



PRODUCT-DETAILS

# DS201 K20 A300

## DS201 K20 A300 Residual Current Circuit Breaker with Overcurrent Protection



| General Information   |                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | DS201 K20 A300                                                                                                                                                                                                                                                                                                                                     |
| Product ID            | 2CSR255180R3207                                                                                                                                                                                                                                                                                                                                    |
| EAN                   | 8012542775812                                                                                                                                                                                                                                                                                                                                      |
| Catalog Description   | DS201 K20 A300 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 and direct pulsating 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                    | K                                |
| Type of Residual Current                   | Type A                           |
| 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                                                                                                                                        |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> )                                       | 4 kV                                                                                                                                                 |
| 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                                                                                                                                               |
| Rated Service Short-Circuit Breaking Capacity, in % of I <sub>cu</sub> (I <sub>cs</sub> ) | 6 kA                                                                                                                                                 |
| Leakage Current Type                                                                      | A                                                                                                                                                    |
| 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                                                                           |
| Earthing Switch Type                                                                      | Undelayed                                                                                                                                            |
| Housing Type                                                                              | Insulation group I - II, RAL 7035                                                                                                                    |
| Mounting Type                                                                             | DIN-Rail                                                                                                                                             |
| Release Type                                                                              | K                                                                                                                                                    |
| 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><br>Flexible with Ferrule 0.75 ... 16 mm <sup>2</sup><br>Flexible 0.75 ... 16 mm <sup>2</sup> |
| Rated Cross-Section   | 1 - Solid-Core 0.75-25 mm <sup>2</sup><br>4 - Multi-Wired 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<br>Reporting Template<br>(CMRT) | 9AKK108468A3363                                                        |

## Environmental

|                                               |                                                           |
|-----------------------------------------------|-----------------------------------------------------------|
| Ambient Temperature                           | -25...55 °C                                               |
| Ambient Air<br>Temperature                    | Operation -25 ... 55 °C                                   |
| Reference Ambient Air<br>Temperature          | 20 °C                                                     |
| Degree of Protection                          | IP20<br>IP40                                              |
| Pollution Degree                              | 2                                                         |
| Environmental<br>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.<br>to IEC 60068-2-27 | 25g 2 shocks 13 ms                                        |
| Environmental<br>Information                  | 2CSC422002K2701                                           |

## Dimensions

|                                        |          |
|----------------------------------------|----------|
| Width in Number of<br>Modular Spacings | 2        |
| Product Net Width                      | 0.035 m  |
| Product Net Height                     | 0.085 m  |
| Product Net Depth /<br>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   |
| E-Number (Finland)           | 3211193 |
| E-Number (Sweden)            | 2100563 |

Certificates and Declarations

|                                |                 |
|--------------------------------|-----------------|
| CB Certificate                 | 9AKK107492A6060 |
| Declaration of Conformity - CE | 9AKK106713A5588 |
| ÖVE Certificate                | 9AKK107492A6085 |

Installation

|                          |                 |
|--------------------------|-----------------|
| Instructions and Manuals | 9AKK107492A6006 |
|--------------------------|-----------------|

Popular Downloads

|                                   |                 |
|-----------------------------------|-----------------|
| Data Sheet, Technical 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 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

