PRODUCT-DETAILS

# S203M-K50UC

## S203M-K50UC Miniature Circuit Breaker - 3P - K - 50 A



### General Information

| | |
|---|---|
| Extended Product Type | S203M-K50UC |
| Product ID | 2CDS273061R0577 |
| EAN | 4013614435522 |
| Catalog Description | S203M-K50UC Miniature Circuit Breaker - 3P - K - 50 A |
| Long Description | The miniature circuit breaker S 200 M UC extends the established ABB System pro M compact® product range with an MCB for DC and AC applications. The S 200 M UC impresses with its performance range and the accordingly large amount of approvals. Its high inbuilt short circuit breaking capacity across the entire model line, its flexible AC and DC application and its approval and compliance in accordance with all major international and local standards make it truly unique.<br><br>All current System pro M compact® accessories can be combined easily with the new model line. Whether warehousing or project engineering, planning, installing or maintaining your equipment, the S 200 M UC is a simple and flexible solution. |

### Technical

| | |
|---|---|
| Standards | CSA 22.2 No. 235<br>IEC/EN 60947-2<br>UL 1077 |

© 2024 ABB. All rights reserved.

| | |
|---|---|
| Tripping Characteristic | K |
| Rated Operational Voltage | acc. to IEC 60898-1 400 V AC<br>acc. to IEC 60898-1 440 V<br>acc. to IEC 60947-2 440 V AC<br>acc. to IEC 60947-2 440 V DC |
| Rated Insulation Voltage ($U_i$) | acc. to IEC/EN 60664-1 440 V |
| Rated Impulse Withstand Voltage ($U_{imp}$) | 4 kV<br>at 2000 m 5 kV<br>at Sea Level 6.2 kV |
| Input Voltage Type | AC/DC |
| Rated Current ($I_n$) | 50 A |
| Rated Short-Circuit Capacity | (AC) 10 kA<br>(DC) 10 kA<br>(230 V AC) 10 kA<br>(400 V AC) 10 kA<br>(230 V) 10 kA<br>(400 V) 10 kA |
| Rated Ultimate Short-Circuit Breaking Capacity ($I_{cu}$) | (220 V DC) 25 kA<br>(230 V AC) 25 kA<br>(400 V AC) 6 kA<br>(440 V AC) 6 kA<br>(440 V DC) 10 kA<br>(230 V) 10 kA |
| Rated Conditional Short-Circuit Current ($I_{nc}$) | (230 V) 25 kA<br>(400 V) 10 kA |
| Rated Service Short-Circuit Breaking Capacity ($I_{cs}$) | (220 V DC) 20 kA |
| Rated Frequency (f) | 50 / 60 Hz<br>DC |
| Power Loss | 12.09 W<br>at Rated Operating Conditions per Pole 4.03 W |
| Power Supply Connection | Please Note Polarity of Device |
| Contact Position Indication | Red ON / Green OFF |
| Energy Limiting Class | 3 |
| Mechanical Endurance | 20000 cycle |
| Number of Protected Poles | 3 |
| Number of Poles | 3 |
| Overvoltage Category | III |
| Tightening Torque | 2.8 N·m |
| Screw Terminal Type | Failsafe Bi-directional Cylinder-lift Terminal |
| Actuator Marking | I / O |
| Actuator Material | Insulation Group II, Black, Sealable |
| Housing Material | Insulation Group I, RAL 7035 |
| Options Provided | Universal current |
| Mounting on DIN Rail | TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715<br>TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715 |
| Mounting Position | any |
| Recommended Screw Driver | Pozidriv 2 |
| Accessories Available | Yes |
| Remarks | Please note polarity of device |
| Connecting Capacity | Busbar 10 / 10 mm²<br>Flexible with Ferrule 0.75 ... 25 mm²<br>Flexible 0.75 ... 25 mm²<br>Flexible 0.75 ... 25 mm²<br>Rigid 0.75 ... 35 mm² |

© 2024 ABB. All rights reserved.

| | |
|---|---|
| | Stranded 0.75 ... 35 mm² |
| Installation Size | acc. to DIN 43880 1 |
| Terminal Type | Screw Terminals |

## Material Compliance

| | |
|---|---|
| RoHS Information | 2CDK400583D2704 |
| RoHS Status | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |
| RoHS Date | 20110608 |
| REACH Declaration | 9AKK108468A9644 |
| REACH Information | True - contains substances > 0.1 mass percentage |
| REACH Date | 20231212 |
| Conflict Minerals Reporting Template (CMRT) | 9AKK108468A3363 |
| SCIP | cec6beff-be12-4313-bcef-0d0cbaa3ae87 Germany (DE) |

## Environmental

| | |
|---|---|
| Ambient Air Temperature | Operation -25 ... +55 °C<br>Storage -40 ... +70 °C |
| Degree of Protection | IP20<br>Enclosure with Cover IP40 |
| Pollution Degree | 3 |
| Environmental Conditions | 28 cycles<br>with 55 °C / 90-96 %<br>and 25 °C / 95-100 % |
| Resistance to Vibrations | 20 Cycles with Load 0.8 In: 5g 5 ... 150 ... 5 Hz |
| Resistance to Shock acc. to IEC 60068-2-27 | 25g 2 shocks 13 ms |
| Environmental Information | 2CDK400030D201 |

## Technical UL/CSA

| | |
|---|---|
| Maximum Operating Voltage UL/CSA | 500 V DC<br>480Y / 277 V AC |
| Interrupting Rating acc. to UL1077 | (220 V AC) 10 kA<br>(277 V AC) 6 kA<br>(440 V DC) 10 kA<br>(480Y / 277 V AC) 10 kA<br>(500 V DC) 10 kA |
| Connecting Capacity UL/CSA | Busbar 14-8 AWG<br>Conductor 14-4 AWG |
| Tightening Torque UL/CSA | 25 in·lb |

## Dimensions

| | |
|---|---|
| Width in Number of Modular Spacings | 3.0 |
| Product Net Width | 52.5 mm |
| Product Net Height | 85 mm |
| Product Net Depth / Length | 69 mm |
| Product Net Weight | 0.375 kg |

© 2024 ABB. All rights reserved.

| | |
|---|---|
| Pole Net Weight | 0.125 kg |
| Built-In Depth ($t_2$) | 69 mm |

## Ordering

| | |
|---|---|
| Package Level 1 Units | carton 1 piece |
| Package Level 1 Gross Weight | 0.4 kg |
| E-Number (Finland) | 3210465 |

## Certificates and Declarations

| | |
|---|---|
| Declaration of Conformity - CE | 2CDK400583D2704 |
| Certification Agency | CSA<br>EN<br>IEC<br>UL |

## Installation

| | |
|---|---|
| Instructions and Manuals | 2CDS207104P0002 |

## Popular Downloads

| | |
|---|---|
| Data Sheet, Technical Information | 2CDC002142D0207 |

## Classifications

| | |
|---|---|
| ETIM 8 | EC000042 - Miniature circuit breaker (MCB) |
| ETIM 9 | EC000042 - Miniature circuit breaker (MCB) |
| WEEE Category | 5. Small Equipment (No External Dimension More Than 50 cm) |
| WEEE B2C / B2B | Business To Business |
| CN8 | 8536 20 10 |
| UNSPSC | 39121603 |
| eClass | V11.0 : 27141901 |
| IDEA Granular Category Code (IGCC) | 4899 >> Miniature circuit breaker (MCB) screw-in model |
| Object Classification Code | F |

## Accessories

© 2024 ABB. All rights reserved.

| Identifier | Description | Type | Quantity | Unit Of Measure |
|---|---|---|---|---|
| 2CDS200922R0001 | S2C-S/H6R Signal / Auxiliary Contact | S2C-S/H6R | 1 | piece |
| 2CDS200912R0001 | S2C-H6R Auxiliary Contact | S2C-H6R | 1 | piece |
| 2CDS200970R0031 | S2C-H01 Auxiliary Contact | S2C-H01 | 1 | piece |
| 2CDS200970R0032 | S2C-H10 Auxiliary Contact | S2C-H10 | 1 | piece |
| 2CDS200936R0001 | S2C-H11L Auxiliary Contact | S2C-H11L | 1 | piece |
| 2CDS200936R0002 | S2C-H20L Auxiliary Contact | S2C-H20L | 1 | piece |
| 2CDS200936R0003 | S2C-H02L Auxiliary Contact | S2C-H02L | 1 | piece |
| 2CDS200946R0001 | S2C-H6-11R Auxiliary Contact | S2C-H6-11R | 1 | piece |
| 2CDS200946R0002 | S2C-H6-20R Auxiliary Contact | S2C-H6-20R | 1 | piece |
| 2CDS200946R0003 | S2C-H6-02R Auxiliary Contact | S2C-H6-02R | 1 | piece |
| 2CDS200909R0001 | S2C-A1 Shunt Trip | S2C-A1 | 1 | piece |
| 2CDS200909R0002 | S2C-A2 Shunt Trip | S2C-A2 | 1 | piece |
| 2CSS200911R0001 | S2C-UA 12 DC Undervoltage Release | S2C-UA 12 DC | 1 | piece |
| 2CSS200911R0002 | S2C-UA 24 AC Undervoltage Release | S2C-UA 24 AC | 1 | piece |
| 2CSS200911R0003 | S2C-UA 48 AC Undervoltage Release | S2C-UA 48 AC | 1 | piece |
| 2CSS200911R0004 | S2C-UA 110 AC Undervoltage Release | S2C-UA 110 AC | 1 | piece |
| 2CSS200911R0005 | S2C-UA 230 AC Undervoltage Release | S2C-UA 230 AC | 1 | piece |
| 2CSS200911R0006 | S2C-UA 400 AC Undervoltage Release | S2C-UA 400 AC | 1 | piece |
| 2CSS200911R0007 | S2C-UA 24 DC Undervoltage Release | S2C-UA 24 DC | 1 | piece |
| 2CSS200911R0008 | S2C-UA 48 DC Undervoltage Release | S2C-UA 48 DC | 1 | piece |
| 2CSS200911R0009 | S2C-UA 110 DC Undervoltage Release | S2C-UA 110 DC | 1 | piece |
| 2CSS200911R0010 | S2C-UA 230 DC Undervoltage Release | S2C-UA 230 DC | 1 | piece |
| GHS2001901R0003 | S2C-DH Mechanical Accessories | S2C-DH | 1 | piece |
| 2CSS200998R0001 | S2C-BP Mechanical tripping device | S2C-BP | 1 | piece |
| 2CSS200999R0001 | S2C-EST Plug-in base | S2C-EST | 1 | piece |
| 2CDS200918R0001 | S2C-NT Hand Operated Neutral | S2C-NT | 1 | piece |
| 2CCA880100R0001 | CMS-100PS Sensor | CMS-100PS | 1 | piece |
| 2CCA880101R0001 | CMS-101PS Sensor | CMS-101PS | 1 | piece |
| 2CCA880102R0001 | CMS-102PS Sensor | CMS-102PS | 1 | piece |

## Categories

Low Voltage Products and Systems → Modular DIN Rail Products → Miniature Circuit Breakers MCBs → Miniature Circuit Breakers MCBs

© 2024 ABB. All rights reserved.






360°

© 2024 ABB. All rights reserved.