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MAIN CATALOG 2025

Electrical installation solutions for rolling stock applications



- Rolling stock dedicated fire- & smoke-protective material ensure passenger & personal safety
- Vibration- and shock-tested and approved products of highest quality
- Extensive range of accessories ensures installation flexibility and fulfills requirements of all applications

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Introduction

Railway reference standards

All ABB products available in this catalogue are not only compliant with the main standards for the railways sector but fulfill the requirements of the most important and demanding international standards for household and industrial installations. The scope of these standards is reported below:

- **IEC/EN 60898-1:** applies to a.c. air-break circuit breakers for operation at 50 Hz or 60 Hz, having a rated voltage not exceeding 440 V (between phases), a rated current not exceeding 125 A and a rated short-circuit capacity not exceeding 25000 A. These MCBs are intended for the protection against overcurrent of wiring installations of buildings and similar applications; they are designed for use by uninstructed people and for not being maintained.
- **IEC/EN 60898-2:** gives additional requirements for circuit breakers which are suitable for operation with direct current, and have a rated d.c. voltage not exceeding 220 V for single-pole and 440 V for two-pole circuit breakers, a rated current not exceeding 125 A and a rated d.c. short-circuit capacity not exceeding 10 000 A.
- **IEC/EN 60947-2:** applies to low voltage circuit breakers (MCBs) for use in industrial and similar applications. In particular, the standards refer to circuit breakers, the main contacts of which are intended to be connected to circuits, the rated voltage of which does not exceed 1000 V AC or 1500 V DC; it also contains additional requirements for integrally fused circuit breakers.
- **IEC/EN 61009:** apply to residual current operated circuit breakers with integral overcurrent protection for household and similar uses (RCBOs), for rated voltages not exceeding 440 V AC with rated frequencies of 50 Hz, 60 Hz or 50/60 Hz and rated currents not exceeding 125 A and rated short circuit capacities not exceeding 25000 A for operation at 50 Hz or 60 Hz.

Product Name	IEC/EN 60898-1	IEC /EN 60898-2	IEC/EN 60947-2	IEC/EN61009	UL1077
S 200 MT	■		■		■
S 200 MT UC		■	■		
S 200 MTR (DC)			■		
ST 200 MTR (DC)			■		■
S 202 TC	■				
S800P			■		■
S800S	■		■		■
S800S-UC			■		■
S800C	■		■		■
S800N	■		■		
DS 201 T				■	
DS301CT				■	
DS 203 NC				■	

03

Residual current devices



Electrical installation solutions for rolling stock applications

Residual current devices

Residual current devices	
RCBO DS201 T	03/2
RCBO DS203NC	03/8
RCBO DS301C T	03/18

RCBO DS201 T 1P+N. The details make the difference

A range designed for rolling stock equipments

Easy to install

Bi-directional cylindrical terminal ensure higher safety of connecting operations, making them easier.

Test pushbutton

Test pushbutton to verify the correct functioning of the device.

Earth fault indicator

Blue flag on the toggle to identify earth fault trips. I ON – 0 OFF indication molded on the toggle.

Contact position indicator (CPI)

To indicate the status of the contacts independently from the toggle position: green (open), red (closed).

Laser printed information

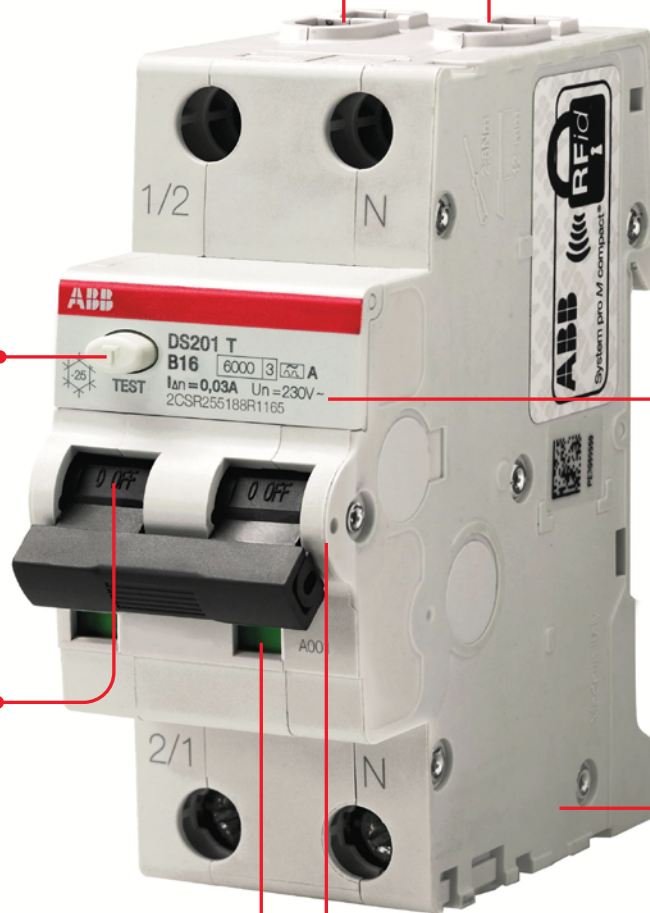
Information on the device are laser printed to ensure readability over time.

Combination with accessories

Improved combination with System pro M compact® accessories, including also the auxiliary contact for bottom fitting and motor operating device.

Dedicated space for label

Dedicated space to insert labels in order to clearly identify the protected lines.





Easy installation

The terminals available on DS201 make easier the supply operation in parallel with cables and busbars as they are composed of two different seats: a front seat for 25 mm² cables and a back seat for 10 mm² busbars. Supply is possible either from top or bottom side.



Mounting clip

Stable fixing on DIN rail, easy and fast mounting and dismounting operations thanks to the standard mounting clip.



Display the operational status

Easy troubleshooting and reduced downtime for maintenance operations thanks to both the blue indicator, that signals the differential tripping to immediately identify any earth fault (it cannot be activated in case of manual operation on the toggle) and the contact position indicator (CPI) that helps to always know the status of the contacts (red: closed contacts; green: open contacts).



Reliable in extreme conditions

RCBO DS201 can be used in ambient conditions where the temperature of the surrounding atmosphere has values between -25 °C (snowflake laser printed on the front of the device) and +55°C.



Additional laser printing

Additional information is laser printed on the lateral side of the device, including also the wiring diagram and the EAN code respectively for easier installation and for easier stock management.

RCBOs

DS201 T technical features



DS201 T

			DS201 T
Standards			IEC/EN 61009-1; IEC/EN 61009-2-1
Electrical features	Type (wave form of the earth leakage sensed)		A - APR
	Number of poles		1P + N
	Rated current I_n	A	$6 \leq I_n \leq 40$
	Rated sensitivity $I_{\Delta n}$	A	0.03
	Rated voltage U_e	V	230-240
	Insulation voltage U_i	V	500 V AC
	Overvoltage category		III
	Pollution degree		2
	Operating voltage of circuit test U_t	V	170 - 264
	Rated frequency	Hz	50/60
	Rated breaking capacity acc. to IEC/EN 61009-1	I_{cn} A	6000
	Rated breaking capacity acc. to IEC/EN 60947-2 (only referring to short circuit test)	ultimate I_{cu}	kA 10
		service I_{cs}	kA 7.5
	Rated residual breaking capacity $I_{\Delta m}$ according to EN 61009-1	$I_{\Delta m}$ A	6000
	Rated residual breaking capacity $I_{\Delta m}$ according to IEC 61009-1	$I_{\Delta m}$ A	6000 up to 25 A; 4500 for 32A and 40A
	Rated impulse withstand voltage (1.2/50) U_{imp}		kV 4 kV
	Dielectric test voltage at ind. freq. for 1 min.		kV 2 kV (50 / 60Hz, 1 min.)
	Thermomagnetic release - characteristic	B: $3 I_n \leq I_n \leq 5 I_n$	■
		C: $5 I_n \leq I_n \leq 10 I_n$	■
		K: $10 I_n \leq I_n \leq 14 I_n$	■
Mechanical features	Energy limiting class acc. to EN 61009-1		3
	Surge current resistance (wave 8/20)	A	NA for A version; 3000 for APR version
	Housing		Insulation group I - II, RAL 7035
	Toggle		Insulation group II, Black RAL 9005,
	Contact position indication		sealable in ON-OFF positions
	Earth fault trip indication		Blue flag on toggle
	Electrical life	operations	10000
	Mechanical life	operations	20000
	Protection degree acc. to EN 60529	housing	IP4X
		terminals	IP2X
	Shock resistance acc. to IEC/EN 60068-2-27		25g - 2 shocks - 13ms
	Vibration resistance acc. to IEC/EN 60068-2-6		0.1 mm or 1 g - 20 cycles at 5...150...5 Hz without load
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30	°C/RH	28 cycles with 55°C/90-96% and 25°C/95-100%
	Reference temperature for setting of thermal element	°C	30
	Ambient temperature (with daily average $\leq +35$ °C)	°C	-25...+55
	Storage temperature	°C	-40...+70

RCBOs

DS201 T technical features



DS201 T

DS201 T			
Installation	Terminal type	top / bottom	failsafe bi-directional cylinder-lift terminal (shock protected)
	Terminal size for cables	top / bottom	mm ² 25/25
	Terminal size for busbars	top / bottom	mm ² 10/10
	Solid /stranded wiring		1 x 0,75-25 mm ² for front terminal and 1 x 1-10 mm ² for rear terminal; 2 x 0,75-10 mm ² for front terminal
	Flexible wires with or without ferrules		1 x 0,75-16 mm ² for front terminal and 1 x 1-4 mm ² for rear terminal; 2 x 0,75-6 mm ² for front terminal
	Solid /stranded and flexible wiring with or without ferrules		2 x 0,75-4 mm ² for front terminal and 2 x 1,5 mm ² or 1 x 2,5-4 mm ² for rear terminal
	Tightening torque	top / bottom	Nm 2.8
	Stripping length of the cable		mm 12
	Mounting		on DIN rail EN 60715 (35mm) by means of mounting clip
	Mounting position		Any
Dimensions weight	Supply from		Top/Bottom terminals
	Dimensions (H x D x W)	mm	85 x 69 x 35
Combination with auxiliary elements	Weight	g	200
	Auxiliary contact		yes
	Signal contact / auxiliary contact		yes
	Shunt trip		yes
	Auxiliary contact for bottom fitting		yes
	Undervoltage release		yes
	Overvoltage release		yes
	Motor operating device		yes

RCBOs

DS201 T series A  type, B, C and K characteristics

DS201 T A type

Function: 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 contact and additional protection against direct contact ($I_{\Delta n}=30$ mA).

Standards: IEC/EN 61009

Hazard level R26/HL3 according to EN 45545

Exigence 3 according to NF F 16-101/102 (I2-F3)

Category 1 - Class A/B (Body mounted) according to IEC 61373

I_{cn}=6 kA



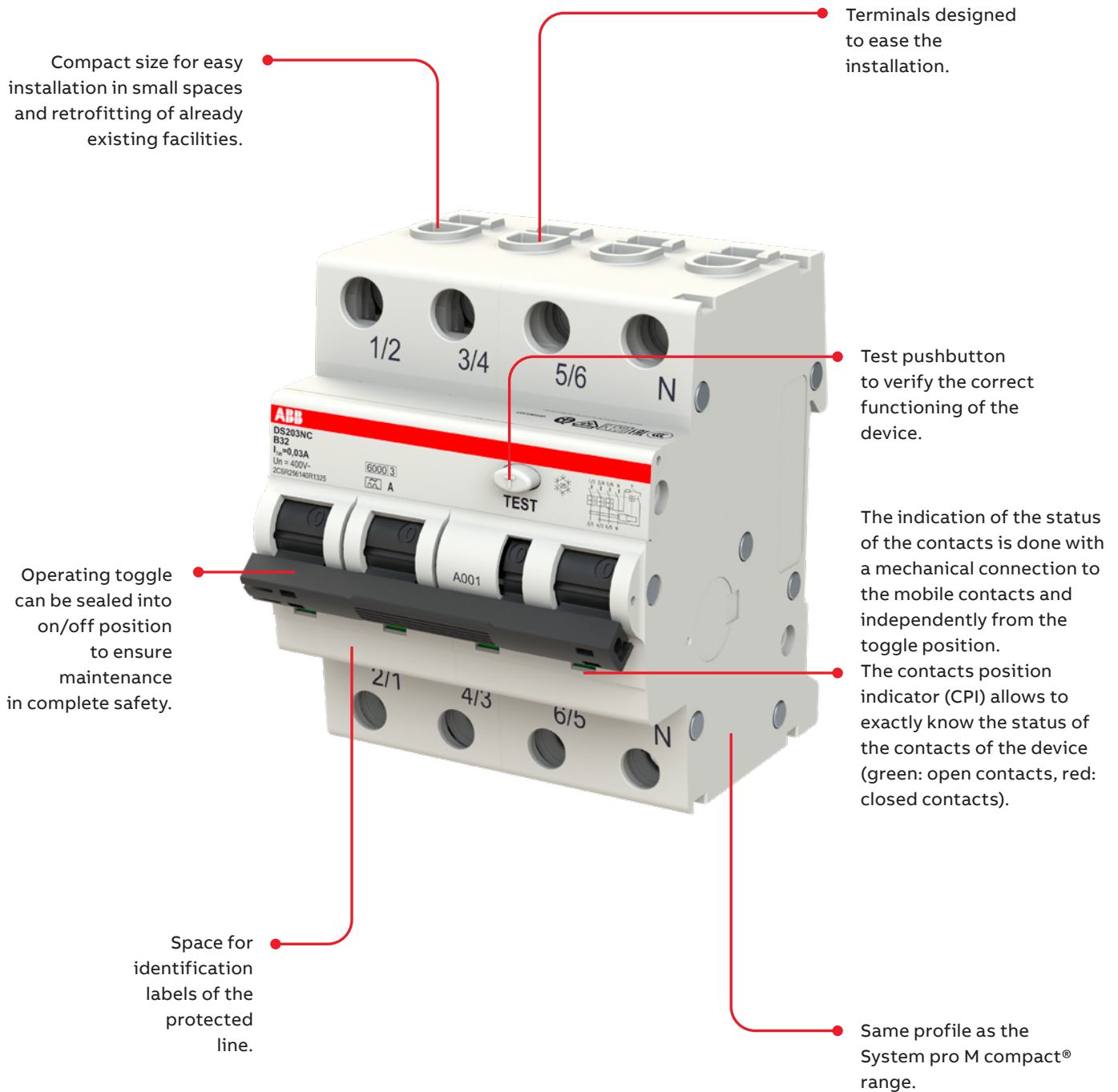
DS201 T

Curve	Type	Rated residual current [mA]	Rated current [A]	Order details			Weight g	Quantity
				EAN code	Type code	Order code		
A	C	30	6	8012542565215	DS201T C6 A30	2CSR255188R1064	239	1
		30	10	8012542590019	DS201T C10 A30	2CSR255188R1104	239	1
		30	13	8012542578215	DS201T C13 A30	2CSR255188R1134	239	1
		30	16	8012542566410	DS201T C16 A30	2CSR255188R1164	239	1
		30	20	8012542591313	DS201T C20 A30	2CSR255188R1204	239	1
		30	25	8012542579519	DS201T C25 A30	2CSR255188R1254	239	1
		30	32	8012542567714	DS201T C32 A30	2CSR255188R1324	239	1
		30	40	8012542589914	DS201T C40 A30	2CSR255188R1404	239	1
	B	30	6	8012542578116	DS201T B6 A30	2CSR255188R1065	239	1
		30	10	8012542566311	DS201T B10 A30	2CSR255188R1105	239	1
		30	13	8012542591214	DS201T B13 A30	2CSR255188R1135	239	1
		30	16	8012542579410	DS201T B16 A30	2CSR255188R1165	239	1
		30	20	8012542567615	DS201T B20 A30	2CSR255188R1205	239	1
		30	25	8012542588719	DS201T B25 A30	2CSR255188R1255	239	1
		30	32	8012542576914	DS201T B32 A30	2CSR255188R1325	239	1
		30	40	8012542565116	DS201T B40 A30	2CSR255188R1405	239	1
	K	30	6	8012542589815	DS201T K6 A30	2CSR255188R1067	239	1
		30	10	8012542578017	DS201T K10 A30	2CSR255188R1107	239	1
		30	13	8012542566212	DS201T K13 A30	2CSR255188R1137	239	1
		30	16	8012542587910	DS201T K16 A30	2CSR255188R1167	239	1
		30	20	8012542576112	DS201T K20 A30	2CSR255188R1207	239	1
		30	25	8012542564317	DS201T K25 A30	2CSR255188R1257	239	1
		30	32	8012542591115	DS201T K32 A30	2CSR255188R1327	239	1
		30	40	8012542579311	DS201T K40 A30	2CSR255188R1407	239	1
APR	C	30	6	8012542567516	DS201T C6 APR30	2CSR255488R1064	239	1
		30	10	8012542588610	DS201T C10 APR30	2CSR255488R1104	239	1
		30	13	8012542576815	DS201T C13 APR30	2CSR255488R1134	239	1
		30	16	8012542565017	DS201T C16 APR30	2CSR255488R1164	239	1
		30	20	8012542589716	DS201T C20 APR30	2CSR255488R1204	239	1
		30	25	8012542577911	DS201T C25 APR30	2CSR255488R1254	239	1
		30	32	8012542566113	DS201T C32 APR30	2CSR255488R1324	239	1
		30	40	8012542591016	DS201T C40 APR30	2CSR255488R1404	239	1
	B	30	6	8012542579212	DS201T B6 APR30	2CSR255488R1065	239	1
		30	10	8012542567417	DS201T B10 APR30	2CSR255488R1105	239	1
		30	13	8012542589617	DS201T B13 APR30	2CSR255488R1135	239	1
		30	16	8012542577812	DS201T B16 APR30	2CSR255488R1165	239	1
		30	20	8012542566014	DS201T B20 APR30	2CSR255488R1205	239	1
		30	25	8012542590910	DS201T B25 APR30	2CSR255488R1255	239	1
		30	32	8012542579113	DS201T B32 APR30	2CSR255488R1325	239	1
		30	40	8012542567318	DS201T B40 APR30	2CSR255488R1405	239	1

Abstract

RCBO DS203NC. The effective choice

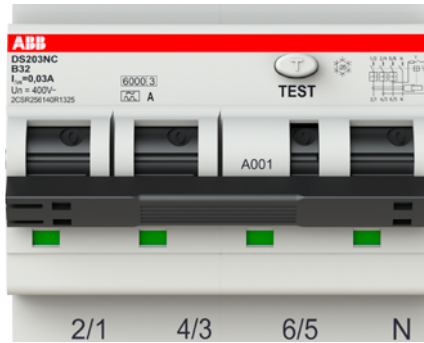
The benefits of a product with the highest quality standards





Use with cables and with busbars

Terminals with two slots allow to use different types of conductors: one housing is designed for cables up to 25 mm², the other for busbars or cables up to 10 mm².



New toggle

The toggle is now squared, with a new and more ergonomic grip, to prevent slip during operations.



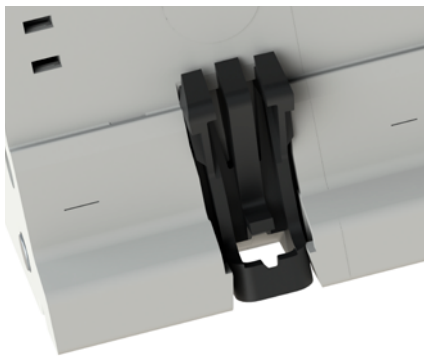
Differential trip indicator

In case of tripping due to earth fault, a blue flag appears on the toggle thus immediately showing the cause of the trip of the device. This feature helps in troubleshooting on the network and reduces the downtime for maintenance.



Laser print information

All the necessary technical and installation information is laser printed on the front and side of units ensuring visibility along the time, including order code on the front of the device for future orders.



Mounting clip

The mounting clip eases the installation and removal from the DIN rail, even when used in a battery of devices with busbars on bottom terminals (without the need to remove other devices).



Approval stamps

DS203NC residual current circuit breakers with overcurrent protection can meet different installation habits in various countries and are approved by the most important certification bodies like IMQ, VDE, KEMA.

RCBOs

DS203NC technical features

			DS203NC
Standards			IEC/EN 61009-1; IEC/EN 61009-2-1
Electrical features	Type (wave form of the earth leakage sensed)		AC, A, APR, S
	Number of poles		3P+N
	Rated current I_n	A	$6 \leq I_n \leq 32A$
	Rated sensitivity $I_{\Delta n}$	mA	30-100-300
	Rated voltage U_e	V	400-415V
	Insulation voltage U_i	V	500 V AC
	Overvoltage category		III
	Pollution degree		2
	Operating voltage of circuit test U_t	V	195 (300 for 30 mA) - 440
	Rated frequency	Hz	50/60
	Rated breaking capacity acc. to IEC/ EN 61009	ultimate I_{cn}	A 6000
	Rated breaking capacity acc. to IEC/EN 60947-2	ultimate I_{cu}	kA 10
		service I_{cs}	kA 5
	Rated residual breaking capacity $I_{\Delta m}$ acc. To EN 61009	kA	6
	Rated residual breaking capacity $I_{\Delta m}$ acc. to IEC 61009	kA	4.5
	Rated impulse withstand voltage (1.2/50) U_{imp}	kV	4
	Dielectric test voltage at ind. freq. for 1 min.	kV	2.5
	Thermomagnetic release - characteristic	B: $3 I_n \leq I_m \leq 5 I_n$	■
		C: $5 I_n \leq I_m \leq 10 I_n$	■
		K: $10 I_n \leq I_m \leq 14 I_n$	■
	Surge current resistance (wave 8/20)	A	NA for A, AC versions; 3000 for APR version; 5000 for S version
	Mechanical features		
	Housing		Insulation group II, RAL 7035
	Toggle		black, sealable in ON-OFF positions
	Flag indicator		Differential trip indicator: blue on toggle
	Contact position indication		CPI on window
	Electrical life	operations	10000
	Mechanical life	operations	20000
	Protection degree	housing	IP4X
		terminals	IP2X
	Shock resistance acc. to IEC/EN 60068-2-27		30g - 2 shocks - 13ms
	Vibration resistance acc. to IEC/EN 60068-2-6		0,35mm or 5g - 20 cycles at 5...150...5 Hz without load
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30	°C/RH	28 cycles with 55°C/90-96% and 25°C/95-100%
	Reference temperature for setting of thermal element	°C	30
	Ambient temperature (with daily average $\leq +35$ °C)	°C	-25...+55
	Storage temperature	°C	-40...+70



RCBOs

DS203NC technical features

DS203NC			
Installation	Terminal type	top/ bottom	failsafe bi-directional cylinder-lift terminal (shock protected)
	Terminal size for cables	top/ bottom	mm² 25/25
	Terminal size for busbars	top/ bottom	mm² 10/10
	Tightening torque	top/ bottom	Nm 2.8
	Mounting		on DIN rail EN 60715 (35mm) by means of mounting clip
	Supply from		Top/bottom terminals
Dimensions and weight	Dimensions (H x D x W)	mm	85 x 69 x 70.4
	Weight	g	480

RCBOs

DS203NC AC  type

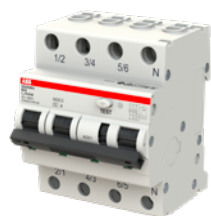
DS203NC - AC type series B characteristic

Function: protection of end user three-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contact and additional protection against direct contact ($I\Delta n = 30 \text{ mA}$).

Application: commercial, industrial.

Standard: IEC/EN 61009-1; IEC/EN 61009-2-1

Icn = 6 000 A



DS203NC

Number of poles	Rated residual current $I\Delta n \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details		Weight 1 piece kg	Pack unit pc.
				Type code	Order code		
3P+N	30	6	077428	DS203NC B6 AC30	2CSR256040R1065	0.480	1
		8	077329	DS203NC B8 AC30	2CSR256040R1085	0.480	1
		10	077220	DS203NC B10 AC30	2CSR256040R1105	0.480	1
		13	077121	DS203NC B13 AC30	2CSR256040R1135	0.480	1
		16	077022	DS203NC B16 AC30	2CSR256040R1165	0.480	1
		20	076926	DS203NC B20 AC30	2CSR256040R1205	0.480	1
		25	790525	DS203NC B25 AC30	2CSR256040R1255	0.480	1
		32	076827	DS203NC B32 AC30	2CSR256040R1325	0.480	1
	100	6	076728	DS203NC B6 AC100	2CSR256040R2065	0.480	1
		8	076629	DS203NC B8 AC100	2CSR256040R2085	0.480	1
		10	076520	DS203NC B10 AC100	2CSR256040R2105	0.480	1
		13	076421	DS203NC B13 AC100	2CSR256040R2135	0.480	1
		16	076322	DS203NC B16 AC100	2CSR256040R2165	0.480	1
		20	076223	DS203NC B20 AC100	2CSR256040R2205	0.480	1
		25	076124	DS203NC B25 AC100	2CSR256040R2255	0.480	1
		32	076025	DS203NC B32 AC100	2CSR256040R2325	0.480	1
	300	6	353423	DS203NC B6 AC300	2CSR256040R3065	0.480	1
		8	353324	DS203NC B8 AC300	2CSR256040R3085	0.480	1
		10	266327	DS203NC B10 AC300	2CSR256040R3105	0.480	1
		13	266228	DS203NC B13 AC300	2CSR256040R3135	0.480	1
		16	266129	DS203NC B16 AC300	2CSR256040R3165	0.480	1
		20	266020	DS203NC B20 AC300	2CSR256040R3205	0.480	1
		25	265924	DS203NC B25 AC300	2CSR256040R3255	0.480	1
		32	790822	DS203NC B32 AC300	2CSR256040R3325	0.480	1

RCBOs

DS203NC AC  type

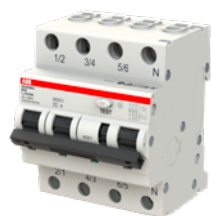
DS203NC - AC type series C characteristic

Function: protection of end user three-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contact and additional protection against direct contact ($I_{\Delta n} = 30 \text{ mA}$).

Application: commercial, industrial.

Standard: IEC/EN 61009-1; IEC/EN 61009-2-1

$I_{cn} = 6\,000 \text{ A}$



DS203NC

Number of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details		Weight 1 piece kg	Pack unit pc.
				Type code	Order code		
3P+N	30	6	265825	DS203NC C6 AC30	2CSR256040R1064	0.480	1
		8	353225	DS203NC C8 AC30	2CSR256040R1084	0.480	1
		10	518228	DS203NC C10 AC30	2CSR256040R1104	0.480	1
		13	186823	DS203NC C13 AC30	2CSR256040R1134	0.480	1
		16	352228	DS203NC C16 AC30	2CSR256040R1164	0.480	1
		20	186724	DS203NC C20 AC30	2CSR256040R1204	0.480	1
		25	352129	DS203NC C25 AC30	2CSR256040R1254	0.480	1
		32	263920	DS203NC C32 AC30	2CSR256040R1324	0.480	1
	100	6	263821	DS203NC C6 AC100	2CSR256040R2064	0.480	1
		8	263722	DS203NC C8 AC100	2CSR256040R2084	0.480	1
		10	263623	DS203NC C10 AC100	2CSR256040R2104	0.480	1
		13	263524	DS203NC C13 AC100	2CSR256040R2134	0.480	1
		16	518327	DS203NC C16 AC100	2CSR256040R2164	0.480	1
		20	263425	DS203NC C20 AC100	2CSR256040R2204	0.480	1
		25	186021	DS203NC C25 AC100	2CSR256040R2254	0.480	1
		32	352020	DS203NC C32 AC100	2CSR256040R2324	0.480	1
	300	6	185925	DS203NC C6 AC300	2CSR256040R3064	0.480	1
		8	185826	DS203NC C8 AC300	2CSR256040R3084	0.480	1
		10	185727	DS203NC C10 AC300	2CSR256040R3104	0.480	1
		13	185628	DS203NC C13 AC300	2CSR256040R3134	0.480	1
		16	185529	DS203NC C16 AC300	2CSR256040R3164	0.480	1
		20	185420	DS203NC C20 AC300	2CSR256040R3204	0.480	1
		25	517825	DS203NC C25 AC300	2CSR256040R3254	0.480	1
		32	180821	DS203NC C32 AC300	2CSR256040R3324	0.480	1

RCBOs

DS203NC A  type

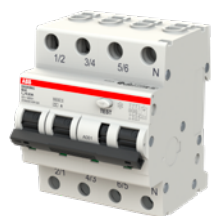
DS203NC - A type series B characteristic

Function: protection of end user three-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact ($I_{\Delta n} = 30 \text{ mA}$).

Application: commercial, industrial.

Standard: IEC/EN 61009-1; IEC/EN 61009-2-1

$I_{cn} = 6\,000 \text{ A}$



DS203NC

Number of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details		Weight 1 piece kg	Pack unit pc.
				Type code	Order code		
3P+N	30	6	078326	DS203NC B6 A30	2CSR256140R1065	0.480	1
		8	078227	DS203NC B8 A30	2CSR256140R1085	0.480	1
		10	078128	DS203NC B10 A30	2CSR256140R1105	0.480	1
		13	078029	DS203NC B13 A30	2CSR256140R1135	0.480	1
		16	077923	DS203NC B16 A30	2CSR256140R1165	0.480	1
		20	077824	DS203NC B20 A30	2CSR256140R1205	0.480	1
		25	077725	DS203NC B25 A30	2CSR256140R1255	0.480	1
		32	077626	DS203NC B32 A30	2CSR256140R1325	0.480	1
	100	6	080329	DS203NC B6 A100	2CSR256140R2065	0.480	1
		8	080220	DS203NC B8 A100	2CSR256140R2085	0.480	1
		10	080121	DS203NC B10 A100	2CSR256140R2105	0.480	1
		13	080022	DS203NC B13 A100	2CSR256140R2135	0.480	1
		16	079927	DS203NC B16 A100	2CSR256140R2165	0.480	1
		20	079828	DS203NC B20 A100	2CSR256140R2205	0.480	1
		25	079729	DS203NC B25 A100	2CSR256140R2255	0.480	1
		32	079620	DS203NC B32 A100	2CSR256140R2325	0.480	1
	300	6	079521	DS203NC B6 A300	2CSR256140R3065	0.480	1
		8	079422	DS203NC B8 A300	2CSR256140R3085	0.480	1
		10	079323	DS203NC B10 A300	2CSR256140R3105	0.480	1
		13	079224	DS203NC B13 A300	2CSR256140R3135	0.480	1
		16	305026	DS203NC B16 A300	2CSR256140R3165	0.480	1
		20	305125	DS203NC B20 A300	2CSR256140R3205	0.480	1
		25	400226	DS203NC B25 A300	2CSR256140R3255	0.480	1
		32	400028	DS203NC B32 A300	2CSR256140R3325	0.480	1

RCBOs

DS203NC A type

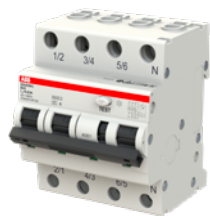
DS203NC - A type series C characteristic

Function: protection of end user three-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact ($I_{\Delta n} = 30 \text{ mA}$).

Application: commercial, industrial.

Standard: IEC/EN 61009-1; IEC/EN 61009-2-1

$I_{cn} = 6\,000 \text{ A}$



DS203NC

Number of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details		Weight 1 piece kg	Pack unit pc.
				Type code	Order code		
3P+N	30	6	400127	DS203NC C6 A30	2CSR256140R1064	0.480	1
		8	058823	DS203NC C8 A30	2CSR256140R1084	0.480	1
		10	896524	DS203NC C10 A30	2CSR256140R1104	0.480	1
		13	768227	DS203NC C13 A30	2CSR256140R1134	0.480	1
		16	830924	DS203NC C16 A30	2CSR256140R1164	0.480	1
		20	839927	DS203NC C20 A30	2CSR256140R1204	0.480	1
		25	768524	DS203NC C25 A30	2CSR256140R1254	0.480	1
		32	831228	DS203NC C32 A30	2CSR256140R1324	0.480	1
	100	6	840220	DS203NC C6 A100	2CSR256140R2064	0.480	1
		8	896425	DS203NC C8 A100	2CSR256140R2084	0.480	1
		10	768128	DS203NC C10 A100	2CSR256140R2104	0.480	1
		13	830825	DS203NC C13 A100	2CSR256140R2134	0.480	1
		16	839828	DS203NC C16 A100	2CSR256140R2164	0.480	1
		20	896722	DS203NC C20 A100	2CSR256140R2204	0.480	1
		25	768425	DS203NC C25 A100	2CSR256140R2254	0.480	1
		32	831129	DS203NC C32 A100	2CSR256140R2324	0.480	1
	300	6	840121	DS203NC C6 A300	2CSR256140R3064	0.480	1
		8	830726	DS203NC C8 A300	2CSR256140R3084	0.480	1
		10	839729	DS203NC C10 A300	2CSR256140R3104	0.480	1
		13	896623	DS203NC C13 A300	2CSR256140R3134	0.480	1
		16	768326	DS203NC C16 A300	2CSR256140R3164	0.480	1
		20	831020	DS203NC C20 A300	2CSR256140R3204	0.480	1
		25	840022	DS203NC C25 A300	2CSR256140R3254	0.480	1
		32	631620	DS203NC C32 A300	2CSR256140R3324	0.480	1

RCBOs

DS203NC A  type

DS203NC - A type series K characteristic

Function: protection of end user three-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact (IΔn = 30 mA).

Application: commercial, industrial.

Standard: IEC/EN 61009-1; IEC/EN 61009-2-1

Icn = 6 000 A



DS203NC

Number of poles	Rated residual current IΔn mA	Rated current In A	Bbn 8012542 EAN	Order details		Weight 1 piece kg	Pack unit pc.
				Type code	Order code		
3P+N	30	6	376026	DS203NC K6 A30	2CSR256140R1067	0.480	1
		8	629726	DS203NC K8 A30	2CSR256140R1087	0.480	1
		10	375920	DS203NC K10 A30	2CSR256140R1107	0.480	1
		13	779322	DS203NC K13 A30	2CSR256140R1137	0.480	1
		16	769323	DS203NC K16 A30	2CSR256140R1167	0.480	1
		20	631521	DS203NC K20 A30	2CSR256140R1207	0.480	1
		25	375821	DS203NC K25 A30	2CSR256140R1257	0.480	1
	100	32	779223	DS203NC K32 A30	2CSR256140R1327	0.480	1
		6	593423	DS203NC K6 A100	2CSR256140R2067	0.480	1
		8	581628	DS203NC K8 A100	2CSR256140R2087	0.480	1
		10	569824	DS203NC K10 A100	2CSR256140R2107	0.480	1
		13	594727	DS203NC K13 A100	2CSR256140R2137	0.480	1
		16	582922	DS203NC K16 A100	2CSR256140R2167	0.480	1
		20	571124	DS203NC K20 A100	2CSR256140R2207	0.480	1
		25	592426	DS203NC K25 A100	2CSR256140R2257	0.480	1
		32	580621	DS203NC K32 A100	2CSR256140R2327	0.480	1

Abstract

RCBO DS301C T

Slim solutions for a complete protection

Easy to install

Bi-directional cylindrical terminals improve the level of safety and ease of connecting operations.

Reliable DIN-Rail clip

The top and bottom clips ensure a secure grip on the rail and a stable vertical position.

Test button

To verify the correct RCD functioning.

Clear terminal identification

To prevent misuses.

Laser printed information

The device information is laser printed to ensure readability over time.

Combination with accessories

Interface to combine DS301C with DIN-Rail accessories.

Contact position indicator (CPI)

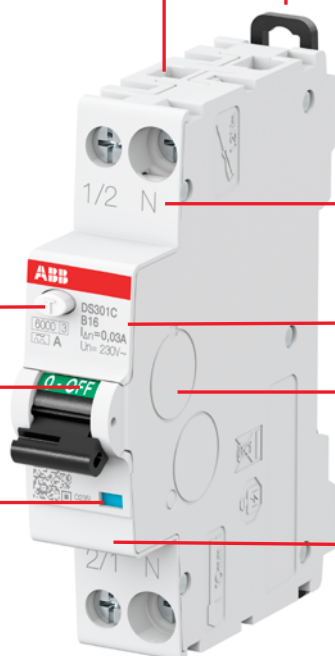
The toggle has a clear color that indicates the level position ON/OFF.

Dedicated space for label

Clearly identify the protected circuits.

Earth fault indicator (DTI)

A dedicated window that changes from grey to blue to indicate if the trip is caused by an earth fault.





Compactness

This voltage independent RCBO fits in one module width (17.8 mm²) only to guarantee its usage in retrofit enhancement and saving space in new consumer units.



Easy installation

The failsafe terminals available on DS301C make easier the supply operation in parallel with cables up to 16 mm² and busbars 10 mm² and make sure the cable is correctly fixed in the terminal.

Supply is possible either from top or bottom side.



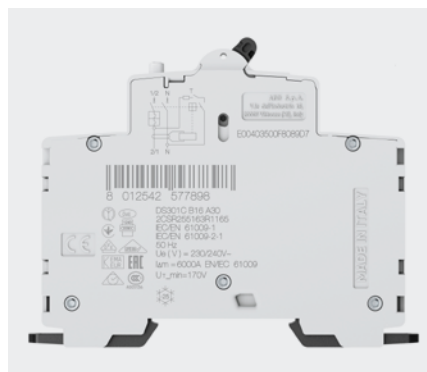
Display the operational status

Easy troubleshooting and reduced downtime for maintenance operations thanks to the blue indicator, that signals the differential tripping to immediately identify any earth fault and the contact position indicator on toggle (CPI) that helps to always know the status of the contacts (red: closed contacts, green: open contacts).



Product identification

To easier the access to all DS301C product information (performance, certificates, troubleshooting...) a laser printed QR code is on the front face to reach the product webpage also when the product is already installed on the Din rail.



Additional laser printing

Additional information are laser printed on the lateral side of the device, including also the wiring diagram and the EAN code respectively for an easier installation and for an easier stock management.



Mounting clip

Stable fixing on DIN rail, easy and fast mounting and dismantling operations thanks to the standard mounting clip.

RCBO DS301C T

Slim solutions for a complete protection



DS301CT			
Electrical features	Standards		IEC/EN 61009-1; IEC/EN 61009-2-1
	Type (wave form of the earth leakage sensed)		A
	Number of poles		1P + N (1 pole protected)
	Rated current I_n	A	$6 \leq I_n \leq 20$
	Rated sensitivity ΔI_n	A	0.03
	Rated voltage U_e	V	230-240
	Insulation voltage U_i	V	500 V AC
	Overvoltage category		III
	Pollution degree		2
	Operating voltage of circuit test U_t	V	170
	Rated frequency	Hz	50
	Rated breaking capacity acc. To IEC/EN 61009-1	A	6000
	Rated breaking capacity ultimate I_{cu}	kA	6
	acc. To IEC/EN 60947-2 (only referring to short circuit test) service I_{cs}	kA	6
	Rated residual breaking capacity IDM IDM according to EN 61009-1	A	6000 A (4500 A for I_n 20 A)
	Rated residual breaking capacity IDM IDM according to IEC 61009-1	A	4500 A (3000 A for I_n 20 A)
	Rated impulse withstand voltage (1.2/50) U_{imp}	KV	4
	Dielectric test voltage at ind. Freq. For 1 min.		2.5 (50 Hz, 1 min).
	Thermomagnetic release—	B: $3 I_n \leq I_n \leq 5 I_n$	■
	Characteristic	C: $5 I_n \leq I_n \leq 10 I_n$	■
	Energy limiting class acc. To EN 61009-1		3
	Surge current resistance (wave 8/20μs)		NA
	Powerloss (average per pole)	W	1.42
Mechanical features	Housing		Insulation group 1-II, RAL 7035
	Toggle		Insulation group II, Black RAL 9005, sealable in ON-OFF positions
	Contact position indication		On toggle
	Earth fault trip indication		Blue flag window
	Electrical life	operations	7000
	Mechanical life	operations	7000
	Protection degree acc. To EN 60529	housing	IP4X
		terminals	IP2X
	Shock resistance acc. To IEC/EN 60068-2-27		25g—2 shocks—13ms
	Vibration resistance acc. To IEC/EN 60068-2-6		0.1 mm or 1 g—20 cycles at 5...150...5 Hz Category 1, Class B according to IEC 61373
	Environmental conditions (damp heat) acc. IEC/EN 60068-2-30	°C/RH	28 cycles with 55°C/90-96% and 25°C/95-100%
	Reference temperature for setting of thermal element	°C	30
	Ambient temperature (with daily average $\leq +35^\circ\text{C}$)		-25...+55
	Storage temperature		-40...+70

RCBO DS301C T

Slim solutions for a complete protection



				DS301CT
Installation	Terminal type	top / bottom		Failsafe bi-directional cylinder-lift terminal (shock protected)
	Terminal size for cables	top / bottom	mm²	16/16
	Terminal size for busbars	top / bottom	mm²	10/10
	Tightening torque	top / bottom	Nm	1.2
	Stripping length of the cable		mm	10
	Mounting	on DIN rail EN 60715 (35 mm) by means of mounting clip		
	Mounting position	Any		
	Supply from	Top/Bottom terminals		
Dimension and weight	Dimensions (H x D x W)		mm	92 x 68 x 17.6
	Weight		g	110
Combination with auxiliary elements by mean of Interface contact SRA-H	Combinable with accessories and auxiliaries	Auxiliary contact		No
		Signal contact / auxiliary contact		No
		Shunt trip		No
		Auxiliary contact for bottom fitting		No
		Undervoltage release		No
		Overvoltage release		No
		Motor operating device		No

RCBO DS301C T

DS301C T 6000 A  type, B characteristic

Function: 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 contact and additional protection against direct contact ($I_{\Delta n} = 30 \text{ mA}$). This series is dedicated to traction and meet the hazard level R22,R23 and R26/HL3.

Application: Traction.

Standard: IEC 61009-1; IEC 61009-2-1; EN45545-2:2013+A1:2015

$I_{cn} = 6000 \text{ A}$



DS301CT B16 A30

No. of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details		Weight 1 piece kg	Pack unit pc.
				Type code	Order code		
1+N	30	6	362555	DS301CT B6 A30	2CSR255164R1065	0.1	1
1+N	30	10	362654	DS301CT B10 A30	2CSR255164R1105	0.1	1
1+N	30	13	362753	DS301CT B13 A30	2CSR255164R1135	0.1	1
1+N	30	16	362852	DS301CT B16 A30	2CSR255164R1165	0.1	1
1+N	30	20	362951	DS301CT B20 A30	2CSR255164R1205	0.1	1

DS301C T 6000 A  type, C characteristic

Function: 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 contact and additional protection against direct contact ($I_{\Delta n} = 30 \text{ mA}$). This series is dedicated to traction and meet the hazard level R22,R23 and R26/HL3.

Application: Traction.

Standard: IEC 61009-1; IEC 61009-2-1; EN45545-2:2013+A1:2015

$I_{cn} = 6000 \text{ A}$



DS301CT C16 A30

No. of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details		Weight 1 piece kg	Pack unit pc.
				Type code	Order code		
1+N	30	6	363057	DS301CT C6 A30	2CSR255164R1064	0.1	1
1+N	30	10	363156	DS301CT C10 A30	2CSR255164R1104	0.1	1
1+N	30	13	363255	DS301CT C13 A30	2CSR255164R1134	0.1	1
1+N	30	16	363354	DS301CT C16 A30	2CSR255164R1164	0.1	1
1+N	30	20	363453	DS301CT C20 A30	2CSR255164R1204	0.1	1