

PRODUCT-DETAILS

# DS201 M C20 APR100

## DS201 M C20 APR100 Residual Current Circuit Breaker with Overcurrent Protection



General Information	
Extended Product Type	DS201 M C20 APR100
Product ID	2CSR275480R2204
EAN	8012542570110
Catalog Description	DS201 M C20 APR100 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. The APR type provides an optimal trade-off between safety and continuity of service, thanks to the resistance to unwanted trippings, offering good protection and isolation of resistive and inductive loads.

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

(U<sub>i</sub>)

Test Voltage (U <sub>t</sub> )	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	100 mA
Rated Short-Circuit Capacity	10 kA
Rated Ultimate Short-Circuit Breaking Capacity (I <sub>cu</sub> )	15 kA
Rated Residual Breaking Capacity (I <sub>Δm</sub> )	EN 61009-1 6000 A IEC 61009-1 6000 A
Rated Conditional Short-Circuit Current (I <sub>nc</sub> )	15 kA
Rated Service Short-Circuit Breaking Capacity (I <sub>cs</sub> )	11.2 kA
Rated Service Short-Circuit Breaking Capacity, in % of I <sub>cu</sub> (I <sub>cs</sub> )	10 kA
Maximum Surge Current	3 kA
Leakage Current Type	A
Frequency (f)	50/60 Hz
Rated Frequency (f)	50 ... 60 Hz
Power Loss	Average per Pole 2.8 W Phase Pole 3.8 W Neutral Pole 1.8 W 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 (APR High Immunity)
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	C
Screw Terminal Type	Failsafe Bi-directional Cylinder-lift Terminal
Mounting Position	Any
Accessories Available	Yes
Surge Immunity acc. to IEC 61000-4-5	3000 A
Number of Batteries	0
Cable Size	25 mm <sup>2</sup>
Connecting Capacity	Busbar 10 ... 10 mm <sup>2</sup> 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>
Rated Cross-Section	1 - Solid-Core 0.75 ... 25 mm <sup>2</sup> 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 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 IP40
Pollution Degree	2
Environmental Conditions	28 cycles with 55 °C / 90-96 % 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
E-Number (Sweden)	2100803

Certificates and Declarations

ABS Certificate	9AKK107991A2823
CB Certificate	9AKK107492A6064 9AKK107492A6065
CCC Certificate	9AKK107492A6069
Declaration of Conformity - CE	9AKK106713A5588
DNV GL Certificate	9AKK107680A3457 9AKK107680A3456
EAC Certificate	9AKK107492A6071 9AKK107991A7755
GOST Certificate	9AKK107992A1640
KEMA Certificate	9AKK107492A6077
ÖVE Certificate	9AKK107492A6086
RMRS Certificate	9AKK107680A3454 9AKK107680A3455
VDE Certificate	9AKK107492A6093

Installation

Instructions and Manuals	9AKK107492A6006
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Popular Downloads

Data Sheet, Technical Information	9AKK107492A6187
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## 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

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## Categories

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

