

## PRODUCT-DETAILS

# S402M-D13

## S402M-D13 Miniature Circuit Breaker



### General Information

|                       |                                     |
|-----------------------|-------------------------------------|
| Extended Product Type | S402M-D13                           |
| Product ID            | 2CCS572001R0131                     |
| EAN                   | 7612270102297                       |
| Catalog Description   | S402M-D13 Miniature Circuit Breaker |

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Long Description | <p>SMISSLINE TP S400M are a current limiting miniature circuit breakers. They have two different tripping mechanisms, the delayed thermal tripping mechanism for overload protection and the electromechanic tripping mechanism for short circuit protection. They are available in different characteristics (B,C,D,K), configurations (1P,1P+N,2P,3P,3P+N), breaking capacities (up to 10 kA at 240/415 V AC ) and rated currents (up to 63A). MCBs of the product range S400M are comply with IEC/EN 60898-1 for B,C and D characteristic and IEC/EN 60947-2 for C and K characteristic. The pluggable solution is only for the SMISSLINE TP System, allowing the use for commercial, industrial, and critical power applications.</p> |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Technical

|                                    |                                      |
|------------------------------------|--------------------------------------|
| Standards                          | IEC/EN 60898-1                       |
| Tripping Characteristic            | D                                    |
| Rated Voltage ( $U_r$ )            | 230 / 400 V                          |
| Rated Operational Voltage          | acc. to IEC 60898-1 240 ... 415 V AC |
| Rated Insulation Voltage ( $U_i$ ) | acc. to IEC/EN 60664-1 440 V         |
| Rated Impulse Withstand            | 4 kV                                 |

Voltage ( $U_{imp}$ )

|                                                                              |                                                                                                                        |
|------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Input Voltage Type                                                           | AC                                                                                                                     |
| Rated Current ( $I_n$ )                                                      | 13 A                                                                                                                   |
| Rated Operational Current ( $I_e$ )                                          | 13 A                                                                                                                   |
| Rated Short-Circuit Capacity ( $I_{cn}$ )                                    | (400 V) 10 kA<br>(230 V) 10 kA                                                                                         |
| Rated Ultimate Short-Circuit Breaking Capacity ( $I_{cu}$ )                  | (230 V) 50 kA<br>(400 V) 50 kA                                                                                         |
| Rated Conditional Short-Circuit Current ( $I_{nc}$ )                         | (230 V) 50 kA<br>(400 V) 50 kA                                                                                         |
| Rated Service Short-Circuit Breaking Capacity ( $I_{cs}$ )                   | (400 V AC) 7.5 kA                                                                                                      |
| Rated Service Short-Circuit Breaking Capacity, in % of $I_{cu}$ ( $I_{cs}$ ) | 50 %                                                                                                                   |
| Frequency (f)                                                                | 50 ... 60 Hz                                                                                                           |
| Rated Frequency (f)                                                          | 50 ... 60 Hz                                                                                                           |
| Power Loss                                                                   | 3.8 W                                                                                                                  |
| Power Supply Connection                                                      | Arbitrary                                                                                                              |
| Contact Position Indication                                                  | Red ON / Green OFF                                                                                                     |
| Energy Limiting Class                                                        | 3                                                                                                                      |
| Electrical Endurance                                                         | 10000 cycle<br>10000 cycle                                                                                             |
| Number of Poles                                                              | 2                                                                                                                      |
| Number of Protected Poles                                                    | 2                                                                                                                      |
| Overvoltage Category                                                         | III                                                                                                                    |
| Tightening Torque                                                            | 2.8 N·m                                                                                                                |
| Release Type                                                                 | D                                                                                                                      |
| Screw Terminal Type                                                          | Failsafe Bi-directional Cylinder-lift Terminal                                                                         |
| Actuator Marking                                                             | I / O                                                                                                                  |
| Mounting Position                                                            | Any                                                                                                                    |
| Recommended Screw Driver                                                     | Pozidriv 2                                                                                                             |
| Accessories Available                                                        | Yes                                                                                                                    |
| Connecting Capacity                                                          | Flexible with Ferrule 0.75 ... 25 mm²<br>Flexible 0.75 ... 25 mm²<br>Rigid 0.75 ... 35 mm²<br>Stranded 0.75 ... 35 mm² |
| Terminal Type                                                                | Screw Terminals                                                                                                        |

## Environmental

|                                   |                                                    |
|-----------------------------------|----------------------------------------------------|
| Ambient Temperature               | -25...55 °C                                        |
| Ambient Air Temperature           | Operation -25 ... +60 °C<br>Storage -40 ... +70 °C |
| Reference Ambient Air Temperature | 30 °C                                              |

|                                                   |                                                                                   |
|---------------------------------------------------|-----------------------------------------------------------------------------------|
| Degree of Protection                              | IP20                                                                              |
| Pollution Degree                                  | 3                                                                                 |
| Resistance to Vibrations<br>acc. to IEC 60068-2-6 | 2...13.2 Hz/1 mm<br>13.2...100Hz/0.7 g, 5 cycles<br>5...150 ... 5 Hz/1 g, 4 waves |
| RoHS Status                                       | Following EU Directive 2002/95/EC August 18, 2005 and amendment                   |
| Environmental Information                         | 2CCY451206D0201                                                                   |

## Dimensions

|                                        |           |
|----------------------------------------|-----------|
| Width in Number of<br>Modular Spacings | 2         |
| Product Net Width                      | 36 mm     |
| Product Net Height                     | 91 mm     |
| Product Net Depth /<br>Length          | 75 mm     |
| Product Net Weight                     | 235 g     |
| Product Net Length                     | 82 mm     |
| Size                                   | 2 modules |
| Built-In Depth (t <sub>2</sub> )       | 75 mm     |

## Container Information

|                                   |                |
|-----------------------------------|----------------|
| Package Level 1 Units             | carton 5 piece |
| Package Level 1 Width             | 100 mm         |
| Package Level 1 Height            | 125 mm         |
| Package Level 1 Depth /<br>Length | 185 mm         |
| Package Level 1 Gross<br>Weight   | 281 g          |
| Package Level 1 EAN               | 7612270102297  |

## Ordering

|                        |                  |
|------------------------|------------------|
| Minimum Order Quantity | 1 piece          |
| Customs Tariff Number  | 85362020         |
| E-Number (Switzerland) | 809859807        |
| Country of Origin      | Switzerland (CH) |

## Certificates and Declarations (Document Number)

|                                   |                      |
|-----------------------------------|----------------------|
| Declaration of Conformity<br>- CE | 9AKK107991A9634      |
| Environmental Information         | 2CCY451206D0201      |
| Instructions and Manuals          | 2CCC451019M0109      |
| RoHS Information                  | 2CCC413008D0206_RoHS |

## Popular Downloads

|                                   |                 |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 9AKK107492A6192 |
| Instructions and Manuals          | 2CCC451019M0109 |
| Dimension Diagram                 | 9AKK107492A6192 |

Classifications

|                            |                                                            |
|----------------------------|------------------------------------------------------------|
| ETIM 7                     | EC000042 - Miniature circuit breaker (MCB)                 |
| ETIM 8                     | EC000042 - Miniature circuit breaker (MCB)                 |
| EPLAN Catalog Tree         | Electrical engineering / Protection devices / General      |
| WEEE Category              | 5. Small Equipment (No External Dimension More Than 50 cm) |
| WEEE B2C / B2B             | Business To Business                                       |
| CN8                        | 85362020                                                   |
| eClass                     | V11.0 : 27141901                                           |
| Object Classification Code | FC                                                         |

Accessories

| Identifier      | Description | Type                                                | Quantity | Unit Of Measure |
|-----------------|-------------|-----------------------------------------------------|----------|-----------------|
| 2CCS500900R0081 | HK40011-L   | HK40011-L<br>Auxiliary switch                       | 1        | piece           |
| 2CCS500900R0214 | HK40011-R   | HK40011-R<br>Auxiliary switch                       | 1        | piece           |
| 2CCF201112R0001 | HK40020-L   | HK40020-L<br>Auxiliary switch                       | 1        | piece           |
| 2CCF201114R0001 | HK40002-L   | HK40002-L<br>Auxiliary switch                       | 1        | piece           |
| 2CCF201113R0001 | HK40020-R   | HK40020-R<br>Auxiliary switch                       | 1        | piece           |
| 2CCF201115R0001 | HK40002-R   | HK40002-R<br>Auxiliary switch                       | 1        | piece           |
| 2CCS500900R0101 | SK40011-L   | SK40011-L<br>Signal contact                         | 1        | piece           |
| 2CCS500900R0215 | SK40011-R   | SK40011-R<br>Signal contact                         | 1        | piece           |
| 2CCF201162R0001 | SK40020-L   | SK40020-L<br>Signal contact                         | 1        | piece           |
| 2CCF201164R0001 | SK40002-L   | SK40002-L<br>Signal contact                         | 1        | piece           |
| 2CCF201163R0001 | SK40020-R   | SK40020-R<br>Signal contact                         | 1        | piece           |
| 2CCF201165R0001 | SK40002-R   | SK40002-R<br>Signal contact                         | 1        | piece           |
| 2CCS500900R0141 | SK40010-LSA | SK40010-LSA<br>Signal contact                       | 1        | piece           |
| 2CCF201212R0001 | HK40010-LSA | HK400 10-L<br>SA Auxiliary<br>switch                | 1        | piece           |
| 2CCS500900R0216 | SK40010-RSA | SK40010-RSA<br>Signal contact                       | 1        | piece           |
| 2CCF201213R0001 | HK40010-RSA | HK400 10-R<br>SA Auxiliary<br>switch                | 1        | piece           |
| 2CCS500900R0161 | ZLS931      | ZLS931 Spare<br>parts                               | 1        | piece           |
| 2CCS500900R0021 | NT40163     | NT401-63<br>Neutral<br>disconnect<br>terminal block | 1        | piece           |
| 2CCS500900R0011 | NT40263     | NT402-63<br>Neutral<br>disconnect<br>terminal block | 1        | piece           |
| 2CDS200909R0001 | S2C-A1      | S2C-A1 Shunt<br>Trip                                | 1        | piece           |
| 2CDS200909R0002 | S2C-A2      | S2C-A2 Shunt<br>Trip                                | 1        | piece           |
| 2CCA880212R0001 | CMS-122PS   | CMS-122PS<br>Sensor                                 | 2        | piece           |
| 2CCA880102R0001 | CMS-102PS   | CMS-102PS<br>Sensor                                 | 2        | piece           |

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## Categories

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Low Voltage Products and Systems → Modular DIN Rail Products → Plug-in Distribution Systems → Miniature Circuit Breakers MCBs

