PRODUCT-DETAILS

# S202-K8

## S202-K8 Miniature Circuit Breaker - 2P - K - 8 A



### General Information

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|---|---|
| Extended Product Type | S202-K8 |
| Product ID | 2CDS252001R0407 |
| EAN | 4016779507387 |
| Catalog Description | S202-K8 Miniature Circuit Breaker - 2P - K - 8 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), 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. |

### Technical

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| Standards | IEC/EN 60898-1<br>IEC/EN 60947-2<br>UL 1077 |
| Tripping Characteristic | K |
| Rated Operational Voltage | acc. to IEC 60898-1 400 V AC<br>acc. to IEC 60947-2 440 V AC |
| Operational Voltage | Maximum (Incl. Tolerance) 125 V DC<br>Maximum (Incl. Tolerance) 440 V AC |
| Rated Insulation Voltage ($U_i$) | acc. to IEC/EN 60664-1 440 V |
| Rated Impulse | 4 kV |

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|---|---|
| Withstand Voltage ($U_{imp}$) | 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 ($I_n$) | 8 A |
| Rated Short-Circuit Capacity ($I_{cn}$) | (AC) 6 kA<br>(DC) 6 kA<br>(400 V AC) 6 kA |
| Rated Ultimate Short-Circuit Breaking Capacity ($I_{cu}$) | (125 V DC) 10 kA<br>(230 V AC) 20 kA<br>(400 V AC) 10 kA<br>(440 V AC) 10 kA<br>(48 V DC) 20 kA |
| Rated Conditional Short-Circuit Current ($I_{nc}$) | (230 V) 20 kA<br>(400 V) 20 kA |
| Rated Service Short-Circuit Breaking Capacity ($I_{cs}$) | (230 V AC) 15 kA<br>(400 V AC) 7.5 kA<br>(440 V AC) 7.5 kA |
| Frequency (f) | 50 Hz |
| Rated Frequency (f) | 50 / 60 Hz |
| Power Loss | 3 W<br>at Rated Operating Conditions per Pole 1.5 W |
| Power Supply Connection | Arbitrary |
| Contact Position Indication | Red ON / Green OFF |
| Electrical Endurance | 20000 AC cycle |
| | 20000 cycle |
| Number of Poles | 2 |
| Number of Protected Poles | 2 |
| Overvoltage Category | III |
| Product Range | S200 |
| Tightening Torque | 2.8 N·m |
| Mounting Type | DIN-Rail |
| Screw Terminal Type | Failsafe Bi-directional Cylinder-lift Terminal |
| Actuator Marking | I / O |
| 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<br>TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715 |
| Mounting Position | Any |
| Recommended Screw Driver | Pozidriv 2 |
| Accessories Available | Yes |
| Connecting Capacity | Busbar 10 / 10 mm²<br>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 |
| Installation Size | acc. to DIN 43880 1 |
| Wire Stripping Length | 12.5 mm |
| Terminal Type | Screw Terminals |

## Environmental

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|---|---|
| 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 | 28 cycles |

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| Conditions | 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. to IEC 60068-2-27 | 25g / 2 shocks / 13 ms |
| RoHS Status | Following EU Directive 2011/65/EU |
| Environmental Information | 2CDK400030D0201 |

## Technical UL/CSA

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|---|---|
| Maximum Operating Voltage UL/CSA | 110 V DC<br>480Y / 277 V AC |
| Interrupting Rating acc. to UL1077 | (277 V AC) 6 kA<br>(480Y / 277 V AC) 6 kA<br>(240 V) 10 kA |
| Connecting Capacity UL/CSA | Busbar 18-8 AWG<br>Conductor 18-4 AWG |
| Tightening Torque UL/CSA | 18 in·lb |

## Dimensions

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|---|---|
| Width in Number of 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 ($t_2$) | 69 mm |

## Container Information

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|---|---|
| Package Level 1 Units | carton 5 piece |
| Package Level 1 Width | 92 mm |
| Package Level 1 Height | 80 mm |
| Package Level 1 Depth / Length | 183 mm |
| Package Level 1 Gross Weight | 1.3 kg |
| Package Level 1 EAN | 4016779608688 |
| Package Level 2 Units | carton 60 piece |
| Package Level 2 Width | 275 mm |
| Package Level 2 Height | 210 mm |
| Package Level 2 Depth / Length | 395 mm |
| Package Level 2 Gross Weight | 14.8 kg |
| Package Level 2 EAN | 4016779972628 |

## Ordering

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| Minimum Order Quantity | 1 piece |
| Customs Tariff Number | 85362010 |
| E-Number (Finland) | 3210581 |
| E-Number (Sweden) | 2100712 |

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| Country of Origin | Germany (DE) |

## Certificates and Declarations (Document Number)

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|---|---|
| Certification Agency | EN<br>IEC<br>UL |
| Declaration of Conformity - CE | 2CDK403001D0607 |
| Environmental Information | 2CDK400030D0201 |
| $I^2t$ Characteristic | 9AKK107992A5103 |
| Instructions and Manuals | 2CDS207104P0001 |
| RoHS Information | 2CDK403001D0607 |

## Popular Downloads

| | |
|---|---|
| Data Sheet, Technical Information | 9AKK107991A8329 |
| Instructions and Manuals | 2CDS207104P0001 |
| Dimension Diagram | 2CDC022007F0010 |
| $I^2t$ Characteristic | 9AKK107992A5103 |
| EPLAN Graphical Macro | 9AKK106713A8115 |
| EPLAN Macro | 9AKK106713A8105 |

## Classifications

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|---|---|
| ETIM 7 | EC000042 - Miniature circuit breaker (MCB) |
| ETIM 8 | EC000042 - Miniature circuit breaker (MCB) |
| EPLAN Catalog Tree | Electrical engineering / Protection devices / General |
| EPLAN Function Definition | Circuit breaker / Double circuit-breaker / Double circuit breaker 1_2_3_4 |
| WEEE Category | 5. Small Equipment (No External Dimension More Than 50 cm) |
| WEEE B2C / B2B | Business To Consumer |
| CN8 | 8536 20 10 |
| UNSPSC | 39121614 |
| eClass | V11.0 : 27141901 |
| Object Classification Code | F |

## Accessories

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

## Categories

Low Voltage Products and Systems → Modular DIN Rail Products → Miniature Circuit Breakers MCBs



