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 PRODUCT-DETAILS

# S803N-C10

## High Performance MCB




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**General Information**

|                       |                      |
|-----------------------|----------------------|
| Extended Product Type | S803N-C10            |
| Product ID            | 2CCS893001R0104      |
| EAN                   | 7612271204525        |
| Catalog Description   | High Performance MCB |

|                  |  |
|------------------|--|
| Long Description | <p>The S803N-C10 is a 3-pole High Performance Circuit breaker with C-characteristic, with cage terminal and a rated current of 10 A. It is a current limiting device with a maximum breaking capacity of 36kA at 240/415V. It can be used for voltages up to 400/690V and in DC as well. It has two different tripping mechanisms, the thermal tripping mechanism for overload protection and the electromechanic tripping mechanism for short circuit protection. The S803N-C10 complies with IEC/EN 60898-1 and IEC/EN 60947-2 and allows the use for residential, commercial and industrial applications. It has numerous of approvals, therefore it can be used worldwide. The extensive range of accessory makes the use of S803N-C10 more comfortable. Due to the fast arc extinction of S803N-C10 your application will be secured.</p> |
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**ABB EcoSolutions**

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| ABB EcoSolutions                                  | Yes  |
| Recyclability Rate of the Product acc. to EN45555 | Design for Closing Resource Loops - Standard EN45555 - 86.29 % |
| ABB Site Meeting Group Waste To Landfill Target   | No non-hazardous waste is sent to a landfill                   |

|   |                                    |
|---|------------------------------------|
| End Of Life Disassembling Instructions  | 9AKK108470A2575                    |
| Environmental Product Declaration - EPD | 9AKK108470A1695<br>9AKK108470A1696 |

## Technical

|   |  |
|---|--|
| Type of Residual Current                                    | Standard Version   |
| Rated Ultimate Short-Circuit Breaking Capacity ( $I_{cu}$ ) | (415 V AC) 36 kA<br>(440 V AC) 20 kA<br>(500 V AC) 10 kA<br>(690 V AC) 4.5 kA<br>(375 V DC) 20 kA                    |
| Rated Service Short-Circuit Breaking Capacity ( $I_{cs}$ )  | (415 V AC) 30 kA<br>(440 V AC) 15 kA<br>(500 V AC) 8 kA<br>(690 V AC) 3 kA<br>(375 V DC) 20 kA                       |
| Contact Position Indication                                 | ON / OFF / TRIP  |
| Energy Limiting Class                                       | 3  |
| Electrical Endurance  | 10000 cycle  |
| Mechanical Endurance  | 10000 cycle  |
| Number of Protected Poles                                   | 3  |
| Number of Poles   | 3P   |
| Tightening Torque   | 3.5 N·m<br>31 in·lb  |
| Release Type  | C  |
| Actuator Marking  | I / O  |
| Recommended Screw Driver                                    | Pozidriv 2   |
| Accessories Available                                       | Yes  |
| Remarks   | Connection from top and bottom Connecting with CU only IP40 in enclosure with cover Cage terminal with captive screw |
| Connecting Capacity   | Flexible 0 ... 50 mm <sup>2</sup><br>Rigid 0 ... 70 mm <sup>2</sup>  |
| Terminal Type   | Screw Terminals  |

## Electrical

|   |  |
|---|--|
| Tripping Characteristic                       | C  |
| Rated Operational Voltage                     | acc. to IEC 60898-1 400 V AC<br>acc. to IEC 60947-2 690 V AC |
| Operational Voltage                           | Maximum 230/400 V AC<br>Minimum 12 V AC                      |
| Rated Insulation Voltage ( $U_i$ )            | acc. to IEC/EN 60664-1 690 V                                 |
| Rated Impulse Withstand Voltage ( $U_{imp}$ ) | 8 kV   |
| Input Voltage Type                            | AC/DC  |
| Rated Current ( $I_n$ )                       | 10 A   |
| Rated Short-Circuit Capacity                  | (400 V AC) 20 kA   |
| Frequency (f)                                 | 50 ... 60 Hz   |
| Rated Frequency (f)                           | 50/60 Hz   |
| Power Loss                                    | 4.5 W<br>at Rated Operating Conditions per Pole 1.5 W        |
| Overvoltage Category                          | IV   |

## Design

|                         |                                     |
|-------------------------|-------------------------------------|
| <u>Housing Material</u> | <u>Insulation group I, RAL 7035</u> |
|-------------------------|-------------------------------------|

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## Material Compliance

|   |  |
|---|--|
| RoHS Information                            | 9AKK107680A3903<br>2CCC005083D0202                         |
| RoHS Status                                 | Following EU Directive 2011/65/EU                          |
| RoHS Date                                   | 20170426   |
| REACH Declaration                           | 9AKK108468A3036  |
| REACH Information                           | False - does not contain substances > 0.1 mass percentage  |
| REACH Date                                  | 20200527   |
| Conflict Minerals Reporting Template (CMRT) | 9AKK108468A3363  |
| WEEE Category                               | 5. Small Equipment (No External Dimension More Than 50 cm) |
| WEEE B2C / B2B                              | Business To Business                                       |

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## Environmental

|  |  |
|--|--|
| Ambient Air Temperature                    | Operation -25 ... +60 °C<br>Storage -40 ... +70 °C         |
| Reference Ambient Air Temperature          | acc. to IEC60947-2 30 °C<br>acc. to EN60898-1 30 °C        |
| Degree of Protection                       | IP20   |
| Pollution Degree                           | 3  |
| Resistance to Vibrations                   | 1 mm 2 - 13.2 Hz<br>0.7g with Load 100% x le 13.2 - 100 Hz |
| Resistance to Shock acc. to IEC 60068-2-27 | 5 g<br>30 ms   |
| Environmental Information                  | 2CCY413207D0203  |

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## Dimensions

|                                     |                 |
|-------------------------------------|-----------------|
| Width in Number of Modular Spacings | 4.5             |
| Product Net Width                   | 81 mm           |
| Product Net Height                  | 95 mm           |
| Product Net Depth / Length          | 82.5 mm         |
| Product Net Weight                  | 735 g           |
| Built-In Depth (t <sub>2</sub> )    | 82.5 mm         |
| Dimension Diagram                   | 2CCC413003C0201 |

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## Ordering

|                              |             |
|------------------------------|-------------|
| Package Level 1 Units        | box 1 piece |
| Package Level 1 Gross Weight | 770 g       |
| E-Number (Norway)            | 1665872     |
| E-Number (Sweden)            | 2101530     |

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## Certificates and Declarations

|                                |                     |
|--------------------------------|---------------------|
| CB Certificate                 | 2CCC413027D0201     |
| CCC Certificate                | CQC2007010307228826 |
| Declaration of Conformity - CE | 2CCC005083D0202     |
| ESTI Certificate               | 9AKK107680A0846     |

|                 |                 |
|-----------------|-----------------|
| KC Certificate  | 9AKK107680A0932 |
| VDE Certificate | 2CCC413039D0601 |

## Installation

|                          |  |
|--------------------------|--|
| Instructions and Manuals | 2CCC413016M0008  |
| 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  |

## Popular Downloads

|                                   |   |
|-----------------------------------|---|
| Data Sheet, Technical Information | 9AKK108468A9560<br>9AKK108468A9561<br>9AKK108468A9562 |
|-----------------------------------|---|

## External Classifications and Standards

|                                    |  |
|------------------------------------|--|
| ETIM 9                             | EC000042 - Miniature circuit breaker (MCB)             |
| UNSPSC                             | 39121603   |
| eClass                             | V11.0 : 27141901                                       |
| IDEA Granular Category Code (IGCC) | 4899 >> Miniature circuit breaker (MCB) screw-in model |
| Object Classification Code         | F  |
| Standards                          | IEC/EN 60947-2<br>IEC/EN 60898-1                       |

## Categories

Low Voltage Products and Systems → Modular DIN Rail Products → High Performance Circuit Breakers HPCBs → High Performance Circuit Breakers HPCBs



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