

**PRODUCT-DETAILS** 

## S802N-C80

## S802N-C80 High Performance MCB



| C      | l Informa | +:   |
|--------|-----------|------|
| -anera | i intorma | TIAN |

| Extended Product Type | \$802N-C80                     |  |
|-----------------------|--------------------------------|--|
| Product ID            | 2CCS892001R0804                |  |
| EAN                   | 7612271204495                  |  |
| Catalog Description   | S802N-C80 High Performance MCB |  |

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

Long Description

| Technical                       |                                  |
|---------------------------------|----------------------------------|
| Standards                       | IEC/EN 60947-2<br>IEC/EN 60898-1 |
| Number of Poles                 | 2                                |
| Number of Protected Poles       | 2                                |
| Tripping Characteristic         | С                                |
| Rated Current (In)              | 80 A                             |
| Rated Operational<br>Voltage    | 400/690 V AC<br>250 V DC         |
| Rated Voltage (U <sub>r</sub> ) | 230 / 400 V                      |

| Power Loss  | 12.8 W<br>at Rated Operating Conditions per Pole 6.4 W   |
|---|--|
| Rated Insulation Voltage (U;)                             | 690 V AC   |
| Operational Voltage                                       | Maximum 230/400 V AC<br>Minimum 12 V AC  |
| Rated Frequency (f)                                       | 5060 Hz  |
| Rated Short-Circuit                                       | (400 V) 25 kA  |
| Capacity (I <sub>cn</sub> )                               | (230 V) 25 kA  |
| Rated Ultimate Short-                                     | (240 / 415 V AC) 36 kA   |
| Circuit Breaking<br>Capacity (I <sub>cu</sub> )           | (254 / 440 V AC) 20 kA<br>(400 / 690 V AC) 4.5 kA<br>(250 V DC) 20 kA  |
| Rated Service Short-                                      | (240 / 415 V AC) 30 kA   |
| Circuit Breaking  | (254 / 440 V AC) 15 kA   |
| Capacity (I <sub>cs</sub> )                               | (400 / 690 V AC) 3 kA<br>(125 V DC) 20 kA  |
| Energy Limiting Class                                     | 3  |
| Overvoltage Category                                      | IV   |
| Pollution Degree  | 3  |
| Rated Impulse<br>Withstand Voltage (U <sub>imp</sub><br>) | 8 kV   |
| Housing Material  | Insulation group I, RAL 7035   |
| Actuator Marking  | 1/0  |
| Contact Position<br>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   |
|   | 4000 cycle   |
| Terminal Type   | Screw Terminals  |
| Connecting Capacity                                       | Rigid 0 50 mm²<br>Flexible 0 70 mm²  |
| Tightening Torque   | 3.5 N·m<br>31 in·lb  |
| Recommended Screw<br>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<br>Temperature                                | Operation -2560 °C   |
| Reference Ambient Air                                     | acc. to IEC60947-2 30 °C   |
| Temperature   | acc. to EN60898-1 30 °C  |

| Environmental                                  |   |
|--|---|
| Ambient Air<br>Temperature                     | Operation -2560 °C  |
| Reference Ambient Air<br>Temperature           | acc. to IEC60947-2 30 °C<br>acc. to EN60898-1 30 °C   |
| Resistance to Shock acc.<br>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<br>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 /<br>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 /<br>Length | 60 mm         |
| Package Level 1 Height            | 99 mm         |
| Package Level 1 Gross<br>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<br>Conformity - CE               | 2CCC413016D0601                    |
| Environmental Information                       | 2CCY413207D0203                    |
| Instructions and<br>Manuals                     | 2CCC413016M0008                    |
| RoHS Information                                | 2CCC413016D0601<br>9AKK107680A3903 |

| Popular Downloads                    |                 |
|--------------------------------------|-----------------|
| Data Sheet, Technical<br>Information | 2CCC413003C0208 |
| Instructions and<br>Manuals          | 2CCC413016M0008 |
| Dimension Diagram                    | 2CCC413003C0201 |

| 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) |

## Categories

\$802N-C80 4

 $Low\ Voltage\ Products\ and\ Systems \rightarrow Modular\ DIN\ Rail\ Products \rightarrow High\ Performance\ Circuit\ Breakers\ HPCBs$ 

