

## PRODUCT-DETAILS

# S-ARC1 B20

## S-ARC1 B20 Arc fault detection device integrated with MCB



### General Information

|                       |                                                                                                                                                                                                                     |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | S-ARC1 B20                                                                                                                                                                                                          |
| Product ID            | 2CSA255901R9205                                                                                                                                                                                                     |
| EAN                   | 8012542749936                                                                                                                                                                                                       |
| Catalog Description   | S-ARC1 B20 Arc fault detection device integrated with MCB                                                                                                                                                           |
| Long Description      | S-ARC1 is a 1P+N arc fault detection device (AFDD) with an integrated MCB in two modules, for the protection against short-circuit currents, overload, earth arc faults, parallel arc faults and series arc faults. |

### Ordering

|                        |               |
|------------------------|---------------|
| E-Number (Finland)     | 3211015       |
| E-Number (Sweden)      | 2100137       |
| EAN                    | 8012542749936 |
| Minimum Order Quantity | 1 piece       |
| Customs Tariff Number  | 85363030      |

### Dimensions

|                            |          |
|----------------------------|----------|
| Product Net Width          | 0.035 m  |
| Product Net Height         | 0.085 m  |
| Product Net Depth / Length | 0.069 m  |
| Product Net Weight         | 0.180 kg |

## Container Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Units          | box 1 piece   |
| Package Level 1 Width          | 0.040 m       |
| Package Level 1 Height         | 0.095 m       |
| Package Level 1 Depth / Length | 0.079 m       |
| Package Level 1 Gross Weight   | 0.200 kg      |
| Package Level 1 EAN            | 8012542749936 |

## Environmental

|                                                |                                                    |
|------------------------------------------------|----------------------------------------------------|
| Ambient Air Temperature                        | Operation -25 ... +55 °C<br>Storage -40 ... +70 °C |
| Resistance to Vibrations acc. to IEC 60068-2-6 | 0.2 mm or 5 g - 20 cycles at 5...150..5 Hz         |
| Resistance to Shock acc. to IEC 60068-2-27     | 25g / 2 shocks / 13 ms                             |
| RoHS Status                                    | Following EU Directive 2011/65/EU                  |

## Additional Information

|                               |                                                                                                                      |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Accessory Type                | Auxiliary contact<br>Signal contact / auxiliary contact<br>Shunt trip<br>Undervoltage release<br>Overvoltage release |
| Actuator Type                 | Toggle - Insulation group II, Orange RAL 2004, sealable in ON-OFF-positions                                          |
| Auxiliary Voltage AC/DC       | 230 V                                                                                                                |
| Connecting Capacity           | Busbar 10 mm²<br>Rigid 1 ... 25 mm²<br>Flexible 1 ... 25 mm²                                                         |
| Degree of Protection          | Housing IP40<br>Terminals IP20                                                                                       |
| Dielectric Test Voltage       | 2.5 kV                                                                                                               |
| Energy Limiting Class         | 3                                                                                                                    |
| Frequency (f)                 | 50 Hz                                                                                                                |
| Housing Type                  | Insulation group I, RAL 7035                                                                                         |
| Mounting Position             | Any                                                                                                                  |
| Mounting Type                 | on DIN rail EN 60715 (35 mm) by means of mounting clip                                                               |
| Number of Poles               | 2                                                                                                                    |
| Number of Protected Poles     | 1                                                                                                                    |
| Options Provided              | -                                                                                                                    |
| Overvoltage Category          | III                                                                                                                  |
| Pollution Degree              | 2                                                                                                                    |
| Position of Neutral Terminals | Right                                                                                                                |
| Power Loss                    | 3.6 W                                                                                                                |
| Power Supply Connection       | Arbitrary                                                                                                            |
| Product Main Type             | S-ARC1                                                                                                               |
| Product Name                  | Arc fault detection device integrated with MCB                                                                       |
| Rated Current ( $I_n$ )       | 20 A                                                                                                                 |
| Rated Frequency (f)           | 50...60 Hz                                                                                                           |
| Rated Voltage ( $U_r$ )       | 230 V                                                                                                                |

|                                                                      |                                                    |
|----------------------------------------------------------------------|----------------------------------------------------|
| Rated Insulation Voltage<br>(U <sub>i</sub> )                        | 500 V AC                                           |
| Rated Operational Voltage                                            | 230-240 V AC                                       |
| Rated Service Short-Circuit Breaking Capacity<br>(I <sub>cs</sub> )  | 6 kA                                               |
| Rated Short-Circuit Capacity (I <sub>cn</sub> )                      | 6 kA                                               |
| Rated Ultimate Short-Circuit Breaking Capacity<br>(I <sub>cu</sub> ) | 7.5 kA                                             |
| Release Type                                                         | B                                                  |
| RoHS Date                                                            | 20170621                                           |
| Standards                                                            | IEC 62606<br>EN 62606<br>IEC 60898-1<br>EN 60898-1 |
| Terminal Type                                                        | Screw Terminals                                    |
| Tightening Torque                                                    | 2.8 N·m                                            |
| Tripping Characteristic                                              | B                                                  |
| Wire Stripping Length                                                | 12 mm                                              |

## Certificates and Declarations (Document Number)

|                                   |                                    |
|-----------------------------------|------------------------------------|
| Data Sheet, Technical Information | 2CDC420032D0201                    |
| Declaration of Conformity - CE    | 9AKK107045A1563                    |
| Instructions and Manuals          | 9AKK106930A8985<br>9AKK106930A8986 |
| RoHS Information                  | 9AKK107045A1564                    |

## Classifications

|                            |                                                                  |
|----------------------------|------------------------------------------------------------------|
| ETIM 5                     | EC002694 - Miniature circuit breaker (MCB) with auxiliary device |
| ETIM 6                     | EC002694 - Miniature circuit breaker (MCB) with auxiliary device |
| ETIM 7                     | EC002694 - Miniature circuit breaker (MCB) with auxiliary device |
| Object Classification Code | Q                                                                |
| WEEE Category              | 5. Small Equipment (No External Dimension More Than 50 cm)       |

## Accessories

| Identifier      | Description                            | Type          | Quantity | Unit Of Measure |
|-----------------|----------------------------------------|---------------|----------|-----------------|
| 2CSS200933R0011 | F2C-A1 Shunt trip                      | F2C-A1        | 1        | piece           |
| 2CSS200933R0012 | F2C-A2 Shunt trip                      | F2C-A2        | 1        | piece           |
| 2CDS200912R0001 | S2C-H6R - Auxiliary Contact            | S2C-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           |
| 2CDS200922R0001 | S2C-S/H6R - Signal / Auxiliary Contact | S2C-S/H6R     | 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           |

## Categories

Low Voltage Products and Systems → Modular DIN Rail Products → Protection Against Arc Faults AFDDs → Arc Fault Detection Devices with Integrated Overcurrent Protection - AFDD+MCB

