

DC Combiner Boxes



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DESIGN COMBINER BOXES - OVERVIEW

Generator junction boxes, ready for connection for 1 MPPT, 2 MPPT or 3 MPPT



MSB-111-16-1000-CDC
1 MPPT / 1 Eingang / 1 Ausgang
1005 VDC / 16A max / Eingang/Ausgang



MSB-111-16-1000-MDM-BC
1 MPPT / 1 Eingang / 1 Ausgang
1005 VDC / 16A max / Eingang/Ausgang



MSB-111-32-1000-TB-BC
1 MPPT / 1 input / 1 output
1000 VDC / 32A max / input / output



MSB-222-32-1000-CDC-BC
2 MPPT / 2 input / 2 output
1005 VDC / 32A max / input / output



MSB-222-32-1000-MDM-BC
2 MPPT / 2 input / 2 output / MC4-EVO
1005 VDC / 32A max / input / output



MSB-222-32-1000-TB-BC
2 MPPT / 2 input / 2 output
1000 VDC / 32A max / input / output



MSB-242-16-1000-CDC-BC
2 MPPT / 4 input / 2 output
1005 VDC / 16A input / 32A output



MSB-242-16-1000-MDM-BC
2 MPPT / 4 input / 2 output / MC4-EVO
1005 VDC / 16A input / 32A output

DESIGN COMBINER BOXES - OVERVIEW

Generator junction boxes, ready for connection for 1 MPPT, 2 MPPT or 3 MPPT



MSB-242-16-1000-TB-BC
2 MPPT / 4 input / 2 output
1000 VDC / 16A input / 32A output



MSB-244-16-1000-CDC-BC
2 MPPT / 4 input / 4 output
1005 VDC / 16A input / 16 output



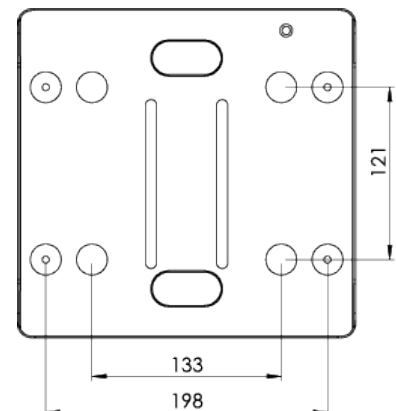
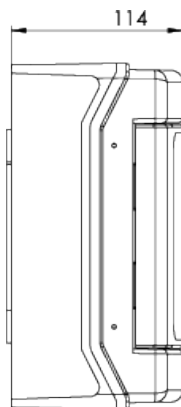
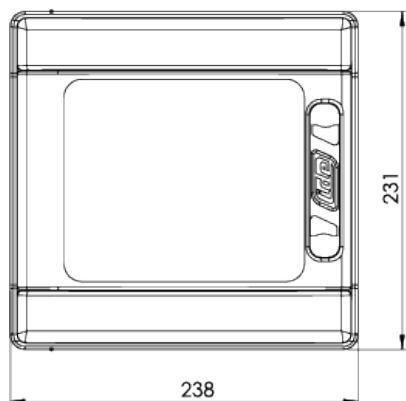
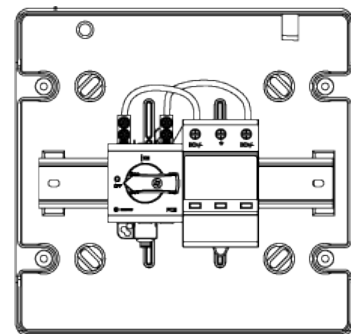
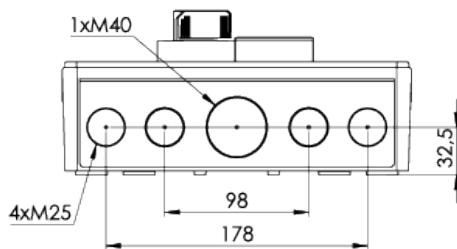
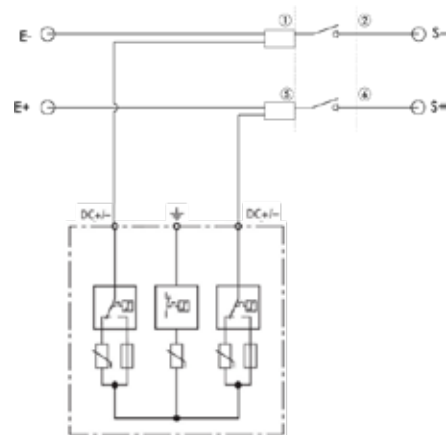
MSB-244-16-1000-MDM-BC
2 MPPT / 4 input / 4 output / MC4-EVO
1005 VDC / 16A input / 16 output



MSB-333-16-1000-MDM-BC
3 MPPT / 3 input / 3 output
1005 VDC / 16A input / 16 output

DESIGN MSB-111-16-1000-CDC

Ready-to-connect generator junction box for PV systems up to 1005 VDC
With DC Switch disconnector
Overvoltage protection (SPD) type 2

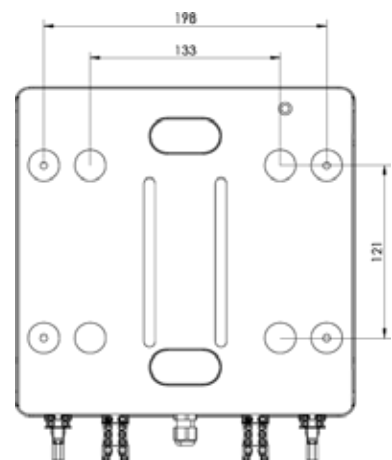
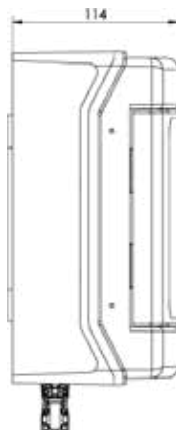
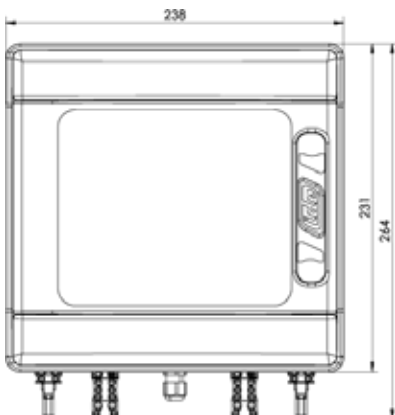
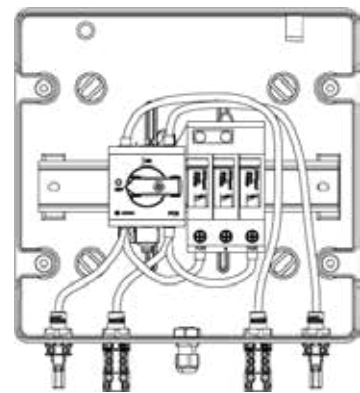
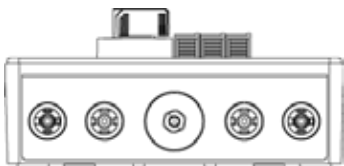
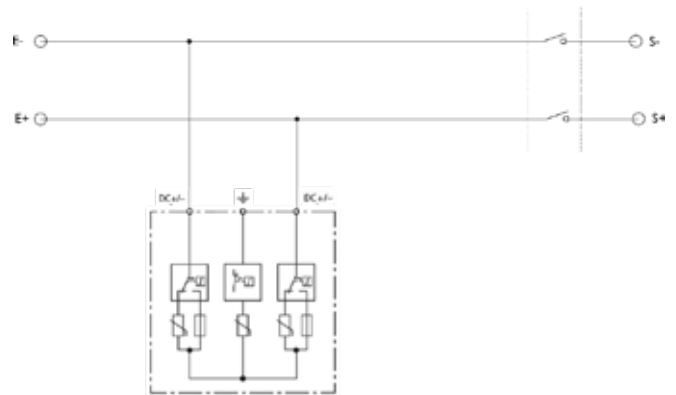


SPECIFICATIONS

| Electrical data | | is/from | to |
|---|-------------------------|---|-----------|
| Max. supported MPPT | | 1 | |
| Inputs (per MPPT) | | 1 | |
| Outputs (per MPPT) | | 1 | |
| Rated operational voltage U_e | Vdc | 1005 | |
| Max. Current per string (input) | A | 16 | |
| Max. Current per string (output) | A | 16 | |
| Surge arrester (SPD) | | | |
| SPD according to EN 61643-31 | | Type 2 | |
| Protection level U_p | kA | ≤4 | |
| Total leakage surge current (8/20 μs) (I_{total}) | kA | 40 | |
| DC-Switch disconnecter | | | |
| Model | | MDC10-2 | |
| Rated operational voltage U_e | V | 1005 | |
| Rated operational current I_e DC-PV1 (per MPPT) | A | 16 | |
| Connection data | | | |
| Input | | Stäubli MC4-EVO / 2,5 - 6 mm ² | |
| Output | | Stäubli MC4-EVO / 2,5 - 6 mm ² | |
| Grounding | | Screw connection min. 6 mm ² | |
| Strip length | mm | 12 | |
| Tightening torque | Nm | 4 | |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Enclosure | | | |
| Material | | ABS, Polycarbonat (Viewing window) | |
| Protection class | | IP 65 | |
| Impact resistance | | IK 08 | |
| Over voltage category | | II | |
| Operating conditions | | | |
| Location | | Indoor / protected outdoor area | |
| Ambient temperature | | -25°C - +40°C | |
| Standards | | | |
| Standards | | 61439-2 | |

DESIGN MSB-111-16-1000-MDM-BC

Ready-to-connect generator junction box for PV systems up to 1005 VDC
With DC Switch disconnector
Overvoltage protection (SPD) type 2
Stäubli MC4-Evo connector

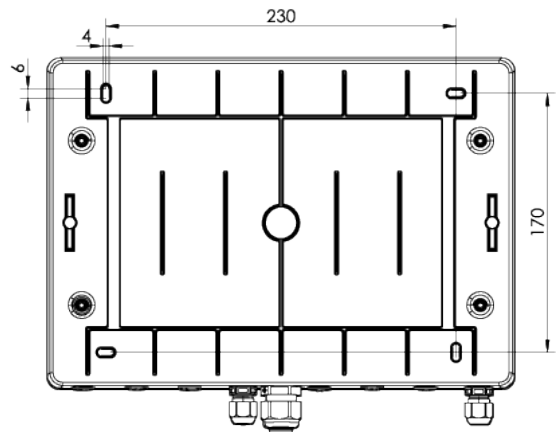
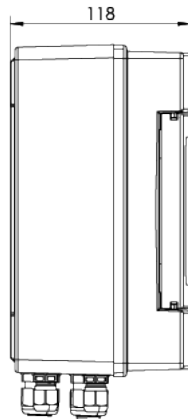
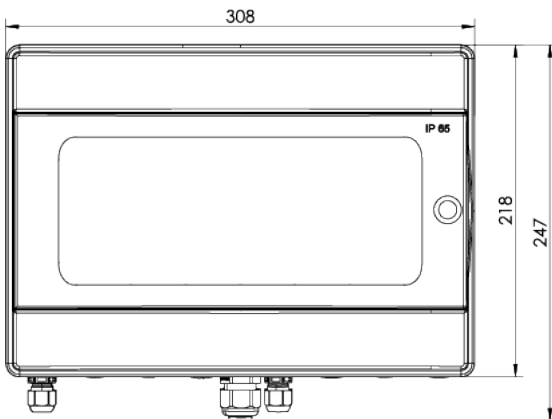
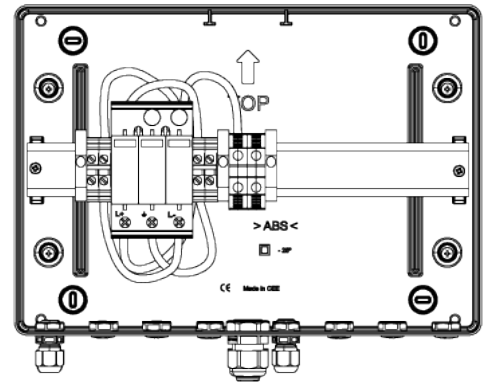
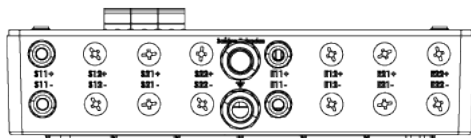
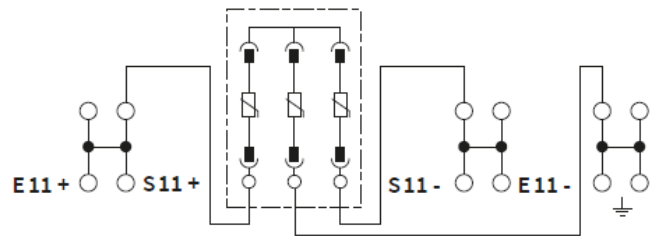


SPECIFICATIONS

| Electrical data | | is/from | to |
|---|-------------------------|---|-----------|
| Max. supported MPPT | | 1 | |
| Inputs (per MPPT) | | 1 | |
| Outputs (per MPPT) | | 1 | |
| Rated operational voltage U_e | Vdc | 1005 | |
| Max. Current per string (input) | A | 16 | |
| Max. Current per string (output) | A | 16 | |
| Surge arrester (SPD) | | | |
| SPD according to EN 61643-31 | | Type 2 | |
| Protection level U_p | kA | ≤4 | |
| Total leakage surge current (8/20 μs) (I_{total}) | kA | 40 | |
| DC-Switch disconnecter | | | |
| Model | | MDC10-2 | |
| Rated operational voltage U_e | V | 1005 | |
| Rated operational current I_e DC-PV1 (per MPPT) | A | 16 | |
| Connection data | | | |
| Input | | Stäubli MC4-EVO / 2,5 - 6 mm ² | |
| Output | | Stäubli MC4-EVO / 2,5 - 6 mm ² | |
| Grounding | | Screw connection min. 6 mm ² | |
| Strip length | mm | 12 | |
| Tightening torque | Nm | 4 | |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Enclosure | | | |
| Material | | ABS, Polycarbonat (Viewing window) | |
| Protection class | | IP 65 | |
| Impact resistance | | IK 08 | |
| Over voltage category | | II | |
| Operating conditions | | | |
| Location | | Indoor / protected outdoor area | |
| Ambient temperature | | -25°C - +40°C | |
| Standards | | | |
| Standards | | 61439-2 | |

DESIGN MSB-111-32-1000-TB-BC

Ready-to-connect generator junction box for PV systems up to 1000 VDC
Overvoltage protection (SPD) type 1/2
Cable entries M12 cable gland,
Cable gland ground M20 Cable glands

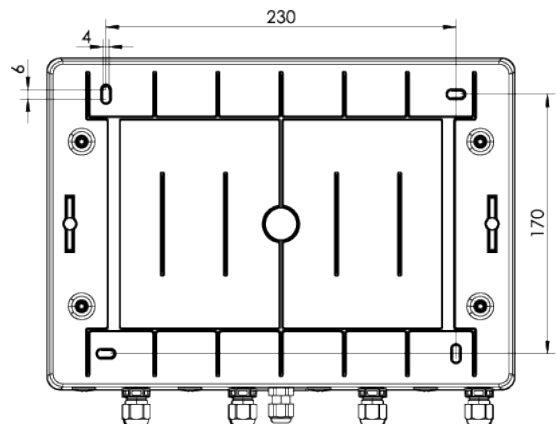
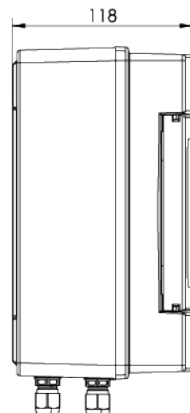
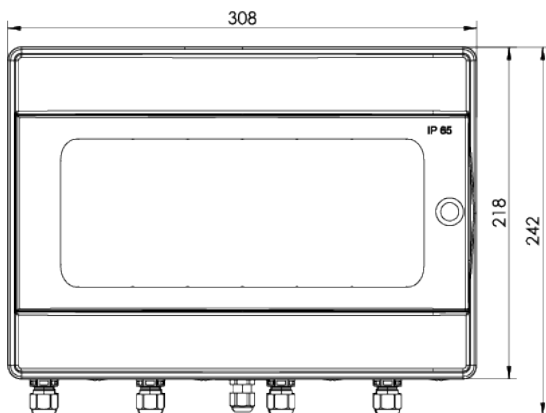
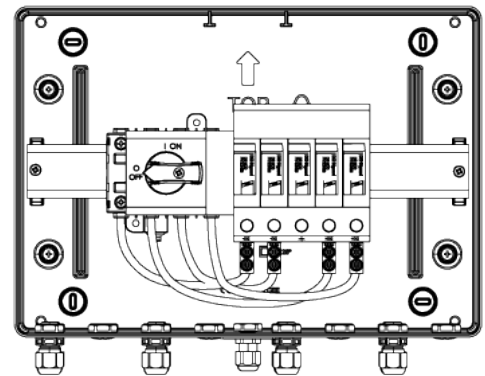
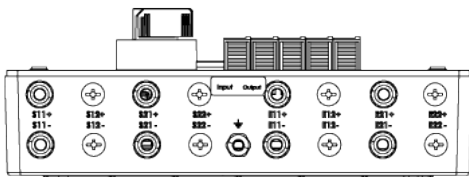
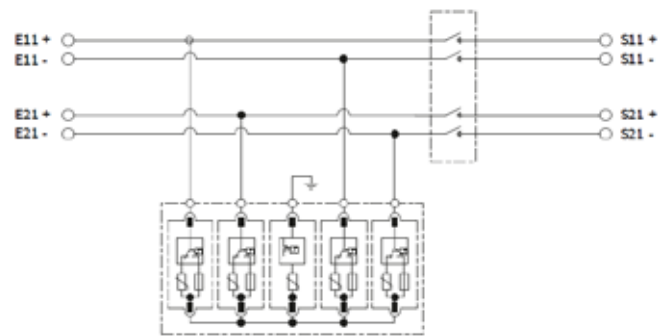


SPECIFICATIONS

| Electrical data | | is / from | to |
|--|-------------------------|------------------------------------|-----------|
| Max. supported MPPT | | 1 | |
| Inputs (per MPPT) | | 1 | |
| Outputs (per MPPT) | | 1 | |
| Rated operational voltage U_e | Vdc | 1000 | |
| Max. Current per string (input) | A | 32 | |
| Max. Current per string (output) | A | 32 | |
| Surge arrester (SPD) | | | |
| SPD according to EN 61643-31 | | Type 1 / Type 2 | |
| Protection level U_p | kA | ≤ 3,5 | |
| Total leakage surge current (8/20 μ s) (I_{total}) | kA | 40 | |
| Connection data | | | |
| Input | | Screw connection | |
| Conductor cross section flexible | mm ² | 0,2 | 10 |
| Conductor cross section flexible with ferrule | mm ² | 0,2 | 6 |
| Strip length | mm | 12 | |
| Tightening torque | NM | 1,2 | 2 |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Output | | Screw connection | |
| Conductor cross section flexible | mm ² | 0,2 | 10 |
| Conductor cross section flexible with ferrule | mm ² | 0,2 | 6 |
| Strip length | mm | 12 | |
| Tightening torque | Nm | 1,2 | 2 |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Grounding | | Screw connection | |
| Conductor cross section flexible / with ferrules | mm ² | 2,5 | 16 |
| Conductor cross section solid/stranded | mm ² | 2,5 | 25 |
| Strip length | mm | 15 | |
| Tightening torque | Nm | 2 | 4 |
| Cable gland | M20 / Clamping range mm | 6 | 12 |
| Enclosure | | | |
| Material | | ABS, Polycarbonat (Viewing window) | |
| Protection class | | IP 65 | |
| Impact resistance | | IK 08 | |
| Over voltage category | | II | |
| Operating conditions | | | |
| Location | | Indoor / protected outdoor area | |
| Ambient temperature | | -25°C - +40°C | |
| Standards | | | |
| Standards | | 61439-2 | |

DESIGN MSB-222-32-1000-CDC-BC

Ready-to-connect generator junction box for PV systems up to 1170 VDC
With DC Switch disconnector
Overvoltage protection (SPD) type 2
Cable entries M12 cable gland

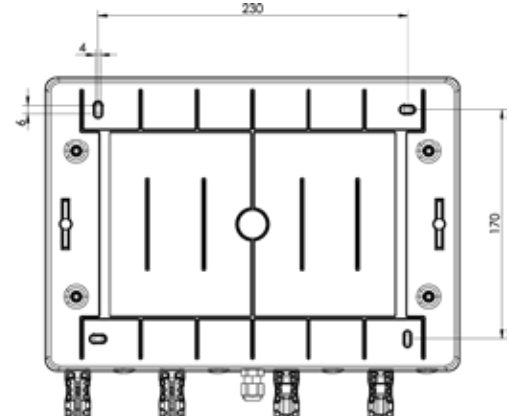
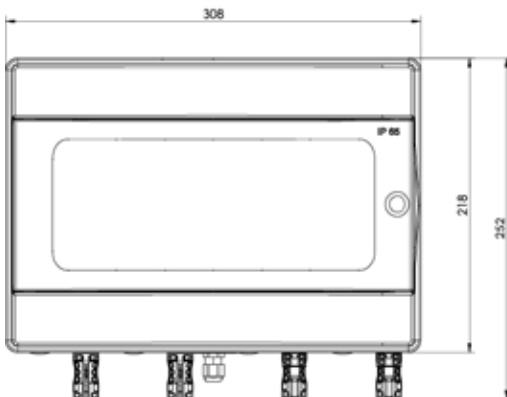
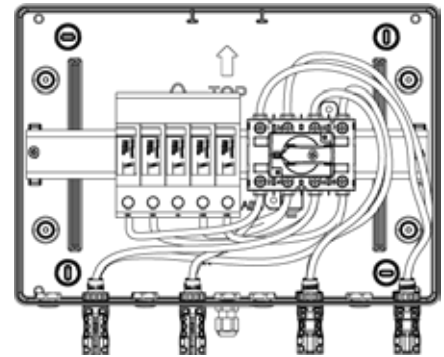
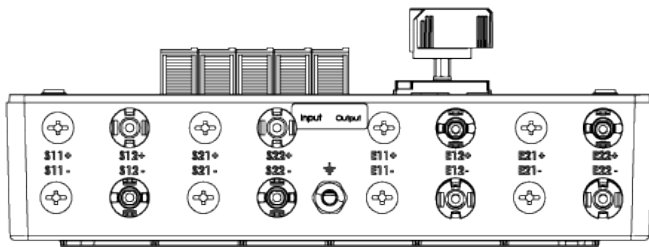
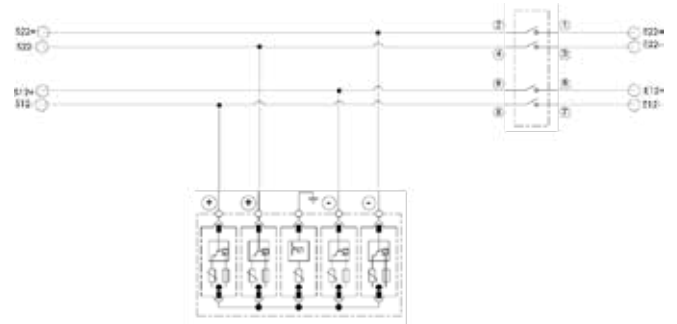


SPECIFICATIONS

| Electrical data | | is/from | to |
|---|-------------------------|---|-----------|
| Max. supported MPPT | | 2 | |
| Inputs (per MPPT) | | 1 | |
| Outputs (per MPPT) | | 1 | |
| Rated operational voltage U_e | Vdc | 1170 | |
| Max. Current per string (input) | A | 32 | |
| Max. Current per string (output) | A | 32 | |
| Surge arrester (SPD) | | | |
| SPD according to EN 61643-31 | | Type 2 | |
| Protection level U_p | kA | ≤ 4,0 | |
| Total leakage surge current (8/20 μs) (I_{total}) | kA | 40 | |
| Connection data | | | |
| Input | | Screw connection / 4-10 mm ² | |
| Strip length | mm | 12 | |
| Tightening torque | NM | 0,8 | |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Output | | Screw connection | |
| Strip length | mm | 12 | |
| Tightening torque | Nm | 1,2 | |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Grounding | | Screw connection | |
| Strip length | mm | 12 | |
| Tightening torque | Nm | 4,0 | |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Enclosure | | | |
| Material | | ABS, Polycarbonat (Viewing window) | |
| Protection class | | IP 65 | |
| Impact resistance | | IK 08 | |
| Over voltage category | | II | |
| Operating conditions | | | |
| Location | | Indoor / protected outdoor area | |
| Ambient temperature | | -25°C - +40°C | |
| Standards | | | |
| Standards | | 61439-2 | |

DESIGN MSB-222-32-1000-MDM-BC

Ready-to-connect generator junction box for PV systems up to 1170 VDC
With DC Switch disconnector
Overvoltage protection (SPD) type 2
Stäubli MC4-Evo connector

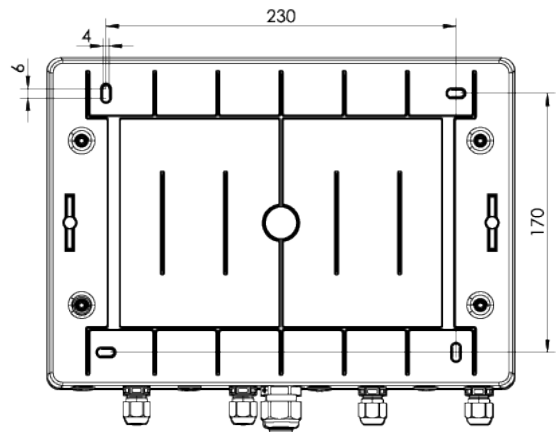
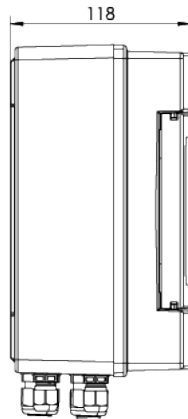
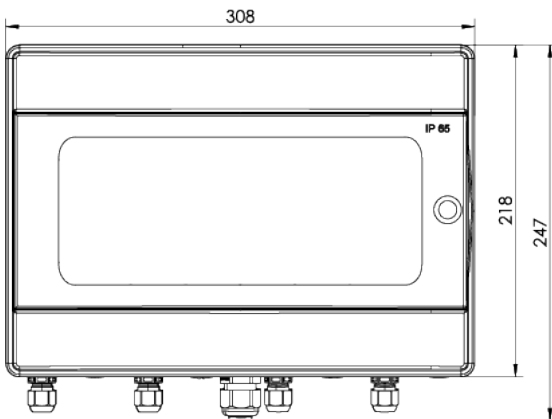
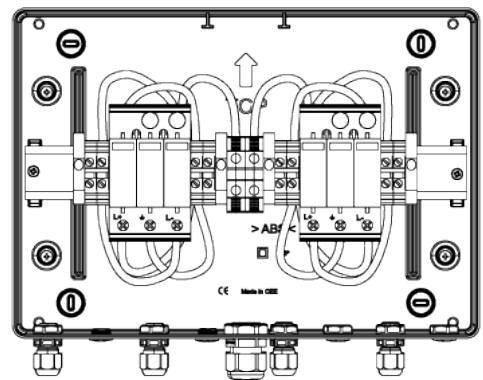
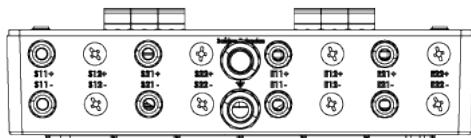
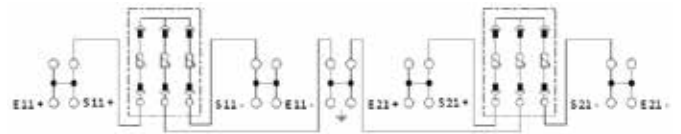


SPECIFICATIONS

| Electrical data | | is/from | to |
|---|-------------------------|---|-----------|
| Max. supported MPPT | | 2 | |
| Inputs (per MPPT) | | 1 | |
| Outputs (per MPPT) | | 1 | |
| Rated operational voltage U_e | Vdc | 1170 | |
| Max. Current per string (input) | A | 32 | |
| Max. Current per string (output) | A | 32 | |
| Surge arrester (SPD) | | | |
| SPD according to EN 61643-31 | | Type 2 | |
| Protection level U_p | kA | ≤4 | |
| Total leakage surge current (8/20 μs) (I_{total}) | kA | 40 | |
| DC-Switch disconnecter | | | |
| Model | | MDC10A-442 | |
| Rated operational voltage U_e | V | 1005 | |
| Rated operational current I_e DC-PV1 (per MPPT) | A | 32 | |
| Connection data | | | |
| Input | | Stäubli MC4-EVO / 2,5 - 6 mm ² | |
| Output | | Stäubli MC4-EVO / 2,5 - 6 mm ² | |
| Grounding | | Screw connection min. 6 mm ² | |
| Strip length | mm | 12 | |
| Tightening torque | Nm | 4 | |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Enclosure | | | |
| Material | | ABS, Polycarbonat (Viewing window) | |
| Protection class | | IP 65 | |
| Impact resistance | | IK 08 | |
| Over voltage category | | II | |
| Operating conditions | | | |
| Location | | Indoor / protected outdoor area | |
| Ambient temperature | | -25°C - +40°C | |
| Standards | | | |
| Standards | | 61439-2 | |

DESIGN MSB-222-32-1000-TB-BC

Ready-to-connect generator junction box for PV systems up to 1000 VDC
 Overvoltage protection (SPD) type 1/2
 Cable entries M12 cable gland,
 Cable gland ground M20 Cable glands

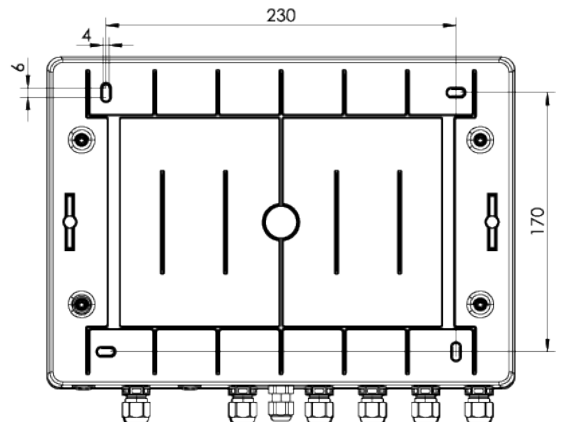
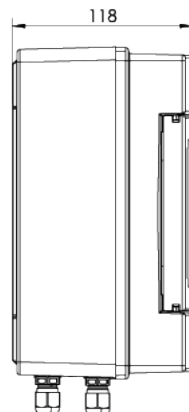
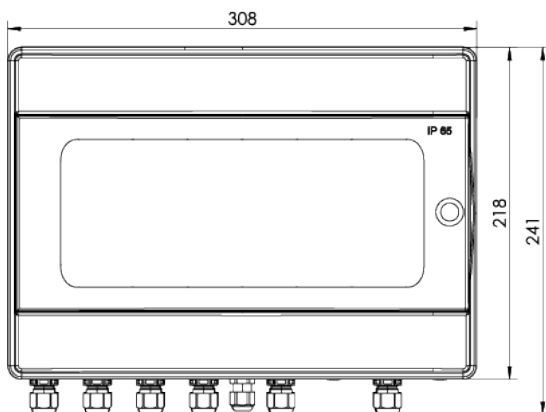
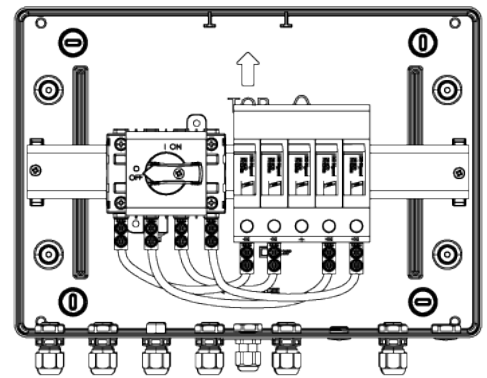
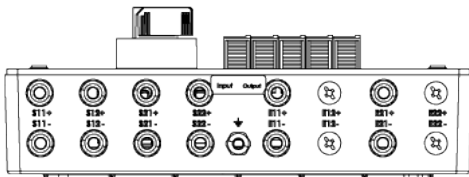
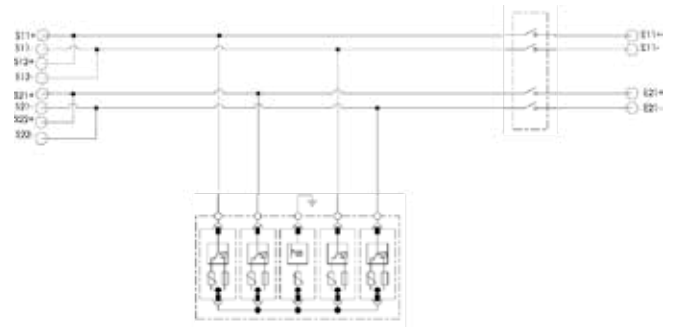


SPECIFICATIONS

| Electrical data | | is/from | to |
|---|-------------------------|------------------------------------|-----------|
| Max. supported MPPT | | 2 | |
| Inputs (per MPPT) | | 1 | |
| Outputs (per MPPT) | | 1 | |
| Rated operational voltage U_e | Vdc | 1000 | |
| Max. Current per string (input) | A | 32 | |
| Max. Current per string (output) | A | 32 | |
| Surge arrester (SPD) | | | |
| SPD according to EN 61643-31 | | Type 1 / Type 2 | |
| Protection level U_p | kA | ≤ 3,5 | |
| Total leakage surge current (8/20 μs) (I_{total}) | kA | 40 | |
| Connection data | | | |
| Input | | Screw connection | |
| Conductor cross section flexible | mm ² | 0,2 | 10 |
| Conductor cross section flexible with ferrule | mm ² | 0,2 | 6 |
| Strip length | mm | 12 | |
| Tightening torque | NM | 1,2 | 2 |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Output | | Screw connection | |
| Conductor cross section flexible | mm ² | 0,2 | 10 |
| Conductor cross section flexible with ferrule | mm ² | 0,2 | 6 |
| Strip length | mm | 12 | |
| Tightening torque | Nm | 1,2 | 2 |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Grounding | | Screw connection | |
| Conductor cross section flexible / with ferrules | mm ² | 2,5 | 16 |
| Conductor cross section solid/stranded | mm ² | 2,5 | 25 |
| Strip length | mm | 15 | |
| Tightening torque | Nm | 2 | 4 |
| Cable gland | M20 / Clamping range mm | 6 | 12 |
| Enclosure | | | |
| Material | | ABS, Polycarbonat (Viewing window) | |
| Protection class | | IP 65 | |
| Impact resistance | | IK 08 | |
| Over voltage category | | II | |
| Operating conditions | | | |
| Location | | Indoor / protected outdoor area | |
| Ambient temperature | | -25°C - +40°C | |
| Standards | | | |
| Standards | | 61439-2 | |

DESIGN MSB-242-16-1000-CDC-BC

Ready-to-connect generator junction box for PV systems up to 1170 VDC
With DC Switch disconnector
Overvoltage protection (SPD) type 2
Cable glands M12 Cable gland

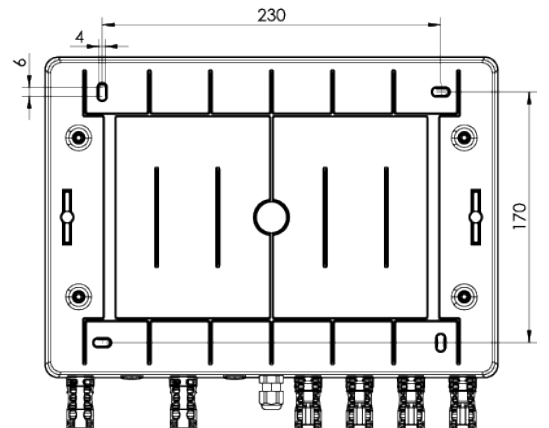
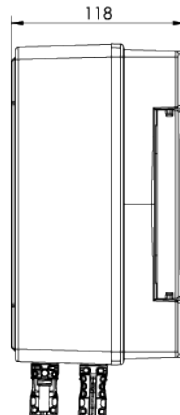
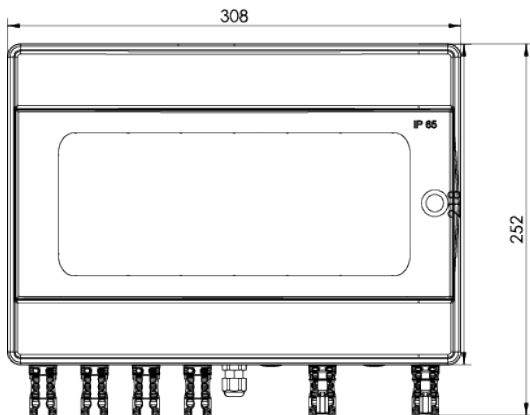
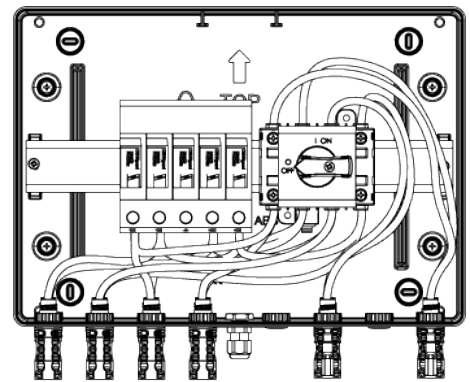
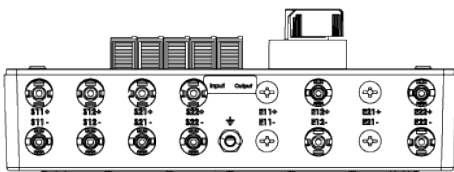
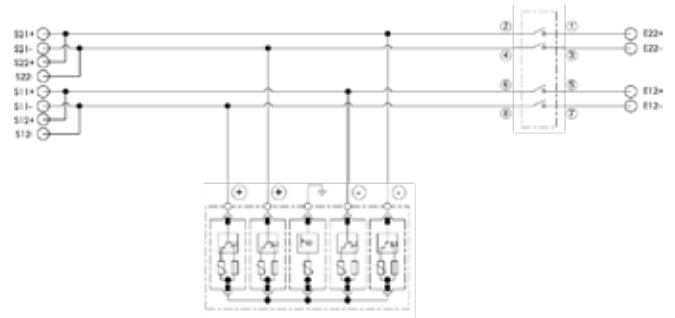


SPECIFICATIONS

| Electrical data | | is/from | to |
|--|-------------------------|---|-----------|
| Max. supported MPPT | | 2 | |
| Inputs (per MPPT) | | 2 | |
| Outputs (per MPPT) | | 1 | |
| Rated operational voltage U_e | Vdc | 1170 | |
| Max. Current per string (input) | A | 16 | |
| Max. Current per string (output) | A | 32 | |
| Surge arrester (SPD) | | | |
| SPD according to EN 61643-31 | | Type 2 | |
| Protection level U_p | kA | ≤ 4 | |
| Total leakage surge current (8/20 μ s) (I_{total}) | kA | 40 | |
| DC-Switch disconnecter | | | |
| Model | | MDC10A-442 | |
| Rated operational voltage U_e | V | 1005 | |
| Rated operational current I_e DC-PV1 (per MPPT) | A | 32 | |
| Connection data | | | |
| Input | | Screw connection / 4-10 mm ² | |
| Strip length | mm | 12 | |
| Tightening torque | Nm | 0,8 | 10 |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Output | | Screw connection / 4-10 mm ² | |
| Strip length | mm | 12 | |
| Tightening torque | Nm | 1,2 | |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Grounding | | Screw connection / 6 mm ² | |
| Strip length | mm | 12 | |
| Tightening torque | Nm | 4 | 2 |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Enclosure | | | |
| Material | | ABS, Polycarbonat (Viewing window) | |
| Protection class | | IP 65 | |
| Impact resistance | | IK 08 | |
| Over voltage category | | II | |
| Operating conditions | | | |
| Location | | Indoor / protected outdoor area | |
| Ambient temperature | | -25°C - +40°C | |
| Standards | | | |
| Standards | | 61439-2 | |

DESIGN MSB-242-16-1000-MDM-BC

Ready-to-connect generator junction box for PV systems up to 1170 VDC
With DC Switch disconnector
Overvoltage protection (SPD) type 2
Stäubli MC4-Evo connector

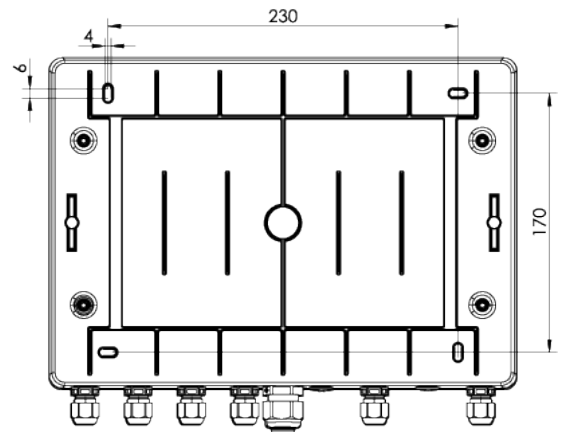
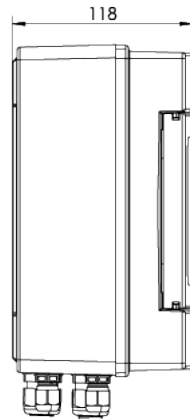
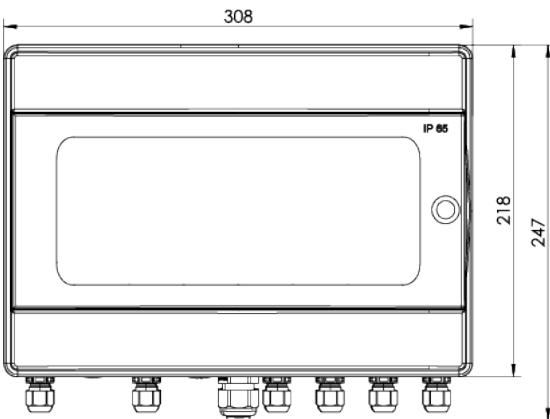
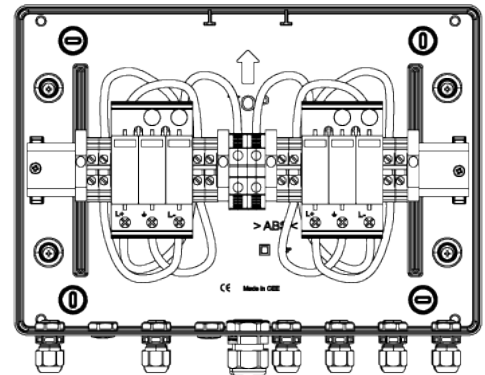
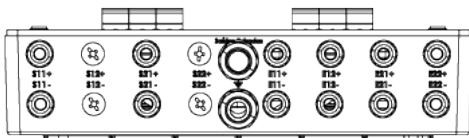
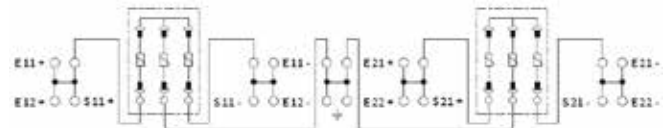


SPECIFICATIONS

| Electrical data | | is/from | to |
|---|-------------------------|---|-----------|
| Max. supported MPPT | | 2 | |
| Inputs (per MPPT) | | 2 | |
| Outputs (per MPPT) | | 1 | |
| Rated operational voltage U_e | Vdc | 1170 | |
| Max. Current per string (input) | A | 16 | |
| Max. Current per string (output) | A | 32 | |
| Surge arrester (SPD) | | | |
| SPD according to EN 61643-31 | | Type 2 | |
| Protection level U_p | kA | ≤ 4 | |
| Total leakage surge current (8/20 μs) (I_{total}) | kA | 40 | |
| DC-Switch disconnecter | | | |
| Model | | MDC10A-442 | |
| Rated operational voltage U_e | V | 1005 | |
| Rated operational current I_e DC-PV1 (per MPPT) | A | 32 | |
| Connection data | | | |
| Input | | Stäubli MC4-EVO / 2,5 - 6 mm ² | |
| Output | | Stäubli MC4-EVO / 2,5 - 6 mm ² | |
| Grounding | | Screw connection / min. 6 mm ² | |
| Strip length | mm | 12 | |
| Tightening torque | Nm | 4 | |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Enclosure | | | |
| Material | | ABS, Polycarbonat (Viewing window) | |
| Protection class | | IP 65 | |
| Impact resistance | | IK 08 | |
| Over voltage category | | II | |
| Operating conditions | | | |
| Location | | Indoor / protected outdoor area | |
| Ambient temperature | | -25°C - +40°C | |
| Standards | | | |
| Standards | | 61439-2 | |

DESIGN MSB-242-16-1000-TB-BC

Ready-to-connect generator junction box for PV systems up to 1000 VDC
Overvoltage protection (SPD) type 1/2
Cable entries M12 cable gland,
Cable gland ground M20 Cable glands

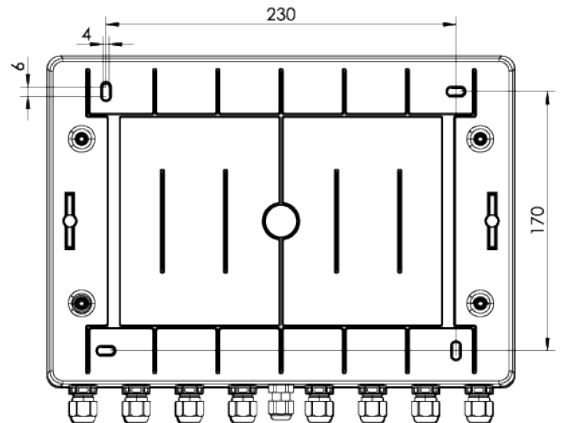
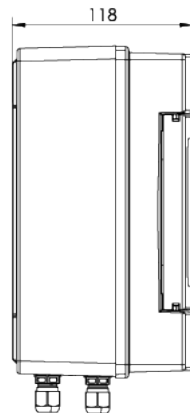
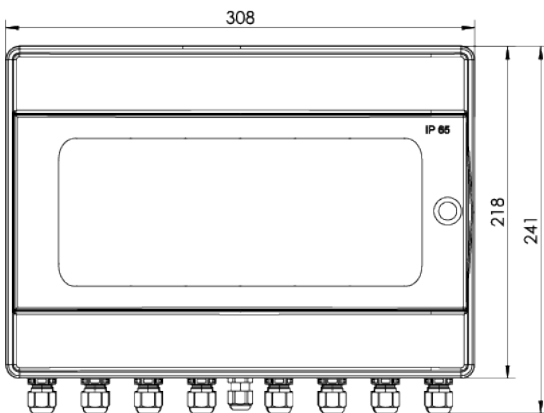
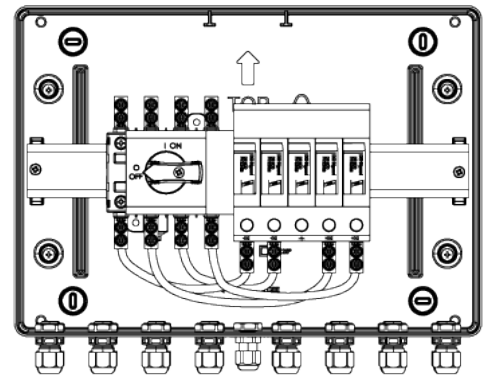
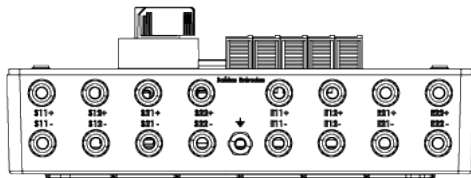
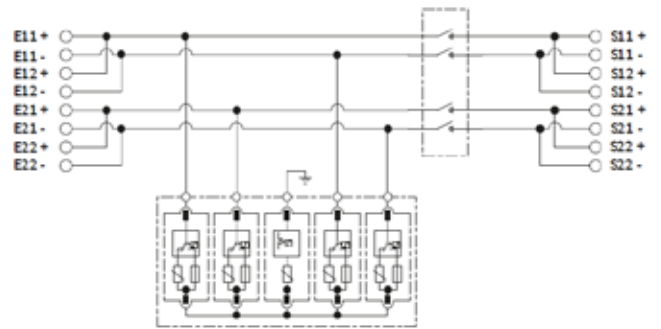


SPECIFICATIONS

| Electrical data | | is/from | to |
|---|-------------------------|------------------------------------|-----------|
| Max. supported MPPT | | 2 | |
| Inputs (per MPPT) | | 2 | |
| Outputs (per MPPT) | | 1 | |
| Rated operational voltage U_e | Vdc | 1000 | |
| Max. Current per string (input) | A | 16 | |
| Max. Current per string (output) | A | 32 | |
| Surge arrester (SPD) | | | |
| SPD according to EN 61643-31 | | Type 1 / Type 2 | |
| Protection level U_p | kA | ≤ 3,5 | |
| Total leakage surge current (8/20 μs) (I_{total}) | kA | 40 | |
| Connection data | | | |
| Input | | Screw connection | |
| Conductor cross section flexible | mm ² | 0,2 | 10 |
| Conductor cross section flexible with ferrule | mm ² | 0,2 | 6 |
| Strip length | mm | 12 | |
| Tightening torque | NM | 1,2 | 2 |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Output | | Screw connection | |
| Conductor cross section flexible | mm ² | 0,2 | 10 |
| Conductor cross section flexible with ferrule | mm ² | 0,2 | 6 |
| Strip length | mm | 12 | |
| Tightening torque | Nm | 1,2 | 2 |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Grounding | | Screw connection | |
| Conductor cross section flexible / with ferrules | mm ² | 2,5 | 16 |
| Conductor cross section solid/stranded | mm ² | 2,5 | 25 |
| Strip length | mm | 15 | |
| Tightening torque | Nm | 2 | 4 |
| Cable gland | M20 / Clamping range mm | 6 | 12 |
| Enclosure | | | |
| Material | | ABS, Polycarbonat (Viewing window) | |
| Protection class | | IP 65 | |
| Impact resistance | | IK 08 | |
| Over voltage category | | II | |
| Operating conditions | | | |
| Location | | Indoor / protected outdoor area | |
| Ambient temperature | | -25°C - +40°C | |
| Standards | | | |
| Standards | | 61439-2 | |

DESIGN MSB-244-16-1000-CDC-BC

Ready-to-connect generator junction box for PV systems up to 1170 VDC
With DC Switch disconnector
Overvoltage protection (SPD) type 2
Cable glands M12 Cable gland

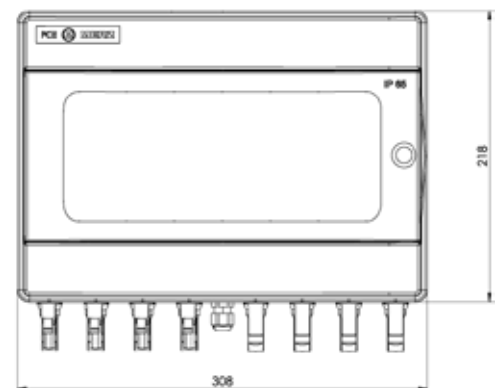
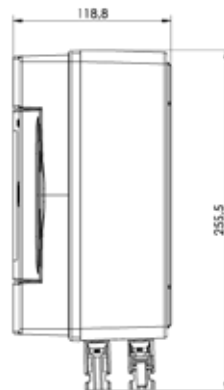
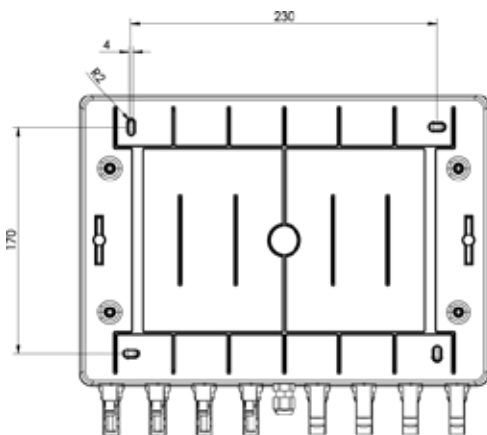
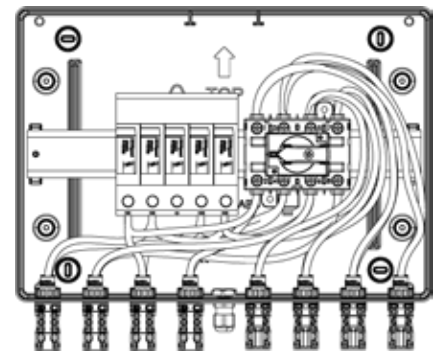
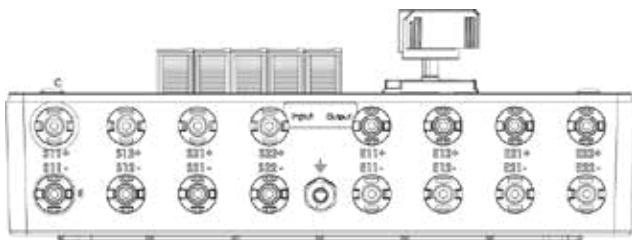
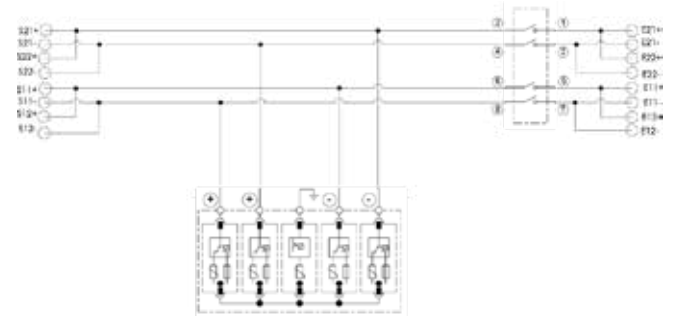


SPECIFICATIONS

| Electrical data | | is/from | to |
|---|-------------------------|---|-----------|
| Max. supported MPPT | | 2 | |
| Inputs (per MPPT) | | 2 | |
| Outputs (per MPPT) | | 2 | |
| Rated operational voltage U_e | Vdc | 1170 | |
| Max. Current per string (input) | A | 16 | |
| Max. Current per string (output) | A | 16 | |
| Surge arrester (SPD) | | | |
| SPD according to EN 61643-31 | | Type 2 | |
| Protection level U_p | kA | ≤ 4 | |
| Total leakage surge current (8/20 μs) (I_{total}) | kA | 32 | |
| DC-Switch disconnecter | | | |
| Model | | MDC10A-442 | |
| Rated operational voltage U_e | V | 1005 | |
| Rated operational current I_e DC-PV1 (per MPPT) | A | 32 | |
| Connection data | | | |
| Input | | Screw connection / 4 - 10 mm ² | |
| Strip length | mm | 12 | |
| Tightening torque | Nm | 0,8 | |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Output | | Screw connection / 4 - 10 mm ² | |
| Strip length | mm | 12 | |
| Tightening torque | Nm | 0,8 | |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Grounding | | Screw connection / 6 mm ² | |
| Strip length | mm | 12 | |
| Tightening torque | Nm | 4 | |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Enclosure | | | |
| Material | | ABS, Polycarbonat (Viewing window) | |
| Protection class | | IP 65 | |
| Impact resistance | | IK 08 | |
| Over voltage category | | II | |
| Operating conditions | | | |
| Location | | Indoor / protected outdoor area | |
| Ambient temperature | | -25°C - +50°C | |
| Standards | | | |
| Standards | | 61439-2 | |

DESIGN MSB-244-16-1000-MDM-BC

Ready-to-connect generator junction box for PV systems up to 1170 VDC
With DC Switch disconnector
Overvoltage protection (SPD) type 2
Stäubli MC4-Evo connector

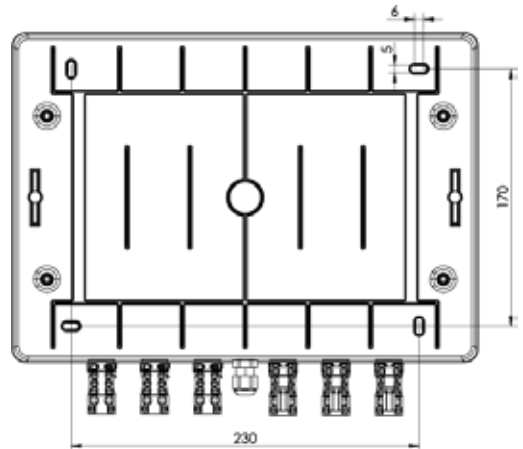
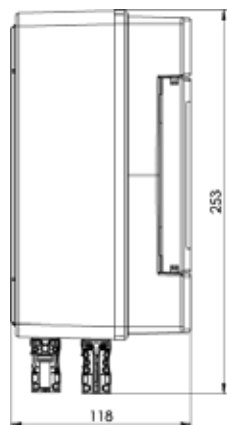
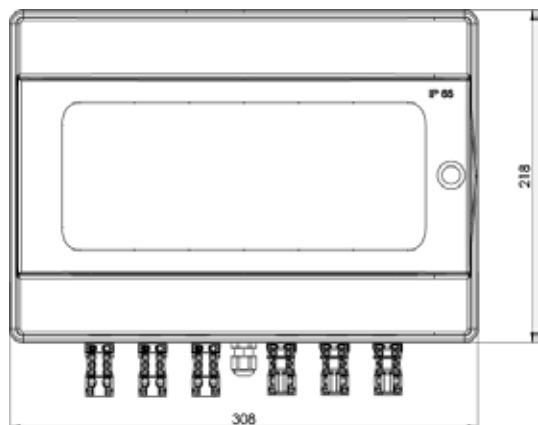
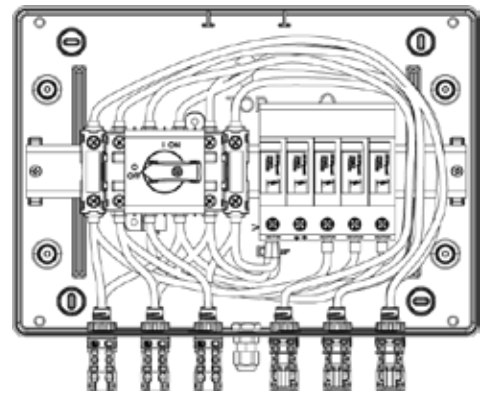
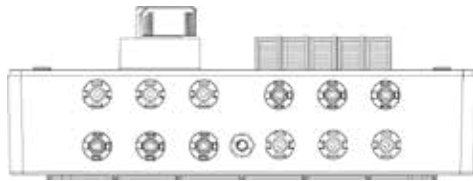
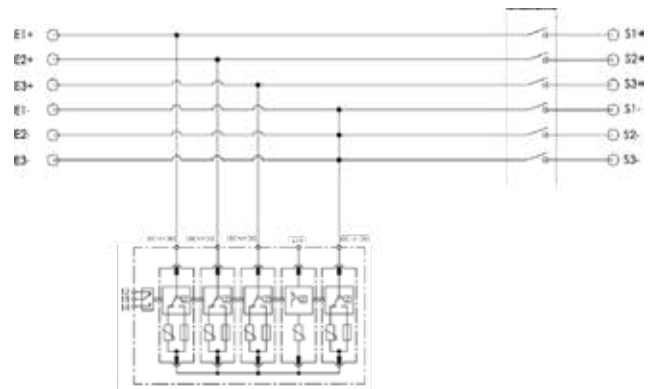


SPECIFICATIONS

| Electrical data | | is/from | to |
|---|-------------------------|---|-----------|
| Max. supported MPPT | | 2 | |
| Inputs (per MPPT) | | 2 | |
| Outputs (per MPPT) | | 2 | |
| Rated operational voltage U_e | Vdc | 1170 | |
| Max. Current per string (input) | A | 16 | |
| Max. Current per string (output) | A | 16 | |
| Surge arrester (SPD) | | | |
| SPD according to EN 61643-31 | | Type 2 | |
| Protection level U_p | kA | ≤ 4 | |
| Total leakage surge current (8/20 μs) (I_{total}) | kA | 40 | |
| DC-Switch disconnecter | | | |
| Model | | MDC10A-442 | |
| Rated operational voltage U_e | V | 1005 | |
| Rated operational current I_e DC-PV1 (per MPPT) | A | 32 | |
| Connection data | | | |
| Input | | Stäubli MC4-EVO / 2,5 - 6 mm ² | |
| Output | | Stäubli MC4-EVO / 2,5 - 6 mm ² | |
| Grounding | | Screw connection / min. 6 mm ² | |
| Strip length | mm | 12 | |
| Tightening torque | Nm | 4 | |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Enclosure | | | |
| Material | | ABS, Polycarbonat (Viewing window) | |
| Protection class | | IP 65 | |
| Impact resistance | | IK 08 | |
| Over voltage category | | II | |
| Operating conditions | | | |
| Location | | Indoor / protected outdoor area | |
| Ambient temperature | | -25°C - +50°C | |
| Standards | | | |
| Standards | | 61439-2 | |

DESIGN MSB-333-16-1000-MDM-BC

Ready-to-connect generator junction box for PV systems up to 1005 VDC
With DC Switch disconnector
Overvoltage protection (SPD) type 2
Stäubli MC4-Evo connector



SPECIFICATIONS

| Electrical data | | is/from | to |
|---|-------------------------|---|-----------|
| Max. supported MPPT | | 3 | |
| Inputs (per MPPT) | | 3 | |
| Outputs (per MPPT) | | 3 | |
| Rated operational voltage U_e | Vdc | 1005 | |
| Max. Current per string (input) | A | 16 | |
| Max. Current per string (output) | A | 16 | |
| Surge arrester (SPD) | | | |
| SPD according to EN 61643-31 | | Type 2 | |
| Protection level U_p | kA | ≤ 4 | |
| Total leakage surge current (8/20 μs) (I_{total}) | kA | 40 | |
| DC-Switch disconnecter | | | |
| Model | | MDC10-04-1000-6V-9121 | |
| Rated operational voltage U_e | V | 1005 | |
| Rated operational current I_e DC-PV1 (per MPPT) | A | 32 | |
| Connection data | | | |
| Input | | Stäubli MC4-EVO / 2,5 - 6 mm ² | |
| Output | | Stäubli MC4-EVO / 2,5 - 6 mm ² | |
| Grounding | | Screw connection / min. 6 mm ² | |
| Strip length | mm | 12 | |
| Tightening torque | Nm | 4 | |
| Cable gland | M12 / Clamping range mm | 2 | 6,5 |
| Enclosure | | | |
| Material | | ABS, Polycarbonat (Viewing window) | |
| Protection class | | IP 65 | |
| Impact resistance | | IK 08 | |
| Over voltage category | | II | |
| Operating conditions | | | |
| Location | | Indoor / protected outdoor area | |
| Ambient temperature | | -25°C - +40°C | |
| Standards | | | |
| Standards | | CE acc. IEC 61439-2 | |

BENEFITS



DC Combiner boxes for photovoltaic applications



High quality enclosures
Suitable for outdoor use



Standard fuseless versions
suitable for 3 MPPTs
Inverters with 1 or 2 inputs
per MPPT



Surge protection devices
Type 1+2, or 2



Custom solutions available
Including more strings and/or
MPPTs, fuse protection, string
monitoring



Overcurrent protection
gPV fuses on both poles
In case of being needed or
required



MERZ -DC switch disconnecter
guarantees a fast safe and
reliable disconnection,
using high quality
contacts and without needing
any maintenance operations



Integration of high
quality components
Guarantee an optimum per-
formance and durability

QUESTIONNAIRE

THE RIGHT STRING BOX **NOT FOUND??**
Our technicians will be happy to advise you.
Please contact us.

SOLAR PANELS INFORMATION

| | |
|--------------------------------|--|
| Peak Power Watts-PMAX (Wp)* | |
| Short Circuit Current-ISC (A) | |
| Maximum Power Current-IMPP (A) | |
| Open Circuit Voltage-VOC (V) | |
| Maximum Power Voltage-VMPP (V) | |

INVERTER INFORMATION

| | |
|-----------------------------------|--|
| Manufacturer | |
| Model | |
| Max. DC power (W) | |
| Max. input voltage (V) | |
| MPPT voltage range (V) | |
| Max. input current per MPPT (A) | |
| Max. input current per string (A) | |
| Number of independent MPP inputs | |
| Strings per MPP input | |

STRING CONFIGURATION

| | |
|----------------------------|--|
| Number of panels in series | |
| MPPTs | |
| Strings per MPPT | |

STRING BOX CONFIGURATION

| | |
|---------------------------------|--|
| Number of MPPTs | |
| Number of inputs (total) | |
| Number of inputs per MPPT | |
| Max. Current per MPPT/input (A) | |
| Max. Voltage per MPPT (V) | |

| | |
|-----------------------------|--|
| Connectors MC4 (Yes/No) | |
| Connectors Sunclix (Yes/No) | |
| Cable glands (Yes/No, Size) | |
| Cable size (AWG or mm) | |
| Number of outputs (total) | |
| Number of outputs per MPPT | |
| Connectors MC4 (Yes/No) | |
| Connectors Sunclix (Yes/No) | |
| Cable glands (Yes/No, Size) | |
| Cable size (AWG or mm) | |

| | |
|---------------------------------|--|
| DC switch disconnecter (Yes/No) | |
| Fuses (Yes/No) | |
| Fuses in one or both poles | |
| Fuse rating (if applicable) (A) | |
| DPS (Yes/NO) | |
| DPS Type (Type I, II, I+II) | |

COMMERCIAL INFORMATION

| | |
|---------------------------------|--|
| Number of string boxes per year | |
| Monthly consumption | |
| Manufacturer (yes/no) | |
| Distributor (yes/no) | |
| Installer (yes/no) | |
| End user (yes/no) | |
| Additional information | |

CUSTOMER INFORMATION

| | |
|-----------------------|--|
| Company | |
| Address | |
| City/Postcode/Country | |
| Website | |
| Name | |
| Position | |
| Email address | |
| Phone | |

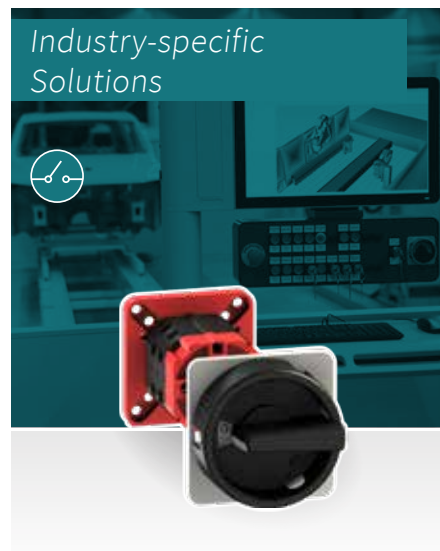
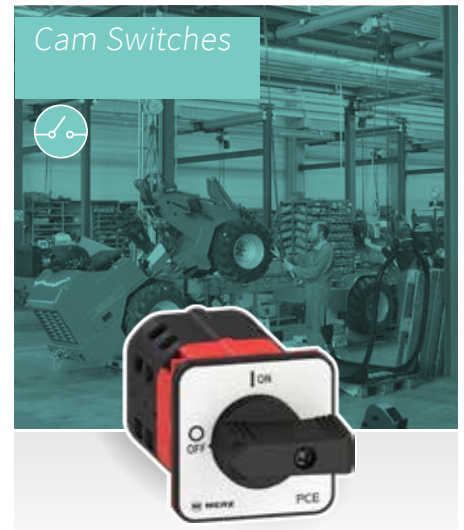
OUR COMPANY



MERZSchaltgeräte GMBH + CO KG operates as a 100 % subsidiary of the Merz GmbH, member of the globally successful and expansive PCE Group. MERZ Schaltgeräte GMBH + CO KG draws on the 70-year switch know-how of Merz GmbH.

WHAT ELSE WE OFFER:

Further product brochures on the following switch categories:



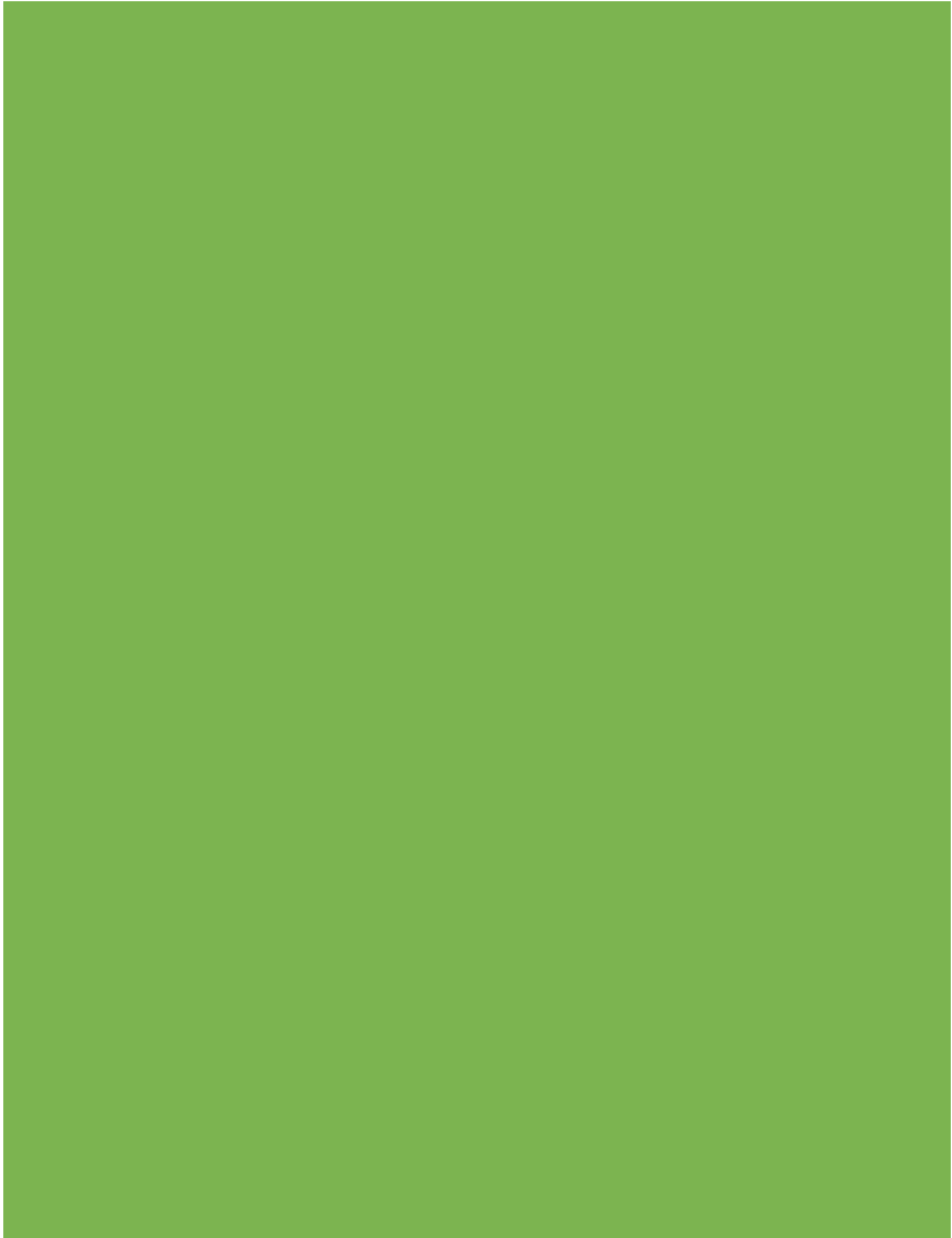
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We help you finding the right switch for your project.

Please contact us.

Our contact persons will be happy to advise you.

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