

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 4000 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 1000 V and 1500 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 1000 V_{DC} systems

| Technical Data | DC-CMB-U10-16 | DC-CMB-U10-24 | DC-CMB-U10-32 |
|---|--|-------------------------|--|
| Input (DC) | | | |
| Rated voltage | 1000 V | 1000 V | 1000 V |
| Altitude derating (rated voltage) | 2001 m to 3000 m above MSL = reduction by 1.0% per 100 m 3001 m to 4000 m above MSL = reduction by 1.2% per 100 m | | |
| Number of string inputs / fuse holders per pole | 16 | 24 | 32 |
| Rated current | 13.75 A | 12.5 A | 12.5 A |
| Fuse type* | 10.3 x 38 - 1000 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 / 1000 V | 400 A / 1000 V | 400 A / 1000 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 61140) | 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 | 4000 m | 4000 m | 4000 m |
| Standards | | | |
| Compliance | CE, IEC 61439-1, IEC 61439-2 | | |
| * accessory required | | | |

SMA STRING-COMBINER for 1500 V_{DC} systems

| Technical Data | DC-CMB-U15-16 | DC-CMB-U15-24 | DC-CMB-U15-32 |
|---|--|-------------------------|--|
| Input (DC) | | | |
| Rated voltage | 1500 V | 1500 V | 1500 V |
| Altitude derating (rated voltage) | 2001 m to 3000 m above MSL = reduction by 1.0% per 100 m 3001 m to 4000 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 | 10.31 A |
| Fuse type* | 10.3 x 85 - 1500 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 / 1500 V | 400 A / 1500 V | 400 A / 1500 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 | 25 kg (55 lb) | 28 kg (62 lb) | 40 kg (88 lb) |
| Protection class (according to IEC 61140) | 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 | 4000 m | 4000 m | 4000 m |
| Standards | | | |
| Compliance | CE, IEC 61439-1, IEC 61439-2 | | |
| * accessory required | | | |

SYSTEM EXAMPLE



