

## PRODUCT-DETAILS

# S802N-C80

## S802N-C80 High Performance MCB



### General Information

|                       |                                |
|-----------------------|--------------------------------|
| Extended Product Type | S802N-C80                      |
| Product ID            | 2CCS892001R0804                |
| EAN                   | 7612271204495                  |
| Catalog Description   | S802N-C80 High Performance MCB |

#### Long Description

The S802N-C80 is a 2-pole High Performance Circuit breaker with C-characteristic, with cage terminal and a rated current of 80 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 S802N-C80 complies with 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 S802N-C80 more comfortable. Due to the fast arc extinction of S802N-C80 your application will be secured.

### Technical

|                           |                                  |
|---------------------------|----------------------------------|
| Standards                 | IEC/EN 60947-2<br>IEC/EN 60898-1 |
| Number of Poles           | 2                                |
| Number of Protected Poles | 2                                |
| Tripping Characteristic   | C                                |
| Rated Current ( $I_n$ )   | 80 A                             |
| Rated Operational Voltage | 400/690 V AC<br>250 V DC         |
| Rated Voltage ( $U_r$ )   | 230 / 400 V                      |

|                                                                   |                                                                                                                      |
|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Power Loss                                                        | 12.8 W<br>at Rated Operating Conditions per Pole 6.4 W                                                               |
| Rated Insulation Voltage (U <sub>i</sub> )                        | 690 V AC                                                                                                             |
| Operational Voltage                                               | Maximum 230/400 V AC<br>Minimum 12 V AC                                                                              |
| Rated Frequency (f)                                               | 50...60 Hz                                                                                                           |
| Rated Short-Circuit Capacity (I <sub>cn</sub> )                   | (400 V) 25 kA<br>(230 V) 25 kA                                                                                       |
| Rated Ultimate Short-Circuit Breaking Capacity (I <sub>cu</sub> ) | (240 / 415 V AC) 36 kA<br>(254 / 440 V AC) 20 kA<br>(400 / 690 V AC) 4.5 kA<br>(250 V DC) 20 kA                      |
| Rated Service Short-Circuit Breaking Capacity (I <sub>cs</sub> )  | (240 / 415 V AC) 30 kA<br>(254 / 440 V AC) 15 kA<br>(400 / 690 V AC) 3 kA<br>(125 V DC) 20 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                                               | Rigid 0 ... 50 mm <sup>2</sup><br>Flexible 0 ... 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                                                                                                                                                                                                                                                       |

## Dimensions

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

## Container Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Units          | box 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            | 7612271204495 |

## Ordering

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

## Certificates and Declarations (Document Number)

|                                |                                    |
|--------------------------------|------------------------------------|
| Declaration of Conformity - CE | 2CCC413016D0601                    |
| Environmental Information      | 2CCY413207D0203                    |
| Instructions and Manuals       | 2CCC413016M0008                    |
| RoHS Information               | 2CCC413016D0601<br>9AKK107680A3903 |

## Popular Downloads

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

## Classifications

|                            |                                            |
|----------------------------|--------------------------------------------|
| Object Classification Code | F                                          |
| ETIM 6                     | EC000042 - Miniature circuit breaker (MCB) |
| ETIM 7                     | EC000042 - Miniature circuit breaker (MCB) |
| ETIM 8                     | EC000042 - Miniature circuit breaker (MCB) |

## Categories

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

