

PRODUCT-DETAILS

## S201-K1NA S201-K1NA Miniature Circuit Breaker - 1+NP - K - 1 A



| General Information   |  |
|-----------------------|--|
| Extended Product Type | S201-K1NA  |
| Product ID            | 2CDS251103R0217  |
| EAN                   | 4016779531832  |
| Catalog Description   | S201-K1NA Miniature Circuit Breaker - 1+NP - K - 1 A   |
| Long Description      | System pro M compact S200 miniature circuit breakers are current limiting. 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,Z), configurations (1P,1P+N,2P,3P,3P+N,4P), brooking conspicios (up to 64A) at 23(400 V, AC) and rated currents (up to 63A). All MCPs |

breaking capacities (up to 6 kA at 230/400 V AC) and rated currents (up to 63A). All MCBs of the product range S200 comply with IEC/EN 60898-1, IEC/EN 60947-2, UL1077 allowing the use for residential, commercial and industrial applications. Bottom-fitting auxiliary contact can be mounted on S200 to save 50% space.

| ABB EcoSolutions |     |
|------------------|-----|
| ABB EcoSolutions | Yes |

| Circular Value                                |   |
|---|---|
| Circular Design Principles Recyclability Rate | Design for Closing Resource Loops - Standard EN45555 - 90 % |
| Sustainable Material<br>Content               | 0 %   |
| Offered with Extended<br>Lifetime             | Product Durability  |
| Offered with Takeback                         | Take Back for Recycling                                     |

Services

## Eco Transparency

Environmental Product 9AKK108467A7832
Declaration - EPD

| Technical  |   |
|--|---|
| Standards  | IEC/EN 60898-1  |
|  | IEC/EN 60947-2<br>UL 1077   |
| Tripping Characteristic  | K   |
| Rated Operational Voltage                                      | acc. to IEC 60898-1 230 V AC  |
|  | acc. to IEC 60947-2 230 V AC  |
| Operational Voltage  | Maximum (Incl. Tolerance) 253 V AC  |
| Rated Insulation Voltage<br>(U <sub>i</sub> )                  | acc. to IEC/EN 60664-1 440 V  |
| Rated Impulse Withstand  | 4 kV  |
| Voltage (U <sub>imp</sub> )                                    | at 2000 m 5 kV<br>at Sea Level 6.2 kV   |
| Dielectric Test Voltage  | 50/60 Hz, 1 min: 2 kV   |
| Input Voltage Type   | AC/DC   |
| Rated Current (I <sub>n</sub> )                                | 1 A   |
| Rated Short-Circuit  | (AC) 6 kA   |
| Capacity   | (DC) 6 kA<br>(230 V AC) 6 kA  |
| Rated Ultimate Short-  | (133 V AC) 20 kA  |
| Circuit Breaking Capacity                                      | (230 V AC) 10 kA  |
| (I <sub>cu</sub> )   | (24 V DC) 20 kA<br>(60 V DC) 10 kA  |
| Rated Conditional Short-<br>Circuit Current (I <sub>nc</sub> ) | (230 V) 10 kA   |
| Rated Service Short-   | (133 V AC) 15 kA  |
| Circuit Breaking Capacity (I <sub>cs</sub> )                   | (230 V AC) 7.5 kA   |
| Frequency (f)  | 50 Hz   |
| Rated Frequency (f)  | 50 / 60 Hz  |
| Power Loss   | 2.5 W<br>at Rated Operating Conditions per Pole 1.25 W  |
| Power Supply Connection  | Arbitrary   |
| Contact Position<br>Indication                                 | Red ON / Green OFF  |
| Electrical Endurance   | 20000 AC cycle  |
| Mechanical Endurance   | 20000 cycle   |
| Number of Poles  | 1+N   |
| Number of Protected Poles                                      | 1   |
| Overvoltage Category   | III   |
| Position of Neutral<br>Terminals                               | Right   |
| Tightening Torque  | 2.8 N·m   |
| Mounting Type  | DIN-Rail  |
| Screw Terminal Type  | Failsafe Bi-directional Cylinder-lift Terminal  |
| Actuator Marking   | 1/0   |
| Actuator Material  | Insulation Group II, Black, Sealable  |
| Housing Material   | Insulation Group II, RAL 7035   |
| Mounting on DIN Rail   | TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715 |
| Mounting Position  | any   |
| Recommended Screw<br>Driver                                    | Pozidriv 2  |
| Accessories Available  | Yes   |
| Connecting Capacity  | Busbar 10 / 10 mm²  |
|  |   |

| Flexible with Ferrule 0.75 ... 25 mm² | Flexible 0.75 ... 25 mm² | Flexible 0.75 ... 25 mm² | Rigid 0.75 ... 35 mm² | Stranded 0.75 ... 35 mm² | Installation Size | acc. to DIN 43880 1 | Wire Stripping Length | 12.5 mm | Terminal Type | Screw Terminals | Screw T

| Environmental                                  |  |
|--|--|
| Ambient Air Temperature                        | Operation -25 +55 °C<br>Storage -40 +70 °C                             |
| Degree of Protection                           | IP20<br>Enclosure with Cover IP40                                      |
| Pollution Degree                               | 3  |
| Environmental Conditions                       | 28 cycles<br>with 55 °C / 90-96 %<br>and 25 °C / 95-100 %              |
| Resistance to Vibrations acc. to IEC 60068-2-6 | 5g, 20 cycles at 5 150 5 Hz with load 0.8 In                           |
| Resistance to Shock acc.<br>to IEC 60068-2-27  | 25g 2 shocks 13 ms   |
| RoHS Status                                    | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |
| RoHS Information                               | 2CDK403001D0607  |
| REACH Declaration                              | 9AKK107492A1906  |

| Technical UL/CSA                    |   |
|-------------------------------------|---|
| Maximum Operating<br>Voltage UL/CSA | 110 V DC<br>480Y / 277 V AC                         |
| Interrupting Rating acc. to UL1077  | (277 V AC) 6 kA<br>(60 V DC) 10 kA<br>(120 V) 10 kA |
| Connecting Capacity UL/CSA          | Busbar 18-8 AWG<br>Conductor 18-4 AWG               |
| Tightening Torque<br><u>UL/CSA</u>  | 18 in·lb  |

| Dimensions                             |                 |
|--|-----------------|
| Width in Number of<br>Modular Spacings | 2               |
| Product Net Width                      | 35 mm           |
| Product Net Height                     | 88 mm           |
| Product Net Depth / Length             | 69 mm           |
| Product Net Weight                     | 0.25 kg         |
| Pole Net Weight                        | 0.125 kg        |
| Built-In Depth (t <sub>2</sub> )       | 69 mm           |
| Dimension Diagram                      | 2CDC022007F0010 |

| Ordering                        |                |
|---------------------------------|----------------|
| Minimum Order Quantity          | 1 piece        |
| Package Level 1 Units           | carton 5 piece |
| Package Level 1 Gross<br>Weight | 1.3 kg         |

| Certificates and Declarations |           |
|-------------------------------|-----------|
| Certification Agency          | EN<br>IEC |

|                                       | UL  |
|---------------------------------------|---|
| Declaration of Conformity - CE        | 2CDK403001D0607   |
| Declaration of Conformity - UKCA      | 9AKK108467A5053   |
| <u>I²t Characteristic</u>             | 9AKK107992A5103   |
| Installation                          |   |
| Instructions and Manuals              | 2CDS207104P0002   |
| Popular Downloads                     |   |
| Data Sheet, Technical<br>Information  | 9AKK107991A8329   |
| I²t Characteristic                    | 9AKK107992A5103   |
| EPLAN Graphical Macro                 | 9AKK106713A8115   |
| EPLAN Macro                           | 9AKK106713A8105   |
| Classifications                       |   |
| ETIM 8                                | EC000042 - Miniature circuit breaker (MCB)  |
| ETIM 9                                | EC000042 - Miniature circuit breaker (MCB)  |
| EPLAN Function<br>Definition          | NO contact / NO contact, 2 connection points / NO contact, leading 3N_4N Circuit breaker / Single circuit breaker / Circuit breaker 1_2 |
| WEEE Category                         | 5. Small Equipment (No External Dimension More Than 50 cm)  |
| WEEE B2C / B2B                        | Business To Business  |
| CN8                                   | 8536 20 10  |
| UNSPSC                                | 39121603  |
| eClass                                | V11.0 : 27141901  |
| IDEA Granular Category<br>Code (IGCC) | 4897 >> Miniature circuit breakers  |
| Object Classification Code            | F   |

## Accessories

| Unit Of<br>Measure | Quantity | Туре             | Description                          | Identifier      |
|--------------------|----------|------------------|--------------------------------------|-----------------|
| piece              | 1        | S2C-S/H6R        | S2C-S/H6R Signal / Auxiliary Contact | 2CDS200922R0001 |
| piece              | 1        | S2C-H6R          | S2C-H6R Auxiliary Contact            | 2CDS200912R0001 |
| piece              | 1        | S2C-H11L         | S2C-H11L Auxiliary Contact           | 2CDS200936R0001 |
| piece              | 11       | S2C-H20L         | S2C-H20L Auxiliary Contact           | 2CDS200936R0002 |
| piece              | 11       | S2C-H02L         | S2C-H02L Auxiliary Contact           | 2CDS200936R0003 |
| piece              | 1        | S2C-H6-11R       | S2C-H6-11R Auxiliary Contact         | 2CDS200946R0001 |
| piece              | 1        | S2C-H6-20R       | S2C-H6-20R Auxiliary Contact         | 2CDS200946R0002 |
| piece              | 1        | S2C-H6-02R       | S2C-H6-02R Auxiliary Contact         | 2CDS200946R0003 |
| piece              | 1        | S2C-A1           | S2C-A1 Shunt Trip                    | 2CDS200909R0001 |
| piece              | 1        | S2C-A2           | S2C-A2 Shunt Trip                    | 2CDS200909R0002 |
| piece              | 1        | S2C-UA 12 DC     | S2C-UA 12 DC Undervoltage release S  | 2CSS200911R0001 |
| piece              | 1        | S2C-UA 24 AC     | S2C-UA 24 AC Undervoltage release S  | 2CSS200911R0002 |
| piece              | 1        | S2C-UA 48 AC     | S2C-UA 48 AC Undervoltage release S  | 2CSS200911R0003 |
| piece              | 1        | S2C-UA 110<br>AC | S2C-UA 110 AC Undervoltage release   | 2CSS200911R0004 |
| piece              | 1        | S2C-UA 230<br>AC | S2C-UA 230 AC Undervoltage release   | 2CSS200911R0005 |
| piece              | 1        | S2C-UA 400<br>AC | S2C-UA 400 AC Undervoltage release   | 2CSS200911R0006 |
| piece              | 1        | S2C-UA 24 DC     | S2C-UA 24 DC Undervoltage release S  | 2CSS200911R0007 |
| piece              | 1        | S2C-UA 48 DC     | S2C-UA 48 DC Undervoltage release S  | 2CSS200911R0008 |
| piece              | 1        | S2C-UA 110<br>DC | S2C-UA 110 DC Undervoltage release   | 2CSS200911R0009 |
| piece              | 1        | S2C-UA 230<br>DC | S2C-UA 230 DC Undervoltage release   | 2CSS200911R0010 |
| piece              | 1        | S2C-CM1          | S2C-CM1 Motor operating device       | 2CSS201997R0013 |
| piece              | 1        | S2C-CM2/3        | S2C-CM2/3 Motor operating device     | 2CSS203997R0013 |
| piece              | 1        | S2C-CM4          | S2C-CM4 Motor operating device       | 2CSS204997R0013 |
| piece              | 1        | S2C-DH           | S2C-DH Mechanical Accessories        | GHS2001901R0003 |
| piece              | 1        | S2C-BP           | S2C-BP Mechanical tripping device    | 2CSS200998R0001 |
| piece              | 1        | S2C-EST          | S2C-EST Plug-in base                 | 2CSS200999R0001 |
| piece              | 1        | S2C-NT           | S2C-NT Hand Operated Neutral         | 2CDS200918R0001 |
| piece              | 1        | CMS-100PS        | CMS-100PS Sensor                     | 2CCA880100R0001 |
| piece              | 1        | CMS-101PS        | CMS-101PS Sensor                     | 2CCA880101R0001 |
| piece              | 1        | CMS-102PS        | CMS-102PS Sensor                     | 2CCA880102R0001 |

## Categories

 $Low\ Voltage\ Products\ and\ Systems\ \rightarrow\ Modular\ DIN\ Rail\ Products\ \rightarrow\ Miniature\ Circuit\ Breakers\ MCBs\ \rightarrow\ Miniature\ MCBs\$ 





