



PRODUCT-DETAILS

# DS201 C20 AC300

## DS201 C20 AC300 Residual Current Circuit Breaker with Overcurrent Protection



| General Information   |                                                                                                                                                                                                                                                                                                                               |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | DS201 C20 AC300                                                                                                                                                                                                                                                                                                               |
| Product ID            | 2CSR255080R3204                                                                                                                                                                                                                                                                                                               |
| EAN                   | 8012542049814                                                                                                                                                                                                                                                                                                                 |
| Catalog Description   | DS201 C20 AC300 Residual Current Circuit Breaker with Overcurrent Protection                                                                                                                                                                                                                                                  |
| Long Description      | The DS201 series is a 1P+N RCBO in two-modules width for the protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts. |

| Technical                                  |                                  |
|--------------------------------------------|----------------------------------|
| Standards                                  | IEC/EN 61009-1, IEC/EN 61009-2-1 |
| Tripping Characteristic                    | C                                |
| Type of Residual Current                   | Type AC                          |
| Rated Voltage (U <sub>r</sub> )            | 230 V                            |
| Rated Operational Voltage                  | acc. to IEC 60898-1 240 V        |
| Rated Insulation Voltage (U <sub>i</sub> ) | acc. to IEC/EN 60664-1 500 V     |

|                                                                   |                                                                                                                                                      |
|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Voltage (Ut)                                                 | 110 ... 264 V                                                                                                                                        |
| Dielectric Test Voltage                                           | 2 kV                                                                                                                                                 |
| Primary Rated Impulse Withstand Voltage                           | 4 kV                                                                                                                                                 |
| Input Voltage Type                                                | AC                                                                                                                                                   |
| Rated Current (I <sub>n</sub> )                                   | 20 A                                                                                                                                                 |
| Rated Residual Current                                            | 300 mA                                                                                                                                               |
| Rated Short-Circuit Capacity                                      | 6 kA                                                                                                                                                 |
| Rated Ultimate Short-Circuit Breaking Capacity (I <sub>cu</sub> ) | 10 kA                                                                                                                                                |
| Rated Residual Breaking Capacity (I <sub>Δm</sub> )               | EN 61009-1 6000 A<br>IEC 61009-1 6000 A                                                                                                              |
| Rated Conditional Short-Circuit Current (I <sub>nc</sub> )        | 10 kA                                                                                                                                                |
| Rated Service Short-Circuit Breaking Capacity (I <sub>cs</sub> )  | 7.5 kA                                                                                                                                               |
| Maximum Surge Current                                             | 0 kA                                                                                                                                                 |
| Leakage Current Type                                              | AC                                                                                                                                                   |
| Frequency (f)                                                     | 50/60 Hz                                                                                                                                             |
| Rated Frequency (f)                                               | 50 ... 60 Hz                                                                                                                                         |
| Power Loss                                                        | Average per Pole 2.8 W<br>Phase Pole 3.8 W<br>Neutral Pole 1.8 W<br>Total 5.7 W                                                                      |
| Power Supply Connection                                           | Arbitrary                                                                                                                                            |
| Contact Position Indication                                       | Red ON / Green OFF                                                                                                                                   |
| Energy Limiting Class                                             | 3                                                                                                                                                    |
| Electrical Endurance                                              | 10000 cycle                                                                                                                                          |
| Mechanical Endurance                                              | 20000 cycle                                                                                                                                          |
| Number of Protected Poles                                         | 1                                                                                                                                                    |
| Number of Poles                                                   | 2                                                                                                                                                    |
| Number of Modular Spacings per DIN Rail                           | 2                                                                                                                                                    |
| Fault Indication                                                  | Blue flag on toggle                                                                                                                                  |
| Operating Characteristic                                          | Instantaneous                                                                                                                                        |
| Overvoltage Category                                              | III                                                                                                                                                  |
| Position of Neutral Terminals                                     | Right                                                                                                                                                |
| Tightening Torque                                                 | 2.8 N·m                                                                                                                                              |
| Accessory Type                                                    | Auxiliary contact, Signal contact / auxiliary contact, Shunt trip, Auxiliary contact for bottom fitting, Overvoltage release, Motor operating device |
| Actuator Type                                                     | Toggle - Insulation group II, Black RAL 9005, sealable in ON-OFF positions                                                                           |
| Housing Type                                                      | Insulation group I - II, RAL 7035                                                                                                                    |
| Mounting Type                                                     | DIN-Rail                                                                                                                                             |
| Release Type                                                      | C                                                                                                                                                    |
| Screw Terminal Type                                               | Failsafe Bi-directional Cylinder-lift Terminal                                                                                                       |
| Mounting Position                                                 | Any                                                                                                                                                  |
| Accessories Available                                             | Yes                                                                                                                                                  |
| Number of Batteries                                               | 0                                                                                                                                                    |
| Cable Size                                                        | 25 mm <sup>2</sup>                                                                                                                                   |
| Connecting Capacity                                               | Busbar 10 ... 10 mm <sup>2</sup><br>Stranded 0.75 ... 25 mm <sup>2</sup>                                                                             |

|                       |                                                   |
|-----------------------|---------------------------------------------------|
|                       | Flexible with Ferrule 0.75 ... 16 mm <sup>2</sup> |
|                       | Flexible 0.75 ... 16 mm <sup>2</sup>              |
| Wire Stripping Length | 12 mm                                             |
| Terminal Type         | Screw Terminals                                   |

### Material Compliance

|                                             |                                                                        |
|---------------------------------------------|------------------------------------------------------------------------|
| RoHS Information                            | 9AKK106713A5588                                                        |
| RoHS Status                                 | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |
| RoHS Date                                   | 20211115                                                               |
| REACH Declaration                           | 9AKK108467A9482                                                        |
| Conflict Minerals Reporting Template (CMRT) | 9AKK108468A3363                                                        |

### Environmental

|                                            |                                                           |
|--------------------------------------------|-----------------------------------------------------------|
| Ambient Temperature                        | -25...55 °C                                               |
| Ambient Air Temperature                    | Operation -25 ... 55 °C                                   |
| Reference Ambient Air Temperature          | 30 °C                                                     |
| Degree of Protection                       | IP20<br>IP40                                              |
| Pollution Degree                           | 2                                                         |
| 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: 1g or 1mm 50 ... 150 ... 5 Hz |
| Resistance to Shock acc. to IEC 60068-2-27 | 25g 2 shocks 13 ms                                        |
| Environmental Information                  | 2CSC422002K2701                                           |

### Dimensions

|                                     |          |
|-------------------------------------|----------|
| Width in Number of Modular Spacings | 2        |
| Product Net Width                   | 0.035 m  |
| Product Net Height                  | 0.085 m  |
| Product Net Depth / Length          | 0.069 m  |
| Product Net Weight                  | 0.200 kg |
| Built-In Depth (t <sub>2</sub> )    | 69 mm    |

### Ordering

|                              |             |
|------------------------------|-------------|
| Package Level 1 Units        | box 1 piece |
| Package Level 1 Gross Weight | 225 g       |

### Certificates and Declarations

|                 |                 |
|-----------------|-----------------|
| ABS Certificate | 9AKK107991A2823 |
| CB Certificate  | 9AKK107492A6060 |

|                                   |                                    |
|-----------------------------------|------------------------------------|
| CCC Certificate                   | 9AKK107492A6067                    |
| Declaration of<br>Conformity - CE | 9AKK106713A5588                    |
| DNV GL Certificate                | 9AKK107680A3457<br>9AKK107680A3456 |
| EAC Certificate                   | 9AKK107492A6071<br>9AKK107991A7755 |
| GOST Certificate                  | 9AKK107992A1640                    |
| ÖVE Certificate                   | 9AKK107492A6085                    |
| RMRS Certificate                  | 9AKK107680A3454<br>9AKK107680A3455 |

**Installation**

|                             |                 |
|-----------------------------|-----------------|
| Instructions and<br>Manuals | 9AKK107492A6006 |
|-----------------------------|-----------------|

**Popular Downloads**

|                                      |                 |
|--------------------------------------|-----------------|
| Data Sheet, Technical<br>Information | 9AKK107492A6187 |
|--------------------------------------|-----------------|

**Classifications**

|                               |                                                            |
|-------------------------------|------------------------------------------------------------|
| ETIM 8                        | EC000905 - Earth leakage circuit breaker                   |
| ETIM 9                        | EC000905 - Earth leakage circuit breaker                   |
| WEEE Category                 | 5. Small Equipment (No External Dimension More Than 50 cm) |
| WEEE B2C / B2B                | Business To Consumer                                       |
| CN8                           | 85363030                                                   |
| eClass                        | V11.0 : 27142207                                           |
| Object Classification<br>Code | F                                                          |

**Accessories**

| Identifier      | Description                          | Type          | Quantity | Unit Of Measure |
|-----------------|--------------------------------------|---------------|----------|-----------------|
| 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           |
| 2CDS200912R0001 | S2C-H6R Auxiliary Contact            | S2C-H6R       | 1        | piece           |
| 2CDS200922R0001 | S2C-S/H6R Signal / Auxiliary Contact | S2C-S/H6R     | 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           |
| 2CDS200970R0031 | S2C-H01 Auxiliary Contact            | S2C-H01       | 1        | piece           |
| 2CDS200970R0032 | S2C-H10 Auxiliary Contact            | S2C-H10       | 1        | piece           |
| 2CSS200910R0005 | S2C-OVP1 Overvoltage Release         | S2C-OVP1      | 1        | piece           |
| 2CSS200933R0011 | F2C-A1 Shunt trip                    | F2C-A1        | 1        | piece           |
| 2CSS200933R0012 | F2C-A2 Shunt trip                    | F2C-A2        | 1        | piece           |
| 2CSS200993R0005 | S2C-OVP2 Overvoltage Release         | S2C-OVP2      | 1        | piece           |
| 2CSS203997R0013 | S2C-CM2/3 Motor Operating Device     | S2C-CM2/3     | 1        | piece           |

Categories

Low Voltage Products and Systems → Modular DIN Rail Products → Residual Current Devices RCDs → Residual Current Circuit Breakers with Overcurrent Protection RCBO

