



PRODUCT-DETAILS

# S403M-K1.6NP

## Miniature Circuit Breaker



| General Information   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | S403M-K1.6NP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Product ID            | 2CCS573103R8257                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| EAN                   | 7612270104109                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Catalog Description   | 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.</p> <p>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> |

| ABB EcoSolutions              |                                                        |
|-------------------------------|--------------------------------------------------------|
| ABB EcoSolutions              | Yes                                                    |
| Circular Design               | Design for Closing Resource Loops - Standard EN45555 - |
| Principles Recyclability Rate | 58.6323356825684 %                                     |

|                                           |                                                                                                   |
|-------------------------------------------|---------------------------------------------------------------------------------------------------|
| Circular Design                           | 9AKK108469A6507                                                                                   |
| Principles Ecodesign                      |                                                                                                   |
| Group Waste to Landfill Target            | No non-hazardous waste is sent to a landfill                                                      |
| Sustainable Material Content in Packaging | Recycled Cardboard - 18.1 %<br>Recycled Cardboard - 67.7 %<br>Chemically Recycled Polymer - 0.0 % |
| Offered with Extended Lifetime            | Product Durability                                                                                |
| End of Life Instructions                  | 9AKK108469A6908                                                                                   |
| Environmental Product Declaration - EPD   | 9AKK108469A5735                                                                                   |

Technical

|                                                                                           |                                                                          |
|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Standards                                                                                 | IEC/EN 60947-2                                                           |
| Tripping Characteristic                                                                   | K                                                                        |
| Rated Operational Voltage                                                                 | acc. to IEC 60898-1 415 V                                                |
| Operational Voltage                                                                       | Maximum (Incl. Tolerance) 440 V AC<br>Minimum 12 V AC<br>Minimum 12 V DC |
| Rated Insulation Voltage (U <sub>i</sub> )                                                | acc. to IEC/EN 60664-1 440 V                                             |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> )                                       | 4 kV                                                                     |
| Input Voltage Type                                                                        | AC                                                                       |
| Rated Current (I <sub>n</sub> )                                                           | 1.6 A                                                                    |
| Rated Operational Current (I <sub>e</sub> )                                               | 1.6 A                                                                    |
| Rated Short-Circuit Capacity                                                              | (230 V) 10 kA<br>(400 V) 10 kA                                           |
| Rated Ultimate Short-Circuit Breaking Capacity (I <sub>cu</sub> )                         | (230 V) 25 kA<br>(400 V) 25 kA                                           |
| Rated Short-Circuit Making Capacity (I <sub>cm</sub> )                                    | (440 V AC) 30 kA<br>(415 V AC) 52.2 kA                                   |
| Rated Service Short-Circuit Breaking Capacity (I <sub>cs</sub> )                          | (240 V AC) 15 kA<br>(415 V AC) 15 kA<br>(440 V AC) 7.5 kA                |
| Rated Service Short-Circuit Breaking Capacity, in % of I <sub>cu</sub> (I <sub>cs</sub> ) | 50 %                                                                     |
| Frequency (f)                                                                             | 50 ... 60 Hz                                                             |
| Rated Frequency (f)                                                                       | 50 ... 60 Hz                                                             |
| Power Loss                                                                                | 5.2 W                                                                    |
| Power Supply Connection                                                                   | Arbitrary                                                                |
| Contact Position Indication                                                               | Red ON / Green OFF                                                       |
| Energy Limiting Class                                                                     | 3                                                                        |
| Electrical Endurance                                                                      | 10000 cycle                                                              |
| Mechanical Endurance                                                                      | 10000 cycle                                                              |
| Number of Protected Poles                                                                 | 4                                                                        |
| Number of Poles                                                                           | 4P                                                                       |
| Overvoltage Category                                                                      | III                                                                      |
| Tightening Torque                                                                         | 2.8 N·m                                                                  |

|                          |                                                   |
|--------------------------|---------------------------------------------------|
| Release Type             | K                                                 |
| 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 0.75 ... 25 mm²<br>Rigid 0.75 ... 35 mm² |
| Terminal Type            | Screw Terminals                                   |

Material Compliance

|                                             |                                                                        |
|---------------------------------------------|------------------------------------------------------------------------|
| RoHS Information                            | 9AKK107991A9634                                                        |
| RoHS Status                                 | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |
| RoHS Date                                   | 20170426                                                               |
| REACH Declaration                           | 9AKK108467A9561                                                        |
| REACH Information                           | True - contains substances > 0.1 mass percentage                       |
| REACH Date                                  | 20230417                                                               |
| Conflict Minerals Reporting Template (CMRT) | 9AKK108468A3363                                                        |

Environmental

|                                   |                         |
|-----------------------------------|-------------------------|
| Ambient Air Temperature           | Operation -25 ... 60 °C |
| Reference Ambient Air Temperature | 40 °C                   |
| Degree of Protection              | IP20                    |
| Pollution Degree                  | 3                       |
| Resistance to Vibrations          | 1 mm 2 ... 13.2 Hz      |
| Environmental Information         | 9AKK108467A9561         |

Dimensions

|                                     |                 |
|-------------------------------------|-----------------|
| Width in Number of Modular Spacings | 4               |
| Product Net Width                   | 72 mm           |
| Product Net Height                  | 91 mm           |
| Product Net Depth / Length          | 75 mm           |
| Product Net Weight                  | 428 g           |
| Built-In Depth (t2)                 | 75 mm           |
| Dimension Diagram                   | 9AKK107492A6192 |

Ordering

|                              |                |
|------------------------------|----------------|
| Package Level 1 Units        | carton 3 piece |
| Package Level 1 Gross Weight | 1355 g         |
| E-Number (Norway)            | 1623530        |
| E-Number (Switzerland)       | 809271817      |

| Certificates and Declarations     |                 |
|-----------------------------------|-----------------|
| Declaration of<br>Conformity - CE | 9AKK107991A9634 |

| Installation                |                 |
|-----------------------------|-----------------|
| Instructions and<br>Manuals | 2CCC451019M0109 |

| Popular Downloads                    |                 |
|--------------------------------------|-----------------|
| Data Sheet, Technical<br>Information | 9AKK107492A6192 |

| Classifications               |                                                            |
|-------------------------------|------------------------------------------------------------|
| ETIM 8                        | EC000042 - Miniature circuit breaker (MCB)                 |
| ETIM 9                        | EC000042 - Miniature circuit breaker (MCB)                 |
| 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<br>Code | FC                                                         |

| Accessories     |             |                  |          |                 |
|-----------------|-------------|------------------|----------|-----------------|
| Identifier      | Description | Type             | Quantity | Unit Of Measure |
| 2CCS500900R0081 | HK40011-L   | Auxiliary swtich | 1        | piece           |
| 2CCF201112R0001 | HK40020-L   | Auxiliary swtich | 1        | piece           |
| 2CCF201114R0001 | HK40002-L   | Auxiliary swtich | 1        | piece           |
| 2CCS500900R0101 | SK40011-L   | Signal contact   | 1        | piece           |
| 2CCF201162R0001 | SK40020-L   | Signal contact   | 1        | piece           |
| 2CCF201164R0001 | SK40002-L   | Signal contact   | 1        | piece           |
| 2CCS500900R0141 | SK40010-LSA | Signal contact   | 1        | piece           |
| 2CCF201212R0001 | HK40010-LSA | Auxiliary swtich | 1        | piece           |
| 2CCS500900R0161 | ZLS931      | Spare parts      | 1        | piece           |
| 2CCA880212R0001 | CMS-122PS   | Sensor           | 3        | piece           |
| 2CCA880102R0001 | CMS-102PS   | Sensor           | 3        | piece           |

---

## Categories

---

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



ABB  
**Eco**  
Solutions™