,000 V
Surge arrester	Type 2, I _n = 15 kA; I _{max} = 40 kA		
DC output	Busbar (ring terminal lug M12)		
Number of DC outputs	1	1 / 2	1 / 2
Conductor cross-section	Busbar 70 mm ² to 400 mm ²		
Sealing range of cable glands	17 mm to 38.5 mm	17 mm to 38.5 mm	17 mm to 38.5 mm
Enclosure / Ambient Parameters			
IP degree of protection according to IEC 60529	IP 54 / self-ventilated	IP 54 / self-ventilated	IP 54 / self-ventilated
Enclosure material	Glass-fiber reinforced plastic / UV-resistant		
Dimensions (W / H / D), wall mounting bracket and string cable harness included	550 / 650 / 260 mm (21.65 / 25.59 / 10.24 inch)		590 / 790 / 285 mm (23.23 / 31.10 / 11.22 inch)
Max. weight	24.2 kg (53.5 lb)	27.4 kg (60.5 lb)	34 kg (75 lb)
Protection class (according to IEC 60529)	II	II	II
Mounting type	Wall mounting		
Ambient temperature in operation / during storage	-25°C to +60°C / -40°C to +70°C		
Relative humidity	0% to 95%, non-condensing		
Max. altitude above MSL	4,000 m	4,000 m	4,000 m
Standards			
Compliance	CE, IEC 61439-1, IEC 61439-2		
* accessory required			

SMA STRING-COMBINER for 1,500 V_{DC} systems

Technical Data	DC-CMB-U15-16	DC-CMB-U15-24	DC-CMB-U15-32
Input (DC)			
Rated voltage	1,500 V	1,500 V	1,500 V
Altitude derating (rated voltage)	2,001 m to 3,000 m above MSL = reduction by 1.0% per 100 m 3,001 m to 4,000 m above MSL = reduction by 1.2% per 100 m		
Number of string inputs / fuse holders per pole	16	24	32
Rated current	17.2 A	13.75 A	9.37 A
Fuse type*	10.3 x 38 - 1,000 VDC - gPV		
String connection	Connection to the fuse holder		
Sealing range of cable gland	5 mm to 8 mm		
Output (DC)			
Rated current	275 A	330 A	330 A
Temperature derating (rated current)	>50°C operating temperature = reduction by 1% per K		
DC switch (load-break switch)	400 A / 1,500 V	400 A / 1,500 V	400 A / 1,500 V
Surge arrester	Type 2, I _n = 15 kA; I _{max} = 40 kA		
DC output	Busbar (ring terminal lug M12)		
Number of DC outputs	1	1 / 2	1 / 2
Conductor cross-section	Busbar 70 mm ² to 400 mm ²		
Sealing range of cable glands	17 mm to 38.5 mm	17 mm to 38.5 mm	17 mm to 38.5 mm
Enclosure / Ambient Parameters			
IP degree of protection according to IEC 60529	IP 54 / self-ventilated	IP 54 / self-ventilated	IP 54 / self-ventilated
Enclosure material	Glass-fiber reinforced plastic / UV-resistant		
Dimensions (W / H / D), wall mounting bracket and string cable harness included	590 / 790 / 285 mm (23.23 / 31.10 / 11.22 inch)		720 / 910 / 320 mm (23.23 / 31.10 / 11.22 inch)
Max. weight	34 kg (75 lb)		
Protection class (according to IEC 60529)	II	II	II
Mounting type	Wall mounting		
Ambient temperature in operation / during storage	-25°C to +60°C / -40°C to +70°C		
Relative humidity	0% to 95%, non-condensing		
Max. altitude above MSL	4,000 m	4,000 m	4,000 m
Standards			
Compliance	CE, IEC 61439-1, IEC 61439-2		
* accessory required			

SYSTEM EXAMPLE



