## System pro M compact® Switch disconnector SD 200



The SD 200 extends the proven System pro $M$ compact ${ }^{\circledR}$ series by a new range of switch disconnectors which provides state-of-the-art safety and comfort. The series is available with 1 to 4 poles with rated currents from 16 to 63 A and provides disconnection properties according to IEC/EN 60947-3.

With a rated voltage of 253/440 V AC, a rated conditional short-circuit current of 25 kA , terminals with protection from misconnection, a "Real CPl" contact position indication, as well as full compatibility with all MCB accessories, SD 200 is unique in its field of application.

The laser printing and the design of the devices allow a consistent optical appearance in the distribution board.


Special features

- Isolating characteristics acc. to IEC/EN 60947-3
- Clear contact position indication in red/green ("Real CPI")
- Highest performance at an increased voltage level: 25 kA conditional short-circuit current at $U_{e}=253 / 440 \mathrm{VAC}$ acc. to IEC/EN 60947-3
- Protection type IP20 = finger safe
- $35 \mathrm{~mm}^{2}$ cylinder lift terminal with 2 terminal openings for two wires or one wire and one busbar for cross wiring
- Bottom fixed auxiliary contact for a space saving installation or upgrade of existing assemblies without additional mounting width
- Consistent design to other System pro M DIN rail products
- Cross wiring with MCBs or RCDs using busbars PS
- Durable device identification due to laser labeling
- Captive screws with recessed head
- Compatibility with all MCB accessories
- Approved acc. to IEC/EN 60947-3 for international use


## Switch disconnector SD 200 Technical data

| Electrical data |  |
| :---: | :---: |
| Standards | IEC/EN 60947-3 |
| Poles | 1P, 2P, 3P, 4P |
| Rated current I | $16 \mathrm{~A}, 25 \mathrm{~A}, 32 \mathrm{~A}, 40 \mathrm{~A}, 50 \mathrm{~A}, 63 \mathrm{~A}$ |
| Utilization category | AC-23A, DC-21A |
| Rated voltage $U_{\text {e }}$ | 1P: 253 V AC; 60 V DC <br> 2P: 440 V AC, 125 V DC <br> 3...4P: 440 V AC |
| Insulation voltage $\mathrm{U}_{\mathrm{i}}$ | 440 V AC |
| Max. power frequency recovery voltage $U_{\text {max }}$. | $\begin{aligned} & 1 \mathrm{P}: 266 \vee \mathrm{AC}, 63 \mathrm{~V} \mathrm{DC} \\ & 2 \mathrm{P}: 462 \mathrm{~V} \mathrm{AC}, 131 \mathrm{~V} \mathrm{DC} \\ & 3 \ldots 4 \mathrm{P}: 462 \mathrm{~V} \mathrm{AC} \end{aligned}$ |
| Min. operating voltage $U_{\text {Bm }}$ | 12 VAC |
| Rated frequency f | $50 / 60 \mathrm{~Hz}$, DC |
| Suitable for isolation | Yes |
| Rated conditional short-circuit current | 25 kA in series with NH $00 \leq 63 \mathrm{~A} \mathrm{gG}$ |
| Overvoltage category | III |
| Pollution degree | 3 |
| Rated impulse withstand voltage $\mathrm{U}_{\text {imp. }}(1.2 / 50 \mu \mathrm{~s})$ | 4 kV (test voltage 6.2 kV at sea level; 5 kV at 2,000 m) |
| Dielectric test voltage | 2 kV (50/60 Hz, 1 min.) |
| Mechanical data |  |
| Housing | Insulation group I, RAL 7035 |
| Toggle | Insulation group II, red, sealable |
| Contact position indication | Marking on toggle, I ON / O OFF Real CPI (green OFF/red ON) |
| Protection degree acc. to EN 60529 | IP20 / IP40 in enclosure with cover |
| Electrical endurance | $\mathrm{I}_{\mathrm{e}}<32 \mathrm{~A}: 20,000$ ops. (AC), 1,500 ops. (DC) $1 . \geq 32$ A: 10,000 ops. (AC), 1,500 ops. (DC) |
| Mechanical endurance | 20,000 ops. |
| Shock resistance acc. to IEC/EN 60068-2-27 | $25 \mathrm{~g}, 2$ shocks, 13 ms |
| Vibration resistance acc. to IEC/EN 60068-2-6 | $5 \mathrm{~g}, 20$ cycles at $5 \ldots 150 \ldots 5 \mathrm{~Hz}$ with load $0.8 \mathrm{I}_{\mathrm{n}}$ |
| Environmental conditions (damp heat cyclic) acc. to EC/EN 60068-2-30 | 28 cycles with $55^{\circ} \mathrm{C} / 90-96 \%$ and $25^{\circ} \mathrm{C} / 95-100 \%$ [ ${ }^{\circ} \mathrm{C} / \mathrm{RH}$ ] |
| Ambient temperature | $-25 \ldots+55^{\circ} \mathrm{C}$ |
| Storage temperature | $-40 \ldots+70^{\circ} \mathrm{C}$ |
| Installation |  |
| Terminal | Cylinder lift terminal |
| Safety wire guard | Yes |
| Two terminal openings for conductor and busbar | Yes |
| Cross-section of conductors | 35 mm² |
| Cross-section of busbars | $10 \mathrm{~mm}^{2}$ |
| Torque | 2.8 Nm |
| Screwdriver | No. 2 Pozidrive |
| Mounting | On DIN rail 35 mm acc. to EN 60715 by fast clip |
| Mounting position | Optional |
| Removal without disassembling of the busbar | Yes |
| Supply | Optional |
| Dimensions and weight |  |
| Mounting dimensions acc. to DIN 43880 | Mounting dimension 1 |
| Pole dimensions ( $\mathrm{H} \times \mathrm{D} \times \mathrm{W}$ ) | $88 \times 68 \times 17.5 \mathrm{~mm}$ |
| Pole weight | approx. 85 g |
| Combination with auxiliary elements |  |
| Auxiliary contact | Yes |
| Signal/auxiliary contact | Yes |
| Shunt trip | Yes |
| Undervoltage release | Yes |
| Motor operating device | Yes |
| Padlock | Yes |
| Approvals |  |
|  | CE and RoHS conform Approvals: VDE |

## Switch disconnector SD 200

## Accessories



| H | Auxiliary contact <br> (changeover contact) | H-L | Auxiliary contact to be <br> mounted on the left |
| :--- | :--- | :--- | :--- |
| S/H | Signal/Auxiliary contact | H-R | Auxiliary contact to be <br> mounted on the right |
| S/H (H) | Signal/Auxiliary contact <br> used as auxiliary contact |  | (2 contacts) |
| ST | Shunt trip | H-BF | Auxiliary contact, <br> UR |
| Undervoltage release |  | bottom fitting (1 per pole) |  |
| OR | Overvoltage release | BP | Mechanical tripping device |
| MOD-S | Motor operating device | NT | Neutral disconnector |

Switch disconnector SD 200
Conditional short-circuit resistance, dimensional drawing and wiring diagrams

Conditional short-circuit restistance (in kA ) in combination with back-up protection


|  |  | Supply side: NH $00-\mathrm{gG}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Load side: | $\mathrm{I}_{0}(\mathrm{~A})$ | 16 | 25 | 32 | 40 | 50 | 63 |
| SD 200 | 16 | 25 |  |  |  |  |  |
|  | 25 | 25 | 25 |  |  |  |  |
|  | 32 | 25 | 25 | 25 |  |  |  |
|  | 40 | 25 | 25 | 25 | 25 |  |  |
|  | 50 | 25 | 25 | 25 | 25 | 25 |  |
|  | 63 | 25 | 25 | 25 | 25 | 25 | 25 |

Dimensional drawing


Wiring diagrams


## Switch disconnector SD 200

## Ordering data



SD 204

| Rated current: 16 A |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Poles | Rated voltage V AC | Power loss W | Bbn 4016779 EAN | Type | Order code | Weight <br> 1 piece kg | Pack unit pc. |
| 1 | 253 |  | 904063 | SD201/16 | 2CDD281101R0016 | 0.085 | 10 |
| 2 | 440 |  | 904124 | SD202/16 | 2CDD282101R0016 | 0.170 | 5 |
| 3 | 440 |  | 904186 | SD203/16 | 2CDD283101R0016 | 0.255 | 1 |
| 4 | 440 |  | 904247 | SD204/16 | 2CDD284101R0016 | 0.340 | 1 |
|  |  |  |  |  |  |  |  |
| Rated current: 25 A |  |  |  |  |  |  |  |
| Poles | Rated voltage V AC | Power loss W | Bbn <br> 4016779 <br> EAN | Type | Order code | Weight <br> 1 piece <br> kg | Pack unit <br> pc. |
| 1 | 253 |  | 904070 | SD201/25 | 2CDD281101R0025 | 0.085 | 10 |
| 2 | 440 |  | 904131 | SD202/25 | 2CDD282101R0025 | 0.170 | 5 |
| 3 | 440 |  | 904193 | SD203/25 | 2CDD283101R0025 | 0.255 | 1 |
| 4 | 440 |  | 904254 | SD204/25 | 2CDD284101R0025 | 0.340 | 1 |


| Rated current: 32 A |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Poles | Rated voltage V AC | Power loss W | Bbn <br> 4016779 <br> EAN | Type | Order code | Weight 1 piece kg | Pack unit pc. |
| 1 | 253 |  | 904087 | SD201/32 | 2CDD281101R0032 | 0.085 | 10 |
| 2 | 440 |  | 904148 | SD202/32 | 2CDD282101R0032 | 0.170 | 5 |
| 3 | 440 |  | 904209 | SD203/32 | 2CDD283101R0032 | 0.255 | 1 |
| 4 | 440 |  | 904261 | SD204/32 | 2CDD284101R0032 | 0.340 | 1 |


| Rated current: 40 A |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Poles | Rated voltage V AC | Power loss W | Bbn <br> 4016779 <br> EAN | Type | Order code | Weight <br> 1 piece kg | Pack unit pc. |
| 1 | 253 |  | 904094 | SD201/40 | 2CDD281101R0040 | 0.085 | 10 |
| 2 | 440 |  | 904155 | SD202/40 | 2CDD282101R0040 | 0.170 | 5 |
| 3 | 440 |  | 904216 | SD203/40 | 2CDD283101R0040 | 0.255 | 1 |
| 4 | 440 |  | 904278 | SD204/40 | 2CDD284101R0040 | 0.340 | 1 |


| Rated current: 50 A |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Poles | Rated voltage V AC | Power loss W | Bbn <br> 4016779 <br> EAN | Type | Order code | Weight <br> 1 piece kg | Pack unit pc. |
| 1 | 253 |  | 904100 | SD201/50 | 2CDD281101R0050 | 0.085 | 10 |
| 2 | 440 |  | 904162 | SD202/50 | 2CDD282101R0050 | 0.170 | 5 |
| 3 | 440 |  | 904223 | SD203/50 | 2CDD283101R0050 | 0.255 | 1 |
| 4 | 440 |  | 904285 | SD204/50 | 2CDD284101R0050 | 0.340 | 1 |


| Rated current: 63 A |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Poles | Rated voltage V AC | Power loss W | Bbn <br> 4016779 <br> EAN | Type | Order code | Weight 1 piece kg | Pack unit pc. |
| 1 | 253 |  | 904117 | SD201/63 | 2CDD281101R0063 | 0.085 | 10 |
| 2 | 440 |  | 904179 | SD202/63 | 2CDD282101R0063 | 0.170 | 5 |
| 3 | 440 |  | 904230 | SD203/63 | 2CDD283101R0063 | 0.255 | 1 |
| 4 | 440 |  | 904292 | SD204/63 | 2CDD284101R0063 | 0.340 | 1 |

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