



 PRODUCT-DETAILS

S301P-C20

S301P-C20 Miniature Circuit Breaker - 1P - C - 20 A



General Information

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| Extended Product Type | S301P-C20 |
| Product ID | 2CDS381001R0204 |
| EAN | 4016779080408 |
| Catalog Description | S301P-C20 Miniature Circuit Breaker - 1P - C - 20 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, <u>for the markets where it is required.</u> |

ABB EcoSolutions

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| ABB EcoSolutions | Yes |
| EcoSolutions Profile | 9AKK108469A3274 |

Circular Value

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| Circular Design Principles | Design for Closing Resource Loops - Standard EN45555 - 63.8 % |
| Recyclability Rate | |
| Improved Resource Efficiency for Customers | Product Efficiency - Product requires less energy to operate compared to similar product on market or older products from the same line |

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| Offered with Extended Lifetime | Product Durability |
| End of Life Instructions | 9AKK108467A9801 |

Eco Transparency

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

Technical

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| Standards | CSA 22.2 No. 235 IEC/EN 60898-1 IEC/EN 60947-2 UL 1077 |
| Tripping Characteristic | C |
| Rated Operational Voltage | acc. to IEC 60898-1 240 V AC acc. to IEC 60898-1 240 V acc. to IEC 60947-2 240 V AC |
| Operational Voltage | Maximum (Incl. Tolerance) 254 V AC Maximum 254 V AC Minimum 12 V AC 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) | 20 A |
| Rated Short-Circuit Capacity | (AC) 25 kA (240 / 415 V AC) 25 kA |
| Rated Ultimate Short-Circuit Breaking Capacity (I _{cu}) | (240 V AC) 25 kA (72 V DC) 25 kA (230 V) 25 kA |
| Rated Service Short-Circuit Breaking Capacity (I _{cs}) | (240 V AC) 12.5 kA |
| Rated Frequency (f) | 50 / 60 Hz |
| Power Loss | 2.3 W at Rated Operating Conditions per Pole 2.3 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 | 1 |
| Number of Poles | 1 |
| 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 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 mm ² |

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| | Flexible with Ferrule 0.75 ... 25 mm ² |
| | Flexible 0.75 ... 25 mm ² |
| | Flexible 0.75 ... 25 mm ² |
| | Rigid 0.75 ... 35 mm ² |
| | Stranded 0.75 ... 35 mm ² |
| Installation Size | acc. to DIN 43880 1 |
| Wire Stripping Length | 14 mm |
| Terminal Type | Screw Terminals |

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 |
| REACH Date | 20231212 |
| Conflict Minerals Reporting Template (CMRT) | 9AKK108468A3363 |

Environmental

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| Ambient Air Temperature | Operation -40 ... +70 °C Storage -55 ... +70 °C |
| Degree of Protection | IP20 IP40 Enclosure with Cover IP40 |
| Pollution Degree | 3 |
| Environmental Conditions | 28 cycles with 55 °C / 90-96 % 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 | 480Y / 277 V AC 480Y/277 V AC |
| Interrupting Rating acc. to UL1077 | (277 V AC) 10 kA (60 V DC) 10 kA |
| Connecting Capacity UL/CSA | Busbar 18-8 AWG Conductor 18-4 AWG |
| Tightening Torque UL/CSA | 18 in-lb |

Dimensions

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| Width in Number of Modular Spacings | 1 |
| Product Net Width | 17.5 mm |
| Product Net Height | 88 mm |
| Product Net Depth / Length | 67.6 mm |
| Product Net Weight | 0.124 kg |
| Pole Net Weight | 0.124 kg |
| Built-In Depth (t ₂) | 69 mm |

Ordering

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|------------------------------|--------------|
| Package Level 1 Units | box 10 piece |
| Package Level 1 Gross Weight | 1.29 kg |
| E-Number (Finland) | 3212225 |
| E-Number (Sweden) | 2101034 |

Certificates and Declarations

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|-------------------------------------|------------------------------------|
| CB Certificate | 2CDZ405000A1089 2CDZ405000A1093 |
| CCA Certificate | 2CDZ405000A1090 2CDZ405000A1094 |
| CCC Certificate | 2CDZ405000A1097 2CDZ405000A1098 |
| Certification Agency | CSA IEC EN UL |
| CQC Certificate | 2CDZ405000A1097 2CDZ405000A1098 |
| CSA Certificate | 2CDZ405000A1102 |
| Declaration of Conformity - CE | 9AKK107991A3220 |
| Declaration of Conformity - UKCA | 9AKK107992A8877 |
| DNV GL Certificate | 2CDZ405000A1155 |
| EAC Certificate | 2CDZ405000A1092 2CDZ405000A1096 |
| NF Certificate | 2CDZ405000A1144 |
| RINA Certificate | 2CDZ405000A1194 |
| UL Certificate | 2CDZ405000A1101 |
| VDE Certificate | 2CDZ405000A1191 2CDZ405000A1195 |

Installation

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| Instructions and Manuals | 2CDS207104P0002 |
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Popular Downloads

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

| 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 |
| 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

