PRODUCT-DETAILS

DS301C B20 A30

Residual Current Circuit Breaker with Overcurrent Protection DS301C - 1P+N - 30 mA - 20 A - B - Type A



General Information

Extended Product Type	DS301C B20 A30
Product ID	2CSR255163R1205
EAN	8012542360056
Catalog Description	Residual Current Circuit Breaker with Overcurrent Protection DS301C - 1P+N - 30 mA - 20 A - B - Type A
Long Description	The DS301C series is a 1P+N RCBO in one module 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

ABB EcoSolutions

ABB EcoSolutions	Yes
EcoSolutions Profile	9AKK108471A0996
Recyclability Rate of the Product acc. to EN45555	Design for Closing Resource Loops - Standard EN45555 - 79.18 %
Material Resource Reduction (wt. %)	Design for Reduced Resource Consumption - 45 %
ABB Site Meeting Group Waste To Landfill Target	No non-hazardous waste is sent to a landfill UL 2799 Zero Waste To Landfill Validation available
Sustainable Material	Recycled Cardboard - 71.18 %

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Content in Packaging (wt. %)	Recycled Paper - 0 %
Improved Energy Efficiency for Customers	Product Efficiency - Product considered more energy-efficient compared to similar product on market or older products from the same line
Extended Product Lifetime	Product Durability
End Of Life Disassembling Instructions	9AKK108469A2271
Environmental Product Declaration - EPD	9AKK108468A8865

Technical

Type of Residual Current	Type A
Test Voltage (Ut)	170 ... 264 V
Dielectric Test Voltage	2.5 kV
Rated Ultimate Short-Circuit Breaking Capacity (I_{cu})	6 kA
Rated Residual Breaking Capacity (IΔm)	EN 61009-1 4500 A IEC 61009-1 3000 A
Rated Service Short-Circuit Breaking Capacity (I_{cs})	6 kA
Power Supply Connection	Arbitrary
Contact Position Indication	Red ON / Green OFF
Energy Limiting Class	3
Electrical Endurance	7000 cycle
Mechanical Endurance	7000 cycle
Number of Protected Poles	1
Number of Poles	1P+N
Number of Modular Spacings per DIN Rail	1
Fault Indication	Blue Flag Below Toggle
Operating Characteristic	Instantaneous
Position of Neutral Terminals	Right
Tightening Torque	1.2 N·m
Accessory Type	Busbar Psc series, Padlock
Actuator Type	Toggle - Insulation group II, Black RAL 9005, sealable in ON-OFF positions
Housing Type	Insulation group I - II, RAL 7035
Screw Terminal Type	Failsafe Bi-directional Cylinder-lift Terminal
Options Provided	Screwless (Please check equivalent DSX301C)
Accessories Available	No
Connecting Capacity	Busbar 10 ... 10 mm² Rigid 1.5 ... 16 mm² Flexible 1.5 ... 16 mm²
Rated Cross-Section	1 - Solid-Core 1.5 … 16 mm² 4 - Multi-Wired 1.5 … 10 mm²
Wire Stripping Length	10 mm
Terminal Type	Screw Terminals

Electrical

Tripping Characteristic	B
Rated Operational Voltage	acc. to IEC 60898-1 240 V
Rated Insulation Voltage (U_i)	acc. to IEC/EN 60664-1 500 V
Rated Impulse Withstand Voltage (U_{imp})	4 kV
Input Voltage Type	AC

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Rated Current (I_n)	20 A
Rated Residual Current	30 mA
Rated Short-Circuit Capacity	6 kA
Rated Frequency (f)	50 Hz
Power Loss	Average per Pole 1.83 W Phase Pole 2.88 W Neutral Pole 0.78 W Total 3.66 W
Overvoltage Category	III

Material Compliance

RoHS Declaration	9AKK108466A7779
RoHS Information	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
RoHS Date	20220727
REACH Declaration	9AKK108467A9482
REACH Information	True - contains substances > 0.1 mass percentage
REACH Date	20240429
Conflict Minerals Reporting Template (CMRT)	9AKK108468A3363
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)
WEEE B2C / B2B	Business To Consumer

Environmental

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

Dimensions

Width in Number of Modular Spacings	1
Product Net Width	17.6 mm
Product Net Height	92 mm
Product Net Depth / Length	68 mm
Product Net Weight	110 g
Built-In Depth (t_2)	17.6 mm

Engineering

EPLAN Data	9AAF618237_EPLAN

Ordering

Package Level 1 Units	box 1 piece

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Package Level 1 Gross Weight	0.127 kg
E-Number (Finland)	3214082
E-Number (Norway)	1682791
E-Number (Sweden)	2160195

Certificates and Declarations

CB Certificate	9AKK107991A9485
CCC Certificate	9AKK108467A0379
CEBEC Certificate	9AKK108466A9450
Declaration of Conformity - CE	9AKK108466A7779
KEMA Certificate	9AKK108467A0378
SEV Certificate	9AKK108467A0377
VDE Certificate	9AKK108466A9224

Installation

Instructions and Manuals	9AKK107991A9407
Mounting Type	DIN-Rail
Mounting Position	Any

Popular Downloads

Data Sheet, Technical Information	9AKK108466A9620
Mechanical Drawings	9AKK107991A9486 9AKK107991A9487

External Classifications and Standards

ETIM 9	EC000905 - Earth leakage circuit breaker
ETIM 10	EC000905 - Earth leakage circuit breaker
UNSPSC	39121601
eClass	V11.0 : 27142207
IDEA Granular Category Code (IGCC)	4875 >> Residual current circuit breaker (RCCB)
Object Classification Code	F
Standards	IEC/EN 61009-1 IEC/EN 61009-2-1

Accessories

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Identifier	Description	Type	Quantity	Unit Of Measure
GJF1101903R0004	SA 1E LOCK ADAPTOR	SA1E	1	piece
GJF1101903R0002	SA 2 Padlock with 2 keys	SA2	1	piece
GJF1109999R0001	SA2 PADLOCK	SA2I	1	piece
GJF1101903R0003	SA3 Locking Device, Set incl. padlock	SA3	1	piece
2CDL210331R1012	Busbar PSc 1/24/10 N 12 Modules, 24Pins,10mm²	PSc 1/24/10 N	1	piece
2CDL210331R1060	Busbar PSc 1/114/10 N 1 meter long, 114Pins,10mm²	PSc 1/120/10 N	1	piece
2CDL230331R1012	Busbar PSc 3/24/10 N 12 Modules, 24Pins,10mm²	PSc 3/24/10 N	1	piece
2CDL230331R1060	Busbar PSc 3/114/10 N 1 meter long, 114Pins,10mm²	PSc 3/120/10 N	1	piece
2CDL200331R0003	End Cap for PSc Busbars	PSc-END	1	piece
2CDL200331R0013	Shock protection cap for PSc Busbars	BSKc	1	piece

Categories

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








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