PRODUCT-DETAILS

# S302P-Z3

# S302P-Z3 Miniature Circuit Breaker - 2P - Z - 3 A



## General Information

| | |
|---|---|
| Extended Product Type | S302P-Z3 |
| Product ID | 2CDS382001R0318 |
| EAN | 4016779078696 |
| Catalog Description | S302P-Z3 Miniature Circuit Breaker - 2P - Z - 3 A |
| Long Description | The MCBs S300P series assures protection in industrial installations against overload and short circuits. This product is manufactured according to international IEC and UL standards, for the markets where it is required. |

## ABB EcoSolutions

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

## Circular Value

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|---|---|
| Circular Design Principles Recyclability Rate | Design for Closing Resource Loops - Standard EN45555 - 63.8 % |
| End of Life Instructions | 9AKK108467A9801 |

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## Eco Transparency

| | |
|---|---|
| Environmental Product Declaration - EPD | 9AKK108467A7130 |

## Technical

| | |
|---|---|
| Standards | CSA 22.2 No. 235<br>IEC/EN 60947-2<br>UL 1077 |
| Tripping Characteristic | Z |
| Rated Operational Voltage | acc. to IEC 60898-1 415 V AC<br>acc. to IEC 60898-1 415 V<br>acc. to IEC 60947-2 415 V AC |
| Operational Voltage | Maximum (Incl. Tolerance) 457 V AC<br>Maximum 457 V AC<br>Minimum 12 V AC<br>Minimum 12 V DC |
| Rated Insulation Voltage ($U_i$) | acc. to IEC/EN 60664-1 500 V |
| Rated Impulse Withstand Voltage ($U_{imp}$) | 6 kV |
| Dielectric Test Voltage | 50/60 Hz, 1 min: 2 kV |
| Input Voltage Type | AC/DC |
| Rated Current ($I_n$) | 3 A |
| Rated Short-Circuit Capacity | (400 V) 25 kA |
| Rated Ultimate Short-Circuit Breaking Capacity ($I_{cu}$) | (415 V AC) 100 kA<br>(440 V AC) 100 kA<br>(400 V) 100 kA |
| Rated Frequency (f) | 50 / 60 Hz |
| Power Loss | 4.4 W<br>at Rated Operating Conditions per Pole 2.2 W |
| Power Supply Connection | Arbitrary |
| Contact Position Indication | Red ON / Green OFF |
| Electrical Endurance | 20000 AC cycle |
| Mechanical Endurance | 20000 cycle |
| Number of Protected Poles | 2 |
| Number of Poles | 2 |
| Overvoltage Category | IV |
| Tightening Torque | 2.8 N·m |
| Screw Terminal Type | Failsafe Bi-directional Cylinder-lift Terminal |
| Actuator Marking | I / O |
| Actuator Material | Insulation Group II, Black, Sealable |
| Housing Material | Insulation Group I, 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>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 | 14 mm |
| Terminal Type | Screw Terminals |

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## Material Compliance

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|---|---|
| RoHS Information | 9AKK107991A3220 |
| RoHS Status | Following EU Directive 2011/65/EU |
| RoHS Date | 20220317 |
| REACH Declaration | 9AKK108468A9644 |
| REACH Information | False - does not contains substances > 0.1 mass percentage |
| Conflict Minerals Reporting Template (CMRT) | 9AKK108468A3363 |

## Environmental

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|---|---|
| Ambient Air Temperature | Operation -40 ... +70 °C<br>Storage -55 ... +70 °C |
| Degree of Protection | IP20<br>IP40<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 | 20 Cycles with Load 0.8 In: 5g 5 ... 150 ... 5 Hz |
| Resistance to Shock acc. to IEC 60068-2-27 | 25g 3 shocks 18 ms |

## Technical UL/CSA

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|---|---|
| Maximum Operating Voltage UL/CSA | 125 V DC<br>480Y / 277 V AC<br>480Y/277 V AC |
| Interrupting Rating acc. to UL1077 | (125 V DC) 10 kA<br>(480Y / 277 V AC) 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 | 0.248 kg |
| Pole Net Weight | 0.124 kg |
| Built-In Depth ($t_2$) | 69 mm |

## Ordering

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|---|---|
| Package Level 1 Units | box 5 piece |
| Package Level 1 Gross Weight | 1.29 kg |
| E-Number (Finland) | 3212498 |

## Certificates and Declarations

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|---|---|
| CB Certificate | 2CDZ405000A1089 |

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|---|---|
| | 2CDZ405000A1093 |
| CCA Certificate | 2CDZ405000A1090<br>2CDZ405000A1094 |
| CCC Certificate | 2CDZ405000A1097<br>2CDZ405000A1098 |
| Certification Agency | CSA<br>IEC<br>EN<br>UL |
| CQC Certificate | 2CDZ405000A1097<br>2CDZ405000A1098 |
| CSA Certificate | 2CDZ405000A1102 |
| Declaration of Conformity - CE | 9AKK107991A3220 |
| Declaration of Conformity - UKCA | 9AKK107992A8877 |
| DNV GL Certificate | 2CDZ405000A1155 |
| EAC Certificate | 2CDZ405000A1092<br>2CDZ405000A1096 |
| NF Certificate | 2CDZ405000A1144 |
| RINA Certificate | 2CDZ405000A1194 |
| UL Certificate | 2CDZ405000A1101 |
| VDE Certificate | 2CDZ405000A1191<br>2CDZ405000A1195 |

## Installation

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|---|---|
| Instructions and Manuals | 2CDS207104P0002 |

## Popular Downloads

| | |
|---|---|
| Data Sheet, Technical Information | 9AKK107992A4964 |

## Classifications

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|---|---|
| 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 | 8536 20 10 |
| UNSPSC | 39121603 |
| eClass | V11.0 : 27141901 |
| IDEA Granular Category Code (IGCC) | 4897 >> Miniature circuit breakers |
| Object Classification Code | F |

## Accessories

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| 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 |
| 2CDS200970R0001 | S2C-H01 Auxiliary Contact | S2C-H01 | 1 | piece |
| 2CDS200970R0002 | S2C-H10 Auxiliary Contact | S2C-H10 | 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 → Miniature Circuit Breakers MCBs

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