

## PRODUCT-DETAILS

# S802C-B80

## S802C-B80 High Performance MCB



### General Information

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | S802C-B80                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Product ID            | 2CCS882001R0805                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| EAN                   | 5413656711285                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Catalog Description   | S802C-B80 High Performance MCB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Long Description      | <p>The S802C-B80 is a 2-pole High Performance Circuit breaker with B-characteristic, with cage terminal and a rated current of 80 A. It is a current limiting device with a maximum breaking capacity of 25kA at 240/415V. It can be used for voltages up to 254/440V 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 S802C-B80 complies with IEC/EN 60898-1 and IEC/EN 60947-2 and allows the use for industrial applications. It has numerous of approvals, therefore it can be used worldwide. The extensive range of accessory makes the use of S802C-B80 more comfortable. Due to the fast arc extinction of S802C-B80 your application will be secured.</p> |

### Technical

|                           |                                             |
|---------------------------|---------------------------------------------|
| Standards                 | IEC/EN 60947-2<br>IEC/EN 60898-1<br>UL 1077 |
| Number of Poles           | 2                                           |
| Number of Protected Poles | 2                                           |
| Tripping Characteristic   | B                                           |
| Rated Current ( $I_n$ )   | 80 A                                        |
| Rated Operational Voltage | 254/440 V AC<br>250 V DC                    |

|                                                                   |                                                                                                                      |                                            |
|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| Power Loss                                                        | at Rated Operating Conditions per Pole 6.4 W                                                                         |                                            |
| Rated Insulation Voltage (U <sub>i</sub> )                        | 500 V AC                                                                                                             |                                            |
| Operational Voltage                                               | Maximum 230/400 V AC                                                                                                 | Minimum 12 V AC                            |
| Rated Frequency (f)                                               | 50...60 Hz                                                                                                           |                                            |
| Rated Short-Circuit Capacity (I <sub>cn</sub> )                   | (230 / 400 V AC) 15 kA                                                                                               |                                            |
| Rated Ultimate Short-Circuit Breaking Capacity (I <sub>cu</sub> ) | (240 / 415 V AC) 25 kA                                                                                               | (254 / 440 V AC) 15 kA<br>(250 V DC) 10 kA |
| Rated Service Short-Circuit Breaking Capacity (I <sub>cs</sub> )  | (240 / 415 V AC) 18 kA                                                                                               | (254 / 440 V AC) 10 kA<br>(125 V DC) 10 kA |
| Energy Limiting Class                                             | 3                                                                                                                    |                                            |
| Overvoltage Category                                              | IV                                                                                                                   |                                            |
| Pollution Degree                                                  | 3                                                                                                                    |                                            |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> )               | 8 kV                                                                                                                 |                                            |
| Housing Material                                                  | Insulation group I, RAL 7035                                                                                         |                                            |
| Actuator Marking                                                  | I / O                                                                                                                |                                            |
| Contact Position Indication                                       | ON / OFF / TRIP                                                                                                      |                                            |
| Degree of Protection                                              | IP20                                                                                                                 |                                            |
| Remarks                                                           | Connection from top and bottom Connecting with CU only IP40 in enclosure with cover Cage terminal with captive screw |                                            |
| Electrical Endurance                                              | 6000 cycle<br>4000 cycle                                                                                             |                                            |
| Terminal Type                                                     | Screw Terminals                                                                                                      |                                            |
| Connecting Capacity                                               | Stranded 1 ... 50 mm <sup>2</sup><br>Flexible 1 ... 70 mm <sup>2</sup>                                               |                                            |
| Tightening Torque                                                 | 3.5 N·m<br>31 in·lb                                                                                                  |                                            |
| Recommended Screw Driver                                          | Pozidriv 2                                                                                                           |                                            |
| 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                                                                                                                  |                                            |
| Built-In Depth (t <sub>2</sub> )                                  | 82.5 mm                                                                                                              |                                            |

## Environmental

|                                                |                                                                                                                                                                                                                                                                                         |  |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Ambient Air Temperature                        | Operation -25...60 °C                                                                                                                                                                                                                                                                   |  |
| Reference Ambient Air Temperature              | acc. to IEC60947-2 30 °C<br>acc. to EN60898-1 30 °C                                                                                                                                                                                                                                     |  |
| Resistance to Shock acc. to IEC 60068-2-27     | 5 g<br>30 ms                                                                                                                                                                                                                                                                            |  |
| Resistance to Vibrations acc. to IEC 60068-2-6 | 2 - 13.2 Hz / 1mm 13.2 - 100Hz / 0.7g with load 100% x le                                                                                                                                                                                                                               |  |
| Environmental Conditions                       | Damp Heat Cyclic acc. to IEC 60068-2-30 12+12 cycle<br>Damp Heat Cyclic acc. to IEC 60068-2-30 55°C @ 90-96%<br>Damp Heat Cyclic acc. to IEC 60068-2-30 25°C @ 90-100%<br>Dry Heat Test B acc. to IEC 60068-2-2 16 hour @ 55 °C<br>Dry Heat Test B acc. to IEC 60068-2-2 2 hour @ 70 °C |  |
| RoHS Status                                    | Following EU Directive 2011/65/EU                                                                                                                                                                                                                                                       |  |

## Technical UL/CSA

|                                    |                                             |
|------------------------------------|---------------------------------------------|
| Interrupting Rating acc. to UL1077 | (480V / 277 V AC) 10 kA<br>(250 V DC) 10 kA |
|------------------------------------|---------------------------------------------|

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**Dimensions**

|                            |         |
|----------------------------|---------|
| Product Net Width          | 54 mm   |
| Product Net Depth / Length | 82.5 mm |
| Product Net Height         | 95 mm   |
| Product Net Weight         | 490 g   |

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**Container Information**

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Units          | 1 piece       |
| Package Level 1 Width          | 105 mm        |
| Package Level 1 Depth / Length | 60 mm         |
| Package Level 1 Height         | 99 mm         |
| Package Level 1 Gross Weight   | 510 g         |
| Package Level 1 EAN            | 5413656711285 |

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**Ordering**

|                        |          |
|------------------------|----------|
| Minimum Order Quantity | 1 piece  |
| Customs Tariff Number  | 85362020 |

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**Certificates and Declarations (Document Number)**

|                                |                 |
|--------------------------------|-----------------|
| Declaration of Conformity - CE | 2CCC413016D0601 |
| Environmental Information      | 2CCY413207D0203 |
| Instructions and Manuals       | 2CCC413016M0008 |
| RoHS Information               | 2CCC413008D0206 |

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**Popular Downloads**

|                                   |                 |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 2CCC413003C0208 |
| Instructions and Manuals          | 2CCC413016M0008 |
| Dimension Diagram                 | 2CCC413003C0201 |

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**Classifications**

|                            |                                            |
|----------------------------|--------------------------------------------|
| Object Classification Code | F                                          |
| ETIM 6                     | EC000042 - Miniature circuit breaker (MCB) |
| ETIM 7                     | EC000042 - Miniature circuit breaker (MCB) |

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## Categories

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

