

## PRODUCT-DETAILS

# S203M-C40UC

## Miniature Circuit Breaker - S200MUC - 3P - C - 40 ampere



### General Information

|                       |                                                          |
|-----------------------|----------------------------------------------------------|
| Extended Product Type | S203M-C40UC                                              |
| Product ID            | 2CDS273061R0404                                          |
| EAN                   | 4013614435270                                            |
| Catalog Description   | Miniature Circuit Breaker - S200MUC - 3P - C - 40 ampere |

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.

#### Long Description

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                       | IEC/EN 60898-1<br>IEC/EN 60947-2                                                             |
| Number of Poles                 | 3                                                                                            |
| Number of Protected Poles       | 3                                                                                            |
| Tripping Characteristic         | C                                                                                            |
| Rated Current (I <sub>n</sub> ) | 40 A                                                                                         |
| Rated Operational Voltage       | acc. to IEC 60898-1 400 V AC<br>acc. to IEC 60898-1 440 V DC<br>acc. to IEC 60898-2 400 V AC |

|                                                                   |                                                                                                                                                                                                          |
|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                   | acc. to IEC 60947-2 440 V AC                                                                                                                                                                             |
|                                                                   | acc. to IEC 60947-2 440 V DC                                                                                                                                                                             |
| Power Loss                                                        | 11.46 W<br>at Rated Operating Conditions per Pole 3.82 W                                                                                                                                                 |
| Rated Insulation Voltage (U <sub>i</sub> )                        | acc. to IEC/EN 60664-1 484 V                                                                                                                                                                             |
| Operational Voltage                                               | Maximum (Incl. Tolerance) 440 V AC<br>Maximum (Incl. Tolerance) 500 V DC<br>Maximum 440 V AC<br>Maximum 500 V DC<br>Minimum 12 V AC<br>Minimum 12 V DC                                                   |
| Rated Frequency (f)                                               | DC<br>50 Hz<br>60 Hz                                                                                                                                                                                     |
| Rated Short-Circuit Capacity (I <sub>cn</sub> )                   | (253 V AC) 10 kA<br>(400 V AC) 10 kA<br>(440 V DC) 10 kA                                                                                                                                                 |
| Rated Ultimate Short-Circuit Breaking Capacity (I <sub>cu</sub> ) | (220 V DC) 25 kA<br>(440 V AC) 10 kA<br>(440 V DC) 10 kA                                                                                                                                                 |
| Rated Service Short-Circuit Breaking Capacity (I <sub>cs</sub> )  | (220 V DC) 20 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                                                                                                                                                                                                    |
| Contact Position Indication                                       | Red ON / Green OFF                                                                                                                                                                                       |
| Degree of Protection                                              | IP20                                                                                                                                                                                                     |
| Remarks                                                           | IP40 in enclosure with cover<br>Please note polarity of device                                                                                                                                           |
| Electrical Endurance                                              | 10000 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 ... 25 mm <sup>2</sup><br>Flexible 0.75 ... 25 mm <sup>2</sup><br>Rigid 0.75 ... 35 mm <sup>2</sup><br>Stranded 0.75 ... 35 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                                                                                                                                                                                      |
| Power Supply Connection                                           | Please Note Polarity of Device                                                                                                                                                                           |

## Environmental

|                         |                                                    |
|-------------------------|----------------------------------------------------|
| Ambient Air Temperature | Operation -25 ... +55 °C<br>Storage -40 ... +70 °C |
| Reference Ambient Air   | 30 °C                                              |

## Temperature

|                                               |                        |
|-----------------------------------------------|------------------------|
| Resistance to Shock acc.<br>to IEC 60068-2-27 | 25g / 2 shocks / 13 ms |
|-----------------------------------------------|------------------------|

|                                                   |                                                      |
|---------------------------------------------------|------------------------------------------------------|
| Resistance to Vibrations<br>acc. to IEC 60068-2-6 | 5g, 20 cycles at 5 ... 150 ... 5 Hz with load 0.8 in |
|---------------------------------------------------|------------------------------------------------------|

|                             |                                                           |
|-----------------------------|-----------------------------------------------------------|
| Environmental<br>Conditions | 28 cycles<br>with 55 °C / 90-96 %<br>and 25 °C / 95-100 % |
|-----------------------------|-----------------------------------------------------------|

|             |                                   |
|-------------|-----------------------------------|
| RoHS Status | Following EU Directive 2011/65/EU |
|-------------|-----------------------------------|

## Technical UL/CSA

|                                       |                                                                                                        |
|---------------------------------------|--------------------------------------------------------------------------------------------------------|
| Maximum Operating<br>Voltage UL/CSA   | 480Y/277 V AC<br>500 V DC                                                                              |
| Connecting Capacity<br>UL/CSA         | Busbar 14-8 AWG<br>Conductor 14-4 AWG                                                                  |
| Tightening Torque<br>UL/CSA           | 25 in-lb                                                                                               |
| Interrupting Rating acc.<br>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 |

## Dimensions

|                               |          |
|-------------------------------|----------|
| Product Net Width             | 52.5 mm  |
| Product Net Depth /<br>Length | 69 mm    |
| Product Net Height            | 88 mm    |
| Product Net Weight            | 0.375 kg |

## Container Information

|                                   |                |
|-----------------------------------|----------------|
| Package Level 1 Units             | carton 1 piece |
| Package Level 1 Width             | 92 mm          |
| Package Level 1 Depth /<br>Length | 58 mm          |
| Package Level 1 Height            | 80 mm          |
| Package Level 1 Gross<br>Weight   | 0.4 kg         |
| Package Level 1 EAN               | 4013614426391  |
| Package Level 2 Units             | 36 piece       |
| Package Level 2 Width             | 275 mm         |
| Package Level 2 Depth /<br>Length | 395 mm         |
| Package Level 2 Height            | 210 mm         |
| Package Level 2 Gross<br>Weight   | 14.8 kg        |
| Package Level 2 EAN               | 4013614444692  |

## Ordering

|                        |          |
|------------------------|----------|
| Minimum Order Quantity | 1 piece  |
| Customs Tariff Number  | 85362010 |
| E-Number (Finland)     | 3210437  |

## Certificates and Declarations (Document Number)

|                                   |                 |
|-----------------------------------|-----------------|
| Declaration of<br>Conformity - CE | 2CDK400583D2704 |
| Environmental<br>Information      | 2CDK400030D201  |
| Instructions and<br>Manuals       | 2CDS207104P0001 |

Popular Downloads

|                                      |                 |
|--------------------------------------|-----------------|
| Data Sheet, Technical<br>Information | 2CDC002142D0207 |
| 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 - Signal / Auxiliary Contact | S2C-S/H6R     | 1        | piece           |
| 2CDS200912R0001 | S2C-H6R - Auxiliary Contact            | S2C-H6R       | 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           |
| 2CSS201997R0013 | S2C-CM1 - Motor operating device       | S2C-CM1       | 1        | piece           |
| 2CSS203997R0013 | S2C-CM2/3 - Motor operating device     | S2C-CM2/3     | 1        | piece           |
| 2CSS204997R0013 | S2C-CM4 - Motor operating device       | S2C-CM4       | 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

