

## PRODUCT-DETAILS

# S203MT-C1NA

## Miniature Circuit Breaker - S200MT - 3+NP - C - 1 ampere



### General Information

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | S203MT-C1NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Product ID            | 2CDS273106R0014                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| EAN                   | 4016779771436                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Catalog Description   | Miniature Circuit Breaker - S200MT - 3+NP - C - 1 ampere                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Long Description      | <p>S200MT miniature circuit breakers are designed especially for traction and railway applications. Acc. NF F 16-101/102 the product range S200MT is classified with Exigence 3, enabling the use in all parts of the vehicle. They are current limiting and have two different tripping mechanisms, the delayed thermal tripping mechanism for overload protection and the electromechanic tripping mechanism for short circuit protection. They are available in different characteristics (C,D,K,Z), configurations (1P,1P+N,2P,3P,3P+N,4P), breaking capacities (up to 10 kA at 230/400 V AC) and rated currents (up to 63A). All MCBs of the product range S200MT comply with IEC/EN 60898-1 and IEC/EN 609 47-2. All system pro M compact accessories can be used. Including the bottom-fitting auxiliary contact S2C-Hxx providing the possibility of 50% space saving and the creation of group signals.</p> |

### Technical

|                           |                                                              |
|---------------------------|--------------------------------------------------------------|
| Standards                 | IEC/EN 60898-1<br>IEC/EN 60947-2                             |
| Number of Poles           | 3+N                                                          |
| Number of Protected Poles | 3                                                            |
| Tripping Characteristic   | C                                                            |
| Rated Current ( $I_n$ )   | 1 A                                                          |
| Rated Operational Voltage | acc. to IEC 60898-1 400 V AC<br>acc. to IEC 60947-2 400 V AC |

|                                                                   |                                                                                                                                                                                                          |
|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power Loss                                                        | 5.6 W<br>at Rated Operating Conditions per Pole 1.4 W                                                                                                                                                    |
| Rated Insulation Voltage (U <sub>i</sub> )                        | acc. to IEC/EN 60664-1 440 V                                                                                                                                                                             |
| Operational Voltage                                               | Maximum (Incl. Tolerance) 440 V AC<br>Maximum 440 V AC<br>Minimum 12 V AC<br>Minimum 12 V DC                                                                                                             |
| Rated Frequency (f)                                               | 50 Hz<br>60 Hz                                                                                                                                                                                           |
| Rated Short-Circuit Capacity (I <sub>cn</sub> )                   | (400 V AC) 10 kA                                                                                                                                                                                         |
| Rated Ultimate Short-Circuit Breaking Capacity (I <sub>cu</sub> ) | (400 V AC) 15 kA                                                                                                                                                                                         |
| Rated Service Short-Circuit Breaking Capacity (I <sub>cs</sub> )  | (400 V AC) 11.3 kA                                                                                                                                                                                       |
| Energy Limiting Class                                             | 3                                                                                                                                                                                                        |
| Overvoltage Category                                              | III                                                                                                                                                                                                      |
| Pollution Degree                                                  | 3                                                                                                                                                                                                        |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> )               | 4 kV<br>(6.2 kV @ sea level)<br>(5.0 kV @ 2000 m)                                                                                                                                                        |
| Dielectric Test Voltage                                           | 50/60 Hz, 1 min: 2 kV                                                                                                                                                                                    |
| Housing Material                                                  | Insulation Group I, RAL 7035                                                                                                                                                                             |
| Actuator Material                                                 | Insulation Group II, Black, Sealable                                                                                                                                                                     |
| Actuator Marking                                                  | I / O                                                                                                                                                                                                    |
| Degree of Protection                                              | IP20                                                                                                                                                                                                     |
| Remarks                                                           | IP40 in enclosure with cover                                                                                                                                                                             |
| Electrical Endurance                                              | 20000 AC cycle<br>20000 cycle                                                                                                                                                                            |
| Terminal Type                                                     | Screw Terminals                                                                                                                                                                                          |
| Screw Terminal Type                                               | Failsafe Bi-directional Cylinder-lift Terminal                                                                                                                                                           |
| Connecting Capacity                                               | Busbar 10 / 10 mm <sup>2</sup><br>Flexible with Ferrule 0.75 ... 16 mm <sup>2</sup><br>Flexible 0.75 ... 16 mm <sup>2</sup><br>Rigid 0.75 ... 25 mm <sup>2</sup><br>Stranded 0.75 ... 25 mm <sup>2</sup> |
| Tightening Torque                                                 | 2.8 N·m                                                                                                                                                                                                  |
| Recommended Screw Driver                                          | Pozidriv 2                                                                                                                                                                                               |
| Mounting on DIN Rail                                              | TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715<br>TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715                                                                                           |
| Mounting Position                                                 | Any                                                                                                                                                                                                      |
| Built-In Depth (t <sub>2</sub> )                                  | 69 mm                                                                                                                                                                                                    |
| Installation Size                                                 | acc. to DIN 43880 1                                                                                                                                                                                      |
| Position of Neutral Terminals                                     | Right                                                                                                                                                                                                    |
| Power Supply Connection                                           | Arbitrary                                                                                                                                                                                                |

## Environmental

|                                                |                                                      |
|------------------------------------------------|------------------------------------------------------|
| Ambient Air Temperature                        | Operation -25 ... +55 °C<br>Storage -40 ... +70 °C   |
| Reference Ambient Air Temperature              | 30 °C                                                |
| Resistance to Shock acc. to IEC 60068-2-27     | 30g / 3 shocks / 11 ms                               |
| Resistance to Vibrations acc. to IEC 60068-2-6 | 5g, 20 cycles at 5 ... 150 ... 5 Hz with load 0.8 In |
| Environmental                                  | 28 cycles                                            |

|             |                                              |
|-------------|----------------------------------------------|
| Conditions  | with 55 °C / 90-96 %<br>and 25 °C / 95-100 % |
| RoHS Status | Following EU Directive 2011/65/EU            |

## Dimensions

|                               |        |
|-------------------------------|--------|
| Product Net Width             | 70 mm  |
| Product Net Depth /<br>Length | 69 mm  |
| Product Net Height            | 88 mm  |
| Product Net Weight            | 0.5 kg |

## Container Information

|                                   |                |
|-----------------------------------|----------------|
| Package Level 1 Units             | carton 1 piece |
| Package Level 1 Width             | 92 mm          |
| Package Level 1 Depth /<br>Length | 78 mm          |
| Package Level 1 Height            | 80 mm          |
| Package Level 1 Gross<br>Weight   | 0.53 kg        |
| Package Level 1 EAN               | 4016779757508  |

## Ordering

|                        |          |
|------------------------|----------|
| Minimum Order Quantity | 1 piece  |
| Customs Tariff Number  | 85362010 |

## Certificates and Declarations (Document Number)

|                                   |                 |
|-----------------------------------|-----------------|
| Declaration of<br>Conformity - CE | 2CDK400594D2704 |
| Environmental<br>Information      | 9AKK107680A6947 |
| Instructions and<br>Manuals       | 2CDS207104P0001 |
| RoHS Information                  | 2cdk400594d2703 |

## Popular Downloads

|                                      |                 |
|--------------------------------------|-----------------|
| Data Sheet, Technical<br>Information | 2CDC002053D0204 |
| Instructions and<br>Manuals          | 2CDS207104P0001 |

## Classifications

|                               |                                            |
|-------------------------------|--------------------------------------------|
| Object Classification<br>Code | F                                          |
| ETIM 6                        | EC000042 - Miniature circuit breaker (MCB) |
| ETIM 7                        | EC000042 - Miniature circuit breaker (MCB) |
| ETIM 8                        | EC000042 - Miniature circuit breaker (MCB) |
| eClass                        | V11.0 : 27141901                           |
| UNSPSC                        | 39121614                                   |

## Accessories

| Identifier      | Description                                                                                                    | Type          | Quantity | Unit Of Measure |
|-----------------|----------------------------------------------------------------------------------------------------------------|---------------|----------|-----------------|
| 2CDS200922R0001 | S2C-S/H6R - Signalkontakt / Hilfsschalter                                                                      | S2C-S/H6R     | 1        | piece           |
| 2CDS200912R0001 | S2C-H6R - Hilfskontakt                                                                                         | S2C-H6R       | 1        | piece           |
| 2CDS200936R0001 | S2C-H11L - Hilfskontakt                                                                                        | S2C-H11L      | 1        | piece           |
| 2CDS200936R0002 | S2C-H20L - Hilfskontakt                                                                                        | S2C-H20L      | 1        | piece           |
| 2CDS200936R0003 | S2C-H02L - Hilfskontakt                                                                                        | S2C-H02L      | 1        | piece           |
| 2CDS200946R0001 | S2C-H6-11R - Hilfskontakt                                                                                      | S2C-H6-11R    | 1        | piece           |
| 2CDS200946R0002 | S2C-H6-20R - Hilfskontakt                                                                                      | S2C-H6-20R    | 1        | piece           |
| 2CDS200946R0003 | S2C-H6-02R - Hilfskontakt                                                                                      | S2C-H6-02R    | 1        | piece           |
| 2CDS200909R0001 | S2C-A1 - Arbeitsstromauslöser                                                                                  | S2C-A1        | 1        | piece           |
| 2CDS200909R0002 | S2C-A2 - Arbeitsstromauslöser                                                                                  | S2C-A2        | 1        | piece           |
| 2CSS200911R0001 | S2C-UA 12 DC - Unterspannungsauslöser                                                                          | S2C-UA 12 DC  | 1        | piece           |
| 2CSS200911R0002 | S2C-UA 24 AC - Unterspannungsauslöser                                                                          | S2C-UA 24 AC  | 1        | piece           |
| 2CSS200911R0003 | S2C-UA 48 AC - Unterspannungsauslöser                                                                          | S2C-UA 48 AC  | 1        | piece           |
| 2CSS200911R0004 | S2C-UA 110 AC - Unterspannungsauslöser                                                                         | S2C-UA 110 AC | 1        | piece           |
| 2CSS200911R0005 | S2C-UA 230 AC - Unterspannungsauslöser                                                                         | S2C-UA 230 AC | 1        | piece           |
| 2CSS200911R0006 | S2C-UA 400 AC - Unterspannungsauslöser                                                                         | S2C-UA 400 AC | 1        | piece           |
| 2CSS200911R0007 | S2C-UA 24 DC - Unterspannungsauslöser                                                                          | S2C-UA 24 DC  | 1        | piece           |
| 2CSS200911R0008 | S2C-UA 48 DC - Unterspannungsauslöser                                                                          | S2C-UA 48 DC  | 1        | piece           |
| 2CSS200911R0009 | S2C-UA 110 DC - Unterspannungsauslöser                                                                         | S2C-UA 110 DC | 1        | piece           |
| 2CSS200911R0010 | S2C-UA 230 DC - Unterspannungsauslöser                                                                         | S2C-UA 230 DC | 1        | piece           |
| 2CSS201997R0013 | S2C-CM1 - Motorantrieb                                                                                         | S2C-CM1       | 1        | piece           |
| 2CSS203997R0013 | S2C-CM2/3 - Motorantrieb                                                                                       | S2C-CM2/3     | 1        | piece           |
| 2CSS204997R0013 | S2C-CM4 - Motorantrieb                                                                                         | S2C-CM4       | 1        | piece           |
| GHS2001901R0003 | S2C-DH - Drehantrieb                                                                                           | S2C-DH        | 1        | piece           |
| 2CSS200998R0001 | S2C-BP - Mechanischer Auslöser                                                                                 | S2C-BP        | 1        | piece           |
| 2CSS200999R0001 | S2C-EST - Stecksockel                                                                                          | S2C-EST       | 1        | piece           |
| 2CDS200918R0001 | S2C-NT - Neutralleiter                                                                                         | S2C-NT        | 1        | piece           |
| 2CCA880100R0001 | CMS-100PS Strom-Messsystem Sensor 80A, 18mm für pro M compact u. SMISLINE Control Unit + Zubehör wird benötigt | CMS-100PS     | 1        | piece           |
| 2CCA880101R0001 | CMS-101PS Strom-Messsystem Sensor 40A, 18mm für pro M compact u. SMISLINE Control Unit + Zubehör wird benötigt | CMS-101PS     | 1        | piece           |
| 2CCA880102R0001 | CMS-102PS Strom-Messsystem Sensor 20A, 18mm für pro M compact u. SMISLINE Control Unit + Zubehör wird benötigt | CMS-102PS     | 1        | piece           |

## Categories

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

