

# Electrical installation solutions for buildings

## Residual current devices

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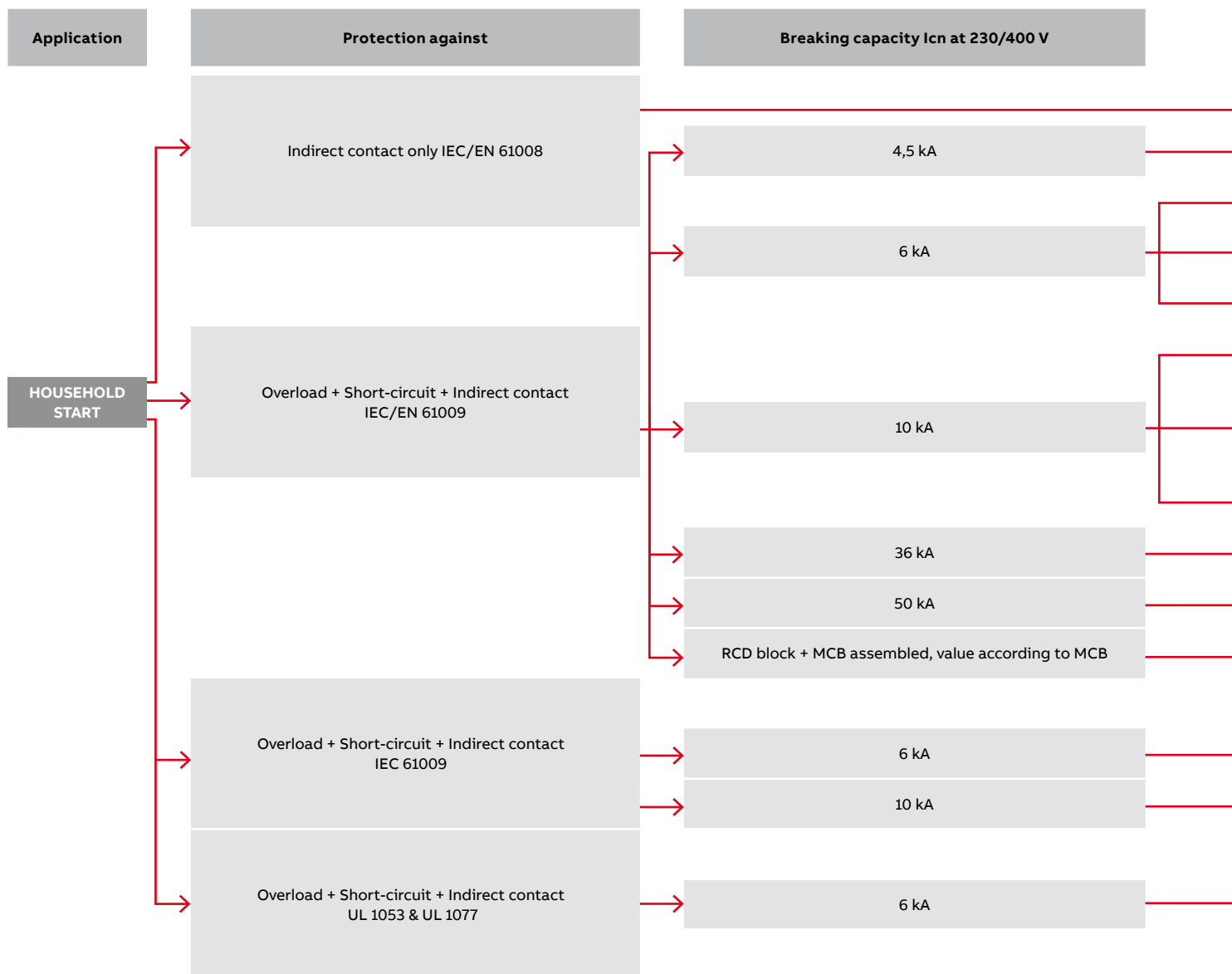
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# System pro M compact®

## Quick selection of RCDs for household and industrial applications

Easy! Find the right range and the corresponding catalogue page at a glance using this selection chart.



## System pro M compact®

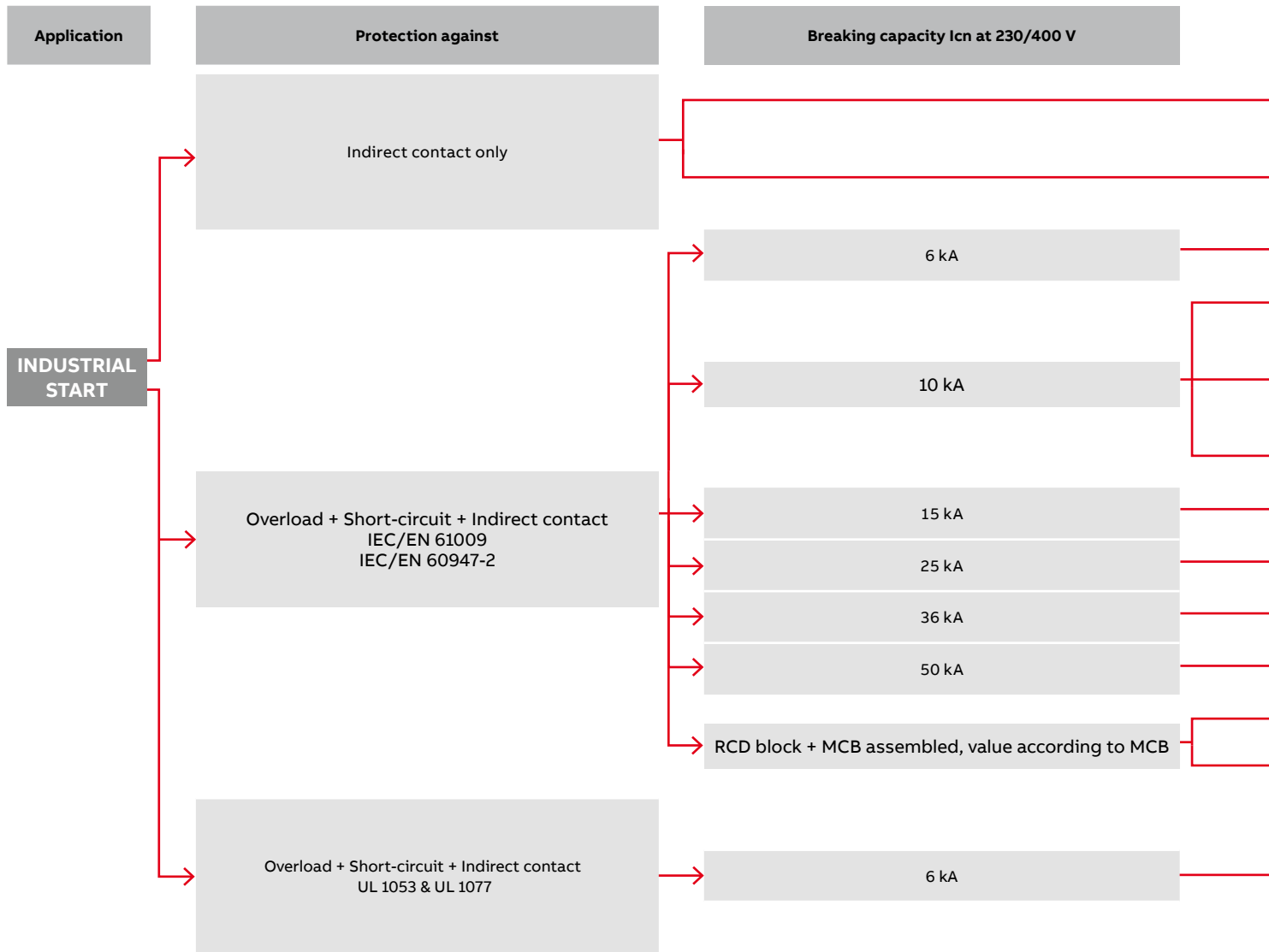
Quick selection of RCDs for household and industrial applications

Rated current	Remark	Poles	Solution	Page
Up to 125 A		All poles	F200	2/10
Up to 32 A		1P+N	DS201L	2/60
Up to 32 A	Reduced size	2P	DS202C	2/84
Up to 40 A	Reduced size	1P+N	DS201	2/62
Up to 63 A	Standard size	All poles	DS 200	2/111
Up to 32 A	Reduced size	2P	DS202C M	2/86
Up to 40 A	Reduced size	1P+N	DS201M	2/72
Up to 63 A	Standard size	All poles	DS 200 M	2/115
Up to 125 A		All poles	DS800N	2/123
Up to 125 A		All poles	DS800S	2/122
Up to 63 A	RCD: IEC/EN 61009 Ann. G	All poles	DDA 200 + S200	2/36 + 1/32
Up to 50 A	Voltage dependent	1P+N	DSE201	2/132
Up to 50 A	Voltage dependent	1P+N	DSE201M	2/138
Up to 25 A	Reduced size	1P+N	DS201 UL	2/81

# System pro M compact®

## Quick selection of RCDs for household and industrial applications

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## System pro M compact®

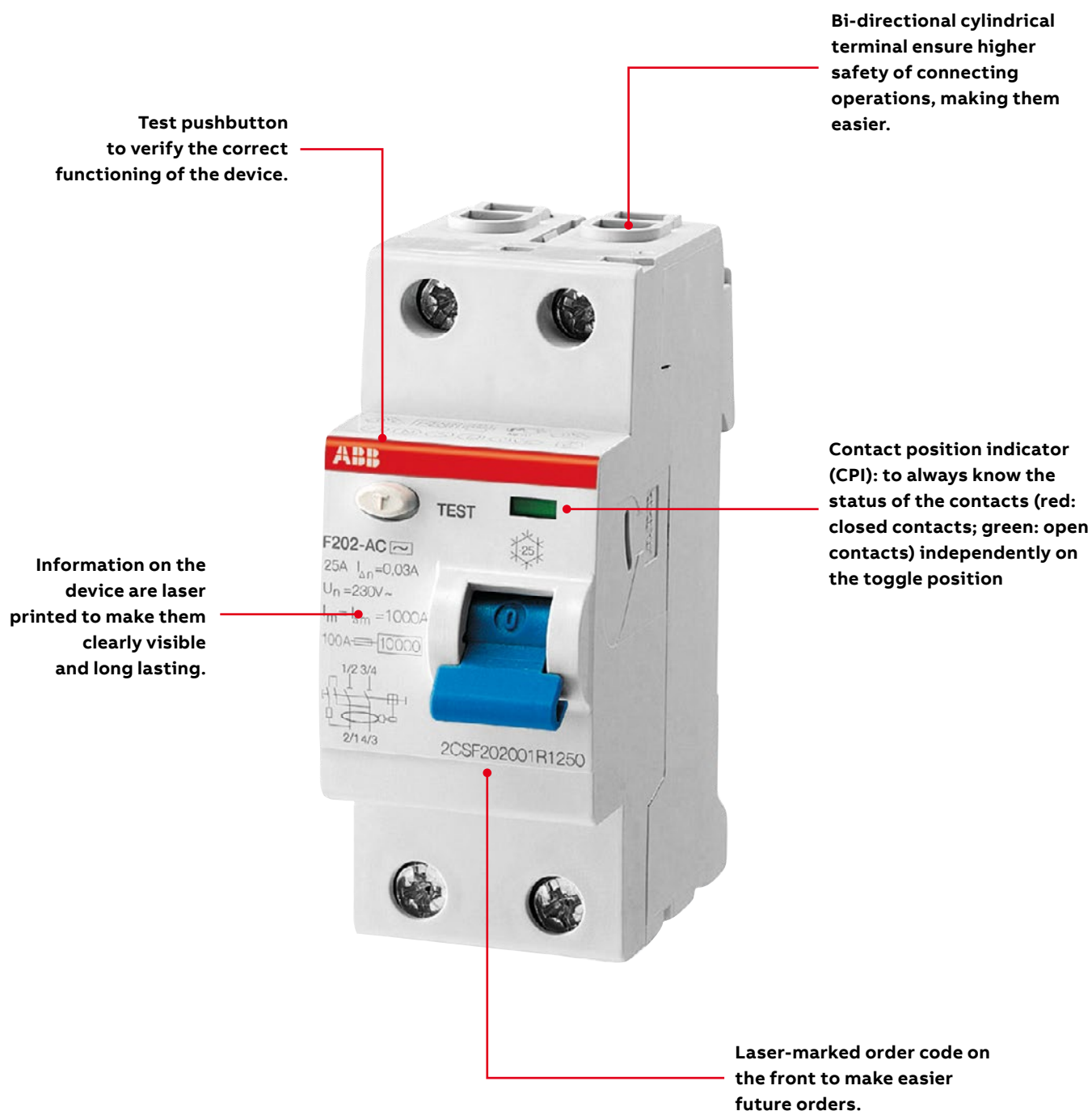
Quick selection of RCDs for household and industrial applications

Rated current	Remark	Poles	Solution	Page
Up to 125 A	IEC/EN 61008	All poles	F200	2/10
According to MCB	IEC/EN 62020	All poles	RD2	2/142
	IEC/EN 60947-2 Ann. M	All poles	RD3	2/143
Up to 32 A		1P+N	DS201 L	2/60
Up to 32 A		2P	DS202C, DS202C M	2/84, 2/86
Up to 40 A		1P+N	DS201, DS201 M	2/62, 2/72
Up to 63 A		All poles	DS 200	2/111
Up to 63 A		All poles	DS 200M	2/115
Up to 100 A		All poles	DDA 800	2/50
Up to 125 A		All poles	DS800N	2/123
Up to 125 A		All poles	DS800S	2/122
Up to 63 A	RCD: IEC/EN 61009 Ann. G	All poles	DDA 200 + S200	2/36 + 1/32
Up to 100 A	RCD: IEC/EN 60947-2 Ann. B	All poles	DDA 800 + S800	2/50 + 1/114
Up to 25 A	Reduced size	1P+N	DS201 UL	2/81

## RCCB F 200.

### The details make the difference

A range designed to ensure efficiency and protection





Two terminals are available, the fore one for cables up to 25 mm<sup>2</sup>, the back one for cables up to 10 mm<sup>2</sup> or for busbars.



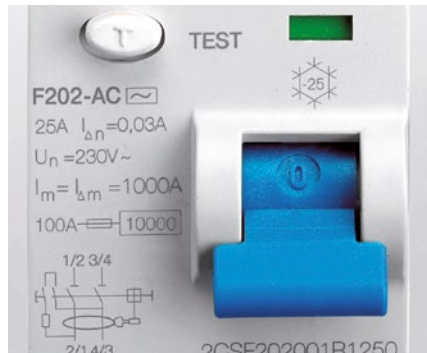
RCCBs F200 can be used in ambient conditions where the temperature of the surrounding atmosphere has values between -25 °C (snowflake laser printed on the front of the device) and +55 °C.



The availability of two terminals offers different connection solutions thanks to the possibility to connect two independent cables in the same device: the second terminal can be used for an auxiliary circuit or for the supply of devices with small section cables without connecting them together with the main circuit.



All the safety ensured by the international marks: approvals' marking in a visible area, even if RCDs is installed and with the panel-door closed.



High performances:

- rated breaking capacity and rated residual breaking capacity laser printed on the device:  $I_m = I_{\Delta m} = 1000 \text{ A}$
- coordination with a 100 A rated current SCPD (short-circuit protective device) = 10 000 A.



The F 202 can be coupled with the autoreclosing unit F2C-ARH in order to ensure continuity of service for the whole installation of your home avoiding lack of supply.

## RCCBs

### F200 technical features



Standards			
Electrical features	Type (wave form of the earth leakage sensed)		
	Poles		
	Rated current $I_n$		A
	Rated sensitivity $I_{\Delta n}$		A
	Rated voltage $U_e$	IEC	V
		UL/CSA	V
	Insulation voltage $U_i$		V
	Operating voltage of circuit test $U_t$	IEC	V
		UL/CSA	V
	Rated frequency		Hz
	Rated conditional short-circuit current $I_{nc}=I_{\Delta 3}$	SCPD - fuse gG 100 A	kA
	Rated residual breaking capacity $I_{\Delta m}=I_m$		kA
	Rated impulse withstand voltage (1.2/50) $U_{imp}$		kV
	Dielectric test voltage at ind. freq. for 1 min.		kV
	Overvoltage category		
Surge current resistance (wave 8/20)		A	
Mechanical features	Toggle		
	Contact position indicator (CPI)		
	Electrical life		
	Mechanical life		
	Protection degree	housing	
		terminals	
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30		°C/RH
	Ambient temperature (with daily average $\leq +35$ °C)	IEC	°C
Storage temperature		°C	
Installation	Terminal type		
	Terminal size top/bottom for cable	IEC	mm <sup>2</sup>
		UL/CSA	AWG
	Terminal size top/bottom for busbar	IEC	mm <sup>2</sup>
		UL/CSA	AWG
	Tightening torque	IEC	Nm
		UL/CSA	in-lbs.
	Tool		
	Mounting		
	Mounting position		
Connection			
Withdrawal from busbar			
Dimensions and weight	Dimensions (H x D x W)	2P	mm
		4P	mm
	Weight	2P	g
		4P	g
Combination with auxiliary elements	Combinable with:	auxiliary contact	
		signal contact/auxiliary switch	
		shunt trip	
		undervoltage release	

① Ground-fault sensing and relaying equipment-component (up to 63 A)

② prior to connection of aluminium conductors ( $\geq 4$  mm<sup>2</sup>) ensure that their contact points are cleaned, brushed and coated with grease

③ for S700-E/K 100A, S750-E 63A, S750DR-E/K 63A and other SCPD coordination values see Chapter 3 of Solutions for electrical distribution in buildings - technical details

④ F200 left neutral has not the UL certification and the UL mark

⑤ Only for versions with marking according to EN 61008-1; EN 61008-2-1

⑥ Neutral conductor can be wired anywhere for 2P devices



## RCCBs

### F200 technical features

F200 AC	F200 A	F200 A AP-R	F200 A S	F200 A 110V	F200 A 400 Hz	F200 A 16 2/3 Hz	F200 F
IEC/EN 61008-1; IEC/EN 61008-2-1, UL 1053 ①				IEC 61008-1; IEC 61008-2-1; UL 1053	IEC/EN 61008-1; IEC/EN 61008-2-1	IEC/EN 61008-1; IEC/EN 61008-2-1	IEC/EN 61008, IEC/EN 62423 2 <sup>nd</sup> ed
AC	A	A	A	A	A	A	F
2P ②, 4P (for 125 A only 4P)				2P, 4P	4P	2P, 4P	2P, 4P
16, 25, 40, 63, 80, 100, 125		25, 40, 63, 80, 100, 125	40, 63, 80, 100, 125	25, 40, 63, 80, 100	25, 40	63	25, 40, 63
0.01-0.03-0.1-0.3-0.5		0.03	0.1-0.3-0.5-1	0.03	0.03	0.03-0.3-0.5	0.03
230/400 - 240/415							2P: 230 V - 4P: 400 V
480Y/277 (up to 100 A)				-	-	-	-
500				-	-	-	-
In ≤ 100; Right neutral: 110 (170 for 30mA) - 254 ⑤; Left neutral: 195 (300 for 30 mA) - 440 ⑤; In = 125 A; Right neutral: 100 (150 for 30 mA) - 250 ⑤; Left neutral: 200 (250 for 30 mA) - 440				110-254	170-254	110 (170 for 30 mA) - 254	254 / 170
In ≤ 100; Right neutral: 110 (170 for 30mA) - 277 ⑤; Left neutral: 195 (250 for 30 mA) - 480 ⑤ ④				-	-	-	-
50...60					50...400	16 2/3	50...60
10 (for 125 A fuse is gG 125 A)							10
1 (1.25 for 125 A)							1
4							
2.5							
III, disconnecter abilities							-
NA		3000	5000	NA	NA	NA	3000
blue sealable in ON-OFF position							
yes							
10000 (2000 for 125 A)				10000	10000	10000	10000
20000 (5000 for 125 A)				20000	20000	20000	20000
IP4X							
IP2X							
28 cycles with 55°C/90-96% and 25°C/95-100%							
-25...+55 (-25...+40 for 125 A)				-25...+55	-25...+55	-25...+55	-25...+55
-40...+70							
failsafe bi-directional cylinder-lift terminal at top and bottom (shock protected) (cage for In > 63 A) ②							
25/25 (35/35 single slot terminal for In > 63 A)					25/25	25/25	25/25
18-4 (up to 63 A)				-	-	-	-
10/10 (not for In = 80-100 A)					10/10	10/10	10/10
18-8 (up to 63 A)				-	-	-	-
2.8 (3 for In = 125 A)				2.8	2.8	2.8	2.8
25 (up to 63 A)				-	-	-	-
Nr. 2 Pozidriv							
on DIN rail EN 60715 (35 mm) by means of fast clip device							
Any							
from top and bottom							
it is possible without using any tools only from the bottom (not for 125 A)							-
85 x 69 x 35					-	-	85 x 69 x 35
85 x 69 x 70 (85 x 69.5 x 72 for 125 A)					85 x 69 x 70	85 x 69 x 70	85 x 69 x 70
200					-	-	225
350 (380 for In = 80 and 100 A and 460 for In = 125A)					350	350	375
yes (no for 125 A)					yes	yes	yes
yes					yes	yes	yes
yes (no for 125 A)					yes	yes	yes
yes (no for 125 A)					yes	yes	yes

## RCCBs

F 200 series AC  type



F202

### F 200 AC type

Function: protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with  $I_{\Delta n}=30$  mA).

**Application: residential, commercial, industrial.**

**Standard: IEC/EN 61008-1; IEC/EN 61008-2-1**

**Marking: according to EN 61008-1; EN 61008-2-1**

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	10	16	779902	F202 AC-16/0.01	2CSF202001R0160		0.225	1/6
		25	738022	F202 AC-25/0.01	2CSF202001R0250		0.225	1/6
	30	25	780007	F202 AC-25/0.03	2CSF202001R1250		0.225	1/6
		40	780106	F202 AC-40/0.03	2CSF202001R1400		0.225	1/6
		63	780205	F202 AC-63/0.03	2CSF202001R1630		0.225	1/6
		80	914204	F202 AC-80/0.03	2CSF202001R1800		0.225	1/6
		100	914303	F202 AC-100/0.03	2CSF202001R1900		0.225	1/6
	100	25	780304	F202 AC-25/0.1	2CSF202001R2250		0.225	1/6
		40	780403	F202 AC-40/0.1	2CSF202001R2400		0.225	1/6
		63	780502	F202 AC-63/0.1	2CSF202001R2630		0.225	1/6
		80	914402	F202 AC-80/0.1	2CSF202001R2800		0.225	1/6
		100	914501	F202 AC-100/0.1	2CSF202001R2900		0.225	1/6
	300	25	780601	F202 AC-25/0.3	2CSF202001R3250		0.225	1/6
		40	780700	F202 AC-40/0.3	2CSF202001R3400		0.225	1/6
		63	780809	F202 AC-63/0.3	2CSF202001R3630		0.225	1/6
		80	914600	F202 AC-80/0.3	2CSF202001R3800		0.225	1/6
		100	914709	F202 AC-100/0.3	2CSF202001R3900		0.225	1/6
	500	25	780908	F202 AC-25/0.5	2CSF202001R4250		0.225	1/6
40		781004	F202 AC-40/0.5	2CSF202001R4400		0.225	1/6	
63		781103	F202 AC-63/0.5	2CSF202001R4630		0.225	1/6	
80		914808	F202 AC-80/0.5	2CSF202001R4800		0.225	1/6	
100		914907	F202 AC-100/0.5	2CSF202001R4900		0.225	1/6	

## RCCBs

F 200 series AC  type



F204



F204 125 A

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	25	781202	F204 AC-25/0.03	2CSF204001R1250		0.375	1/3
		40	781301	F204 AC-40/0.03	2CSF204001R1400		0.375	1/3
		63	781400	F204 AC-63/0.03	2CSF204001R1630		0.375	1/3
		80	916604	F204 AC-80/0.03	2CSF204001R1800		0.405	1/3
		100	916703	F204 AC-100/0.03	2CSF204001R1900		0.405	1/3
		125	941507	F204 AC-125/0.03	2CSF204001R1950		0.500	1
100	25	25	781509	F204 AC-25/0.1	2CSF204001R2250		0.375	1/3
		40	781608	F204 AC-40/0.1	2CSF204001R2400		0.375	1/3
		63	781707	F204 AC-63/0.1	2CSF204001R2630		0.375	1/3
		80	916802	F204 AC-80/0.1	2CSF204001R2800		0.405	1/3
		100	916901	F204 AC-100/0.1	2CSF204001R2900		0.405	1/3
		125	941606	F204 AC-125/0.1	2CSF204001R2950		0.500	1
300	25	25	781806	F204 AC-25/0.3	2CSF204001R3250		0.375	1/3
		40	781905	F204 AC-40/0.3	2CSF204001R3400		0.375	1/3
		63	782001	F204 AC-63/0.3	2CSF204001R3630		0.375	1/3
		80	917007	F204 AC-80/0.3	2CSF204001R3800		0.405	1/3
		100	917106	F204 AC-100/0.3	2CSF204001R3900		0.405	1/3
		125	941705	F204 AC-125/0.3	2CSF204001R3950		0.500	1
500	25	25	782100	F204 AC-25/0.5	2CSF204001R4250		0.375	1/3
		40	782209	F204 AC-40/0.5	2CSF204001R4400		0.375	1/3
		63	782308	F204 AC-63/0.5	2CSF204001R4630		0.375	1/3
		80	917205	F204 AC-80/0.5	2CSF204001R4800		0.405	1/3
		100	917304	F204 AC-100/0.5	2CSF204001R4900		0.405	1/3
		125	941804	F204 AC-125/0.5	2CSF204001R4950		0.500	1

## RCCBs

F 200 series AC  type, for overseas markets



F202

### F 200 AC type (for overseas markets)

Function: protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with  $I_{\Delta n}=30$  mA).

**Application: residential, commercial, industrial.**

**Standard: IEC 61008-1; IEC 61008-2-1**

**Marking: according to IEC 61008-1; IEC 61008-2-1**

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	10	16	814603	F202 AC-16/0.01	2CSF202005R0160		0.225	1/6
		25	814702	F202 AC-25/0.03	2CSF202005R1250		0.225	1/6
	30	40	814801	F202 AC-40/0.03	2CSF202005R1400		0.225	1/6
		63	814900	F202 AC-63/0.03	2CSF202005R1630		0.225	1/6
		80	935902	F202 AC-80/0.03	2CSF202005R1800		0.225	1/6
		100	936008	F202 AC-100/0.03	2CSF202005R1900		0.225	1/6
	100	25	815006	F202 AC-25/0.1	2CSF202005R2250		0.225	1/6
		40	815105	F202 AC-40/0.1	2CSF202005R2400		0.225	1/6
		63	815204	F202 AC-63/0.1	2CSF202005R2630		0.225	1/6
		80	936107	F202 AC-80/0.1	2CSF202005R2800		0.225	1/6
100		936206	F202 AC-100/0.1	2CSF202005R2900		0.225	1/6	
300	25	815303	F202 AC-25/0.3	2CSF202005R3250		0.225	1/6	
	40	815402	F202 AC-40/0.3	2CSF202005R3400		0.225	1/6	
	63	815501	F202 AC-63/0.3	2CSF202005R3630		0.225	1/6	
	80	936305	F202 AC-80/0.3	2CSF202005R3800		0.225	1/6	
	100	936404	F202 AC-100/0.3	2CSF202005R3900		0.225	1/6	
500	25	883302	F202 AC-25/0.5	2CSF202005R4250		0.225	1/6	
	40	883401	F202 AC-40/0.5	2CSF202005R4400		0.225	1/6	
	63	883500	F202 AC-63/0.5	2CSF202005R4630		0.225	1/6	
	80	936503	F202 AC-80/0.5	2CSF202005R4800		0.225	1/6	
	100	936602	F202 AC-100/0.5	2CSF202005R4900		0.225	1/6	

## RCCBs

F 200 series AC  type, for overseas markets



F204

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	25	817109	F204 AC-25/0.03	2CSF204005R1250	0.375	1/3	
		40	817208	F204 AC-40/0.03	2CSF204005R1400			
		63	817307	F204 AC-63/0.03	2CSF204005R1630			
		80	936701	F204 AC-80/0.03	2CSF204005R1800			
		100	936800	F204 AC-100/0.03	2CSF204005R1900			
100	25	25	817406	F204 AC-25/0.1	2CSF204005R2250	0.375	1/3	
		40	817505	F204 AC-40/0.1	2CSF204005R2400			
		63	817604	F204 AC-63/0.1	2CSF204005R2630			
		80	936909	F204 AC-80/0.1	2CSF204005R2800			
		100	937005	F204 AC-100/0.1	2CSF204005R2900			
300	25	25	817703	F204 AC-25/0.3	2CSF204005R3250	0.375	1/3	
		40	817802	F204 AC-40/0.3	2CSF204005R3400			
		63	817901	F204 AC-63/0.3	2CSF204005R3630			
		80	937104	F204 AC-80/0.3	2CSF204005R3800			
		100	937203	F204 AC-100/0.3	2CSF204005R3900			
500	25	25	883609	F204 AC-25/0.5	2CSF204005R4250	0.375	1/3	
		40	883609	F204 AC-40/0.5	2CSF204005R4400			
		63	883807	F204 AC-63/0.5	2CSF204005R4630			
		80	937302	F204 AC-80/0.5	2CSF204005R4800			
		100	937401	F204 AC-100/0.5	2CSF204005R4900			

## RCCBs

F 200 series AC  type left neutral



F204 left neutral

### F 200 AC type with neutral pole on the left

Function: protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with  $I_n=30$  mA). Product helpful where for installation habits, for wiring with busbars or cables, for special needs neutral on the left is needed.

**Application: residential, commercial, industrial.**

**Standard: IEC/EN 61008-1; IEC/EN 61008-2-1**

**Marking: according to EN 61008-1; EN 61008-2-1**



F204 left neutral 125 A

Number of poles	Rated residual current $I_n$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	25	815907	F204 AC-25/0.03	2CSF204023R1250		0.375	1/3
		40	816003	F204 AC-40/0.03	2CSF204023R1400		0.375	1/3
		63	816102	F204 AC-63/0.03	2CSF204023R1630		0.375	1/3
		80	917403	F204 AC-80/0.03	2CSF204023R1800		0.405	1/3
		100	917502	F204 AC-100/0.03	2CSF204023R1900		0.405	1/3
		125	975106	F204 AC-125/0.03	2CSF204023R1950		0.500	1
100	25	25	816201	F204 AC-25/0.1	2CSF204023R2250		0.375	1/3
		40	816300	F204 AC-40/0.1	2CSF204023R2400		0.375	1/3
		63	816409	F204 AC-63/0.1	2CSF204023R2630		0.375	1/3
300	25	25	816508	F204 AC-25/0.3	2CSF204023R3250		0.375	1/3
		40	816607	F204 AC-40/0.3	2CSF204023R3400		0.375	1/3
		63	816706	F204 AC-63/0.3	2CSF204023R3630		0.375	1/3
		80	917601	F204 AC-80/0.3	2CSF204023R3800		0.405	1/3
		100	917700	F204 AC-100/0.3	2CSF204023R3900		0.405	1/3
		125	975304	F204 AC-125/0.3	2CSF204023R3950		0.500	1
500	25	25	816805	F204 AC-25/0.5	2CSF204023R4250		0.375	1/3
		40	816904	F204 AC-40/0.5	2CSF204023R4400		0.375	1/3
		63	817000	F204 AC-63/0.5	2CSF204023R4630		0.375	1/3

## RCCBs

F 200 series A  type



F202

### F 200 A type

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with  $I_{\Delta n}=30$  mA).

**Application: residential, commercial, industrial.**

**Standard: IEC/EN 61008-1; IEC/EN 61008-2-1**

**Marking: according to EN 61008-1; EN 61008-2-1**

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.	
				Type code	Order code				
2	10	16	782407	F202 A-16/0.01	2CSF202101R0160		0.225	1/6	
		30	25	782506	F202 A-25/0.03	2CSF202101R1250		0.225	1/6
			40	782605	F202 A-40/0.03	2CSF202101R1400		0.225	1/6
			63	782704	F202 A-63/0.03	2CSF202101R1630		0.225	1/6
			80	915201	F202 A-80/0.03	2CSF202101R1800		0.225	1/6
	100	915300	F202 A-100/0.03	2CSF202101R1900		0.225	1/6		
	100	25	786900	F202 A-25/0.1	2CSF202101R2250		0.225	1/6	
			40	787006	F202 A-40/0.1	2CSF202101R2400		0.225	1/6
			63	787105	F202 A-63/0.1	2CSF202101R2630		0.225	1/6
			80	915409	F202 A-80/0.1	2CSF202101R2800		0.225	1/6
			100	915508	F202 A-100/0.1	2CSF202101R2900		0.225	1/6
	300	25	782803	F202 A-25/0.3	2CSF202101R3250		0.225	1/6	
			40	782902	F202 A-40/0.3	2CSF202101R3400		0.225	1/6
			63	783008	F202 A-63/0.3	2CSF202101R3630		0.225	1/6
			80	915607	F202 A-80/0.3	2CSF202101R3800		0.225	1/6
100			915706	F202 A-100/0.3	2CSF202101R3900		0.225	1/6	
500	25	783107	F202 A-25/0.5	2CSF202101R4250		0.225	1/6		
		40	783206	F202 A-40/0.5	2CSF202101R4400		0.225	1/6	
		63	783305	F202 A-63/0.5	2CSF202101R4630		0.225	1/6	
		80	915805	F202 A-80/0.5	2CSF202101R4800		0.225	1/6	
		100	915904	F202 A-100/0.5	2CSF202101R4900		0.225	1/6	

## RCCBs

F 200 series A  type



F204



F204 125 A

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.	
				Type code	Order code				
4	30	25	783404	F204 A-25/0.03	2CSF204101R1250		0.375	1/3	
		40	783503	F204 A-40/0.03	2CSF204101R1400		0.375	1/3	
		63	783602	F204 A-63/0.03	2CSF204101R1630		0.375	1/3	
		80	917809	F204 A-80/0.03	2CSF204101R1800		0.405	1/3	
		100	917908	F204 A-100/0.03	2CSF204101R1900		0.405	1/3	
		125	941903	F204 A-125/0.03	2CSF204101R1950		0.500	1	
	100	25	25	787204	F204 A-25/0.1	2CSF204101R2250		0.375	1/3
			40	787303	F204 A-40/0.1	2CSF204101R2400		0.375	1/3
			63	787402	F204 A-63/0.1	2CSF204101R2630		0.375	1/3
			80	918004	F204 A-80/0.1	2CSF204101R2800		0.405	1/3
			100	918103	F204 A-100/0.1	2CSF204101R2900		0.405	1/3
			125	942009	F204 A-125/0.1	2CSF204101R2950		0.500	1
	300	25	25	783701	F204 A-25/0.3	2CSF204101R3250		0.375	1/3
			40	783800	F204 A-40/0.3	2CSF204101R3400		0.375	1/3
			63	783909	F204 A-63/0.3	2CSF204101R3630		0.375	1/3
80			918202	F204 A-80/0.3	2CSF204101R3800		0.405	1/3	
100			918301	F204 A-100/0.3	2CSF204101R3900		0.405	1/3	
125			942108	F204 A-125/0.3	2CSF204101R3950		0.500	1	
500	25	25	784005	F204 A-25/0.5	2CSF204101R4250		0.375	1/3	
		40	784104	F204 A-40/0.5	2CSF204101R4400		0.375	1/3	
		63	784203	F204 A-63/0.5	2CSF204101R4630		0.375	1/3	
		80	918400	F204 A-80/0.5	2CSF204101R4800		0.405	1/3	
		100	918509	F204 A-100/0.5	2CSF204101R4900		0.405	1/3	
		125	942207	F204 A-125/0.5	2CSF204101R4950		0.500	1	



## RCCBs

F 200 series A  type left neutral



F204 left neutral

### F 200 A type with neutral pole on the left

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with  $I_{\Delta n}=30$  mA). Product helpful where for installation habits, for wiring with bus-bars or cables, for special needs neutral on the left is needed.

**Application: residential, commercial, industrial.**

**Standard: IEC/EN 61008-1; IEC/EN 61008-2-1**


**Marking: according to EN 61008-1; EN 61008-2-1**



F204 left neutral 125 A

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	25	820109	F204 A-25/0.03	2CSF204123R1250		0.375	1/3
		40	820208	F204 A-40/0.03	2CSF204123R1400		0.375	1/3
		63	820307	F204 A-63/0.03	2CSF204123R1630		0.375	1/3
		80	918608	F204 A-80/0.03	2CSF204123R1800		0.405	1/3
		100	918707	F204 A-100/0.03	2CSF204123R1900		0.405	1/3
		125	967705	F204 A-125/0.03	2CSF204123R1950		0.500	1
100	25	25	820406	F204 A-25/0.1	2CSF204123R2250		0.375	1/3
		40	820505	F204 A-40/0.1	2CSF204123R2400		0.375	1/3
		63	820604	F204 A-63/0.1	2CSF204123R2630		0.375	1/3
300	25	25	820703	F204 A-25/0.3	2CSF204123R3250		0.375	1/3
		40	820802	F204 A-40/0.3	2CSF204123R3400		0.375	1/3
		63	820901	F204 A-63/0.3	2CSF204123R3630		0.375	1/3
		80	918806	F204 A-80/0.3	2CSF204123R3800		0.405	1/3
		100	918905	F204 A-100/0.3	2CSF204123R3900		0.405	1/3
500	25	25	967804	F204 A-125/0.3	2CSF204123R3950		0.500	1
		25	821007	F204 A-25/0.5	2CSF204123R4250		0.375	1/3
		40	821106	F204 A-40/0.5	2CSF204123R4400		0.375	1/3
		63	821205	F204 A-63/0.5	2CSF204123R4630		0.375	1/3

## RCCBs

F 200 series A  type, AP-R (high immunity)



F202



F204



F204 125 A

### F 200 AP-R, A type

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing the best compromise between safety and continuity in the service thanks to the resistance to unwanted trippings; protection against indirect contacts and additional protection against direct contacts ( $I_{\Delta n}=30$  mA).

**Application: residential, commercial, industrial.**

**Standard: IEC/EN 61008-1; IEC/EN 61008-2-1**

**Surge current resistance (wave 8/20)=3000 A**

**Marking: according to EN 61008-1; EN 61008-2-1**

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	25	785101	F202 A-25/0.03 AP-R	2CSF202401R1250		0.225	1/6
		40	785200	F202 A-40/0.03 AP-R	2CSF202401R1400		0.225	1/6
		63	785309	F202 A-63/0.03 AP-R	2CSF202401R1630		0.225	1/6
		80	916406	F202 A-80/0.03 AP-R	2CSF202401R1800		0.225	1/6
		100	916505	F202 A-100/0.03 AP-R	2CSF202401R1900		0.225	1/6

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	25	785408	F204 A-25/0.03 AP-R	2CSF204401R1250		0.375	1/3
		40	785507	F204 A-40/0.03 AP-R	2CSF204401R1400		0.375	1/3
		63	785606	F204 A-63/0.03 AP-R	2CSF204401R1630		0.375	1/3
		80	919407	F204 A-80/0.03 AP-R	2CSF204401R1800		0.405	1/3
		100	919506	F204 A-100/0.03 AP-R	2CSF204401R1900		0.405	1/3
		125	967903	F204 A-125/0.03 AP-R	2CSF204401R1950		0.500	1

## RCCBs

F 200 series A  type, selective



F202

### F 200 A selective type

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents with an intentional tripping delay, which permits to realize the selectivity with downstream instantaneous devices (for more information about selectivity see the technical guide); protection against indirect contacts.

**Application: commercial, industrial.**

**Standard: IEC/EN 61008-1; IEC/EN 61008-2-1**

**Surge current resistance (wave 8/20)=5000 A**

**Marking: according to EN 61008-1; EN 61008-2-1**



F204



F204 125 A

Number of poles	Rated residual current I $\Delta$ n mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	100	40	822905	F202 A S-40/0.1	2CSF202201R2400	0.225	1/6	
		63	823001	F202 A S-63/0.1	2CSF202201R2630			
		100	916000	F202 A S-100/0.1	2CSF202201R2900			
300	40	40	784302	F202 A S-40/0.3	2CSF202201R3400	0.225	1/6	
		63	784401	F202 A S-63/0.3	2CSF202201R3630			
		100	916109	F202 A S-100/0.3	2CSF202201R3900			
500	40	40	784500	F202 A S-40/0.5	2CSF202201R4400	0.225	1/6	
		63	784609	F202 A S-63/0.5	2CSF202201R4630			
		100	916208	F202 A S-100/0.5	2CSF202201R4900			
1000	40	40	823100	F202 A S-40/1	2CSF202201R5400	0.225	1/6	
		63	823209	F202 A S-63/1	2CSF202201R5630			
		100	916307	F202 A S-100/1	2CSF202201R5900			

Number of poles	Rated residual current I $\Delta$ n mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	100	40	823308	F204 A S-40/0.1	2CSF204201R2400	0.375	1/3	
		63	823407	F204 A S-63/0.1	2CSF204201R2630			
		100	919001	F204 A S-100/0.1	2CSF204201R2900			
300	40	40	784708	F204 A S-40/0.3	2CSF204201R3400	0.375	1/3	
		63	784807	F204 A S-63/0.3	2CSF204201R3630			
		100	919100	F204 A S-100/0.3	2CSF204201R3900			
500	125	125	968207	F204 A S-125/0.3	2CSF204201R3950	0.500	1	
		40	784906	F204 A S-40/0.5	2CSF204201R4400			
		63	785002	F204 A S-63/0.5	2CSF204201R4630			
1000	100	100	919209	F204 A S-100/0.5	2CSF204201R4900	0.405	1/3	
		125	968405	F204 A S-125/0.5	2CSF204201R4950			
		40	823506	F204 A S-40/1	2CSF204201R5400			
1000	63	63	823605	F204 A S-63/1	2CSF204201R5630	0.375	1/3	
		100	919308	F204 A S-100/1	2CSF204201R5900			

## RCCBs

F 200 110V series A  type



F202 110V

### F 200 110V A type

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with  $I_{\Delta n}=30$  mA). This particular series of devices has the minimum operating voltage of test button of 110V and it is suitable for 230 V applications. This range is UL approved.

**Application: residential, commercial, industrial.**

**Standard: IEC 61008-1; IEC 61008-2-1**



F204 110V

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542		Order details	Price 1 piece	Weight 1 piece	Pack unit
			EAN	Type code				
2	30	25	343332	F202 A-25/0.03 110V	2CSF202199R1250		0.225	1/6
		40	343233	F202 A-40/0.03 110V	2CSF202199R1400		0.225	1/6
		63	343134	F202 A-63/0.03 110V	2CSF202199R1630		0.225	1/6
		80	343035	F202 A-80/0.03 110V	2CSF202199R1800		0.225	1/6
		100	342939	F202 A-100/0.03 110V	2CSF202199R1100		0.225	1/6

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542		Order details	Price 1 piece	Weight 1 piece	Pack unit
			EAN	Type code				
4	30	25	776734	F204 A-25/0.03 110V	2CSF204199R1250		0.375	1/3
		40	342830	F204 A-40/0.03 110V	2CSF204199R1400		0.375	1/3
		63	342731	F204 A-63/0.03 110V	2CSF204199R1630		0.375	1/3
		80	358435	F204 A-80/0.03 110V	2CSF204199R1800		0.405	1/3
		100	079132	F204 A-100/0.03 110V	2CSF204199R1100		0.405	1/3

## RCCBs

F 200 series A  type for high frequency and railways applications



F202

### F 200 A type for high frequency (400 Hz)

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct (with  $I_{\Delta n}=30$  mA) contacts.

Advantages: increasing the frequency generates an increase of the magnetic reluctance of the toroidal transformer of standard RCCB and what follows is the value of the increasing operating residual current at 400 Hz reaching values 3 or more times higher than those of the residual current at 50 Hz. The RCCB F 200 400 Hz guarantees protection against indirect contacts and additional protection against direct contacts (with  $I_{\Delta n}=30$  mA) considering that the operating residual current doesn't increase with the increase of the network frequency.

**Application: commercial, industrial.**

**Standard: IEC/EN 61008-1; IEC/EN 61008-2-1**

**Marking: according to EN 61008-1; EN 61008-2-1**



F204

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	25	968603	F204 A-25/0.03 400Hz	2CSF204197R1250		0.375	1/3
		40	968702	F204 A-40/0.03 400Hz	2CSF204197R1400			

### F200 A type 16 2/3 Hz

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with  $I_{\Delta n}=30$  mA).

The RCCB F200 16 2/3 Hz can work at rated frequency of 16 2/3 Hz which is common in railways applications

**Application: railways**

**Standard: IEC/EN 61008-1; IEC/EN 61008-2-1**

**Marking: according to EN 61008-1; EN 61008-2-1**

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.		
				Type code	Order code					
2	30	63	734536	F202 A-63/0.03 16- 2/3Hz	2CSF202196R1630		0.225	1/6		
	300	63	733638	F202 A-63/0.3 16- 2/3Hz	2CSF202196R3630				0.225	1/6
	500	63	734437	F202 A-63/0.5 16- 2/3Hz	2CSF202196R4630				0.225	1/6
4	30	63	733539	F204 A-63/0.03 16- 2/3Hz	2CSF204196R1630		0.375	1/3		
	300	63	734338	F204 A-63/0.3 16- 2/3Hz	2CSF204196R3630				0.375	1/3
	500	63	733430	F204 A-63/0.5 16- 2/3Hz	2CSF204196R4630				0.375	1/3

## RCCBs

F 200 series F   type



### F 200 series F type

Function: 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). Specifically suitable for the protection of lines supplying single phase inverters.

**Application: residential, commercial, industrial.**

**Standard: IEC/EN 61008-1; IEC/EN 61008-2-1**

**Surge current resistance (wave 8/20)=3000 A**

**Marking: according to EN 61008-1; EN 61008-2-1**

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	25	992738	F202 F-25/0.03	2CSF202325R1250	0.225	1/6	
		40	992837	F202 F-40/0.03	2CSF202325R1400			
		63	992936	F202 F-63/0.03	2CSF202325R1630			
4	30	25	993032	F204 F-25/0.03	2CSF204325R1250	0.375	1/3	
		40	993131	F204 F-40/0.03	2CSF204325R1400			
		63	993230	F204 F-63/0.03	2CSF204325R1630			



# New F 200 series - B

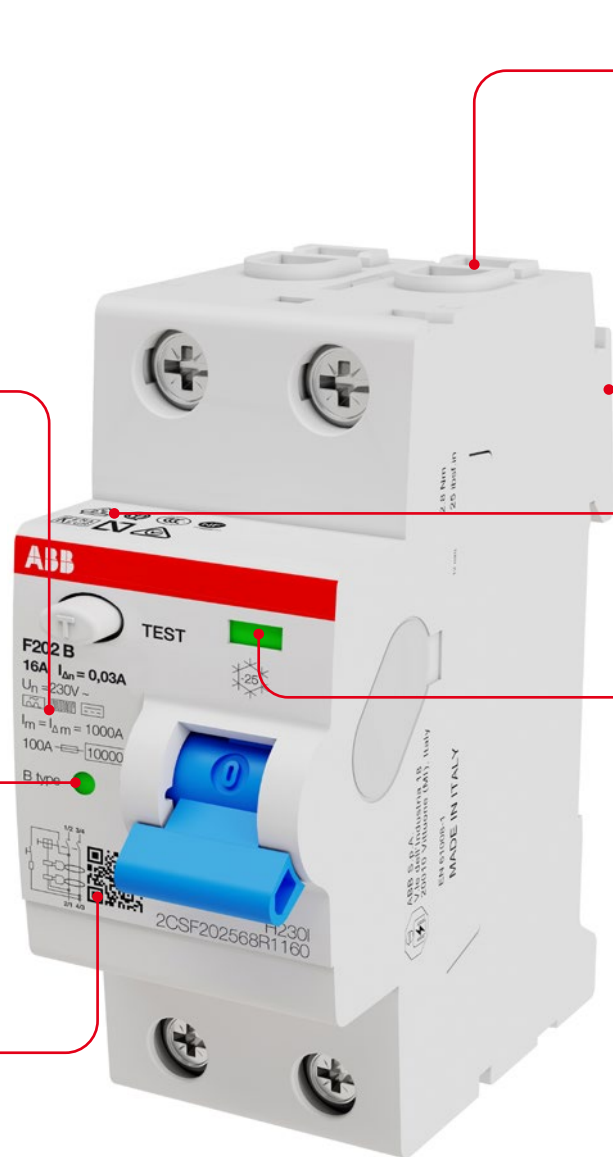
## Details that make the difference

Type B residual current devices are marked according to EN 62423. The marking reminds the different current types that Type B residual current devices are sensitive to



Frontal LED for device status monitoring

QR code to product webpage



Easy to connect thanks to the availability of two terminals slot and compatible with busbars thanks to the System pro M compact clamps

Two-pole device in only two modules

VDE approved

Indication of the position of the contacts



## F 200 series - B

Details that make the difference

### Compatibility

Compatible with all System Pro M compact accessories of F200 series. Higher operational continuity thanks to auto-reclosing units and motor operating devices.

### Robustness to operating environment

Operating temperature from  $-25\text{ }^{\circ}\text{C}$  to  $+70\text{ }^{\circ}\text{C}$  (for system up to 32 A). High immunity against unwanted tripping.

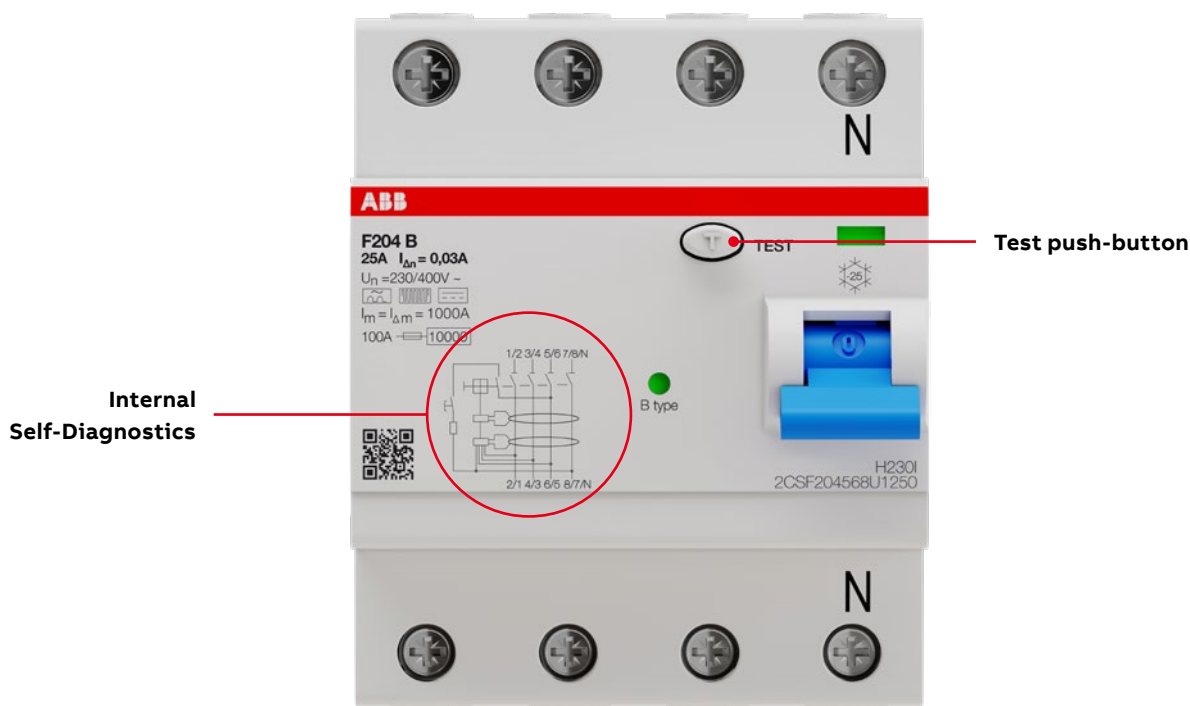
### New self-diagnostics feature

Pushing the TEST button it is possible to check the proper functionality of the device regarding AC fault currents. Together with it, the new F200 B range is introducing a new SELF-DIAGNOSTICS feature. Thanks to this, the

device is able to continuously verify the status of the DC fault currents detection functionality: each few seconds, an internal micro-controller is able to check the status of the main electronic components as well as the firmware integrity of the Voltage Dependent PCBA.

### Low power consumption and pollution degree 3

Extreme low stand by power consumption and pollution degree 3 features (for 16–63 A devices 30–300 mA) ensure great performance during the time.



## RCCBs

### F 200 series - B type technical features




		F200 B Type		F200 B Type high ratings		
		F202 B 16-63 A	F204 B 25-63 A	F204 B 80-125 A		
Standards		IEC/EN 61008-1, IEC/EN 61008-2-1, EN 62423				
Electrical features	Type (wave form of the earth leakage sensed)	B	B, B-S	B		
	Poles	2P	4P	4P		
	Rated current $I_n$	A	16, 25, 40, 63	25, 40, 63	80, 125	
	Rated sensitivity $I_{\Delta n}$	A	0,03 - 0,3	0,03 - 0,3 - 0,5	0,03 - 0,3 - 0,5	
	Rated voltage $U_e$	V AC	230	230/400	230/400	
	Insulation voltage $U_i$	V	440	440 - 500 <sup>1</sup>		
	Operating voltage of circuit test $U_c$	IEC/EN	V	110 - 253 V AC 170 - 253 V AC (30 mA)	110 - 253 V AC 170 - 253 V AC (30 mA)	150 - 250 V AC (80 A) 200 - 250 V AC (80 A, 30 mA) 200 - 440 V AC (125 A) 250 - 440 V AC (125A, 30 mA)
	Min. operating voltage for detecting Type A/AC residual currents	V AC	0	0	0	
	Min. operating voltage for detecting Type B residual currents	V AC	50	50	50	
	Rated frequency	Hz	50/60	50/60	50	
	Frequency range of residual current	kHz	2	2	100	
	Rated conditional short-circuit current $I_{nc}=I_{\Delta}^3$	SCPD - fuse gG 100 A	kA	10	10	10 (fuse gG 125 A)
	Rated residual breaking capacity $I_{\Delta m}=I_m$	kA	1	1	125 A: 1,25 80 A: 1	
	Rated impulse withstand voltage (1.2/50) $U_{imp}$	kV	4	4	4	
	Dielectric test voltage at ind. freq. for 1 min.	kV	2,5	2,5	2,5	
	Overvoltage category		III, disconnecter abilities	III, disconnecter abilities	III, disconnecter abilities	
	Surge current resistance (wave 8/20)	A	3.000	3.000 - 5.000 (B S)	3.000 - 5.000 (B S)	
	Maximum electronic consumption	W	0,3	1,2 (3,5 <sup>1</sup> )		
	Mechanical features	Toggle		Blue sealable in ON-OFF	Blue sealable in ON-OFF	Blue sealable in ON-OFF
		Contact position indicator (CPI)		yes	yes	yes
Electrical life			10.000	10.000	2.000	
Mechanical life			20.000	20.000	5.000	
Protection degree		housing		IP4X	IP4X	IP4X
		terminals		IP2X	IP2X	IP2X
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%			
Ambient temperature		IEC	°C	-25...+70 (for system current ≤ 32 A) -25...+65 for system current = 40 A -25...+50 for system current = 63 A For other system current see derating table		-25...+40
Storage temperature			°C	-40...+70	-40...+70	-40...+70
Installation		Terminal Type		Failsafe bi-directional cylinder-lift terminal at top and bottom (shock protected) (cage for $I_n > 63 A$ ) <sup>2</sup>		
	Min/Max Terminal size top/bottom for cable	IEC	mm <sup>2</sup>	1 - 25	1 - 25	50
	Terminal size top/bottom for busbar	IEC	mm <sup>2</sup>	10/10	10/10	
	Tightening torque	IEC	Nm	2,8	2,8	3
	Tool			Flat tip PZ2		
	Mounting			Any position on DIN rail EN 60715 (35 mm) by means of fast clip device		
	Supply			Top/bottom		
	Withdrawal from busbar			It is possible without using any tools only from the bottom		no
Dimensions and weight	Dimensions (H × D × W)	2P	mm	85 × 69 × 35	85 × 69 × 70	85 × 69,5 × 72
	Weight	2P	g	220	380	460
Combination with auxiliary elements	Combinable with:					
	auxiliary contact			yes	yes	no
	signal contact/auxiliary switch			yes	yes	yes
	motor operating device			yes	yes	no
	shunt trip			yes	yes	no
undervoltage release			yes	yes	no	

<sup>1</sup> 500 mA devices

<sup>2</sup> Prior to connection of aluminium conductors (≥ 4 mm<sup>2</sup>) ensure that their contact points are cleaned, brushed and coated with grease

<sup>3</sup> for S700-E/K 100A, S750-E 63A, S750DR-E/K 63A and other SCPD coordination values are available.

## RCCBs

F 200 series - B    type



F202 B



F204 B

### F200 B Type from 16 to 63 A

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	16	341154	F202 B-16/0,03	2CSF202568R1160		0,220	1
		25	341253	F202 B-25/0,03	2CSF202568R1250		0,220	1
		40	341352	F202 B-40/0,03	2CSF202568R1400		0,220	1
		63	341154	F202 B-63/0,03	2CSF202568R1630		0,220	1
	300	16	341451	F202 B-16/0,3	2CSF202568R3160		0,220	1
		25	341550	F202 B-25/0,3	2CSF202568R3250		0,220	1
		40	341659	F202 B-40/0,3	2CSF202568R3400		0,220	1
		63	341758	F202 B-63/0,3	2CSF202568R3630		0,220	1
4	30	25	341857	F204 B-25/0,03	2CSF204568R1250		0,380	1
		40	341956	F204 B-40/0,03	2CSF204568R1400		0,380	1
		63	342052	F204 B-63/0,03	2CSF204568R1630		0,380	1
	300	25	342151	F204 B-25/0,3	2CSF204568R3250		0,380	1
		40	342250	F204 B-40/0,3	2CSF204568R3400		0,380	1
		63	342359	F204 B-63/0,3	2CSF204568R3630		0,380	1
	300 S	40	342458	F204 B S-40/0,3	2CSF204868R3400		0,380	1
		63	342557	F204 B S-63/0,3	2CSF204868R3630		0,380	1
	500	40	776932	F204 B-40/0,5 <sup>2</sup>	2CSF204592R4400		0,380	1
		63	347637	F204 B-63/0,5 <sup>2</sup>	2CSF204592R4630		0,380	1
	500 S	40	357834	F204 B S-40/0,5 <sup>2</sup>	2CSF204892R4400		0,380	1
			63	347538	F204 B S-63/0,5 <sup>2</sup>	2CSF204892R4630		0,380
2	30	25	356356	F202 B-25/0,03 U	2CSF202568U1250		0,220	48
4	30	25	356158	F204 B-25/0,03 U	2CSF204568U1250		0,380	24
		40	355953	F204 B-40/0,03 U	2CSF204568U1400		0,380	24
		63	356059	F204 B-63/0,03 U	2CSF204568U1630		0,380	24
	300	63	356257	F204 B-63/0,3 U	2CSF204568U3630		0,380	24

### F200 B Type high ratings

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	80	988601	F204B-80/0,03 <sup>2</sup>	2CSF204501R1800		0,500	1
		125	988700	F204B-125/0,03L <sup>1,2</sup>	2CSF204523R1950		0,500	1
	300	80	989103	F204B-80/0,3 <sup>2</sup>	2CSF204501R3800		0,500	1
		125	989202	F204B-125/0,3L <sup>1,2</sup>	2CSF204523R3950		0,500	1
	300 S	125	989509	F204BS-125/0,3L <sup>1,2</sup>	2CSF204823R3950		0,500	1
	500	125	730439	F204B-125/0,5L <sup>1,2</sup>	2CSF204523R4950		0,500	1
	500 S	125	731238	F204BS-125/0,5L <sup>1,2</sup>	2CSF204823R4950		0,500	1



F204 B 100, 125 A

<sup>1</sup> Left-sided neutral pole

<sup>2</sup> No-self-diagnostics

## RCCBs

### F-ATI and F-ARI



F-ATI and F-ARI Test are RCCBs equipped with automatic test features. RCCBs are supposed to be checked every six months in order to make sure that the contacts are working properly and the device is able to trip in case of a leakage to earth. This swift operation affects the operational continuity of the circuits downstream and required a lot of man power. F-ATI and F-ARI test ranges push the periodic test to another level as this is run automatically and with no interruption at all of the service. Therefore, also the operations carried out by maintenance personnel are reduced to the very minimum.

In addition to the automatic test, F-ARI Range features a reclosing unit that tries to reclose the RCCB as it trips. The reclosing operations are based on an insulation check to make sure that no permanent fault is present. The insulation check is done with a very low current with no danger for human at any time. Once the insulation check is positive the reclosing unit recloses the RCCB again. Moreover, the results coming from each and every circuit are collected at once thanks to ARBus interface.

- Saving: maintenance costs are cut down as the device runs automatically the test monthly in accordance with EN 61008 provisions.
- Uptime: while running the test, no disconnection of the supply occurs like in the traditional RCCB units.
- Time saving: a full array of maximum 99 devices can be commanded and read by remote by the means of the ARBus interface.
- Easy installation: the unit is factory fitted and it needs no coupling
- Quality: F-ATI Test range is approved by VDE while F-ARI Test is approved by IMQ CSV.
- Smart: complete monitoring over the application thanks to a fault check system and a programmable aux contact
- Reliability: Suitable for demanding environments up to 60 °C
- High immunity: RCCBs Type A APR offer the adequate solution according to the type of loads to be protected , the level of safety and the continuity of service. (inserire forme d'onda ammesse per APR)

## RCCBs

### F-ATI and F-ARI technical features

		F-ATI Test	F-ARI Test
Reference Standards	EN61008-1 , VDE V 0664-120 (annex M)	EN61008-1 , CPT054, EN50557	
Electrical features	Distribution system	TN, TT, IT	TN, TT
	Rated voltage Ue	230-400 V a.c. -15% ÷ 10%	
	Rated frequency	50 Hz	
	Rated current In	25, 40, 63 A	
	Rated sensitivity IΔn	30, 300 mA	
	Type	A AP-R	
	Poles	2P, 4P	
	Insulation voltage Ui	500 V d.c.	
	Minimum test voltage Utmin	195 V a.c.	
	Rated non-operating resistance between live parts and earth Rdo	8 kΩ (30 mA), 2,5 kΩ(300 mA)	
	Rated operating resistance between live parts and earth Rd	16 kΩ (30 mA), 5 kΩ (300 mA)	
	Rated conditional short-circuit Inc	10 kA (SCPD – gL fuse 63 A for In 25, 40 A; gL fuse 80 A for In 63 A)	
	Dielectric test voltage at ind. freq. for 1 min	2,5 kV	
	Rated impulse withstand voltage (1,2/50) Uimp	4 kV	
	Power loss	2P: 2.2 W (25 A); 5.4 W (40 A); 6.2 W (63 A) 4P: 3.5 W (25 A); 6 W (40 A); 12 W (63 A)	
	Power consumption during operation	41 VA	
Other features	Test cycle time	< 7 s	
	Reclosing time	< 10 s (6 s check, 3 s reclosing)	
Mechanical features	Protection degree	IP20 (terminals), IP40 (housing)	
	Contact position indicator CPI	yes	
	Mechanical life	4000	
Installation	Tightening torque	2 Nm	
	Ambient temperature with daily average <= 35 °C	-25...+60 °C	
	Storage temperature	-40...+70 °C	
Auxiliary contact	Type	NO-NC-NO+pulse (100 ms)	
	Operating features	5 ÷ 230 V a.c./d.c. I <sub>max</sub> 100 mA	
	Terminals cross section	2,5 mm <sup>2</sup>	
	Tightening torque	0,4 Nm	
Dimensions	DIN modules	5, 7	
	Weight	550, 900g	
<b>ARBus</b>			
Electrical features	Rated voltage Ue	230 V a.c. -15% ÷ 10%	
	Rated frequency	50 Hz	
	Insulation voltage Ui	500 V d.c.	
	Rated conditional short-circuit Inc	10 kA (SCPD – gL fuse 63 A for In 25, 40 A; gL fuse 80 A for In 63 A)	
	Rated impulse withstand voltage (1,2/50) Uimp	4 kV	
	Power consumption	1 W	
Installation	Terminals	2,5 mm <sup>2</sup>	
	Tightening torque	0,4 Nm	
	Ambient temperature with daily average <= 35°C	-25...+60 °C	
	Storage temperature	-40...+70 °C	
Communication	Protocol	Modbus RS485	
	Baud rate	38400	
	Addresses	1...99	
Dimensions and weight	DIN modules	1	
	Weight	180 gr	

## RCCBs

### F-ATI and F-ARI



F-ATI 2 Test



F-ARI 4 Test

#### F-ATI

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1P+N	30	25	288855	F-ATI2Test A-25/0.03	2CSF302130R1250		0.550	5
		40	288954	F-ATI2Test A-40/0.03	2CSF302130R1400		0.550	5
		63	289050	F-ATI2Test A-63/0.03	2CSF302130R1630		0.550	5
3P+N	30	25	289159	F-ATI4Test A-25/0.03	2CSF304130R1250		0.900	7
		40	289258	F-ATI4Test A-40/0.03	2CSF304130R1400		0.900	7
		63	289357	F-ATI4Test A-63/0.03	2CSF304130R1630		0.900	7
	300	25	289456	F-ATI4Test A-25/0.3	2CSF304130R3250		0.900	7
		40	289555	F-ATI4Test A-40/0.3	2CSF304130R3400		0.900	7
		63	289654	F-ATI4Test A-63/0.3	2CSF304130R3630		0.900	7

#### F-ARI Test

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1P+N	30	25	289753	F-ARI2Test A-25/0.03	2CSF302131R1250		0.550	5
		40	289852	F-ARI2Test A-40/0.03	2CSF302131R1400		0.550	5
		63	293453	F-ARI2Test A-63/0.03	2CSF302131R1630		0.550	5
3P+N	30	25	289951	F-ARI4Test A-25/0.03	2CSF304131R1250		0.900	7
		40	290056	F-ARI4Test A-40/0.03	2CSF304131R1400		0.900	7
		63	290155	F-ARI4Test A-63/0.03	2CSF304131R1630		0.900	7
	300	25	290254	F-ARI4Test A-25/0.3	2CSF304131R3250		0.900	7
		40	290353	F-ARI4Test A-40/0.3	2CSF304131R3400		0.900	7
		63	290452	F-ARI4Test A-63/0.3	2CSF304131R3630		0.900	7

## RCCBs

F-ATI and F-ARI



ARBus

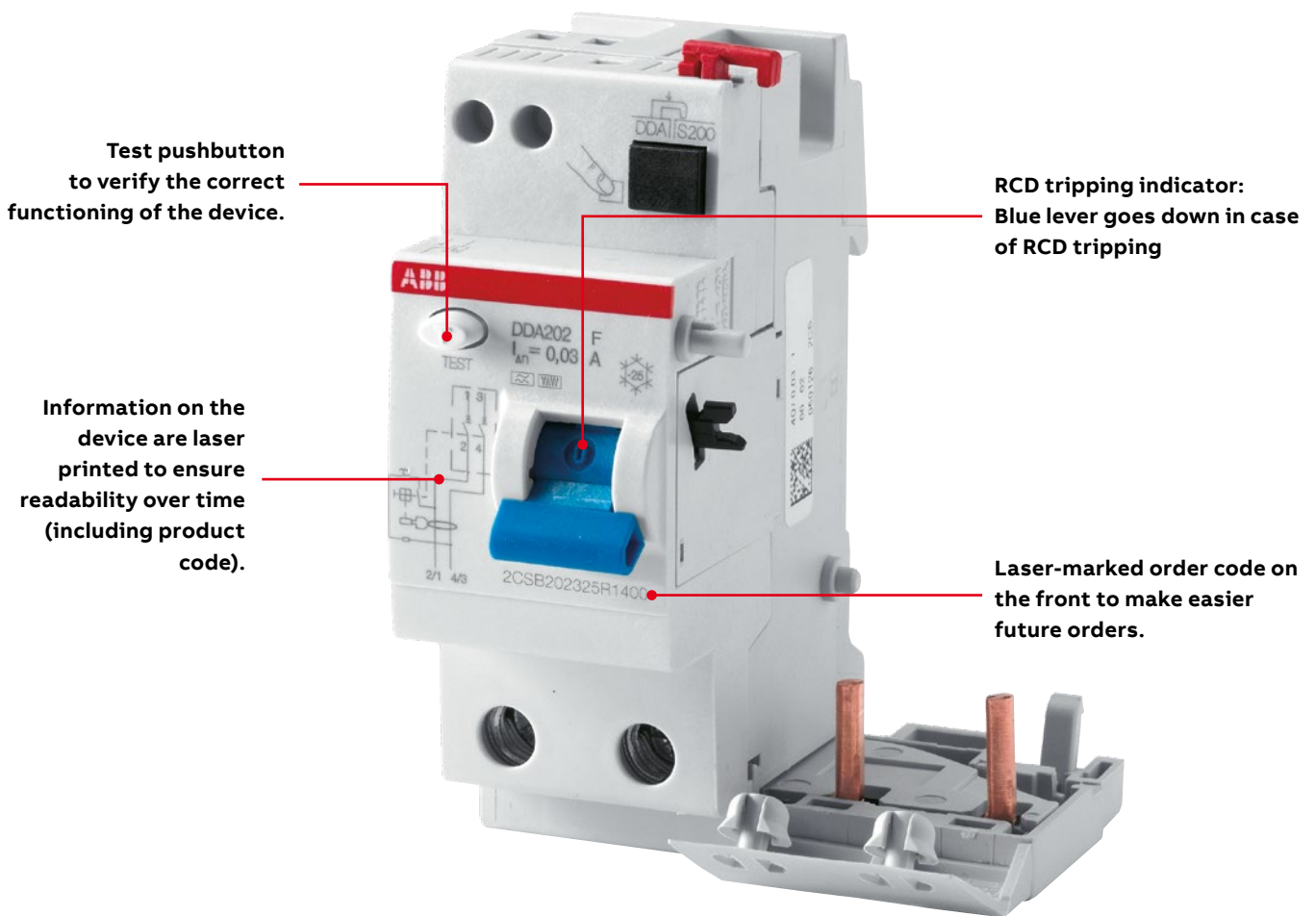
### Gamma ARBus

	<b>Bbn</b>	<b>Order details</b>	<b>Price</b>	<b>Weight</b>	<b>Pack</b>
	8012542		1 piece	1 piece	unit
	<b>EAN</b>	<b>Type code</b>	<b>Order code</b>	<b>kg</b>	<b>pc.</b>
ARBus	293354		2CSF300130R1989	0.180	1

# DDA 200

## The details make the difference

A range designed to ensure efficiency and protection



DDA200 RCD block mounted with S200 MCB.



DDA200  
RCD block

S200 MCB

RCBO





### Flexibility

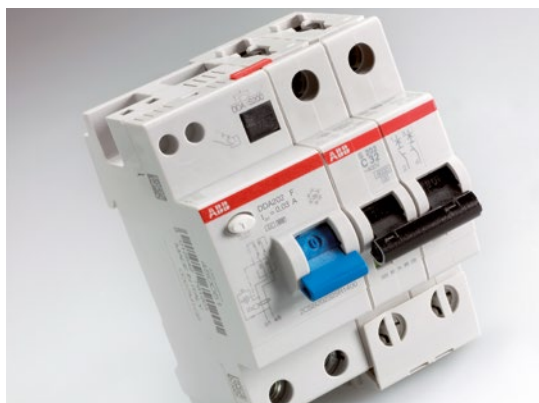
DDA200 is suitable for mounting with S200 extensive range of MCBs, covering applications in 2P up to 63A with breaking capacity up to 25kA.



RCD block DDA200 can be used in ambient conditions where the temperature of the surrounding atmosphere has values between  $-25\text{ }^{\circ}\text{C}$  (snowflake laser printed on the front of the device) and  $+55\text{ }^{\circ}\text{C}$ .



Possibility to connect a remote test button for 63A versions.



### No misuse

Mistakes in assembling the MCB on the DDA200 are avoided thanks to a mechanical key that avoids mounting an MCB with higher rated current than the RCD block.

## RCD-blocks

### DDA 200 technical features



DDA 200

Standards		
Operating characteristic: type		
Rated current $I_n$		[A]
Poles		
Rated voltage $U_e$	2P	[V]
	3P	
	4P	
Insulation voltage $U_i$		[V]
Operating voltage of circuit test $U_t$	2P	[V]
	3P	
	4P	
Rated frequency		Hz
Rated breaking capacity according to	IEC EN 61009	[A]
Rated breaking capacity according to	IEC EN 60947-2	[A]
Rated residual breaking capacity $I_{\Delta n}$		[kA]
Rated impulse withstand capacity (1,2/50) $U_{imp}$		[kV]
Dielectric test voltage at ind. freq. for 1 min.		[kV]
Surge current resistance (wave 8/20)		[A]
Rated sensitivity $I_{\Delta n}$		[A]
Toggle		
Electrical life		
Mechanical life		
Protection degree	housing terminals	
Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30		[°C/RH]
Ambient temperature (with daily average $\leq +35$ °C)		[°C]
Storage temperature		[°C]
Terminal type	2P	
	3P/4P $I_n=25$ and 40 A	
	3P/4P $I_n=63$ A	
Terminal size	2P	[mm <sup>2</sup> ]
	3P/4P $I_n=25$ and 40 A	[mm <sup>2</sup> ]
	3P/4P $I_n=63$ A	[mm <sup>2</sup> ]
Tightening torque	2P	[Nm]
	3P/4P $I_n=25$ and 40 A	[Nm]
	3P/4P $I_n=63$ A	[Nm]
Mounting		
Mounting position		
Dimensions	2P	[mm]
H x P x L	3P/4P $I_n=25$ and 40 A	[mm]
	3P/4P $I_n=63$ A	[mm]
Weight	2P	[g]
	3P/4P $I_n=25$ and 40 A	[g]
	3P/4P $I_n=63$ A	[g]
Combinable with	S 200L	
	S 200	
	S 200M	
	S 200 P	

① All RCD-blocks DDA 200 with rated current 63 A are provided with two additional terminals for remote tripping.

② DDA200 A AE is provided with two additional terminals for remote release in positive safety.

A remote control circuit should be connected to those terminals where circuit breakers or push buttons with normally closed contacts should be inserted.

## RCD-blocks

### DDA 200 technical features

DDA 200 AC	DDA 200 A	DDA 200 A AP-R	DDA 200 A AE	DDA 200 A S	DDA 200 F	DDA 200 B
IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1					IEC/EN 61009 App.G, IEC/EN 62423 2 <sup>nd</sup> ed	IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1, IEC EN 62423
AC	A	A	A	A	F	B
25, 40, 63 ①		25, 40, 63 ①	63 ②	63 ①	40, 63 A1 (to mount with MCB with In = 0,5...63A)	25-40-63
2P, 3P, 4P					2P	2P, 3P, 4P
230 (400 for special execution @400 V)			230	230	230	230
230/400			400	400	-	400
230/400			230/400	230/400	-	230/400
500						
110-254 for special execution @110V; 195-254 (170-254 for 30 mA; 400 for special execution @400 V)			184-264	195-254 (170-254 for 30 mA)	254/170	195-254 (170-254 for 30 mA)
195-440 (300-440 for 30 mA; 110-254 for special execution @110 V)			310-440	195-440 (300-440 for 30 mA)	-	310-440 (300-440 for 30 mA)
195-440 (300-440 for 30 mA; 110-254 for special execution @110 V)			184-264	195-440 (300-440 for 30 mA)	-	195-254 (300-440 for 30 mA)
50...60						
same of the coupled MCB						
same of the coupled MCB						
same of the coupled MCB						
4						
2,5						
NA		3000	NA	5000	3000	3000 (5000 for selective types)
0.01-0.03-0.1-0.3-0.5-1		0.03	0.03-0.3-0.5-1	0.1-0.3-0.5-1	-	0.03 - 0.3 - 0.5
blue					blue sealable in ON-OFF position	blue
10000						
20000						
IP4X						
IP2X						
28 cycles with 55°C/90-96% and 25°C/95-100%						
-25...+55						
-40...+70						
bi-directional cylinder-lift					Top: failsafe bi-directional cylinder-lift terminal (shock protected) Bottom: failsafe cylinder-lift terminal (shock protected)	bi-directional cylinder-lift
cage type					-	-
bi-directional cylinder-lift					-	bi-directional cylinder-lift
(rigid or flexible) up to 25						
(rigid or flexible) up to 16					-	-
(rigid or flexible) up to 25					-	(rigid or flexible) up to 25
2.8						
1.2					-	-
2.8					-	2.8
on DIN rail EN 60715 (35 mm) by means of fast clip device						
Any						
85 x 69 x 35					93 x 69 x 69,5	85 x 69 x 70
85 x 69 x 35					-	85 x 69 x 70
85 x 69 x 70					-	85 x 69 x 70
175					180	350
175					-	375
325					-	395
yes					-	yes
yes					-	yes
yes					-	yes
yes					-	yes

## RCD-blocks

DDA 200 series AC  type



DDA 202



DDA 203

### DDA 200 AC type

Function: RCD-block for assembly on site with MCBs S 200 series. Protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with  $I_{\Delta n}=30$  mA).

Application: residential, commercial, industrial.

Standard: IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	10	25	791003	DDA202 AC-25/0.01	2CSB202001R0250	0.180	1	
		25	791102	DDA202 AC-25/0.03	2CSB202001R1250			
		40	791201	DDA202 AC-40/0.03	2CSB202001R1400			
	30	63 ②	791300	DDA202 AC-63/0.03	2CSB202001R1630	0.180	1	
		100	25	791409	DDA202 AC-25/0.1	2CSB202001R2250	0.180	1
			40	791508	DDA202 AC-40/0.1	2CSB202001R2400		
	63 ②		791607	DDA202 AC-63/0.1	2CSB202001R2630			
	300	25	791706	DDA202 AC-25/0.3	2CSB202001R3250	0.180	1	
		40	791805	DDA202 AC-40/0.3	2CSB202001R3400			
		63 ②	791904	DDA202 AC-63/0.3	2CSB202001R3630			
	500	25	792000	DDA202 AC-25/0.5	2CSB202001R4250	0.180	1	
			40	792109	DDA202 AC-40/0.5			2CSB202001R4400
63 ②			792208	DDA202 AC-63/0.5	2CSB202001R4630			
1000	25	808305	DDA202 AC-25/1	2CSB202001R5250	0.180	1		
		40	808404	DDA202 AC-40/1			2CSB202001R5400	
		63 ②	792307	DDA202 AC-63/1			2CSB202001R5630	
2000	63	792406	DDA202 AC-63/2	2CSB202001R6630	0.180	1		

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3	30	25	792505	DDA203 AC-25/0.03	2CSB203001R1250	0.220	1	
		40	792604	DDA203 AC-40/0.03	2CSB203001R1400			
		63 ②	792703	DDA203 AC-63/0.03	2CSB203001R1630			
	100	25	792802	DDA203 AC-25/0.1	2CSB203001R2250	0.220	1	
			40	792901	DDA203 AC-40/0.1			2CSB203001R2400
			63 ②	793007	DDA203 AC-63/0.1			2CSB203001R2630
	300	25	793106	DDA203 AC-25/0.3	2CSB203001R3250	0.220	1	
			40	793205	DDA203 AC-40/0.3			2CSB203001R3400
			63 ②	793304	DDA203 AC-63/0.3			2CSB203001R3630
	500	25	793403	DDA203 AC-25/0.5	2CSB203001R4250	0.220	1	
			40	793502	DDA203 AC-40/0.5			2CSB203001R4400
			63 ②	793601	DDA203 AC-63/0.5			2CSB203001R4630
	1000	25	808503	DDA203 AC-25/1	2CSB203001R5250	0.220	1	
			40	808602	DDA203 AC-40/1			2CSB203001R5400
			63 ①②	793700	DDA203 AC-63/1			2CSB203001R5630
	2000	63	793809	DDA203 AC-63/2	2CSB203001R6630	0.260	1	

① version with test button working at 110VAC - 254VAC is available. For selection tables refer to special version paragraph.

② provided with additional terminals for remote tripping

## RCD-blocks

DDA 200 series AC  type



DDA 204

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	25	793908	DDA204 AC-25/0.03	2CSB204001R1250	0.260	1	
		40	794004	DDA204 AC-40/0.03	2CSB204001R1400	0.260	1	
		63 ①②	794103	DDA204 AC-63/0.03	2CSB204001R1630	0.305	1	
	100	25	794202	DDA204 AC-25/0.1	2CSB204001R2250	0.260	1	
		40	794301	DDA204 AC-40/0.1	2CSB204001R2400	0.260	1	
		63 ②	794400	DDA204 AC-63/0.1	2CSB204001R2630	0.305	1	
	300	25	794509	DDA204 AC-25/0.3	2CSB204001R3250	0.260	1	
		40	794608	DDA204 AC-40/0.3	2CSB204001R3400	0.260	1	
		63 ②	794707	DDA204 AC-63/0.3	2CSB204001R3630	0.305	1	
500	25	794806	DDA204 AC-25/0.5	2CSB204001R4250	0.260	1		
	40	794905	DDA204 AC-40/0.5	2CSB204001R4400	0.260	1		
	63 ②	795001	DDA204 AC-63/0.5	2CSB204001R4630	0.305	1		
1000	25	808701	DDA204 AC-25/1	2CSB204001R5250	0.260	1		
	40	808800	DDA204 AC-40/1	2CSB204001R5400	0.260	1		
	63 ②	795100	DDA204 AC-63/1	2CSB204001R5630	0.305	1		
2000	63	795209	DDA204 AC-63/2	2CSB204001R6630	0.305	1		

① version with test button working at 110VAC - 254VAC is available. For selection tables refer to special version paragraph.

② provided with additional terminals for remote tripping

## RCD-blocks

DDA 200 series A  type



DDA 202



DDA 203

### DDA 200 A type

Function: RCD-block for assembly on site with MCBs S 200 series. Protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with  $I_{\Delta n}=30$  mA).

**Application: residential, commercial, industrial.**

**Standard: IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1**

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.	
				Type code	Order code				
2	10	25	795308	DDA202 A-25/0.01	2CSB202101R0250		0.180	1	
		30	795407	DDA202 A-25/0.03	2CSB202101R1250		0.180	1	
		40	795506	DDA202 A-40/0.03	2CSB202101R1400		0.180	1	
	100	25	795704	DDA202 A-25/0.1	2CSB202101R2250		0.180	1	
			40	795803	DDA202 A-40/0.1	2CSB202101R2400		0.180	1
			63 ②	795902	DDA202 A-63/0.1	2CSB202101R2630		0.180	1
	300	25	796008	DDA202 A-25/0.3	2CSB202101R3250		0.180	1	
			40	796107	DDA202 A-40/0.3	2CSB202101R3400		0.180	1
			63 ②	796206	DDA202 A-63/0.3	2CSB202101R3630		0.180	1
500	25	796305	DDA202 A-25/0.5	2CSB202101R4250		0.180	1		
		40	796404	DDA202 A-40/0.5	2CSB202101R4400		0.180	1	
		63 ②	796503	DDA202 A-63/0.5	2CSB202101R4630		0.180	1	
1000	25	808909	DDA202 A-25/1	2CSB202101R5250		0.180	1		
		40	809005	DDA202 A-40/1	2CSB202101R5400		0.180	1	
		63 ②	796602	DDA202 A-63/1	2CSB202101R5630		0.180	1	

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.	
				Type code	Order code				
3	30	25	796701	DDA203 A-25/0.03	2CSB203101R1250		0.220	1	
		40 ①	796800	DDA203 A-40/0.03	2CSB203101R1400		0.220	1	
		63 ①②	796909	DDA203 A-63/0.03	2CSB203101R1630		0.260	1	
	100	25	797005	DDA203 A-25/0.1	2CSB203101R2250		0.220	1	
			40	797104	DDA203 A-40/0.1	2CSB203101R2400		0.220	1
			63 ②	797203	DDA203 A-63/0.1	2CSB203101R2630		0.260	1
	300	25	797302	DDA203 A-25/0.3	2CSB203101R3250		0.220	1	
			40	797401	DDA203 A-40/0.3	2CSB203101R3400		0.220	1
			63 ②	797500	DDA203 A-63/0.3	2CSB203101R3630		0.260	1
	500	25	797609	DDA203 A-25/0.5	2CSB203101R4250		0.220	1	
			40	797708	DDA203 A-40/0.5	2CSB203101R4400		0.220	1
			63 ②	797807	DDA203 A-63/0.5	2CSB203101R4630		0.260	1
	1000	25	809104	DDA203 A-25/1	2CSB203101R5250		0.220	1	
			40	809203	DDA203 A-40/1	2CSB203101R5400		0.220	1
			63 ②	797906	DDA203 A-63/1	2CSB203101R5630		0.260	1

① version with test button working at 110VAC - 254VAC is available. For selection tables refer to special version paragraph.

② provided with additional terminals for remote tripping

## RCD-blocks

DDA 200 series A  type



DDA 204

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	25	798002	DDA204 A-25/0.03	2CSB204101R1250		0.260	1
		40	798101	DDA204 A-40/0.03	2CSB204101R1400		0.260	1
		63 ①②	798200	DDA204 A-63/0.03	2CSB204101R1630		0.305	1
	100	25	798309	DDA204 A-25/0.1	2CSB204101R2250		0.260	1
		40	798408	DDA204 A-40/0.1	2CSB204101R2400		0.260	1
		63 ②	798507	DDA204 A-63/0.1	2CSB204101R2630		0.305	1
	300	25	798606	DDA204 A-25/0.3	2CSB204101R3250		0.260	1
		40	798705	DDA204 A-40/0.3	2CSB204101R3400		0.260	1
		63 ②	798804	DDA204 A-63/0.3	2CSB204101R3630		0.305	1
500	25	798903	DDA204 A-25/0.5	2CSB204101R4250		0.260	1	
	40	799009	DDA204 A-40/0.5	2CSB204101R4400		0.260	1	
	63 ②	799108	DDA204 A-63/0.5	2CSB204101R4630		0.305	1	
1000	25	809302	DDA204 A-25/1	2CSB204101R5250		0.260	1	
	40	809401	DDA204 A-40/1	2CSB204101R5400		0.260	1	
	63 ②	799207	DDA204 A-63/1	2CSB204101R5630		0.305	1	

① version with test button working at 110VAC - 254VAC is available. For selection tables refer to special version paragraph.

② provided with additional terminals for remote tripping

## RCD-blocks

### DDA 200 special version 110 V and 400 V



DDA 202



DDA 203



DDA 204

#### DDA 200 special version 110 V and 400 V

Function: special version of RCD-blocks to assembly on site with MCBs S 200 series. Special version are available with protection against the effects of sinusoidal alternating and/or direct pulsating earth fault currents, protection against indirect contacts and additional protection against direct contacts (with  $I_{\Delta n}=30$  mA).

DDA200 110 V is a particular RCD-block with voltage range for test button  $U_t = 110-254$  V. RCD- blocks work for naval applications where the IT system is typically used and the voltage between the phase and the neutral conductor is 115 - 125 V. DDA200 110 V ( $U_t = 110-254$  V) are suitable for naval applications.

Special version is also available for 400 V in the two poles version working in two-phase industrial systems where voltage between phases is 400 V.

**Applications: naval, industrial.**

**Standards: IEC 61009-1 Ann. G; IEC 61009-2-1**

#### 110 V version

##### AC type

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	63 ①	929901	DDA 204 AC-63/0.03 110V	2CSB204099R1630		0.350	1

##### A type

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	25	079033	DDA202 A-25/0.03 110V	2CSB202199R1250		0.180	1
				DDA202 A-40/0.03 110V	2CSB202199R1400			
				DDA202 A-63/0.03 110V	2CSB202199R1630			
3	30	40	811701	DDA 203 A-40/0.03 110V	2CSB203199R1400		0.350	1
				DDA 203 A-63/0.03 110V	2CSB203199R1630			
4	30	63 ①	812104	DDA 204 A-63/0.03 110V	2CSB204199R1630		0.350	1

#### 400 V version

##### A type

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	63 ①	954934	DDA 202 A-63/0.03 400V	2CSB202192R1630		0.200	1

① provided with additional terminals for remote tripping



## RCD-blocks

DDA 200 series A  type, AP-R (high immunity)



DDA 202

### DDA 200 AP-R, A type

Function: RCD-block for assembly on site with MCBs S 200 series. Protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing the best compromise between safety and continuity in the service thanks to the resistance to unwanted trippings; protection against indirect contacts and additional protection against direct contacts (with  $I_{\Delta n}=30$  mA).

**Application: residential, commercial, industrial.**

**Standard: IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1**

**Surge current resistance (wave 8/20)=3000 A**



DDA 203

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	25	801108	DDA202 A-25/0.03 AP-R	2CSB202401R1250		0.180	1
			801207	DDA202 A-40/0.03 AP-R	2CSB202401R1400			
			63 ①	DDA202 A-63/0.03 AP-R	2CSB202401R1630			
	300	63	961932	DDA202 A-63/0,3 AP-R	2CSB202401R3630	0,260	1	




DDA 204

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3	30	25	811008	DDA203 A-25/0.03 AP-R	2CSB203401R1250		0.220	1
			811107	DDA203 A-40/0.03 AP-R	2CSB203401R1400			
			63 ①	DDA203 A-63/0.03 AP-R	2CSB203401R1630			

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	25	801405	DDA204 A-25/0.03 AP-R	2CSB204401R1250		0.260	1
			801504	DDA204 A-40/0.03 AP-R	2CSB204401R1400			
			63 ①	DDA204 A-63/0.03 AP-R	2CSB204401R1630			

① provided with additional terminals for remote tripping

## RCD-blocks

DDA 200 series A  type, AE (for emergency stop)



DDA 202

### DDA 200 AE, A type

Function: RCD-block for assembly on site with MCBs S 200 series. Protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with  $I_n=30$  mA). The RCD-block is provided with two additional terminals to be used in emergency circuits for remote opening in positive safety. A remote control circuit should be connected to those terminals where NC push buttons should be inserted in series.

#### ATTENTION!

It's allowed to use multiple NC buttons to control one DDA200 AE but it's not permitted to use one button in a control circuit for more RCD-blocks DDA200 AE. DDA200 AE must be supplied by the top side.

**Application: commercial, industrial.**

**Standard: IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1**



DDA 203

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	63	801702	DDA202 A-63/0.03 AE	2CSB202701R1630		0.180	1
	300	63	801801	DDA202 A-63/0.3 AE	2CSB202701R3630		0.180	1
	500	63	801900	DDA202 A-63/0.5 AE	2CSB202701R4630		0.180	1
	1000	63	802006	DDA202 A-63/1 AE	2CSB202701R5630		0.180	1



DDA 204

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3	30	63	802105	DDA203 A-63/0.03 AE	2CSB203701R1630		0.260	1
	300	63	802204	DDA203 A-63/0.3 AE	2CSB203701R3630		0.260	1
	500	63	802303	DDA203 A-63/0.5 AE	2CSB203701R4630		0.260	1
	1000	63	802402	DDA203 A-63/1 AE	2CSB203701R5630		0.260	1

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	63	802501	DDA204 A-63/0.03 AE	2CSB204701R1630		0.305	1
	300	63	802600	DDA204 A-63/0.3 AE	2CSB204701R3630		0.305	1
	500	63	802709	DDA204 A-63/0.5 AE	2CSB204701R4630		0.305	1
	1000	63	802808	DDA204 A-63/1 AE	2CSB204701R5630		0.305	1

## RCD-blocks

DDA 200 series A  type, selective



DDA 202

### DDA 200 A selective type

Function: RCD-block for assembly on site with MCBs S 200 series. Protection against the effects of sinusoidal alternating and direct pulsating earth fault currents with an intentional tripping delay, which permits to realize the selectivity with downstream instantaneous devices (for more information about selectivity see the technical guide).

**Application: commercial, industrial.**

**Standard: IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1**

**Surge current resistance (wave 8/20)=5000 A**



DDA 203



DDA 204

Number of poles	Rated residual current I $\Delta$ n mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	100	63	799306	DDA202 A S-63/0.1	2CSB202201R2630		0.180	1
	300	63	799405	DDA202 A S-63/0.3	2CSB202201R3630		0.180	1
	500	63	799504	DDA202 A S-63/0.5	2CSB202201R4630		0.180	1
	1000	63	799603	DDA202 A S-63/1	2CSB202201R5630		0.180	1

Number of poles	Rated residual current I $\Delta$ n mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3	100	63	799702	DDA203 A S-63/0.1	2CSB203201R2630		0.260	1
	300	63	799801	DDA203 A S-63/0.3	2CSB203201R3630		0.260	1
	500	63	799900	DDA203 A S-63/0.5	2CSB203201R4630		0.260	1
	1000	63	800002	DDA203 A S-63/1	2CSB203201R5630		0.260	1

Number of poles	Rated residual current I $\Delta$ n mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	100	63	800101	DDA204 A S-63/0.1	2CSB204201R2630		0.305	1
	300	63	800200	DDA204 A S-63/0.3	2CSB204201R3630		0.305	1
	500	63	800309	DDA204 A S-63/0.5	2CSB204201R4630		0.305	1
	1000	63	800408	DDA204 A S-63/1	2CSB204201R5630		0.305	1

Attention: All DDA 200 A S are provided with additional terminals for remote tripping

## RCD-blocks

DDA 200 series F   type



DDA 202

### DDA 200 series F type

Function: RCD-block for assembly on site with MCBs S 200 series. Protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with  $I_{\Delta n}=30$  mA). Specifically suitable for the protection of lines supplying single phase inverters.

**Application: residential, commercial, industrial.**

**Standard: IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1**

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	40	801221	DDA 202 F-40/0.03	2CSB202325R1400	0.180	1	
		63	801122	DDA 202 F-63/0.03	2CSB202325R1630			



## RCD-blocks

DDA 200 series B    type



DDA 202

### DDA 200 type B for continuous type fault currents

RCD-blocks type B are also sensitive to continuous or mainly continuous (continuous with weak ondulation) current pulsating earth fault currents. They are also sensitive to alternate sinusoidal and direct pulsating earth fault currents as with type A circuit breakers.

They satisfy the requirements of type A devices and thus the requirements for type AC devices which can be considered an extension. For this reason the differential blocks type B are sometimes referred as “universal type”, as sensitive to “all” kind of residual current shape.

DDA 200 type B can be coupled with all the S 200 series MCBs.

They are used for protection in installations with electronic equipments according to EN 50178.



DDA 203

**Applications: tertiary and industrial.**

**Standards: IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1; IEC 62423 ed.2**

**Surge current resistance (8/20 wave): 3000 A**

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	25	748021	DDA202 B APR-25/0,03	2CSB202592R1250		0.350	1
		40	515128	DDA202 B APR-40/0,03	2CSB202592R1400		0.350	1
		63	610922	DDA202 B APR-63/0,03	2CSB202592R1630		0.350	1
300	25	25	733324	DDA202 B APR-25/0,3	2CSB202592R3250		0.350	1
		63	732426	DDA202 B APR-63/0,3	2CSB202592R3630		0.350	1






DDA 204

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3	30	63	733225	DDA203 B APR-63/0,03	2CSB203592R1630		0.375	1
		300	732327	DDA203 B APR-63/0,3	2CSB203592R3630		0.375	1

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	25	732228	DDA204 B APR-25/0,03	2CSB204592R1250		0.395	1
		40	020325	DDA204 B APR-40/0,03	2CSB204592R1400		0.395	1
		63	733027	DDA204 B APR-63/0,03	2CSB204592R1630		0.395	1
300	25	25	732129	DDA204 B APR-25/0,3	2CSB204592R3250		0.395	1
		63	732921	DDA204 B APR-63/0,3	2CSB204592R3630		0.395	1
		500	732020	DDA204 B APR-63/0,5	2CSB204592R4630		0.395	1

## RCD-blocks

DDA 200 series B    type



DDA 203

### DDA 200 type B for selective continuous type fault currents

Function: protection against the effects of alternate sinusoidal, direct pulsating, continuous current and continuous current pulsating earth fault currents with an intentional trip delay that permits selectivity with instantaneous type devices placed downstream (for further information on selectivity, see Chapter 3 of Electrical installation solutions for buildings - technical details).

DDA 200 type B can be coupled with all the S 200 series MCBs.

They are used for protection in installations with electronic equipments according to EN 50178.

**Applications: tertiary and industrial.**

**Standards: IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1; IEC 62423 ed.2**

**Surge current resistance (8/20 wave): 5000 A**



DDA 204

Number of poles	Rated residual current I $\Delta$ n mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3	300	63	733126	DDA203 B S-63/0,3	2CSB203892R3630		0.375	1

Number of poles	Rated residual current I $\Delta$ n mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	300	63	732822	DDA204 B S-63/0,3	2CSB204892R3630		0.395	1

## RCD-blocks

### DDA 800 technical features



DDA 800

		Standards		
Electrical features	Type (wave form of the earth leakage sensed)			
	Poles			
	Rated current $I_n$		A	
	Rated sensitivity $I_{\Delta n}$		A	
	Rated voltage $U_e$		V	
	Insulation voltage $U_i$		V	
	Operating voltage of circuit test $U_t$		V	
	Rated frequency		Hz	
	Rated breaking capacity ( $I_{cn}$ ) acc. to IEC /EN 60947-2		A	
	Rated residual breaking capacity $I_{\Delta m}$	with S 800 C		kA
		with S 800 N		kA
		with S 800 S		kA
	Rated impulse withstand voltage (1.2/50) $U_{imp}$		kV	
	Dielectric test voltage at ind. freq. for 1 min.		kV	
Surge current resistance (wave 8/20)		A		
Mechanical features	Toggle			
	Electrical life			
	Mechanical life			
	Protection degree	housing		
		terminals		
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30		°C/RH	
	Ambient temperature (with daily average $\leq +35$ °C)		°C	
	Storage temperature		°C	
	Terminal size for cables	flexible		mm <sup>2</sup>
		rigid		mm <sup>2</sup>
	Tightening torque		Nm	
Mounting				
Dimensions and weight	Dimensions (H x D x W)	2P	mm	
		3P	mm	
		4P	mm	
	Weight	2P	g	
		3P	g	
		4P	g	
Combination with MCBs	Combinable with:	S 800 N		
		S 800 S		

\* only on 3P and 4P versions



## RCD-blocks

### DDA 800 technical features

DDA 800 AC	DDA 800 A		DDA 800 A AP-R	DDA 800 A S	
IEC/EN 60947-2 Ann. B					
AC	A		A	A	
2P, 3P, 4P					
63	63	100	63-100	63	100
0.03-0.3	0.03-0.3-0.5	0.3-0.5	0.03	0.3-1	0.3-0.5*-1
230/400 - 240/415 - 400/690					
690					
195-690					
50...60					
according to the breaking capacity of the associated MCB					
according to the Icu of the associated MCB					
according to the Icu of the associated MCB					
according to the Icu of the associated MCB					
6					
2.5					
NA			3000	5000	
blue operating just from OFF position					
10000					
20000					
IP4X					
IP2X					
28 cycles with 55°C/90-96% and 25°C/95-100%					
-25...+60					
-40...+70					
6...50					
6...70					
min. 3 / max. 4					
on DIN rail EN 60715 (35 mm) by means of rapid fixing device					
108.2 x 82.3 x 81					
108.2 x 82.3 x 117					
108.2 x 82.3 x 117					
300 for 63 A - 415 for 100 A					
400 for 63 A - 640 for 100 A					
460 for 63 A - 765 for 100 A					
yes					
yes					

## RCD-blocks

DDA 800 AC  type for MCBs S800



DDA 802



DDA 803



DDA 804

### DDA 800 AC type for MCBs S800

Function: RCD-block for assembly on site with MCBs S800 series up to 63 A. Protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with  $I_{\Delta n} = 30 \text{ mA}$ ).

Application: commercial, industrial.

Standard: IEC/EN 60947-2 Ann. B

Number of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece	Pack unit
				Type code	Order code			
2	30	63	919704	DDA802AC-63/0.03	2CSB802001R1630	0.300	1	1
	300	63	919902	DDA802AC-63/0.3	2CSB802001R3630			

Number of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece	Pack unit
				Type code	Order code			
3	30	63	922001	DDA803AC-63/0.03	2CSB803001R1630	0.400	1	1
	300	63	922209	DDA803AC-63/0.3	2CSB803001R3630			

Number of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece	Pack unit
				Type code	Order code			
4	30	63	924401	DDA804AC-63/0.03	2CSB804001R1630	0.460	1	1
	300	63	924609	DDA804AC-63/0.3	2CSB804001R3630			

## RCD-blocks

DDA 800 A  type for MCBs S800



DDA 802

### DDA 800 A type for MCBs S800

Function: RCD-block for assembly on site with MCBs S800 up to 100 A. Protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contacts and additional protection against direct contacts (with  $I_{\Delta n} = 30$  mA).

**Application: commercial, industrial.**

**Standard: IEC/EN 60947-2 Ann. B**



DDA 803

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	63	920007	DDA802 A-63/0.03	2CSB802101R1630		0.300	1
	300	63	920205	DDA802 A-63/0.3	2CSB802101R3630		0.300	1
		100	545033	DDA802 A-100/0.3	2CSB802101R3000		0.415	1
	500	63	920403	DDA802 A-63/0.5	2CSB802101R4630		0.300	1
100		542636	DDA802 A-100/0.5	2CSB802101R4000		0.415	1	



DDA 804

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3	30	63	922308	DDA803 A-63/0.03	2CSB803101R1630		0.400	1
	300	63	922506	DDA803 A-63/0.3	2CSB803101R3630		0.400	1
		100	544135	DDA803 A-100/0.3	2CSB803101R3000		0.640	1
	500	63	922704	DDA803 A-63/0.5	2CSB803101R4630		0.400	1
100		541738	DDA803 A-100/0.5	2CSB803101R4000		0.640	1	

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	63	924807	DDA804 A-63/0.03	2CSB804101R1630		0.460	1
	300	63	925002	DDA804 A-63/0.3	2CSB804101R3630		0.460	1
		100	547532	DDA804 A-100/0.3	2CSB804101R3000		0.765	1
	500	63	925200	DDA804 A-63/0.5	2CSB804101R4630		0.460	1
100		544937	DDA804 A-100/0.5	2CSB804101R4000		0.765	1	

## RCD-blocks

DDA 800 A  type AP-R (high immunity) for MCBs S800



DDA 802

### DDA 800 A AP-R type for MCBs S800

Function: RCD-block for assembly on site with MCBs S800 up to 100 A. Protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing the best compromise between safety and continuity in the service thanks to the resistance to unwanted trippings; protection against indirect contacts and additional protection against direct contacts (with  $I_{\Delta n} = 30$  mA).

**Application: commercial, industrial.**

**Standard: IEC/EN 60947-2 Ann. B**



DDA 803

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	63	921400	DDA802 A-63/0.03 AP-R	2CSB802401R1630		0.300	1
		100	544630	DDA802 A-100/0.03 AP-R	2CSB802401R1000		0.415	1



DDA 804

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3	30	63	923800	DDA803 A-63/0.03 AP-R	2CSB803401R1630		0.400	1
		100	542230	DDA803 A-100/0.03 AP-R	2CSB803401R1000		0.640	1

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	63	927709	DDA804 A-63/0.03 AP-R	2CSB804401R1630		0.460	1
		100	547136	DDA804 A-100/0.03 AP-R	2CSB804401R1000		0.765	1

## RCD-blocks

DDA 800 A  type selective for MCBs S800



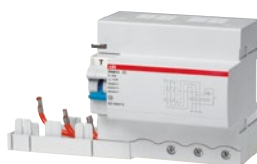
DDA 802

### DDA 800 A selective type for MCBs S800

Function: RCD-block for assembly on site with MCBs S800 series up to 100 A. Protection against the effects of sinusoidal alternating and direct pulsating earth fault currents with an intentional tripping delay, which permits to realize the selectivity with downstream instantaneous devices (for more information about selectivity see the technical guide).

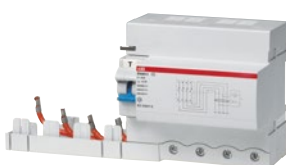
**Application: commercial, industrial.**

**Standard: IEC/EN 60947-2 Ann. B**



DDA 803

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	300	63	920601	DDA802 A S-63/0.3	2CSB802201R3630		0.300	1
		100	542537	DDA802 A S-100/0.3	2CSB802201R3000		0.415	1
	1000	63	920809	DDA802 A S-63/1	2CSB802201R5630		0.300	1
		100	547433	DDA802 A S-100/1	2CSB802201R5000		0.415	1



DDA 804

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3	300	63	922902	DDA803 A S-63/0.3	2CSB803201R3630		0.400	1
		100	544838	DDA803 A S-100/0.3	2CSB803201R3000		0.640	1
	500	100	542438	DDA803 A S-100/0.5	2CSB803201R4000		0.640	1
		1000	63	923206	DDA803 A S-63/1	2CSB803201R5630		0.400
	100		547334	DDA803 A S-100/1	2CSB803201R5000		0.640	1

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	300	63	926207	DDA804 A S-63/0.3	2CSB804201R3630		0.460	1
		100	544739	DDA804 A S-100/0.3	2CSB804201R3000		0.765	1
	500	100	542339	DDA804 A S-100/0.5	2CSB804201R4000		0.765	1
		1000	63	926504	DDA804 A S-63/1	2CSB804201R5630		0.460
	100		547235	DDA804 A S-100/1	2CSB804201R5000		0.765	1

# RCBO DS201

## Compact solutions for a complete protection

### Easy to install

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

### Test pushbutton

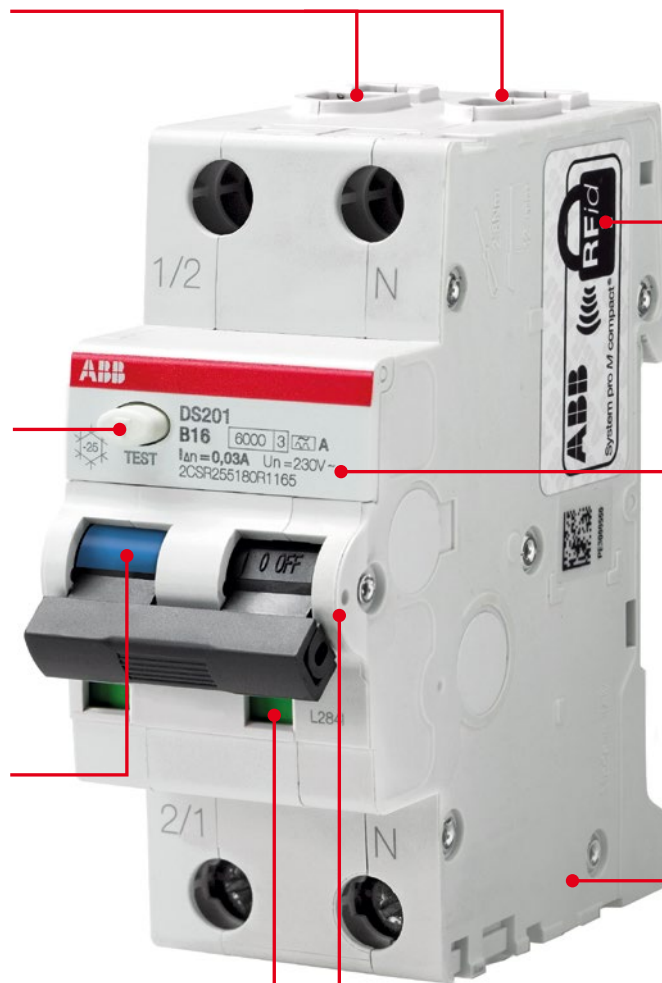
Test pushbutton to verify the correct functioning of the device.

### 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).



### Anti counterfeiting

DS201 is equipped with a tag Rfid in order to authenticate the product.

### Laser printed information

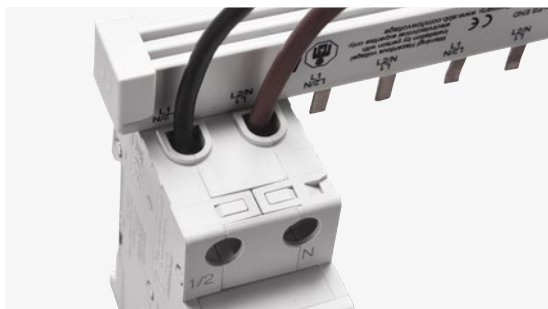
Information on the device are laser printed to ensure readability over time.

### 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 by two different seats: a front seat for 25 mm<sup>2</sup> cables and a back seat for 10 mm<sup>2</sup> 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 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.



### RFid

Product Made in Italy, with RFid tag on the product side containing a unique serial number assigned to ABB according to the standard ISO/IEC FCD 15693-3 in order to authenticate the product.

## RCBOs

### DS201 technical features



		DS201 L	DS201		
Standards		IEC/EN 61009-1; IEC/EN 61009-2-1	IEC/EN 61009-1; IEC/EN 61009-2-1		
<b>Electrical features</b>	Type (wave form of the earth leakage sensed)	A - AC - APR	A - AC - APR		
	Number of poles	1P + N	1P + N		
	Rated current $I_n$	A	$1 \leq I_n \leq 40$		
	Rated sensitivity $\Delta n$	A	0.01 - 0.03 - 0.3		
	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	110 (170 for 30mA) - 264	110 (170 for 30mA) - 264	
	Rated frequency	Hz	50/60	50/60	
	Rated breaking capacity acc. to IEC/EN 61009-1	$I_{cn}$	A	4500	6000
	Rated breaking capacity acc. to IEC/EN 60947-2 (only referring to short circuit test)	ultimate $I_{cu}$	kA	6	10
		service $I_{cs}$	kA	4.5	7.5
	Rated residual breaking capacity $I_{\Delta m}$ according to EN 61009-1	$I_{\Delta m}$	A	4500	6000
	Rated residual breaking capacity $I_{\Delta m}$ according to IEC 61009-1	$I_{\Delta m}$	A	4500	6000 up to 25 A; 4500 for 32A and 40A
	Rated impulse withstand voltage (1.2/50) $U_{imp}$	kV	4 kV	4 kV	
	Dielectric test voltage at ind. freq. for 1 min.	kV	2.5 kV (50 / 60Hz, 1 min.)	2.5 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: $10 I_n \leq I_n \leq 14 I_n$			■		
Energy limiting class acc. to EN 61009-1		3	3		
Surge current resistance (wave 8/20)	A	NA for A, AC versions; 3000 for APR version	NA for A, AC versions; 3000 for APR version		
<b>Mechanical features</b>	Housing	Insulation group I - II, RAL 7035	Insulation group I - II, RAL 7035		
	Toggle	Insulation group II, Black RAL 9005, sealable in ON-OFF positions	Insulation group II, Black RAL 9005, sealable in ON-OFF positions		
	Contact position indication	Green/Red Window	Green/Red Window		
	Earth fault trip indication	Blue flag on toggle	Blue flag on toggle		
	Electrical life	operations	10000	10000	
	Mechanical life	operations	20000	20000	
	Protection degree acc. to EN 60529	housing	IP4X	IP4X	
		terminals	IP2X	IP2X	
	Shock resistance acc. to IEC/EN 60068-2-27		25g - 2 shocks - 13ms	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	0.1 mm or 1 g - 20 cycles at 5...150...5 Hz	
	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%	28 cycles with 55°C/90-96% and 25°C/95-100%	
	Reference temperature for setting of thermal element	°C	30	30 (20 for K tripping char)	
Ambient temperature (with daily average $\leq +35$ °C)	°C	-25...+55	-25...+55		
Storage temperature	°C	-40...+70	-40...+70		



## RCBOs

### DS201 technical features



DS201 M	DS201 M 110V	DS201 T
IEC/EN 61009-1; IEC/EN 61009-2-1	IEC 61009-1; IEC 61009-2-1	IEC/EN 61009-1; IEC/EN 61009-2-1
A - AC - APR - F	A	A - APR
1P + N	1P + N	1P + N
$4 \leq I_n \leq 40$	$6 \leq I_n \leq 40$	$6 \leq I_n \leq 40$
0.01 - 0.03 - 0.1 - 0.3	0.03	0.03
230-240	230-240	230-240
500 V AC	500 V AC	500 V AC
III	III	III
2	2	2
110 (170 for 30mA) - 264	110 - 264	170 - 264
50/60	50/60	50/60
10000	10000	6000
15	15	10
11.2	11.2	7.5
6000	6000	6000
6000 up to 25 A; 4500 for 32A and 40A	6000 up to 25 A; 4500 for 32A and 40A	6000 up to 25 A; 4500 for 32A and 40A
4 kV	4 kV	4 kV
2.5 kV (50 / 60Hz, 1 min.)	2.5 kV (50 / 60Hz, 1 min.)	2.5 kV (50 / 60Hz, 1 min.)
■	■	■
■	■	■
■		
3	NA	3
NA for A, AC versions; 3000 for APR and F version	NA	NA for A; 3000 for APR version
Insulation group I - II, RAL 7035	Insulation group I - II, RAL 7035	Insulation group I - II, RAL 7035
Insulation group II, Black RAL 9005, sealable in ON-OFF positions	Insulation group II, Black RAL 9005, sealable in ON-OFF positions	Insulation group II, Black RAL 9005, sealable in ON-OFF positions
Green/Red Window	Green/Red Window	Green/Red Window
Blue flag on toggle	Blue flag on toggle	Blue flag on toggle
10000	10000	10000
20000	20000	20000
IP4X	IP4X	IP4X
IP2X	IP2X	IP2X
25g - 2 shocks - 13ms	25g - 2 shocks - 13ms	25g - 2 shocks - 13ms
0.1 mm or 1 g - 20 cycles at 5...150...5 Hz	0.1 mm or 1 g - 20 cycles at 5...150...5 Hz	0.1 mm or 1 g - 20 cycles at 5...150...5 Hz
28 cycles with 55°C/90-96% and 25°C/95-100%	28 cycles with 55°C/90-96% and 25°C/95-100%	28 cycles with 55°C/90-96% and 25°C/95-100%
30 (20 for K tripping char)	30	30
-25...+55	-25...+55	-25...+55
-40...+70	-40...+70	-40...+70

## RCBOs

### DS201 technical features



			DS201 L	DS201
<b>Installation</b>	Terminal type	top / bottom	failsafe bi-directional cylinder-lift terminal (shock protected)	failsafe bi-directional cylinder-lift terminal (shock protected)
	Terminal size for cables	top / bottom	mm <sup>2</sup> 25/25	25/25
	Terminal size for busbars	top / bottom	mm <sup>2</sup> 10/10	10/10
	Tightening torque	top / bottom	Nm 2.8	2.8
	Stripping length of the cable		mm 12	12
	Mounting		on DIN rail EN 60715 (35mm) by means of mounting clip	on DIN rail EN 60715 (35mm) by means of mounting clip
	Mounting position		Any	Any
Supply from		Top/Bottom terminals	Top/Bottom terminals	
<b>Dimensions and weight</b>	Dimensions (H x D x W)	mm	85 x 69 x 35	85 x 69 x 35
	Weight	g	200	200
<b>Combination with auxiliary elements</b>	Combinable with accessories and auxiliaries	Auxiliary contact	yes	yes
		Signal contact / auxiliary contact	yes	yes
		Shunt trip	yes	yes
		Auxiliary contact for bottom fitting	yes	yes
		Undervoltage release	yes	yes
		Overvoltage release	yes	yes
		Motor operating device	yes	yes



## RCBOs

DS201L series 4500 A  type, C characteristic



DS201L

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).

**Application: residential, commercial, industrial.**

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

**$I_{cn} = 4500$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1+N	10	6	637318	DS201 L C6 A10	2CSR245180R0064	0.2	1	
		10	637011	DS201 L C10 A10	2CSR245180R0104	0.2	1	
		16	637110	DS201 L C16 A10	2CSR245180R0164	0.2	1	
	30	6	636717	DS201 L C6 A30	2CSR245180R1064	0.2	1	
		10	636816	DS201 L C10 A30	2CSR245180R1104	0.2	1	
		16	636915	DS201 L C16 A30	2CSR245180R1164	0.2	1	
		20	638216	DS201 L C20 A30	2CSR245180R1204	0.2	1	
		25	638315	DS201 L C25 A30	2CSR245180R1254	0.2	1	
		32	638018	DS201 L C32 A30	2CSR245180R1324	0.2	1	
	300	6	638117	DS201 L C6 A300	2CSR245180R3064	0.2	1	
		10	638919	DS201 L C10 A300	2CSR245180R3104	0.2	1	
		16	639114	DS201 L C16 A300	2CSR245180R3164	0.2	1	
		20	638810	DS201 L C20 A300	2CSR245180R3204	0.2	1	
		25	638612	DS201 L C25 A300	2CSR245180R3254	0.2	1	
		32	639312	DS201 L C32 A300	2CSR245180R3324	0.2	1	

## RCBOs

DS201 L 4500 AC  type, C characteristic



DS201 L

Function: protection of end user single-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 ( $I_{\Delta n}=30$  mA).

**Application: residential, commercial, industrial.**

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

**$I_{cn} = 4500$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.	
				Type code	Order code				
1+N	30	6	043515	DS201 L C6 AC30	2CSR245080R1064		0.2	1	
		10	043416	DS201 L C10 AC30	2CSR245080R1104		0.2	1	
		16	030218	DS201 L C16 AC30	2CSR245080R1164		0.2	1	
		20	030010	DS201 L C20 AC30	2CSR245080R1204		0.2	1	
		25	030119	DS201 L C25 AC30	2CSR245080R1254		0.2	1	
		32	637615	DS201 L C32 AC30	2CSR245080R1324		0.2	1	
	300	300	6	637714	DS201 L C6 AC300	2CSR245080R3064		0.2	1
			10	637417	DS201 L C10 AC300	2CSR245080R3104		0.2	1
			16	637516	DS201 L C16 AC300	2CSR245080R3164		0.2	1
			20	637813	DS201 L C20 AC300	2CSR245080R3204		0.2	1
			25	637912	DS201 L C25 AC300	2CSR245080R3254		0.2	1
			32	637219	DS201 L C32 AC300	2CSR245080R3324		0.2	1

DS201 L 4500 APR  type, C characteristic



DS201 L

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing an optimal trade-off between safety and continuity of service, thanks to the resistance to unwanted tripping; protection against indirect contact and additional protection against direct contact ( $I_{\Delta n}=30$ mA); protection and isolation of resistive and inductive loads.

**Application: residential, commercial, industrial.**

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

**$I_{cn} = 4500$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1+N	30	6	639411	DS201 L C6 APR30	2CSR245480R1064		0.2	1
		10	638711	DS201 L C10 APR30	2CSR245480R1104		0.2	1
		16	639619	DS201 L C16 APR30	2CSR245480R1164		0.2	1
		20	639213	DS201 L C20 APR30	2CSR245480R1204		0.2	1
		25	639510	DS201 L C25 APR30	2CSR245480R1254		0.2	1
		32	639015	DS201 L C32 APR30	2CSR245480R1324		0.2	1

## RCBOs

DS201 6000 A  type, B characteristic



DS201

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).

**Application: residential, commercial, industrial.**

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

**$I_{cn} = 6000$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1+N	10	10	065913	DS201 B10 A10	2CSR255180R0105	0.2	1	
		13	065814	DS201 B13 A10	2CSR255180R0135	0.2	1	
		16	066316	DS201 B16 A10	2CSR255180R0165	0.2	1	
	30	6	066217	DS201 B6 A30	2CSR255180R1065	0.2	1	
		10	066118	DS201 B10 A30	2CSR255180R1105	0.2	1	
		13	058113	DS201 B13 A30	2CSR255180R1135	0.2	1	
		16	058519	DS201 B16 A30	2CSR255180R1165	0.2	1	
		20	969815	DS201 B20 A30	2CSR255180R1205	0.2	1	
		25	969716	DS201 B25 A30	2CSR255180R1255	0.2	1	
		32	970019	DS201 B32 A30	2CSR255180R1325	0.2	1	
		40	969914	DS201 B40 A30	2CSR255180R1405	0.2	1	
	100	6	779414	DS201 B6 A100	2CSR255180R2065	0.2	1	
		10	790211	DS201 B10 A100	2CSR255180R2105	0.2	1	
		13	779810	DS201 B13 A100	2CSR255180R2135	0.2	1	
		16	779711	DS201 B16 A100	2CSR255180R2165	0.2	1	
		20	779612	DS201 B20 A100	2CSR255180R2205	0.2	1	
		25	779513	DS201 B25 A100	2CSR255180R2255	0.2	1	
		32	372011	DS201 B32 A100	2CSR255180R2325	0.2	1	
		40	023913	DS201 B40 A100	2CSR255180R2405	0.2	1	
	300	6	070313	DS201 B6 A300	2CSR255180R3065	0.2	1	
		10	643616	DS201 B10 A300	2CSR255180R3105	0.2	1	
		13	643418	DS201 B13 A300	2CSR255180R3135	0.2	1	
		16	643517	DS201 B16 A300	2CSR255180R3165	0.2	1	
		20	643814	DS201 B20 A300	2CSR255180R3205	0.2	1	
25		643715	DS201 B25 A300	2CSR255180R3255	0.2	1		
32		643319	DS201 B32 A300	2CSR255180R3325	0.2	1		
40		965312	DS201 B40 A300	2CSR255180R3405	0.2	1		

## RCBOs

DS201T 6000 A  type, B characteristic



DS201T

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).

**Application: railway, rolling stock, traction.**

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

**$I_{cn} = 6000$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1P+N	30	6	578116	DS201T B6 A30	2CSR255188R1065		0.2	1
		10	566311	DS201T B10 A30	2CSR255188R1105		0.2	1
		13	591214	DS201T B13 A30	2CSR255188R1135		0.2	1
		16	579410	DS201T B16 A30	2CSR255188R1165		0.2	1
		20	567615	DS201T B20 A30	2CSR255188R1205		0.2	1
		25	588719	DS201T B25 A30	2CSR255188R1255		0.2	1
		32	576914	DS201T B32 A30	2CSR255188R1325		0.2	1
		40	565116	DS201T B40 A30	2CSR255188R1405		0.2	1

## RCBOs

DS201 6000 A  type, C characteristic



DS201

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).

**Application: residential, commercial, industrial.**

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

**$I_{cn} = 6000$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1+N	10	10	738817	DS201 C10 A10	2CSR255180R0104	0.2	1	
		13	738015	DS201 C13 A10	2CSR255180R0134	0.2	1	
		16	739418	DS201 C16 A10	2CSR255180R0164	0.2	1	
	30	2	738718	DS201 C2 A30	2CSR255180R1024	0.2	1	
		4	737919	DS201 C4 A30	2CSR255180R1044	0.2	1	
		6	737117	DS201 C6 A30	2CSR255180R1064	0.2	1	
		8	738619	DS201 C8 A30	2CSR255180R1084	0.2	1	
		10	737810	DS201 C10 A30	2CSR255180R1104	0.2	1	
		13	737018	DS201 C13 A30	2CSR255180R1134	0.2	1	
		16	739319	DS201 C16 A30	2CSR255180R1164	0.2	1	
		20	738510	DS201 C20 A30	2CSR255180R1204	0.2	1	
	100	25	737711	DS201 C25 A30	2CSR255180R1254	0.2	1	
32		737612	DS201 C32 A30	2CSR255180R1324	0.2	1		
40		738411	DS201 C40 A30	2CSR255180R1404	0.2	1		
6		739012	DS201 C6 A100	2CSR255180R2064	0.2	1		
10		738213	DS201 C10 A100	2CSR255180R2104	0.2	1		
13		737315	DS201 C13 A100	2CSR255180R2134	0.2	1		
16		738916	DS201 C16 A100	2CSR255180R2164	0.2	1		
20		738114	DS201 C20 A100	2CSR255180R2204	0.2	1		
300	25	737216	DS201 C25 A100	2CSR255180R2254	0.2	1		
	32	747215	DS201 C32 A100	2CSR255180R2324	0.2	1		
	40	747116	DS201 C40 A100	2CSR255180R2404	0.2	1		
	2	739210	DS201 C2 A300	2CSR255180R3024	0.2	1		
	4	062714	DS201 C4 A300	2CSR255180R3044	0.2	1		
	6	007814	DS201 C6 A300	2CSR255180R3064	0.2	1		
	8	007715	DS201 C8 A300	2CSR255180R3084	0.2	1		
	10	062615	DS201 C10 A300	2CSR255180R3104	0.2	1		
	13	886716	DS201 C13 A300	2CSR255180R3134	0.2	1		
	16	886815	DS201 C16 A300	2CSR255180R3164	0.2	1		
	20	886617	DS201 C20 A300	2CSR255180R3204	0.2	1		
	25	886310	DS201 C25 A300	2CSR255180R3254	0.2	1		
32	886211	DS201 C32 A300	2CSR255180R3324	0.2	1			
40	326311	DS201 C40 A300	2CSR255180R3404	0.2	1			



## RCBOs

DS201T 6000 A  type, C characteristic



DS201T

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).

**Application: railway, rolling stock, traction.**

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

**$I_{cn} = 6000$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1P+N	30	6	565215	DS201T C6 A30	2CSR255188R1064	0.2	1	
		10	590019	DS201T C10 A30	2CSR255188R1104	0.2	1	
		13	578215	DS201T C13 A30	2CSR255188R1134	0.2	1	
		16	566410	DS201T C16 A30	2CSR255188R1164	0.2	1	
		20	591313	DS201T C20 A30	2CSR255188R1204	0.2	1	
		25	579519	DS201T C25 A30	2CSR255188R1254	0.2	1	
		32	567714	DS201T C32 A30	2CSR255188R1324	0.2	1	
		40	589914	DS201T C40 A30	2CSR255188R1404	0.2	1	

## RCBOs

DS201 6000 A  type, K characteristic



DS201

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).

**Application: residential, commercial, industrial.**

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

**$I_{cn} = 6000$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1+N	10	10	647515	DS201 K10 A10	2CSR255180R0107	0.2	1	
		13	061717	DS201 K13 A10	2CSR255180R0137	0.2	1	
		16	295419	DS201 K16 A10	2CSR255180R0167	0.2	1	
	30	30	1	295310	DS201 K1 A30	2CSR255180R1017	0.2	1
			2	498513	DS201 K2 A30	2CSR255180R1027	0.2	1
			4	305415	DS201 K4 A30	2CSR255180R1047	0.2	1
			6	647614	DS201 K6 A30	2CSR255180R1067	0.2	1
			8	643913	DS201 K8 A30	2CSR255180R1087	0.2	1
			10	587712	DS201 K10 A30	2CSR255180R1107	0.2	1
			13	575917	DS201 K13 A30	2CSR255180R1137	0.2	1
			16	564119	DS201 K16 A30	2CSR255180R1167	0.2	1
	300	300	20	586814	DS201 K20 A30	2CSR255180R1207	0.2	1
25			575016	DS201 K25 A30	2CSR255180R1257	0.2	1	
32			563211	DS201 K32 A30	2CSR255180R1327	0.2	1	
40			775911	DS201 K40 A30	2CSR255180R1407	0.2	1	
1			773719	DS201 K1 A300	2CSR255180R3017	0.2	1	
2			771517	DS201 K2 A300	2CSR255180R3027	0.2	1	
4			587613	DS201 K4 A300	2CSR255180R3047	0.2	1	
6			575818	DS201 K6 A300	2CSR255180R3067	0.2	1	
8			564010	DS201 K8 A300	2CSR255180R3087	0.2	1	
10			586715	DS201 K10 A300	2CSR255180R3107	0.2	1	
		13	574910	DS201 K13 A300	2CSR255180R3137	0.2	1	
		16	563112	DS201 K16 A300	2CSR255180R3167	0.2	1	
		20	775812	DS201 K20 A300	2CSR255180R3207	0.2	1	
		25	773610	DS201 K25 A300	2CSR255180R3257	0.2	1	
		32	771418	DS201 K32 A300	2CSR255180R3327	0.2	1	
		40	587514	DS201 K40 A300	2CSR255180R3407	0.2	1	

## RCBOs

DS201T 6000 A  type, K characteristics



DS201T

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).

**Application: railway, rolling stock, traction.**

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

**$I_{cn} = 6000$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1P+N	30	6	589815	DS201T K6 A30	2CSR255188R1067		0.2	1
		10	578017	DS201T K10 A30	2CSR255188R1107		0.2	1
		13	566212	DS201T K13 A30	2CSR255188R1137		0.2	1
		16	587910	DS201T K16 A30	2CSR255188R1167		0.2	1
		20	576112	DS201T K20 A30	2CSR255188R1207		0.2	1
		25	564317	DS201T K25 A30	2CSR255188R1257		0.2	1
		32	591115	DS201T K32 A30	2CSR255188R1327		0.2	1
		40	579311	DS201T K40 A30	2CSR255188R1407		0.2	1

## RCBOs

DS201 6000 AC  type, B characteristic



DS201

Function: protection of end user single-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 ( $I_{\Delta n}=30$  mA).

**Application: residential, commercial, industrial.**

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

**$I_{cn} = 6000$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1+N	30	6	274315	DS201 B6 AC30	2CSR255080R1065	0.2	1	
		10	333913	DS201 B10 AC30	2CSR255080R1105	0.2	1	
		13	508014	DS201 B13 AC30	2CSR255080R1135	0.2	1	
		16	295815	DS201 B16 AC30	2CSR255080R1165	0.2	1	
		20	295617	DS201 B20 AC30	2CSR255080R1205	0.2	1	
		25	965213	DS201 B25 AC30	2CSR255080R1255	0.2	1	
		32	963011	DS201 B32 AC30	2CSR255080R1325	0.2	1	
		40	964919	DS201 B40 AC30	2CSR255080R1405	0.2	1	
100	6	6	965114	DS201 B6 AC100	2CSR255080R2065	0.2	1	
		10	295716	DS201 B10 AC100	2CSR255080R2105	0.2	1	
		13	649410	DS201 B13 AC100	2CSR255080R2135	0.2	1	
		16	649311	DS201 B16 AC100	2CSR255080R2165	0.2	1	
		20	649212	DS201 B20 AC100	2CSR255080R2205	0.2	1	
		25	649113	DS201 B25 AC100	2CSR255080R2255	0.2	1	
		32	649519	DS201 B32 AC100	2CSR255080R2325	0.2	1	
		40	027911	DS201 B40 AC100	2CSR255080R2405	0.2	1	
300	6	6	027812	DS201 B6 AC300	2CSR255080R3065	0.2	1	
		10	007210	DS201 B10 AC300	2CSR255080R3105	0.2	1	
		13	007111	DS201 B13 AC300	2CSR255080R3135	0.2	1	
		16	644118	DS201 B16 AC300	2CSR255080R3165	0.2	1	
		20	644019	DS201 B20 AC300	2CSR255080R3205	0.2	1	
		25	644316	DS201 B25 AC300	2CSR255080R3255	0.2	1	
		32	644217	DS201 B32 AC300	2CSR255080R3325	0.2	1	
		40	066019	DS201 B40 AC300	2CSR255080R3405	0.2	1	

## RCBOs

DS201 6000 AC  type, C characteristic



DS201

Function: protection of end user single-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 ( $I_{\Delta n}=30$  mA).

**Application: residential, commercial, industrial.**

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

**$I_{cn} = 6000$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1+N	30	6	896319	DS201 C6 AC30	2CSR255080R1064	0.2	1	
		10	049418	DS201 C10 AC30	2CSR255080R1104	0.2	1	
		13	049319	DS201 C13 AC30	2CSR255080R1134	0.2	1	
		16	049210	DS201 C16 AC30	2CSR255080R1164	0.2	1	
		20	049111	DS201 C20 AC30	2CSR255080R1204	0.2	1	
		25	049012	DS201 C25 AC30	2CSR255080R1254	0.2	1	
		32	048916	DS201 C32 AC30	2CSR255080R1324	0.2	1	
		40	048817	DS201 C40 AC30	2CSR255080R1404	0.2	1	
100	6	6	048718	DS201 C6 AC100	2CSR255080R2064	0.2	1	
		10	048619	DS201 C10 AC100	2CSR255080R2104	0.2	1	
		13	048510	DS201 C13 AC100	2CSR255080R2134	0.2	1	
		16	048411	DS201 C16 AC100	2CSR255080R2164	0.2	1	
		20	048312	DS201 C20 AC100	2CSR255080R2204	0.2	1	
		25	048213	DS201 C25 AC100	2CSR255080R2254	0.2	1	
		32	048114	DS201 C32 AC100	2CSR255080R2324	0.2	1	
		40	048015	DS201 C40 AC100	2CSR255080R2404	0.2	1	
300	6	6	047919	DS201 C6 AC300	2CSR255080R3064	0.2	1	
		10	047810	DS201 C10 AC300	2CSR255080R3104	0.2	1	
		13	047711	DS201 C13 AC300	2CSR255080R3134	0.2	1	
		16	047612	DS201 C16 AC300	2CSR255080R3164	0.2	1	
		20	049814	DS201 C20 AC300	2CSR255080R3204	0.2	1	
		25	049715	DS201 C25 AC300	2CSR255080R3254	0.2	1	
		32	049616	DS201 C32 AC300	2CSR255080R3324	0.2	1	
		40	049517	DS201 C40 AC300	2CSR255080R3404	0.2	1	

## RCBOs

DS201  $\boxed{6000}$  APR  type, C characteristic



DS201

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing an optimal trade-off between safety and continuity of service thanks to the resistance to unwanted tripping; protection against indirect contact and additional protection against direct contact ( $I_{\Delta n}=30$  mA); protection and isolation of resistive and inductive loads.


**Application: residential, commercial, industrial.**

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

**$I_{cn} = 6000$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1+N	30	6	326212	DS201 C6 APR30	2CSR255480R1064	0.2	1	
		10	399612	DS201 C10 APR30	2CSR255480R1104	0.2	1	
		13	399711	DS201 C13 APR30	2CSR255480R1134	0.2	1	
		16	658917	DS201 C16 APR30	2CSR255480R1164	0.2	1	
		20	658412	DS201 C20 APR30	2CSR255480R1204	0.2	1	
		25	659914	DS201 C25 APR30	2CSR255480R1254	0.2	1	
		32	659419	DS201 C32 APR30	2CSR255480R1324	0.2	1	
		40	658610	DS201 C40 APR30	2CSR255480R1404	0.2	1	
	100	6	658115	DS201 C6 APR100	2CSR255480R2064	0.2	1	
		10	659617	DS201 C10 APR100	2CSR255480R2104	0.2	1	
		13	910916	DS201 C13 APR100	2CSR255480R2134	0.2	1	
		16	659112	DS201 C16 APR100	2CSR255480R2164	0.2	1	
		20	658719	DS201 C20 APR100	2CSR255480R2204	0.2	1	
		25	658214	DS201 C25 APR100	2CSR255480R2254	0.2	1	
		32	659716	DS201 C32 APR100	2CSR255480R2324	0.2	1	
		40	659211	DS201 C40 APR100	2CSR255480R2404	0.2	1	
300	6	658818	DS201 C6 APR300	2CSR255480R3064	0.2	1		
	10	658313	DS201 C10 APR300	2CSR255480R3104	0.2	1		
	13	659815	DS201 C13 APR300	2CSR255480R3134	0.2	1		
	16	659310	DS201 C16 APR300	2CSR255480R3164	0.2	1		
	20	658511	DS201 C20 APR300	2CSR255480R3204	0.2	1		
	25	658016	DS201 C25 APR300	2CSR255480R3254	0.2	1		
	32	659518	DS201 C32 APR300	2CSR255480R3324	0.2	1		
	40	910817	DS201 C40 APR300	2CSR255480R3404	0.2	1		

## RCBOs

DS201T 6000 APR  type, C characteristic



DS201T

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing an optimal trade-off between safety and continuity of service thanks to the resistance to unwanted tripping; protection against indirect contact and additional protection against direct contact ( $I_{\Delta n}=30$  mA); protection and isolation of resistive and inductive loads.


**Application: railway, rolling stock, traction.**

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

**$I_{cn} = 6000$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1P+N	30	6	567516	DS201T C6 APR30	2CSR255488R1064		0.2	1
		10	588610	DS201T C10 APR30	2CSR255488R1104		0.2	1
		13	576815	DS201T C13 APR30	2CSR255488R1134		0.2	1
		16	565017	DS201T C16 APR30	2CSR255488R1164		0.2	1
		20	589716	DS201T C20 APR30	2CSR255488R1204		0.2	1
		25	577911	DS201T C25 APR30	2CSR255488R1254		0.2	1
		32	566113	DS201T C32 APR30	2CSR255488R1324		0.2	1
		40	591016	DS201T C40 APR30	2CSR255488R1404		0.2	1

## RCBOs

DS201 M 10000 A  type, B characteristic



DS201 M

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).

**Application: residential, commercial, industrial.**

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

**$I_{cn} = 10000$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1+N	10	10	574613	DS201 M B10 A10	2CSR275180R0105	0.2	1	
		16	562818	DS201 M B16 A10	2CSR275180R0165	0.2	1	
	30	6	775515	DS201 M B6 A30	2CSR275180R1065	0.2	1	
		10	773313	DS201 M B10 A30	2CSR275180R1105	0.2	1	
		13	771111	DS201 M B13 A30	2CSR275180R1135	0.2	1	
		16	587217	DS201 M B16 A30	2CSR275180R1165	0.2	1	
		20	575412	DS201 M B20 A30	2CSR275180R1205	0.2	1	
		25	563617	DS201 M B25 A30	2CSR275180R1255	0.2	1	
		32	586319	DS201 M B32 A30	2CSR275180R1325	0.2	1	
		40	574514	DS201 M B40 A30	2CSR275180R1405	0.2	1	
	100	6	562719	DS201 M B6 A100	2CSR275180R2065	0.2	1	
		10	775416	DS201 M B10 A100	2CSR275180R2105	0.2	1	
		13	773214	DS201 M B13 A100	2CSR275180R2135	0.2	1	
		16	771012	DS201 M B16 A100	2CSR275180R2165	0.2	1	
		20	587118	DS201 M B20 A100	2CSR275180R2205	0.2	1	
		25	575313	DS201 M B25 A100	2CSR275180R2255	0.2	1	
32		563518	DS201 M B32 A100	2CSR275180R2325	0.2	1		
40		586210	DS201 M B40 A100	2CSR275180R2405	0.2	1		
300	6	574415	DS201 M B6 A300	2CSR275180R3065	0.2	1		
	10	562610	DS201 M B10 A300	2CSR275180R3105	0.2	1		
	13	775317	DS201 M B13 A300	2CSR275180R3135	0.2	1		
	16	773115	DS201 M B16 A300	2CSR275180R3165	0.2	1		
	20	770916	DS201 M B20 A300	2CSR275180R3205	0.2	1		
	25	587019	DS201 M B25 A300	2CSR275180R3255	0.2	1		
	32	575214	DS201 M B32 A300	2CSR275180R3325	0.2	1		
	40	563419	DS201 M B40 A300	2CSR275180R3405	0.2	1		



## RCBOs

DS201 M 10000 A  type, C characteristic



DS201 M

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).


**Application: residential, commercial, industrial.**

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

**$I_{cn} = 10000$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1+N	10	10	594116	DS201 M C10 A10	2CSR275180R0104	0.2	1	
		16	582311	DS201 M C16 A10	2CSR275180R0164	0.2	1	
	30	4	570516	DS201 M C4 A30	2CSR275180R1044	0.2	1	
		6	595410	DS201 M C6 A30	2CSR275180R1064	0.2	1	
		10	583615	DS201 M C10 A30	2CSR275180R1104	0.2	1	
		13	571810	DS201 M C13 A30	2CSR275180R1134	0.2	1	
		16	592815	DS201 M C16 A30	2CSR275180R1164	0.2	1	
		20	581017	DS201 M C20 A30	2CSR275180R1204	0.2	1	
		25	569213	DS201 M C25 A30	2CSR275180R1254	0.2	1	
		32	594017	DS201 M C32 A30	2CSR275180R1324	0.2	1	
	40	582212	DS201 M C40 A30	2CSR275180R1404	0.2	1		
	100	6	570417	DS201 M C6 A100	2CSR275180R2064	0.2	1	
		10	595311	DS201 M C10 A100	2CSR275180R2104	0.2	1	
		16	583516	DS201 M C16 A100	2CSR275180R2164	0.2	1	
		20	571711	DS201 M C20 A100	2CSR275180R2204	0.2	1	
		25	593911	DS201 M C25 A100	2CSR275180R2254	0.2	1	
		32	582113	DS201 M C32 A100	2CSR275180R2324	0.2	1	
	300	40	570318	DS201 M C40 A100	2CSR275180R2404	0.2	1	
		6	595212	DS201 M C6 A300	2CSR275180R3064	0.2	1	
		10	583417	DS201 M C10 A300	2CSR275180R3104	0.2	1	
13		571612	DS201 M C13 A300	2CSR275180R3134	0.2	1		
16		592716	DS201 M C16 A300	2CSR275180R3164	0.2	1		
20		580911	DS201 M C20 A300	2CSR275180R3204	0.2	1		
25		569114	DS201 M C25 A300	2CSR275180R3254	0.2	1		
32	593812	DS201 M C32 A300	2CSR275180R3324	0.2	1			
	40	582014	DS201 M C40 A300	2CSR275180R3404	0.2	1		

## RCBOs

DS201 M 10000 A  type, K characteristic



DS201 M

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.

**Application: residential, commercial, industrial.**

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

**I<sub>cn</sub> = 10000 A**

No. of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1+N	100	6	568919	DS201 M K6 A100	2CSR275180R2067		0.2	1
		10	593515	DS201 M K10 A100	2CSR275180R2107		0.2	1
		13	581710	DS201 M K13 A100	2CSR275180R2137		0.2	1
		16	569916	DS201 M K16 A100	2CSR275180R2167		0.2	1
		20	594819	DS201 M K20 A100	2CSR275180R2207		0.2	1
		25	583011	DS201 M K25 A100	2CSR275180R2257		0.2	1
		32	571216	DS201 M K32 A100	2CSR275180R2327		0.2	1
		40	593416	DS201 M K40 A100	2CSR275180R2407		0.2	1

## RCBOs

DS201 M 10000 AC  type, B characteristic



DS201 M

Function: protection of end user single-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 ( $I_{\Delta n}=30$  mA).

**Application: residential, commercial, industrial.**

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

**$I_{cn} = 10000$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1+N	30	6	575719	DS201 M B6 AC30	2CSR275080R1065	0.2	1	
		10	563914	DS201 M B10 AC30	2CSR275080R1105	0.2	1	
		13	586616	DS201 M B13 AC30	2CSR275080R1135	0.2	1	
		16	574811	DS201 M B16 AC30	2CSR275080R1165	0.2	1	
		20	563013	DS201 M B20 AC30	2CSR275080R1205	0.2	1	
		25	775713	DS201 M B25 AC30	2CSR275080R1255	0.2	1	
		32	773511	DS201 M B32 AC30	2CSR275080R1325	0.2	1	
		40	771319	DS201 M B40 AC30	2CSR275080R1405	0.2	1	
100	6	6	775010	DS201 M B6 AC100	2CSR275080R2065	0.2	1	
		10	772811	DS201 M B10 AC100	2CSR275080R2105	0.2	1	
		13	770619	DS201 M B13 AC100	2CSR275080R2135	0.2	1	
		16	587415	DS201 M B16 AC100	2CSR275080R2165	0.2	1	
		20	575610	DS201 M B20 AC100	2CSR275080R2205	0.2	1	
		25	563815	DS201 M B25 AC100	2CSR275080R2255	0.2	1	
		32	586517	DS201 M B32 AC100	2CSR275080R2325	0.2	1	
		40	574712	DS201 M B40 AC100	2CSR275080R2405	0.2	1	
300	6	6	562917	DS201 M B6 AC300	2CSR275080R3065	0.2	1	
		10	775614	DS201 M B10 AC300	2CSR275080R3105	0.2	1	
		13	773412	DS201 M B13 AC300	2CSR275080R3135	0.2	1	
		16	771210	DS201 M B16 AC300	2CSR275080R3165	0.2	1	
		20	587316	DS201 M B20 AC300	2CSR275080R3205	0.2	1	
		25	575511	DS201 M B25 AC300	2CSR275080R3255	0.2	1	
		32	563716	DS201 M B32 AC300	2CSR275080R3325	0.2	1	
		40	586418	DS201 M B40 AC300	2CSR275080R3405	0.2	1	

## RCBOs

DS201 M 10000 AC type, C characteristic



DS201 M

Function: protection of end user single-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 ( $I_{\Delta n}=30$  mA).

**Application: residential, commercial, industrial.**

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

**$I_{cn} = 10000$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1+N	30	6	586111	DS201 M C6 AC30	2CSR275080R1064	0.2	1	
		10	574316	DS201 M C10 AC30	2CSR275080R1104	0.2	1	
		13	562511	DS201 M C13 AC30	2CSR275080R1134	0.2	1	
		16	775218	DS201 M C16 AC30	2CSR275080R1164	0.2	1	
		20	773016	DS201 M C20 AC30	2CSR275080R1204	0.2	1	
		25	770817	DS201 M C25 AC30	2CSR275080R1254	0.2	1	
		32	910015	DS201 M C32 AC30	2CSR275080R1324	0.2	1	
		40	909811	DS201 M C40 AC30	2CSR275080R1404	0.2	1	
100	6	6	909613	DS201 M C6 AC100	2CSR275080R2064	0.2	1	
		10	587811	DS201 M C10 AC100	2CSR275080R2104	0.2	1	
		13	576013	DS201 M C13 AC100	2CSR275080R2134	0.2	1	
		16	564218	DS201 M C16 AC100	2CSR275080R2164	0.2	1	
		20	586913	DS201 M C20 AC100	2CSR275080R2204	0.2	1	
		25	575115	DS201 M C25 AC100	2CSR275080R2254	0.2	1	
		32	563310	DS201 M C32 AC100	2CSR275080R2324	0.2	1	
		40	586012	DS201 M C40 AC100	2CSR275080R2404	0.2	1	
300	6	6	574217	DS201 M C6 AC300	2CSR275080R3064	0.2	1	
		10	562412	DS201 M C10 AC300	2CSR275080R3104	0.2	1	
		13	775119	DS201 M C13 AC300	2CSR275080R3134	0.2	1	
		16	772910	DS201 M C16 AC300	2CSR275080R3164	0.2	1	
		20	770718	DS201 M C20 AC300	2CSR275080R3204	0.2	1	
		25	774914	DS201 M C25 AC300	2CSR275080R3254	0.2	1	
		32	772712	DS201 M C32 AC300	2CSR275080R3324	0.2	1	
		40	770510	DS201 M C40 AC300	2CSR275080R3404	0.2	1	

## RCBOs

DS201 M 10000 APR  type, C characteristic



DS201 M

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing an optimal compromise between safety and continuity of service, thanks to the resistance to unwanted tripping; protection against indirect contact and additional protection against direct contact ( $I_{\Delta n}=30$  mA); protection and isolation of resistive and inductive loads.


**Application: residential, commercial, industrial.**

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

**$I_{cn} = 10000$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1+N	30	6	570219	DS201 M C6 APR30	2CSR275480R1064	0.2	1	
		10	591917	DS201 M C10 APR30	2CSR275480R1104	0.2	1	
		13	580119	DS201 M C13 APR30	2CSR275480R1134	0.2	1	
		16	568315	DS201 M C16 APR30	2CSR275480R1164	0.2	1	
		20	595113	DS201 M C20 APR30	2CSR275480R1204	0.2	1	
		25	583318	DS201 M C25 APR30	2CSR275480R1254	0.2	1	
		32	571513	DS201 M C32 APR30	2CSR275480R1324	0.2	1	
	100	40	592617	DS201 M C40 APR30	2CSR275480R1404	0.2	1	
		6	580812	DS201 M C6 APR100	2CSR275480R2064	0.2	1	
		10	569015	DS201 M C10 APR100	2CSR275480R2104	0.2	1	
		13	593713	DS201 M C13 APR100	2CSR275480R2134	0.2	1	
		16	581918	DS201 M C16 APR100	2CSR275480R2164	0.2	1	
		20	570110	DS201 M C20 APR100	2CSR275480R2204	0.2	1	
		25	595014	DS201 M C25 APR100	2CSR275480R2254	0.2	1	
300	32	583219	DS201 M C32 APR100	2CSR275480R2324	0.2	1		
	40	571414	DS201 M C40 APR100	2CSR275480R2404	0.2	1		
	6	593614	DS201 M C6 APR300	2CSR275480R3064	0.2	1		
	10	581819	DS201 M C10 APR300	2CSR275480R3104	0.2	1		
	13	570011	DS201 M C13 APR300	2CSR275480R3134	0.2	1		
	16	594918	DS201 M C16 APR300	2CSR275480R3164	0.2	1		
	20	583110	DS201 M C20 APR300	2CSR275480R3204	0.2	1		
	25	571315	DS201 M C25 APR300	2CSR275480R3254	0.2	1		
	32	592518	DS201 M C32 APR300	2CSR275480R3324	0.2	1		
	40	580713	DS201 M C40 APR300	2CSR275480R3404	0.2	1		

## RCBOs

DS201T 6000 APR  type, B characteristic



DS201T

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing an optimal compromise between safety and continuity of service, thanks to the resistance to unwanted tripping; protection against indirect contact and additional protection against direct contact ( $I_{\Delta n}=30$  mA); protection and isolation of resistive and inductive loads.

**Application: railway, rolling stock, traction.**

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

**$I_{cn} = 6000$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1P+N	30	6	579212	DS201T B6 APR30	2CSR255488R1065	0.2	1	
		10	567417	DS201T B10 APR30	2CSR255488R1105			
		13	589617	DS201T B13 APR30	2CSR255488R1135			
		16	577812	DS201T B16 APR30	2CSR255488R1165			
		20	566014	DS201T B20 APR30	2CSR255488R1205			
		25	590910	DS201T B25 APR30	2CSR255488R1255			
		32	579113	DS201T B32 APR30	2CSR255488R1325			
		40	567318	DS201T B40 APR30	2CSR255488R1405			

## RCBOs

DS201 M  $\boxed{10000}$  F   type, B characteristic



DS201 M

Function: protection of end user single-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 ( $I_{\Delta n}=30$  mA). Specifically suitable for the protection of lines supplying single phase inverters.

**Application: residential, commercial, industrial.**

**Standard: IEC/EN 61009-1; IEC/EN 61009-2-1; IEC/EN 62423**

**$I_{cn} = 10000$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1+N	10	10	569411	DS201 M B10 F10	2CSR275580R0105	0.2	1	
		13	594314	DS201 M B13 F10	2CSR275580R0135	0.2	1	
		16	582519	DS201 M B16 F10	2CSR275580R0165	0.2	1	
	300	6	6	594413	DS201 M B6 F30	2CSR275580R1065	0.2	1
			10	582618	DS201 M B10 F30	2CSR275580R1105	0.2	1
			13	570813	DS201 M B13 F30	2CSR275580R1135	0.2	1
			16	595717	DS201 M B16 F30	2CSR275580R1165	0.2	1
			20	583912	DS201 M B20 F30	2CSR275580R1205	0.2	1
			25	572114	DS201 M B25 F30	2CSR275580R1255	0.2	1
			32	592112	DS201 M B32 F30	2CSR275580R1325	0.2	1
			40	580317	DS201 M B40 F30	2CSR275580R1405	0.2	1

DS201 M  $\boxed{10000}$  F   type, C characteristic



DS201 M

Function: protection of end user single-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 ( $I_{\Delta n}=30$  mA). Specifically suitable for the protection of lines supplying single phase inverters.

**Application: residential, commercial, industrial.**

**Standard: IEC/EN 61009-1; IEC/EN 61009-2-1; IEC/EN 62423**

**$I_{cn} = 10000$  A**

No. of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1+N	10	10	568513	DS201 M C10 F10	2CSR275580R0104	0.2	1	
		13	593010	DS201 M C13 F10	2CSR275580R0134	0.2	1	
		16	581215	DS201 M C16 F10	2CSR275580R0164	0.2	1	
	300	6	6	580416	DS201 M C6 F30	2CSR275580R1064	0.2	1
			10	568612	DS201 M C10 F30	2CSR275580R1104	0.2	1
			13	595816	DS201 M C13 F30	2CSR275580R1134	0.2	1
			16	584018	DS201 M C16 F30	2CSR275580R1164	0.2	1
			20	572213	DS201 M C20 F30	2CSR275580R1204	0.2	1
			25	593119	DS201 M C25 F30	2CSR275580R1254	0.2	1
			32	581314	DS201 M C32 F30	2CSR275580R1324	0.2	1
			40	569510	DS201 M C40 F30	2CSR275580R1404	0.2	1

## RCBOs

DS201 M 110V  $\boxed{10000}$  A  type, B characteristic



DS201 M 110V

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).

This particular series of devices has the minimum operating voltage of test button of 110 V and it is suitable for 230 V applications.

**Application: residential, commercial, industrial.**

**Standard: IEC 61009-1; IEC 61009-2-1**

**$I_{cn} = 10000$  A**

No. of poles	Rated residual current $I\Delta n$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1+N	30	6	582410	DS201 M B6 A30 110V	2CSR275189R1065		0.2	1
		10	570615	DS201 M B10 A30 110V	2CSR275189R1105		0.2	1
		13	592013	DS201 M B13 A30 110V	2CSR275189R1135		0.2	1
		16	580218	DS201 M B16 A30 110V	2CSR275189R1165		0.2	1
		20	568414	DS201 M B20 A30 110V	2CSR275189R1205		0.2	1
		25	595519	DS201 M B25 A30 110V	2CSR275189R1255		0.2	1
		32	583714	DS201 M B32 A30 110V	2CSR275189R1325		0.2	1
		40	571919	DS201 M B40 A30 110V	2CSR275189R1405		0.2	1

DS201 M 110V  $\boxed{10000}$  A  type, C characteristic



DS201 M 110V

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).

This particular series of devices has the minimum operating voltage of test button of 110 V and it is suitable for 230 V applications.

**Application: residential, commercial, industrial.**

**Standard: IEC 61009-1; IEC 61009-2-1**

**$I_{cn} = 10000$  A**

No. of poles	Rated residual current $I\Delta n$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
1+N	30	6	570714	DS201 M C6 A30 110V	2CSR275189R1064		0.2	1
		10	595618	DS201 M C10 A30 110V	2CSR275189R1104		0.2	1
		13	583813	DS201 M C13 A30 110V	2CSR275189R1134		0.2	1
		16	572015	DS201 M C16 A30 110V	2CSR275189R1164		0.2	1
		20	592914	DS201 M C20 A30 110V	2CSR275189R1204		0.2	1
		25	581116	DS201 M C25 A30 110V	2CSR275189R1254		0.2	1
		32	569312	DS201 M C32 A30 110V	2CSR275189R1324		0.2	1
		40	594215	DS201 M C40 A30 110V	2CSR275189R1404		0.2	1



## RCBOs

### DS201 UL technical features

		DS201 UL		
Standards		UL 1053, UL 1077, IEC 61009-1, IEC 61009-2-1		
<b>Electrical features</b>	Type (wave form of the earth leakage sensed)		A	
	Number of poles		1P + N	
	Rated current $I_n$	A	$6 \leq I_n \leq 25$	
	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	110 – 264	
	Rated frequency	Hz	50/60	
	Rated breaking capacity acc. to To UL 1053, IEC 61009-1, IEC 61009-2-1	$I_{cn}$	A	6 000
	Rated breaking capacity acc. to IEC 60947-2	ultimate $I_{cu}$	kA	10
		service $I_{cs}$	kA	7.5
	Rated residual breaking capacity $I_{\Delta m}$ according to IEC 61009-1	$I_{\Delta m}$	A	6 000
	Rated impulse withstand voltage (1.2/50) $U_{imp}$		kV	4 kV
	Dielectric test voltage at ind. freq. for 1 min.		kV	2.5 kV (50 / 60Hz, 1 min.)
	Thermomagnetic release - characteristic	B: $3 I_n \leq I_n \leq 5 I_n$		■
C: $5 I_n \leq I_n \leq 10 I_n$			■	
Rated residual breaking capacity $I_{\Delta m}$	A		6 000	
Surge current resistance (wave 8/20 $\mu$ s)			NA	
<b>Mechanical features</b>	Housing		Insulation group I - II, RAL 7035	
	Toggle		Insulation group II, Black RAL 9005, sealable in ON-OFF positions	
	Contact position indication		Green/Red Window	
	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
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30	$^{\circ}$ C / RH		28 cycles with 55 $^{\circ}$ C/90-96% and 25 $^{\circ}$ C/95-100%
	Reference temperature for setting of thermal element	$^{\circ}$ C / $^{\circ}$ F		30 / 86
Ambient temperature (with daily average $\leq +35$ $^{\circ}$ C)	$^{\circ}$ C / $^{\circ}$ F		-25...+55 / -13...+131	
Storage temperature	$^{\circ}$ C / $^{\circ}$ F		-40...+70 / -40...+158	
<b>Installation</b>	Terminal type	top / bottom		Failsafe bi-directional cylinder-lift terminal (shock protected)
	Terminal size for solid cables	top / bottom	mm <sup>2</sup> / AWG	25/25 / 10/10
	Terminal size for stranded cables	top / bottom	mm <sup>2</sup> / AWG	16/16 / 6/6
	These terminals are not suitable for copper compact stranded conductors			
	Terminal size for busbars	top / bottom	mm <sup>2</sup> / AWG	10/8
	Tightening torque	top / bottom	Nm / in.lb	2.8 / 24.5
	Stripping length of the cable		mm / in	12 / 0.5
	Mounting			on DIN rail EN 60715 (35mm) by means of mounting clip
Mounting position			Any	
Supply from			Top/Bottom terminals	
<b>Dimensions and weight</b>	Dimensions (H x D x W)		mm / in	85 x 69 x 35 / 3.34 x 2.71 x 1.37
	Weight		g / lb	200 / 0.44
<b>Combination with auxiliary elements</b>	Combinable with accessories and auxiliaries	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

N.B The combination is mechanically compatible with but no UL approved.

## RCBOs

### DS201 UL technical features

#### DS201 UL 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 ( $I\Delta n=30$  mA).

This particular series of devices is UL & CSA approved and is a supplementary protector.

**Application: residential, commercial, industrial.**

**Standard: UL 1053 & 1077, CSA C22.2 NO. 144, CSA C22.2 NO. 235**



DS201 UL

No. of poles	Rated residual current $I\Delta n$ mA	Rated current In A	Bbn 8012542 EAN	Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	30	6	577614	DS201 B6 A30	2CSR255187R1065		0.2	1
		10	565819	DS201 B10 A30	2CSR255187R1105		0.2	1
		13	590712	DS201 B13 A30	2CSR255187R1135		0.2	1
		16	578918	DS201 B16 A30	2CSR255187R1165		0.2	1
		20	567170	DS201 B20 A30	2CSR255187R1205		0.2	1
		25	588412	DS201 B25 A30	2CSR255187R1255		0.2	1

#### DS201 UL 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 ( $I\Delta n=30$  mA).

This particular series of devices is UL & CSA approved and is a supplementary protector.

**Application: residential, commercial, industrial.**

**Standard: UL 1053 & 1077, CSA C22.2 NO. 144, CSA C22.2 NO. 235**



DS201 UL

No. of poles	Rated residual current $I\Delta n$ mA	Rated current In A	Bbn 8012542 EAN	Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
1+N	30	6	588511	DS201 C6 A30	2CSR255187R1064		0.2	1
		10	576716	DS201 C10 A30	2CSR255187R1104		0.2	1
		13	564911	DS201 C13 A30	2CSR255187R1134		0.2	1
		16	589518	DS201 C16 A30	2CSR255187R1164		0.2	1
		20	577713	DS201 C20 A30	2CSR255187R1204		0.2	1
		25	565918	DS201 C25 A30	2CSR255187R1254		0.2	1

## RCBOs

### DS202C technical features

		DS202C	DS202C M	DS202C M	DS202C M 110V		
Standards		IEC/EN 61009-1; IEC/EN 61009-2-1			IEC 61009-1; IEC 61009-2-1		
Electrical features	Type (wave form of the earth leakage sensed)	A	A	APR	A		
	Poles	2P	2P	2P	2P		
	Rated current I <sub>n</sub>	A	6 ≤ I <sub>n</sub> ≤ 32	6 ≤ I <sub>n</sub> ≤ 32	6 ≤ I <sub>n</sub> ≤ 32	6 ≤ I <sub>n</sub> ≤ 32	
	Rated sensitivity IΔn	A	0.03-0.3	0.01-0.03-0.3	0.03-0.3	0.03	
	Rated voltage U <sub>e</sub>	V	230-240	230-240	230-240	230-240	
	Insulation voltage U <sub>i</sub>	V	500	500	500	500	
	Operating voltage of circuit test U <sub>t</sub>	V	110 (170 for 30 mA) - 254	110 (170 for 30 mA) - 254	110 (170 for 30 mA) - 254	110-254	
	Rated frequency	Hz	50...60	50...60	50...60	50...60	
	Rated breaking capacity acc. to IEC/EN 61009	ultimate I <sub>cn</sub>	A	6000	10000	10000	10000
	Rated breaking capacity acc. to IEC/EN 60947-2	ultimate I <sub>cu</sub>	kA	10	10	10	10
	2P @230 VAC	service I <sub>cs</sub>	kA	6	7.5	7.5	7.5
	Rated residual breaking capacity IΔm		kA	6	6	6	6
	Rated impulse withstand voltage (1.2/50) U <sub>imp</sub>		kV	4	4	4	4
	Dielectric test voltage at ind. freq. for 1 min.		kV	2.5	2.5	2.5	2.5
	Thermomagnetic release characteristic	B: 3 I <sub>n</sub> ≤ I <sub>m</sub> ≤ 5 I <sub>n</sub>		■	■	■	
C: 5 I <sub>n</sub> ≤ I <sub>m</sub> ≤ 10 I <sub>n</sub>			■	■	■	■	
Surge current resistance (wave 8/20)		A	NA for A, AC versions; 3000 for APR version				
Mechanical features	Toggle		black sealable in ON-OFF position				
	Flag indicators		differential trip indicator (blue)				
			contact position indicator (green/red)				
	Electrical life		10000	10000	10000	10000	
	Mechanical life		20000	20000	20000	20000	
	Protection degree	housing		IP4X	IP4X	IP4X	IP4X
		terminals		IP2X	IP2X	IP2X	IP2X
	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	30	30	30
Ambient temperature (with daily average ≤ +35 °C)		°C	-25...+55	-25...+55	-25...+55	-25...+55	
Storage temperature		°C	-40...+70	-40...+70	-40...+70	-40...+70	
Installation	Terminal type	top	failsafe bi-directional cylinder-lift terminal at top and bottom (shock protected)				
		bottom	failsafe bi-directional cylinder-lift terminal at top and bottom (shock protected)				
	Terminal size top/bottom for cables	mm <sup>2</sup>	25/25	25/25	25/25	25/25	
	Terminal size top/bottom for busbar	mm <sup>2</sup>	10/10	10/10	10/10	10/10	
	Tightening torque top/bottom	Nm	2.8	2.8	2.8	2.8	
	Mounting		on DIN rail EN 60715 (35 mm) by means of fast clip device				
	Mounting position		Any	Any	Any	Any	
Connection		from top and bottom	from top and bottom	from top and bottom	from top and bottom		
Dimensions and weight	Dimensions (H x D x W)		mm	85 x 69 x 35	85 x 69 x 35	85 x 69 x 35	85 x 69 x 35
	Weight		g	239	239	239	239
Combination with auxiliary elements	Combinable with:		auxiliary contact	yes	yes	yes	yes
			signal contact	yes	yes	yes	yes
			shunt trip	yes	yes	yes	yes
			undervoltage release	yes	yes	yes	yes

## RCBOs

DS202C series  $\boxed{6000}$  A  type, B characteristic



DS202C

### DS202C 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 ( $I_{\Delta n}=30$  mA).

**Application: residential, commercial, industrial.**

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

**$I_{cn} = 6\ 000$  A**

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	6	132257	DS202C B6 A30	2CSR252140R1065		0.240	5
		10	132356	DS202C B10 A30	2CSR252140R1105		0.240	5
		13	132455	DS202C B13 A30	2CSR252140R1135		0.240	5
		16	132554	DS202C B16 A30	2CSR252140R1165		0.240	5
		20	132653	DS202C B20 A30	2CSR252140R1205		0.240	5
		25	132752	DS202C B25 A30	2CSR252140R1255		0.240	5
		32	132851	DS202C B32 A30	2CSR252140R1325		0.240	5
	300	6	132950	DS202C B6 A300	2CSR252140R3065		0.240	5
		10	133056	DS202C B10 A300	2CSR252140R3105		0.240	5
		13	133155	DS202C B13 A300	2CSR252140R3135		0.240	5
		16	133254	DS202C B16 A300	2CSR252140R3165		0.240	5
		20	133353	DS202C B20 A300	2CSR252140R3205		0.240	5
		25	133452	DS202C B25 A300	2CSR252140R3255		0.240	5
		32	133551	DS202C B32 A300	2CSR252140R3325		0.240	5

## RCBOs

DS202C series  $\boxed{6000}$  A  type, C characteristic



DS202C

### DS202C 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 ( $I\Delta n=30$  mA).

**Application: residential, commercial, industrial.**

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

**$I_{cn} = 6\ 000\ A$**

Number of poles	Rated residual current $I\Delta n$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	6	122357	DS202C C6 A30	2CSR252140R1064		0.240	5
		10	122456	DS202C C10 A30	2CSR252140R1104		0.240	5
		13	122555	DS202C C13 A30	2CSR252140R1134		0.240	5
		16	122654	DS202C C16 A30	2CSR252140R1164		0.240	5
		20	122753	DS202C C20 A30	2CSR252140R1204		0.240	5
		25	122852	DS202C C25 A30	2CSR252140R1254		0.240	5
		32	122951	DS202C C32 A30	2CSR252140R1324		0.240	5
300	6	6	123057	DS202C C6 A300	2CSR252140R3064		0.240	5
		10	123156	DS202C C10 A300	2CSR252140R3104		0.240	5
		13	123255	DS202C C13 A300	2CSR252140R3134		0.240	5
		16	123354	DS202C C16 A300	2CSR252140R3164		0.240	5
		20	123453	DS202C C20 A300	2CSR252140R3204		0.240	5
		25	123552	DS202C C25 A300	2CSR252140R3254		0.240	5
		32	123651	DS202C C32 A300	2CSR252140R3324		0.240	5

## RCBOs

DS202C M series 10000 A  type, B characteristic



DS202C M

### DS202C M 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 ( $I_{\Delta n}=30$  mA).

**Application: residential, commercial, industrial.**

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

**$I_{cn} = 10\ 000$  A**

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.		
				Type code	Order code					
2	10	10	124856	DS202C M B10 A10	2CSR272140R0105		0.240	5		
		13	117759	DS202C M B13 A10	2CSR272140R0135		0.240	5		
		16	117858	DS202C M B16 A10	2CSR272140R0165		0.240	5		
	30	6	6	118152	DS202C M B6 A30	2CSR272140R1065		0.240	5	
			10	118251	DS202C M B10 A30	2CSR272140R1105		0.240	5	
			13	118350	DS202C M B13 A30	2CSR272140R1135		0.240	5	
			16	118459	DS202C M B16 A30	2CSR272140R1165		0.240	5	
			20	118558	DS202C M B20 A30	2CSR272140R1205		0.240	5	
			25	118657	DS202C M B25 A30	2CSR272140R1255		0.240	5	
	300	32	32	118756	DS202C M B32 A30	2CSR272140R1325		0.240	5	
			6	6	119555	DS202C M B6 A300	2CSR272140R3065		0.240	5
				10	119654	DS202C M B10 A300	2CSR272140R3105		0.240	5
				13	119753	DS202C M B13 A300	2CSR272140R3135		0.240	5
				16	119852	DS202C M B16 A300	2CSR272140R3165		0.240	5
				20	119951	DS202C M B20 A300	2CSR272140R3205		0.240	5
25	120056	DS202C M B25 A300	2CSR272140R3255		0.240	5				
		32	120155	DS202C M B32 A300	2CSR272140R3325		0.240	5		

## RCBOs

DS202C M series  $\boxed{10000}$  A  type, C characteristic



DS202C M

### DS202C M 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 ( $I\Delta n=30$  mA).

**Application: residential, commercial, industrial.**

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

**$I_{cn} = 10\ 000$  A**

Number of poles	Rated residual current $I\Delta n$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	10	13	117957	DS202C M C13 A10	2CSR272140R0134	0.240	5	
		16	118053	DS202C M C16 A10	2CSR272140R0164			
	30	6	118855	DS202C M C6 A30	2CSR272140R1064	0.240	5	
		10	118954	DS202C M C10 A30	2CSR272140R1104	0.240	5	
		13	119050	DS202C M C13 A30	2CSR272140R1134	0.240	5	
		16	119159	DS202C M C16 A30	2CSR272140R1164	0.240	5	
		20	119258	DS202C M C20 A30	2CSR272140R1204	0.240	5	
		25	119357	DS202C M C25 A30	2CSR272140R1254	0.240	5	
	300	32	119456	DS202C M C32 A30	2CSR272140R1324	0.240	5	
			6	120254	DS202C M C6 A300	2CSR272140R3064	0.240	5
			10	120353	DS202C M C10 A300	2CSR272140R3104	0.240	5
			13	120452	DS202C M C13 A300	2CSR272140R3134	0.240	5
			16	120551	DS202C M C16 A300	2CSR272140R3164	0.240	5
			20	120650	DS202C M C20 A300	2CSR272140R3204	0.240	5
25			120759	DS202C M C25 A300	2CSR272140R3254	0.240	5	
32			120858	DS202C M C32 A300	2CSR272140R3324	0.240	5	

## RCBOs

DS202C M series 10000 A  APR type, B characteristic



DS202C M

### DS202C M APR 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 ( $I\Delta n=30$  mA).

**Application: residential, commercial, industrial.**

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

**$I_{cn} = 10\ 000$  A**

Number of poles	Rated residual current $I\Delta n$ mA	Rated current $I_n$ A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	6	120957	DS202C M B6 APR30	2CSR272440R1065		0.240	5
		10	121053	DS202C M B10 APR30	2CSR272440R1105		0.240	5
		13	121152	DS202C M B13 APR30	2CSR272440R1135		0.240	5
		16	121251	DS202C M B16 APR30	2CSR272440R1165		0.240	5
		20	121350	DS202C M B20 APR30	2CSR272440R1205		0.240	5
		25	121459	DS202C M B25 APR30	2CSR272440R1255		0.240	5
		32	121558	DS202C M B32 APR30	2CSR272440R1325		0.240	5
	300	6	124955	DS202C M B6 APR300	2CSR272440R3065		0.240	5
		10	125051	DS202C M B10 APR300	2CSR272440R3105		0.240	5
		13	125150	DS202C M B13 APR300	2CSR272440R3135		0.240	5
		16	125259	DS202C M B16 APR300	2CSR272440R3165		0.240	5
		20	125358	DS202C M B20 APR300	2CSR272440R3205		0.240	5
		25	125457	DS202C M B25 APR300	2CSR272440R3255		0.240	5
		32	125556	DS202C M B32 APR300	2CSR272440R3325		0.240	5



## RCBOs

DS202C M series 10000 APR type, C characteristic



DS202C M

### DS202C M APR 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 ( $I_{\Delta n}=30$  mA).


**Application: residential, commercial, industrial.**

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

**$I_{cn} = 10\ 000$  A**

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	6	121657	DS202C M C6 APR30	2CSR272440R1064		0.240	5
		10	121756	DS202C M C10 APR30	2CSR272440R1104		0.240	5
		13	121855	DS202C M C13 APR30	2CSR272440R1134		0.240	5
		16	121954	DS202C M C16 APR30	2CSR272440R1164		0.240	5
		20	122050	DS202C M C20 APR30	2CSR272440R1204		0.240	5
		25	122159	DS202C M C25 APR30	2CSR272440R1254		0.240	5
		32	122258	DS202C M C32 APR30	2CSR272440R1324		0.240	5

## RCBOs

DS202C M 110V series 10000 A  type, C characteristic



DS202C M 110V

### DS202C M 110V 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 particular series of devices has the minimum operating voltage of test button of 110V and it is suitable for 230 V applications.

**Application: residential, commercial, industrial.**

**Standard: IEC 61009-1; IEC 61009-2-1**

**$I_{cn} = 10\,000 \text{ A}$**

Number of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	6	079934	DS202C M C6 A30 110V	2CSR272199R1064	0.240	5	
		10	079835	DS202C M C10 A30 110V	2CSR272199R1104			
		13	079330	DS202C M C13 A30 110V	2CSR272199R1134			
		16	079736	DS202C M C16 A30 110V	2CSR272199R1164			
		20	079637	DS202C M C20 A30 110V	2CSR272199R1204			
		25	079538	DS202C M C25 A30 110V	2CSR272199R1254			
		32	079439	DS202C M C32 A30 110V	2CSR272199R1324			



# RCBO DS203NC. The effective choice

## The benefits of a product with the highest quality standards

Compact size for easy installation in small spaces and retrofitting of already existing facilities.

Terminals designed to ease the installation.

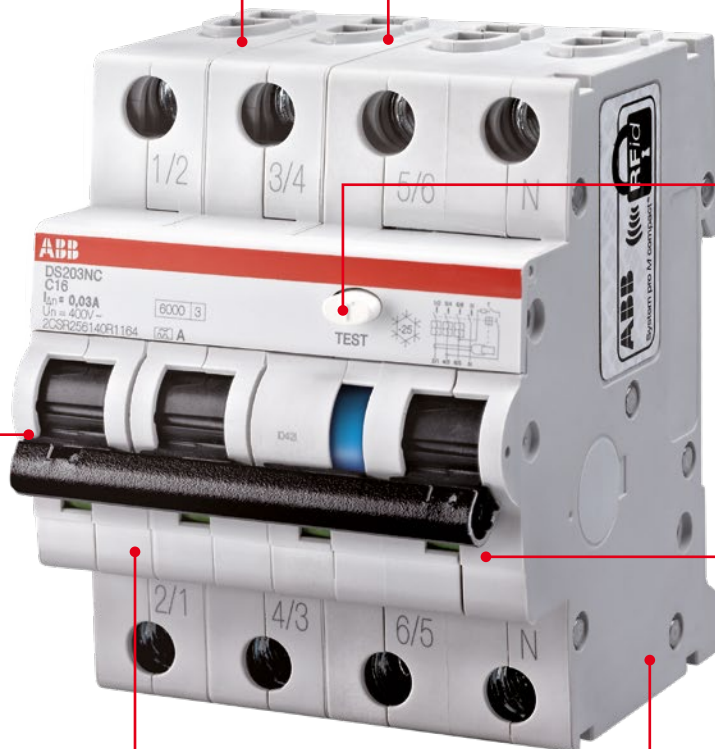
Test pushbutton to verify the correct functioning of the device.

Operating toggle can be sealed into on/off position to ensure maintenance in complete safety.

The indication of the status of the contacts is done with a mechanical connection to the mobile contacts and independently from the toggle position. The contacts position indicator (CPI) allows to exactly know the status of the contacts of the device (green: open contacts, red: closed contacts).

Space for identification labels of the protected line.

Same profile as the System pro M compact® range.





#### 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 mm<sup>2</sup>, the other for busbars or cables up to 10 mm<sup>2</sup>.



#### RFid

Radio frequency tracking via a radio frequency tag to facilitate logistics and to be assured of the originality of the product.



#### Differential trip indicator

In case of tripping due to earth fault, a blue flag appears on the toggle thus immediately showing the cause of 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 are laser printed on the front and side of units ensuring visibility along the time, including order code on front of 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 need of remove other devices).



#### Approval stamps

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

## RCBOs

### DS203NC technical features

		DS203NC L	DS203NC
Standards		IEC/EN 61009-1; IEC/EN 61009-2-1	IEC/EN 61009-1; IEC/EN 61009-2-1
Electrical features			
Type (wave form of the earth leakage sensed)		AC, A, APR	AC, A, APR, S
Number of poles		3P+N	3P+N
Rated current $I_n$	A	$6 \leq I_n \leq 32A$	$6 \leq I_n \leq 32A$
Rated sensitivity $I_{\Delta n}$	mA	30-300	30-100-300
Rated voltage $U_e$	V	400-415V	400-415V
Insulation voltage $U_i$	V	500 V AC	500 V AC
Overvoltage category		III	III
Pollution degree		2	2
Operating voltage of circuit test $U_t$	V	195 (300 for 30 mA) - 440	
Rated frequency	Hz	50/60	50/60
Rated breaking capacity acc. to IEC/ EN 61009	ultimate $I_{cn}$	A	4500
Rated breaking capacity acc. to IEC/EN 60947-2	ultimate $I_{cu}$	kA	6
	service $I_{cs}$	kA	4.5
Rated residual breaking capacity $I_{\Delta m}$ acc. To EN 61009		kA	4.5
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	NA for A, AC versions; 3000 for APR version; 5000 for S version
Mechanical features			
Housing		Insulation group II, RAL 7035	Insulation group II, RAL 7035
Toggle		black, sealable in ON-OFF positions	black, sealable in ON-OFF positions
Flag indicator		Differential trip indicator: blue on toggle	Differential trip indicator: blue on toggle
Contact position indication		CPI on window	CPI on window
Electrical life	operations	10000	10000
Mechanical life	operations	20000	20000
Protection degree	housing	IP4X	IP4X
	terminals	IP2X	IP2X
Shock resistance acc. to IEC/EN 60068-2-27		30g - 2 shocks - 13ms	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	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%	28 cycles with 55°C/90-96% and 25°C/95-100%
Reference temperature for setting of thermal element	°C	30	30
Ambient temperature (with daily average $\leq +35$ °C)	°C	-25...+55	-25...+55
Storage temperature	°C	-40...+70	-40...+70

## RCBOs

### DS203NC technical features

		DS203NC L	DS203NC
Installation			
Terminal type	top/ bottom	failsafe bi-directional cylinder-lift terminal (shock protected)	failsafe bi-directional cylinder-lift terminal (shock protected)
Terminal size for cables	top/ bottom	mm <sup>2</sup> 25/25	25/25
Terminal size for busbars	top/ bottom	mm <sup>2</sup> 10/10	10/10
Tightening torque	top/ bottom	Nm 2.8	2.8
Mounting		on DIN rail EN 60715 (35 mm) by means of mounting clip	on DIN rail EN 60715 (35 mm) by means of mounting clip
Supply from		Top/bottom terminals	Top/bottom terminals
Dimensions and weight			
Dimensions (H x D x W)		mm 85 x 69 x 70.4	85 x 69 x 70.4
Weight		g 480	480
Combination with auxiliary elements			
Combinable with accessories and auxiliaries, by means of interface contact SN201-IH	Auxiliary contact	yes	yes
	Signal contact	yes	yes
	Shunt trip	yes	yes
	Undervoltage release	yes	yes
	Overvoltage release	yes	yes

## RCBOs

DS203NC L AC 



### DS203NC L - AC type - C curve

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

$I_{cn} = 4\ 500 \text{ A}$

Number of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.	
				Type code	Order code				
3P+N	30	6	353928	DS203NC L C6 AC30	2CSR246040R1064		0.480	1	
		8	343622	DS203NC L C8 AC30	2CSR246040R1084		0.480	1	
		10	353829	DS203NC L C10 AC30	2CSR246040R1104		0.480	1	
		13	343523	DS203NC L C13 AC30	2CSR246040R1134		0.480	1	
		16	353720	DS203NC L C16 AC30	2CSR246040R1164		0.480	1	
		20	343424	DS203NC L C20 AC30	2CSR246040R1204		0.480	1	
		25	353621	DS203NC L C25 AC30	2CSR246040R1254		0.480	1	
		32	343325	DS203NC L C32 AC30	2CSR246040R1324		0.480	1	
	300	30	6	343226	DS203NC L C6 AC300	2CSR246040R3064		0.480	1
			8	343127	DS203NC L C8 AC300	2CSR246040R3084		0.480	1
			10	343028	DS203NC L C10 AC300	2CSR246040R3104		0.480	1
			13	342922	DS203NC L C13 AC300	2CSR246040R3134		0.480	1
			16	776727	DS203NC L C16 AC300	2CSR246040R3164		0.480	1
			20	342823	DS203NC L C20 AC300	2CSR246040R3204		0.480	1
25			342724	DS203NC L C25 AC300	2CSR246040R3254		0.480	1	
	32	358428	DS203NC L C32 AC300	2CSR246040R3324		0.480	1		



## RCBOs

DS203NC L A  type



### DS203NC L - A type - C curve

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**

**$I_{cn} = 4\ 500 \text{ A}$**

Number of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.	
				Type code	Order code				
3P+N	30	6	354628	DS203NC L C6 A30	2CSR246140R1064		0.480	1	
		8	344322	DS203NC L C8 A30	2CSR246140R1084		0.480	1	
		10	354529	DS203NC L C10 A30	2CSR246140R1104		0.480	1	
		13	344223	DS203NC L C13 A30	2CSR246140R1134		0.480	1	
		16	354420	DS203NC L C16 A30	2CSR246140R1164		0.480	1	
		20	344124	DS203NC L C20 A30	2CSR246140R1204		0.480	1	
		25	354321	DS203NC L C25 A30	2CSR246140R1254		0.480	1	
		32	498025	DS203NC L C32 A30	2CSR246140R1324		0.480	1	
	300	30	6	499220	DS203NC L C6 A300	2CSR246140R3064		0.480	1
			8	344025	DS203NC L C8 A300	2CSR246140R3084		0.480	1
			10	354222	DS203NC L C10 A300	2CSR246140R3104		0.480	1
			13	343929	DS203NC L C13 A300	2CSR246140R3134		0.480	1
			16	354123	DS203NC L C16 A300	2CSR246140R3164		0.480	1
			20	343820	DS203NC L C20 A300	2CSR246140R3204		0.480	1
25			354024	DS203NC L C25 A300	2CSR246140R3254		0.480	1	
	32	343721	DS203NC L C32 A300	2CSR246140R3324		0.480	1		

## RCBOs

### DS203NC L APR type



#### DS203NC L - APR type - C curve

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, providing an optimal compromise between safety and continuity of service, thanks to the resistance to unwanted tripping; protection against indirect contact and additional protection against direct contact ( $I_{\Delta n} = 30 \text{ mA}$ ); protection and isolation of resistive and inductive loads.

**Application: commercial, industrial.**

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

**$I_{cn} = 4\,500 \text{ A}$**

Number of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3P+N	30	6	079125	DS203NC L C6 APR30	2CSR246440R1064		0.480	1
		8	079026	DS203NC L C8 APR30	2CSR246440R1084		0.480	1
		10	078920	DS203NC L C10 APR30	2CSR246440R1104		0.480	1
		13	078821	DS203NC L C13 APR30	2CSR246440R1134		0.480	1
		16	078722	DS203NC L C16 APR30	2CSR246440R1164		0.480	1
		20	078623	DS203NC L C20 APR30	2CSR246440R1204		0.480	1
		25	078524	DS203NC L C25 APR30	2CSR246440R1254		0.480	1
		32	078425	DS203NC L C32 APR30	2CSR246440R1324		0.480	1

## RCBOs

DS203NC AC  type



### DS203NC - AC type - B curve

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**

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

Number of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details		Price 1 piece	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 - C curve

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**

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

Number of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details		Price 1 piece	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 - B curve

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**

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

Number of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details		Price 1 piece	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 - C curve

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**

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

Number of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
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 - K curve

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**

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

Number of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.	
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		

## RCBOs

### DS203NC APR type



#### DS203NC - APR type - C curve

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, providing an optimal compromise between safety and continuity of service, thanks to the resistance to unwanted tripping; protection against indirect contact and additional protection against direct contact ( $I_{\Delta n} = 30 \text{ mA}$ ); protection and isolation of resistive and inductive loads.

**Application: commercial, industrial.**

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

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

Number of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3P+N	30	6	349822	DS203NC C6 APR30	2CSR256440R1064	0.480	1	
		8	180722	DS203NC C8 APR30	2CSR256440R1084			
		10	349723	DS203NC C10 APR30	2CSR256440R1104			
		13	261520	DS203NC C13 APR30	2CSR256440R1134			
		16	261421	DS203NC C16 APR30	2CSR256440R1164			
		20	261322	DS203NC C20 APR30	2CSR256440R1204			
		25	261223	DS203NC C25 APR30	2CSR256440R1254			
		32	261124	DS203NC C32 APR30	2CSR256440R1324			
	100	6	274223	DS203NC C6 APR100	2CSR256440R2064	0.480	1	
		8	517924	DS203NC C8 APR100	2CSR256440R2084			
		10	261025	DS203NC C10 APR100	2CSR256440R2104			
		13	180029	DS203NC C13 APR100	2CSR256440R2134			
		16	349624	DS203NC C16 APR100	2CSR256440R2164			
		20	179924	DS203NC C20 APR100	2CSR256440R2204			
		25	179825	DS203NC C25 APR100	2CSR256440R2254			
		32	179726	DS203NC C32 APR100	2CSR256440R2324			
300	6	179627	DS203NC C6 APR300	2CSR256440R3064	0.480	1		
	8	179528	DS203NC C8 APR300	2CSR256440R3084				
	10	179429	DS203NC C10 APR300	2CSR256440R3104				
	13	518020	DS203NC C13 APR300	2CSR256440R3134				
	16	176329	DS203NC C16 APR300	2CSR256440R3164				
	20	351023	DS203NC C20 APR300	2CSR256440R3204				
	25	176220	DS203NC C25 APR300	2CSR256440R3254				
	32	350927	DS203NC C32 APR300	2CSR256440R3324				



## RCBOs

DS203NC A  S type



### DS203NC - A S type - C curve

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 ( $I_{\Delta n} = 30 \text{ mA}$ ). Selective type.

**Application: commercial, industrial.**

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

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

Number of poles	Rated residual current $I_{\Delta n} \text{ mA}$	Rated current $I_n \text{ A}$	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3P+N	100	16	021827	DS203NC C16 A S100	2CSR256240R2164		0.480	1
		20	021728	DS203NC C20 A S100	2CSR256240R2204		0.480	1
		25	021629	DS203NC C25 A S100	2CSR256240R2254		0.480	1
		32	021520	DS203NC C32 A S100	2CSR256240R2324		0.480	1
	300	16	297727	DS203NC C16 A S300	2CSR256240R3164		0.480	1
		20	373223	DS203NC C20 A S300	2CSR256240R3204		0.480	1
		25	373124	DS203NC C25 A S300	2CSR256240R3254		0.480	1
		32	077527	DS203NC C32 A S300	2CSR256240R3324		0.480	1

## RCBOs

### DS 200 technical features



DS 200

Standards			
Electrical features	Operating characteristic: type (wave form of the earth leakage sensed)		
	Poles		
	Rated sensitivity $I_{\Delta n}$	A	
	Rated current $I_n$	A	
	Rated voltage $U_e$	2P	V
		3P, 4P	V
	Insulation voltage $U_i$	V	
	Operating voltage of circuit test $U_t$	2P	V
		3P	V
		4P	V
	Rated frequency	Hz	
	Rated breaking capacity acc. to IEC/EN 61009	ultimate $I_{cn}$	A
	Rated breaking capacity acc. to IEC/EN 60947-2 1P+N @230 VAC, 2P, 3P, 4P @400 VAC	ultimate $I_{cu}$	kA
		service $I_{cs}$	kA
	Rated residual breaking capacity $I_{\Delta m}$	kA	
	Rated impulse withstand voltage (1.2/50) $U_{imp}$	kV	
	Dielectric test voltage at ind. freq. for 1 min.	kV	
	Overvoltage category		
	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		
Mechanical features	Toggle	2P, 3P, 4P	
	Contact position indication		
	Electrical life		
	Mechanical life		
	Protection degree	housing	
		terminals	
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30	°C/RH	
	Reference temperature for setting of thermal element	°C	
	Ambient temperature (with daily average $\leq +35$ °C)	°C	
	Storage temperature	°C	
Installation	Terminal type	top	
		bottom 2P	
		3P/4P $I_n \leq 40$ A	
		3P/4P $50$ A $\leq I_n \leq 63$ A	
	Terminal size top/bottom per cable	2P	mm <sup>2</sup>
		3P/4P $I_n \leq 40$ A	mm <sup>2</sup>
		3P/4P $50$ A $\leq I_n \leq 63$ A	mm <sup>2</sup>
	Tightening torque top/bottom	2P	Nm
		3P/4P $I_n \leq 40$ A	Nm
		3P/4P $50$ A $\leq I_n \leq 63$ A	Nm
Mounting			
Mounting position			
Connection			

① Available depending on type and characteristic curve. For 2P RCBOs A type B-C curves up to 32 A, refer to DS202C 2 protected poles RCBOs in only two modules

② Prior to connection of aluminium conductors ( $\geq 4$  mm<sup>2</sup>) ensure that their contact points are cleaned, brushed and coated with grease

## RCBOs

### DS 200 technical features

DS 200 AC	DS 200 A	DS 200M AC	DS 200M A
IEC/EN 61009-1; IEC/EN 61009-2-1; IEC/EN 60947-2			
AC	A	AC	A
2P, 3P, 4P			
0.03			
6 ≤ In ≤ 63 ①			
230-240			
230/400 - 240/415			
500			
110 (170 for 30 mA) - 254			
195 (300 for 30 mA) - 440			
195 (300 for 30 mA) - 440			
50...60			
6000	6000	10000	10000
10	10	15	15
7.5	7.5	11.2	11.2
6	6	10	10
6			
2.5			
III, disconnector abilities			
■	■	■	■
■	■	■	■
	■		
NA			
black (MCB) sealable in ON-OFF position + blue (RCD)			
CPI on window			
10000			
20000			
IP4X			
IP2X			
28 cycles with 55°C/90-96% and 25°C/95-100%			
30			
-25...+55			
-40...+70			
failsafe bidirectional cylinder-lift terminal (shock protected) ②			
failsafe bidirectional cylinder-lift terminal (shock protected) ②			
cage (shock protected)			
failsafe bidirectional cylinder-lift terminal (shock protected) ②			
rigid: 35/25 flexible: 25/25			
rigid: 35/25 flexible: 25/16			
rigid : 35/25 flexible : 25/25			
2.8/2.8			
2.8/1.2			
2.8/2.8			
on DIN rail EN 60715 (35 mm) by means of fast clip device			
Any			
715 (35 mm) by means of fast clip device from top and bottom			

## RCBOs

### DS 200 technical features



DS 200

Dimensions and weight	Dimensions (H x D x W)	2P	mm
		3P $I_n \leq 40$ A	mm
		4P $I_n \leq 40$ A	mm
		3P $50$ A $\leq I_n \leq 63$ A	mm
		4P $50$ A $\leq I_n \leq 63$ A	mm
Weight		2P	g
		3P $I_n \leq 40$ A	g
		4P $I_n \leq 40$ A	g
		3P $50$ A $\leq I_n \leq 63$ A	g
		4P $50$ A $\leq I_n \leq 63$ A	g
Combination with auxiliary elements	Combinable with:	auxiliary contact	
		signal contact/auxiliary switch	
		shunt trip	
		undervoltage release	

## RCBOs

### DS 200 technical features

DS 200 AC	DS 200 A	DS 200M AC	DS 200M A
85 x 69 x 70			
85 x 69 x 87.5			
85 x 69 x 105			
85 x 69 x 122.5			
85 x 69 x 140			
475			
625			
775			
775			
925			
yes			
yes			
yes			
yes			

## RCBOs

DS 201 series  $\boxed{6000}$  - AC  $\boxed{\sim}$  type, B characteristic



DS 202

### DS 200 AC type, B characteristic

Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts.

Application: commercial, industrial, residential.

Standard: IEC/EN 61009-1, IEC/EN 61009-2-1 and IEC/EN 60947-2

I<sub>cn</sub> = 6 kA



DS 203

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	6	863502	DS202 AC-B6/0.03	2CSR252001R1065	0.440	1	
		10	863601	DS202 AC-B10/0.03	2CSR252001R1105			
		13	863700	DS202 AC-B13/0.03	2CSR252001R1135			
		16	863809	DS202 AC-B16/0.03	2CSR252001R1165			
		20	863908	DS202 AC-B20/0.03	2CSR252001R1205			
		25	864004	DS202 AC-B25/0.03	2CSR252001R1255			
		32	864103	DS202 AC-B32/0.03	2CSR252001R1325			
		40	864202	DS202 AC-B40/0.03	2CSR252001R1405			
		50 ①	864301	DS202 AC-B50/0.03	2CSR252001R1505			
		63 ①	864400	DS202 AC-B63/0.03	2CSR252001R1635			



DS 204

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3	30	6	865506	DS203 AC-B6/0.03	2CSR253001R1065	0.610	1	
		10	865605	DS203 AC-B10/0.03	2CSR253001R1105			
		13	865704	DS203 AC-B13/0.03	2CSR253001R1135			
		16	865803	DS203 AC-B16/0.03	2CSR253001R1165			
		20	865902	DS203 AC-B20/0.03	2CSR253001R1205			
		25	866008	DS203 AC-B25/0.03	2CSR253001R1255			
		32	866107	DS203 AC-B32/0.03	2CSR253001R1325			
		40	866206	DS203 AC-B40/0.03	2CSR253001R1405			
		50 ①	866305	DS203 AC-B50/0.03	2CSR253001R1505			
		63 ①	866404	DS203 AC-B63/0.03	2CSR253001R1635			

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	6	867500	DS204 AC-B6/0.03	2CSR254001R1065	0.780	1	
		10	867609	DS204 AC-B10/0.03	2CSR254001R1105			
		13	867708	DS204 AC-B13/0.03	2CSR254001R1135			
		16	867807	DS204 AC-B16/0.03	2CSR254001R1165			
		20	867906	DS204 AC-B20/0.03	2CSR254001R1205			
		25	868002	DS204 AC-B25/0.03	2CSR254001R1255			
		32	868101	DS204 AC-B32/0.03	2CSR254001R1325			
		40	868200	DS204 AC-B40/0.03	2CSR254001R1405			
		50 ①	868309	DS204 AC-B50/0.03	2CSR254001R1505			
		63 ①	868408	DS204 AC-B63/0.03	2CSR254001R1635			

① provided with additional terminals for remote tripping

## RCBOs

DS 200 series  $\boxed{6000}$  - AC  $\square$  type, C characteristic



DS 202

### DS 200 AC type, C characteristic

Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts.

Application: commercial, industrial.

Standard: IEC/EN 61009-1; IEC/EN 61009-2-1 and IEC/EN 60947-2

Icn = 6 kA



DS 203

Number of poles	Rated residual current I $\Delta$ n mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	6	869504	DS202 AC-C6/0.03	2CSR252001R1064		0.440	1
		10	869603	DS202 AC-C10/0.03	2CSR252001R1104		0.440	1
		13	869702	DS202 AC-C13/0.03	2CSR252001R1134		0.440	1
		16	869801	DS202 AC-C16/0.03	2CSR252001R1164		0.440	1
		20	869900	DS202 AC-C20/0.03	2CSR252001R1204		0.440	1
		25	870005	DS202 AC-C25/0.03	2CSR252001R1254		0.440	1
		32	870104	DS202 AC-C32/0.03	2CSR252001R1324		0.440	1
		40	870203	DS202 AC-C40/0.03	2CSR252001R1404		0.440	1
		50 ①	870302	DS202 AC-C50/0.03	2CSR252001R1504		0.440	1
		63 ①	870401	DS202 AC-C63/0.03	2CSR252001R1634		0.440	1



DS 204

Number of poles	Rated residual current I $\Delta$ n mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3	30	6	871507	DS203 AC-C6/0.03	2CSR253001R1064		0.610	1
		10	871606	DS203 AC-C10/0.03	2CSR253001R1104		0.610	1
		13	871705	DS203 AC-C13/0.03	2CSR253001R1134		0.610	1
		16	871804	DS203 AC-C16/0.03	2CSR253001R1164		0.610	1
		20	871903	DS203 AC-C20/0.03	2CSR253001R1204		0.610	1
		25	872009	DS203 AC-C25/0.03	2CSR253001R1254		0.610	1
		32	872108	DS203 AC-C32/0.03	2CSR253001R1324		0.610	1
		40	872207	DS203 AC-C40/0.03	2CSR253001R1404		0.610	1
		50 ①	872306	DS203 AC-C50/0.03	2CSR253001R1504		0.650	1
		63 ①	872405	DS203 AC-C63/0.03	2CSR253001R1634		0.650	1

Number of poles	Rated residual current I $\Delta$ n mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	6	873501	DS204 AC-C6/0.03	2CSR254001R1064		0.780	1
		10	873600	DS204 AC-C10/0.03	2CSR254001R1104		0.780	1
		13	873709	DS204 AC-C13/0.03	2CSR254001R1134		0.780	1
		16	873808	DS204 AC-C16/0.03	2CSR254001R1164		0.780	1
		20	873907	DS204 AC-C20/0.03	2CSR254001R1204		0.780	1
		25	874003	DS204 AC-C25/0.03	2CSR254001R1254		0.780	1
		32	874102	DS204 AC-C32/0.03	2CSR254001R1324		0.780	1
		40	874201	DS204 AC-C40/0.03	2CSR254001R1404		0.780	1
		50 ①	874300	DS204 AC-C50/0.03	2CSR254001R1504		0.825	1
		63 ①	874409	DS204 AC-C63/0.03	2CSR254001R1634		0.825	1

① provided with additional terminals for remote tripping

## RCBOs

DS 200 series 6000 - A  type, B characteristic



DS 202

### DS 200 A type, B characteristic

Function: protection 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.

Application: commercial, industrial.

Standard: IEC/EN 61009-1; IEC/EN 61009-2-1 and IEC/EN 60947-2

Icn = 6 kA



DS 203

Number of poles	Rated residual current I $\Delta$ n mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	40	858201	DS202 A-B40/0.03	2CSR252101R1405		0.440	1
		50 ①	858300	DS202 A-B50/0.03	2CSR252101R1505			
		63 ①	858409	DS202 A-B63/0.03	2CSR252101R1635			



DS 204

Number of poles	Rated residual current I $\Delta$ n mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3	30	6	858508	DS203 A-B6/0.03	2CSR253101R1065		0.610	1
		10	858607	DS203 A-B10/0.03	2CSR253101R1105			
		13	858706	DS203 A-B13/0.03	2CSR253101R1135			
		16	858805	DS203 A-B16/0.03	2CSR253101R1165			
		20	858904	DS203 A-B20/0.03	2CSR253101R1205			
		25	859000	DS203 A-B25/0.03	2CSR253101R1255			
		32	859109	DS203 A-B32/0.03	2CSR253101R1325			
		40	859208	DS203 A-B40/0.03	2CSR253101R1405			
		50 ①	859307	DS203 A-B50/0.03	2CSR253101R1505			
63 ①	859406	DS203 A-B63/0.03	2CSR253101R1635					

Number of poles	Rated residual current I $\Delta$ n mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	6	859505	DS204 A-B6/0.03	2CSR254101R1065		0.780	1
		10	859604	DS204 A-B10/0.03	2CSR254101R1105			
		13	859703	DS204 A-B13/0.03	2CSR254101R1135			
		16	859802	DS204 A-B16/0.03	2CSR254101R1165			
		20	859901	DS204 A-B20/0.03	2CSR254101R1205			
		25	860006	DS204 A-B25/0.03	2CSR254101R1255			
		32	860105	DS204 A-B32/0.03	2CSR254101R1325			
		40	860204	DS204 A-B40/0.03	2CSR254101R1405			
		50 ①	860303	DS204 A-B50/0.03	2CSR254101R1505			
63 ①	860402	DS204 A-B63/0.03	2CSR254101R1635					

① provided with additional terminals for remote tripping



## RCBOs

DS 200 series 6000 - A  type, C characteristic



DS 202

### DS 200 A type, C characteristic

Function: protection 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.

Application: commercial, industrial.

Standard: IEC/EN 61009-1; IEC/EN 61009-2-1 and IEC/EN 60947-2

I<sub>cn</sub> = 6 kA



DS 203

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	40	861201	DS202 A-C40/0.03	2CSR252101R1404		0.440	1
		50 ①	861300	DS202 A-C50/0.03	2CSR252101R1504			
		63 ①	861409	DS202 A-C63/0.03	2CSR252101R1634			



DS 204

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3	30	6	861508	DS203 A-C6/0.03	2CSR253101R1064		0.610	1
		10	861607	DS203 A-C10/0.03	2CSR253101R1104			
		13	861706	DS203 A-C13/0.03	2CSR253101R1134			
		16	861805	DS203 A-C16/0.03	2CSR253101R1164			
		20	861904	DS203 A-C20/0.03	2CSR253101R1204			
		25	862000	DS203 A-C25/0.03	2CSR253101R1254			
		32	862109	DS203 A-C32/0.03	2CSR253101R1324			
		40	862208	DS203 A-C40/0.03	2CSR253101R1404			
		50 ①	862307	DS203 A-C50/0.03	2CSR253101R1504			
		63 ①	862406	DS203 A-C63/0.03	2CSR253101R1634			

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	6	862505	DS204 A-C6/0.03	2CSR254101R1064		0.780	1
		10	862604	DS204 A-C10/0.03	2CSR254101R1104			
		13	862703	DS204 A-C13/0.03	2CSR254101R1134			
		16	862802	DS204 A-C16/0.03	2CSR254101R1164			
		20	862901	DS204 A-C20/0.03	2CSR254101R1204			
		25	863007	DS204 A-C25/0.03	2CSR254101R1254			
		32	863106	DS204 A-C32/0.03	2CSR254101R1324			
		40	863205	DS204 A-C40/0.03	2CSR254101R1404			
		50 ①	863304	DS204 A-C50/0.03	2CSR254101R1504			
		63 ①	863403	DS204 A-C63/0.03	2CSR254101R1634			

① provided with additional terminals for remote tripping

## RCBOs

DS 200 series 6000 - A  type, K characteristic



DS 202

### DS 200 A type, K characteristic

Function: protection and control against overloads and short-circuit in systems where motors, transformers and auxiliary circuits are present. Advantages: no unwanted release in case of currents peak up to  $8 \times I_n$ , according to the series; thanks to the high sensibility bimetal, the K curve switches offer protection of the sensible elements from overcurrents; they also allow the best protection of cables and lines.

**Application: commercial, industrial.**

**Standard: IEC/EN 60947-2**

**I<sub>cn</sub> = 6 kA**



DS 203

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	6	930303	DS202 A-K6/0.03	2CSR252101R1067		0.475	1
		10	900702	DS202 A-K10/0.03	2CSR252101R1107		0.475	1
		13	930402	DS202 A-K13/0.03	2CSR252101R1137		0.475	1
		16	930501	DS202 A-K16/0.03	2CSR252101R1167		0.475	1
		20	930600	DS202 A-K20/0.03	2CSR252101R1207		0.475	1
		25	930709	DS202 A-K25/0.03	2CSR252101R1257		0.475	1
		32	930808	DS202 A-K32/0.03	2CSR252101R1327		0.475	1
		40	930907	DS202 A-K40/0.03	2CSR252101R1407		0.475	1
		50 ①	931003	DS202 A-K50/0.03	2CSR252101R1507		0.475	1
63 ①	931102	DS202 A-K63/0.03	2CSR252101R1637		0.475	1		



DS 204

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	6	931201	DS204 A-K6/0.03	2CSR254101R1067		0.775	1
		10	931300	DS204 A-K10/0.03	2CSR254101R1107		0.775	1
		13	931409	DS204 A-K13/0.03	2CSR254101R1137		0.775	1
		16	931508	DS204 A-K16/0.03	2CSR254101R1167		0.775	1
		20	931607	DS204 A-K20/0.03	2CSR254101R1207		0.775	1
		25	931706	DS204 A-K25/0.03	2CSR254101R1257		0.775	1
		32	931805	DS204 A-K32/0.03	2CSR254101R1327		0.775	1
		40	931904	DS204 A-K40/0.03	2CSR254101R1407		0.775	1
		50 ①	932000	DS204 A-K50/0.03	2CSR254101R1507		0.775	1
63 ①	932109	DS204 A-K63/0.03	2CSR254101R1637		0.775	1		

① provided with additional terminals for remote tripping

## RCBOs

DS 200 M series 10000 - AC  type, B characteristic



DS 202

### DS 200 M AC type, B characteristic

Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts.

Application: commercial, industrial.

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

I<sub>cn</sub> = 10 kA



DS 203

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	6	932208	DS202 M AC-B6/0.03	2CSR272001R1065	0.440	1	1
		10	932307	DS202 M AC-B10/0.03	2CSR272001R1105			
		13	932406	DS202 M AC-B13/0.03	2CSR272001R1135			
		16	932505	DS202 M AC-B16/0.03	2CSR272001R1165			
		20	932604	DS202 M AC-B20/0.03	2CSR272001R1205			
		25	932703	DS202 M AC-B25/0.03	2CSR272001R1255			
		32	932802	DS202 M AC-B32/0.03	2CSR272001R1325			
		40	932901	DS202 M AC-B40/0.03	2CSR272001R1405			
		50 ①	933007	DS202 M AC-B50/0.03	2CSR272001R1505			
		63 ①	933106	DS202 M AC-B63/0.03	2CSR272001R1635			



DS 204

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3	30	6	933205	DS203 M AC-B6/0.03	2CSR273001R1065	0.610	1	1
		10	933304	DS203 M AC-B10/0.03	2CSR273001R1105			
		13	933403	DS203 M AC-B13/0.03	2CSR273001R1135			
		16	933502	DS203 M AC-B16/0.03	2CSR273001R1165			
		20	933601	DS203 M AC-B20/0.03	2CSR273001R1205			
		25	933700	DS203 M AC-B25/0.03	2CSR273001R1255			
		32	933809	DS203 M AC-B32/0.03	2CSR273001R1325			
		40	933908	DS203 M AC-B40/0.03	2CSR273001R1405			
		50 ①	934004	DS203 M AC-B50/0.03	2CSR273001R1505			
		63 ①	934103	DS203 M AC-B63/0.03	2CSR273001R1635			

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	6	934202	DS204 M AC-B6/0.03	2CSR274001R1065	0.780	1	1
		10	934301	DS204 M AC-B10/0.03	2CSR274001R1105			
		13	934400	DS204 M AC-B13/0.03	2CSR274001R1135			
		16	934509	DS204 M AC-B16/0.03	2CSR274001R1165			
		20	934608	DS204 M AC-B20/0.03	2CSR274001R1205			
		25	934707	DS204 M AC-B25/0.03	2CSR274001R1255			
		32	934806	DS204 M AC-B32/0.03	2CSR274001R1325			
		40	934905	DS204 M AC-B40/0.03	2CSR274001R1405			
		50 ①	935001	DS204 M AC-B50/0.03	2CSR274001R1505			
		63 ①	935100	DS204 M AC-B63/0.03	2CSR274001R1635			

① provided with additional terminals for remote tripping

## RCBOs

DS 200 M series 10000 - AC  type, C characteristic



DS 202

### DS 200 M AC type, C characteristic

Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct contacts.

Application: commercial, industrial.

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

I<sub>cn</sub> = 10 kA



DS 203

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	6	851509	DS202 M AC-C6/0.03	2CSR272001R1064		0.440	1
		10	851608	DS202 M AC-C10/0.03	2CSR272001R1104		0.440	1
		13	851707	DS202 M AC-C13/0.03	2CSR272001R1134		0.440	1
		16	851806	DS202 M AC-C16/0.03	2CSR272001R1164		0.440	1
		20	851905	DS202 M AC-C20/0.03	2CSR272001R1204		0.440	1
		25	852001	DS202 M AC-C25/0.03	2CSR272001R1254		0.440	1
		32	852100	DS202 M AC-C32/0.03	2CSR272001R1324		0.440	1
		40	852209	DS202 M AC-C40/0.03	2CSR272001R1404		0.440	1
		50 ①	852308	DS202 M AC-C50/0.03	2CSR272001R1504		0.440	1
63 ①	852407	DS202 M AC-C63/0.03	2CSR272001R1634		0.440	1		



DS 204

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3	30	6	852506	DS203 M AC-C6/0.03	2CSR273001R1064		0.610	1
		10	852605	DS203 M AC-C10/0.03	2CSR273001R1104		0.610	1
		13	852704	DS203 M AC-C13/0.03	2CSR273001R1134		0.610	1
		16	852803	DS203 M AC-C16/0.03	2CSR273001R1164		0.610	1
		20	852902	DS203 M AC-C20/0.03	2CSR273001R1204		0.610	1
		25	853008	DS203 M AC-C25/0.03	2CSR273001R1254		0.610	1
		32	853107	DS203 M AC-C32/0.03	2CSR273001R1324		0.610	1
		40	853206	DS203 M AC-C40/0.03	2CSR273001R1404		0.610	1
		50 ①	853305	DS203 M AC-C50/0.03	2CSR273001R1504		0.650	1
63 ①	853404	DS203 M AC-C63/0.03	2CSR273001R1634		0.650	1		

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	6	853503	DS204 M AC-C6/0.03	2CSR274001R1064		0.780	1
		10	853602	DS204 M AC-C10/0.03	2CSR274001R1104		0.780	1
		13	853701	DS204 M AC-C13/0.03	2CSR274001R1134		0.780	1
		16	853800	DS204 M AC-C16/0.03	2CSR274001R1164		0.780	1
		20	853909	DS204 M AC-C20/0.03	2CSR274001R1204		0.780	1
		25	854005	DS204 M AC-C25/0.03	2CSR274001R1254		0.780	1
		32	854104	DS204 M AC-C32/0.03	2CSR274001R1324		0.780	1
		40	854203	DS204 M AC-C40/0.03	2CSR274001R1404		0.780	1
		50 ①	854302	DS204 M AC-C50/0.03	2CSR274001R1504		0.825	1
63 ①	854401	DS204 M AC-C63/0.03	2CSR274001R1634		0.825	1		

① provided with additional terminals for remote tripping

## RCBOs

DS 200 M series 10000 - A  type, B characteristic



DS 202

### DS 200 M A type, B characteristic

Function: protection 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.

Application: commercial, industrial.

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

I<sub>cn</sub> = 10 kA



DS 203

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	40	846208	DS202 M A-B40/0.03	2CSR272101R1405		0.440	1
		50 ①	846307	DS202 M A-B50/0.03	2CSR272101R1505			
		63 ①	846406	DS202 M A-B63/0.03	2CSR272101R1635			



DS 204

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3	30	6	846505	DS203 M A-B6/0.03	2CSR273101R1065		0.610	1
		10	846604	DS203 M A-B10/0.03	2CSR273101R1105			
		13	846703	DS203 M A-B13/0.03	2CSR273101R1135			
		16	846802	DS203 M A-B16/0.03	2CSR273101R1165			
		20	846901	DS203 M A-B20/0.03	2CSR273101R1205			
		25	847007	DS203 M A-B25/0.03	2CSR273101R1255			
		32	847106	DS203 M A-B32/0.03	2CSR273101R1325			
		40	847205	DS203 M A-B40/0.03	2CSR273101R1405			
		50 ①	847304	DS203 M A-B50/0.03	2CSR273101R1505			
63 ①	847403	DS203 M A-B63/0.03	2CSR273101R1635					

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	6	847502	DS204 M A-B6/0.03	2CSR274101R1065		0.780	1
		10	847601	DS204 M A-B10/0.03	2CSR274101R1105			
		13	847700	DS204 M A-B13/0.03	2CSR274101R1135			
		16	847809	DS204 M A-B16/0.03	2CSR274101R1165			
		20	847908	DS204 M A-B20/0.03	2CSR274101R1205			
		25	848004	DS204 M A-B25/0.03	2CSR274101R1255			
		32	848103	DS204 M A-B32/0.03	2CSR274101R1325			
		40	848202	DS204 M A-B40/0.03	2CSR274101R1405			
		50 ①	848301	DS204 M A-B50/0.03	2CSR274101R1505			
63 ①	848400	DS204 M A-B63/0.03	2CSR274101R1635					

① provided with additional terminals for remote tripping

## RCBOs

DS 200 M series 10000 - A  type, C characteristic



DS 202

### DS 200 M A type, C characteristic

Function: protection 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.

Application: commercial, industrial.

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

I<sub>cn</sub> = 10 kA



DS 203

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
2	30	40	849209	DS202 M A-C40/0.03	2CSR272101R1404		0.440	1
		50 ①	849308	DS202 M A-C50/0.03	2CSR272101R1504			
		63 ①	849407	DS202 M A-C63/0.03	2CSR272101R1634			

Number of poles	Rated residual current I <sub>Δn</sub> mA	Rated current I <sub>n</sub> A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
3	30	6	849506	DS203 M A-C6/0.03	2CSR273101R1064		0.610	1
		10	849605	DS203 M A-C10/0.03	2CSR273101R1104			
		13	849704	DS203 M A-C13/0.03	2CSR273101R1134			
		16	849803	DS203 M A-C16/0.03	2CSR273101R1164			
		20	849902	DS203 M A-C20/0.03	2CSR273101R1204			
		25	850007	DS203 M A-C25/0.03	2CSR273101R1254			
		32	850106	DS203 M A-C32/0.03	2CSR273101R1324			
		40	850205	DS203 M A-C40/0.03	2CSR273101R1404			
		50 ①	850304	DS203 M A-C50/0.03	2CSR273101R1504			
		63 ①	850403	DS203 M A-C63/0.03	2CSR273101R1634			

① provided with additional terminals for remote tripping

## RCBOs

DS 200 M series 10000 - A  type, C characteristic



DS 204

Number of poles	Rated residual current $I_{\Delta n}$ mA	Rated current In A	Bbn 8012542 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
				Type code	Order code			
4	30	6	850502	DS204 M A-C6/0.03	2CSR274101R1064		0.780	1
		10	850601	DS204 M A-C10/0.03	2CSR274101R1104		0.780	1
		13	850700	DS204 M A-C13/0.03	2CSR274101R1134		0.780	1
		16	850809	DS204 M A-C16/0.03	2CSR274101R1164		0.780	1
		20	850908	DS204 M A-C20/0.03	2CSR274101R1204		0.780	1
		25	851004	DS204 M A-C25/0.03	2CSR274101R1254		0.780	1
		32	851103	DS204 M A-C32/0.03	2CSR274101R1324		0.780	1
		40	851202	DS204 M A-C40/0.03	2CSR274101R1404		0.780	1
		50 ①	851301	DS204 M A-C50/0.03	2CSR274101R1504		0.825	1
		63 ①	851400	DS204 M A-C63/0.03	2CSR274101R1634		0.825	1

① provided with additional terminals for remote tripping

## RCBOs

### DS800 technical features



DS800S

		Standards		
Electrical features	Operating characteristic: type (wave form of the earth leakage sensed)			
	Poles			
	Rated sensitivity $I_{\Delta n}$		A	
	Rated current $I_n$		A	
	Rated voltage $U_e$		V	
	Insulation voltage $U_i$		V	
	Operating voltage of circuit test $U_t$		V	
	Rated frequency		Hz	
	Rated ultimate short-circuit breaking capacity $I_{cu}$	240/415 V AC	kA	
		254/440 V AC	kA	
		289/500 V AC	kA	
		400/690 V AC	kA	
	Rated service short-circuit breaking capacity $I_{cs}$	240/415 V AC	kA	
		254/440 V AC	kA	
		289/500 V AC	kA	
		400/690 V AC	kA	
	Rated impulse withstand voltage (1.2/50) $U_{imp}$		kV	
Dielectric test voltage at ind. freq. for 1 min.		kV		
Thermomagnetic release characteristic	B: $3 I_n \leq I_m \leq 5 I_n$			
	C: $5 I_n \leq I_m \leq 10 I_n$			
	D**: $10 I_n \leq I_m \leq 20 I_n$			
	K**: $8 I_n \leq I_m \leq 14 I_n$			
Surge current resistance acc. to VDE 0432 Part 2 (wave 8/20)		A		
Mechanical features	Toggle			
	Electrical life			
	Mechanical life			
	Protection degree	housing		
		terminals		
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30		°C/RH	
	Ambient temperature (with daily average $\leq + 35$ °C)		°C	
Storage temperature		°C		
Installation	Terminal size for cables	flexible	mm <sup>2</sup>	
		rigid	mm <sup>2</sup>	
	Tightening torque		Nm	
Dimensions and weight	Dimensions (H x D x W)	2P	mm	
		3P	mm	
		4P	mm	
	Weight	2P	g	
		3P	g	
4P		g		
Combination with auxiliary elements	Combinable with:	auxiliary contact		
		signal contact/auxiliary switch		
		shunt trip		
		undervoltage release		

\* 1A on 2P and 4P versions, while 0.3A only on 4P ones.

\*\* as specified in standard IEC/EN 60947-2 the device withstands  $I_m \leq 6 I_n$  with guaranteed non intervention



## RCBOs

### DS800 technical features

DS800S A	DS800N A	DS800S A S	DS800N A S	DS800S A AP-R	DS800N A AP-R
IEC/EN 60947-2					
A		A		A	
2P, 3P, 4P		2P,4P		2P, 3P, 4P	
0.3		0.3-1(*)		0.03	
125					
230/400-240/415-400/690					
690					
195-690					
50...60					
50	36	50	36	50	36
30	20	30	20	30	20
10	10	10	10	10	10
4.5	4.5	4.5	4.5	4.5	4.5
40	30	40	30	40	30
15	10	15	10	15	10
5	5	5	5	5	5
3	3	3	3	3	3
6					
2.5					
■	■	■	■	■	■
■	■	■	■	■	■
■	■	■	■	■	■
■		■		■	
NA	NA	5000	5000	3000	3000
black (MCB) sealable in ON-OFF position + blue (RCD) operating just from OFF position					
10000					
20000					
IP4X					
IP2X					
28 cycles with 55°C/90-96% and 25°C/95-100%					
-25...+60					
-40...+70					
6...50					
6...70					
min. 3 / max. 4					
on DIN rail EN 60715 (35 mm) by means of rapid fixing device					
108,2 x 82,3 x 133.5					
108,2 x 82,3 x 196					
108,2 x 82,3 x 223					
790					
1140					
1440					
yes					
yes					
yes					
yes					
yes					

## RCBOs

DS800S series 50000 A  type B, C, D and K characteristic



DS802S

### DS800S, A type

Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts; command and isolation of resistive and inductive loads.

Application: industrial.

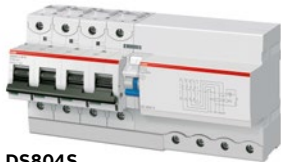
Standard: IEC/EN 60947-2

Icu = 50 kA



DS803S

Number of poles	Curve	Rated residual current I $\Delta$ n mA	Rated current In A	Bbn 7612271 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
					Type code	Order code			
2	B	300	125	211721	DS802S-B125/0.3A	2CCA862005R0845	0.790	1	
	C	300	125	211738	DS802S-C125/0.3A	2CCA862005R0844			
	D	300	125	211745	DS802S-D125/0.3A	2CCA862005R0841			
	K	300	125	211752	DS802S-K125/0.3A	2CCA862005R0647			



DS804S

Number of poles	Curve	Rated residual current I $\Delta$ n mA	Rated current In A	Bbn 7612271 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
					Type code	Order code			
3	B	300	125	211769	DS803S-B125/0.3A	2CCA863005R0845	1.14	1	
	C	300	125	211776	DS803S-C125/0.3A	2CCA863005R0844			
	D	300	125	211783	DS803S-D125/0.3A	2CCA863005R0841			
	K	300	125	211790	DS803S-K125/0.3A	2CCA863005R0647			

Number of poles	Curve	Rated residual current I $\Delta$ n mA	Rated current In A	Bbn 7612271 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
					Type code	Order code			
4	B	300	125	211806	DS804S-B125/0.3A	2CCA864005R0845	1.44	1	
	C	300	125	211813	DS804S-C125/0.3A	2CCA864005R0844			
	D	300	125	211820	DS804S-D125/0.3A	2CCA864005R0841			
	K	300	125	211837	DS804S-K125/0.3A	2CCA864005R0647			

## RCBOs

DS800N series  $\boxed{36000}$  A  type B, C and D characteristics



DS802N

### DS800N, A type

Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts; command and isolation of resistive and inductive loads.

**Application: industrial.**

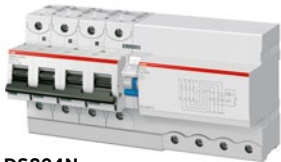
**Standard: IEC/EN 60947-2**

**Icu = 36 kA**



DS803N

Number of poles	Curve	Rated residual current I $\Delta$ n mA	Rated current In A	Bbn 7612271 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
					Type code	Order code			
2	B	300	125	211844	DS802N-B125/0.3A	2CCA892005R0845		0.790	1
	C	300	125	211851	DS802N-C125/0.3A	2CCA892005R0844		0.790	1
	D	300	125	211868	DS802N-D125/0.3A	2CCA892005R0841		0.790	1



DS804N

Number of poles	Curve	Rated residual current I $\Delta$ n mA	Rated current In A	Bbn 7612271 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
					Type code	Order code			
3	B	300	125	211875	DS803N-B125/0.3A	2CCA893005R0845		1.14	1
	C	300	125	211882	DS803N-C125/0.3A	2CCA893005R0844		1.14	1
	D	300	125	211899	DS803N-D125/0.3A	2CCA893005R0841		1.14	1

Number of poles	Curve	Rated residual current I $\Delta$ n mA	Rated current In A	Bbn 7612271 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
					Type code	Order code			
4	B	300	125	211905	DS804N-B125/0.3A	2CCA894005R0845		1.44	1
	C	300	125	211912	DS804N-C125/0.3A	2CCA894005R0844		1.44	1
	D	300	125	211929	DS804N-D125/0.3A	2CCA894005R0841		1.44	1

## RCBOs

DS800S series 50000 A  type selective B, C, D and K characteristics



DS802S

### DS800S, A selective type

Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents with an intentional tripping delay, which allows to realize the selectivity with downstream instantaneous devices (for more information about selectivity see the technical guide); protection against indirect contacts; command and isolation of resistive and inductive loads.

**Application: industrial.**

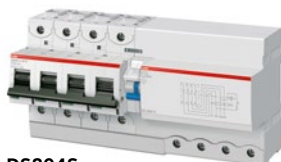
**Standard: IEC/EN 60947-2**

**Icu = 50 kA**



DS803S

Number of poles	Curve	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 7612271 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
					Type code	Order code			
2	B	1000	125	211516	DS802S-B125/1AS	2CCC862006R0845		0.790	1
	C	1000	125	211523	DS802S-C125/1AS	2CCC862006R0844			
	D	1000	125	211530	DS802S-D125/1AS	2CCC862006R0841			
	K	1000	125	211547	DS802S-K125/1AS	2CCC862006R0647			



DS804S

Number of poles	Curve	Rated residual current $I_{\Delta n}$ mA	Rated current $I_n$ A	Bbn 7612271 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
					Type code	Order code			
4	B	300	125	211554	DS804S-B125/0.3AS	2CCC864005R0845		1.44	1
		1000	125	211592	DS804S-B125/1AS	2CCC864006R0845			
	C	300	125	211561	DS804S-C125/0.3AS	2CCC864005R0844			
		1000	125	211608	DS804S-C125/1AS	2CCC864006R0844			
	D	300	125	211578	DS804S-D125/0.3AS	2CCC864005R0841			
		1000	125	211615	DS804S-D125/1AS	2CCC864006R0841			
	K	300	125	211685	DS804S-K125/0.3AS	2CCC864005R0647			
		1000	125	211622	DS804S-K125/1AS	2CCC864006R0647			

## RCBOs

DS800N series  $\boxed{36000}$  A  $\boxed{\text{A}}$  type selective B, C and D characteristics



DS802N

### DS800N, A selective type

Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents with an intentional tripping delay, which allows to realize the selectivity with downstream instantaneous devices (for more information about selectivity see the technical guide); protection against indirect contacts; command and isolation of resistive and inductive loads.

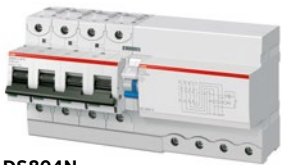
**Application: industrial.**

**Standard: IEC/EN 60947-2**

**Icu = 36 kA**



DS803N



DS804N

Number of poles	Curve	Rated residual current I $\Delta$ n mA	Rated current In A	Bbn 7612271 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
					Type code	Order code			
2	B	1000	125	211639	DS802N-B125/1AS	2CCC892006R0845	0.790	1	
	C	1000	125	211646	DS802N-C125/1AS	2CCC892006R0844			
	D	1000	125	211653	DS802N-D125/1AS	2CCC892006R0841			

Number of poles	Curve	Rated residual current I $\Delta$ n mA	Rated current In A	Bbn 7612271 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
					Type code	Order code			
4	B	300	125	211660	DS804N-B125/0.3AS	2CCC894005R0845	1.44	1	
		1000	125	211691	DS804N-B125/1AS	2CCC894006R0845			
	C	300	125	211677	DS804N-C125/0.3AS	2CCC894005R0844	1.44	1	
		1000	125	211707	DS804N-C125/1AS	2CCC894006R0844			
	D	300	125	211684	DS804N-D125/0.3AS	2CCC894005R0841	1.44	1	
		1000	125	211714	DS804N-D125/1AS	2CCC894006R0841			

## RCBOs

DS800S series 50000 A  type, AP-R (high immunity) B, C, D and K characteristics



DS802S

### DS800S AP-R, A type

Function: protection against the effects of sinusoidal alternating earth fault currents, providing the best compromise between safety and continuity in the service thanks to the resistance to unwanted trippings; protection against indirect contacts and additional protection against direct contacts ( $I\Delta n=30$  mA); protection and isolation of resistive and inductive loads.

**Application: industrial.**

**Standard: IEC/EN 60947-2**

**Icu = 50 kA**



DS803S



DS804S

Number of poles	Curve	Rated residual current $I\Delta n$ mA	Rated current In A	Bbn 7612271 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
					Type code	Order code			
2	B	30	125	211301	DS802SB125 /03AP-R	2CCB862004R0845	0.790	1	
	C	30	125	211318	DS802SC125 /03AP-R	2CCB862004R0844			
	D	30	125	211325	DS802SD125 /03AP-R	2CCB862004R0841			
	K	30	125	211332	DS802SK125 /03AP-R	2CCB862004R0647			

Number of poles	Curve	Rated residual current $I\Delta n$ mA	Rated current In A	Bbn 7612271 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
					Type code	Order code			
3	B	30	125	211349	DS803SB125 /03AP-R	2CCB863004R0845	1.14	1	
	C	30	125	211356	DS803SC125 /03AP-R	2CCB863004R0844			
	D	30	125	211363	DS803SD125 /03AP-R	2CCB863004R0841			
	K	30	125	211370	DS803SK125 /03AP-R	2CCB863004R0647			

Number of poles	Curve	Rated residual current $I\Delta n$ mA	Rated current In A	Bbn 7612271 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
					Type code	Order code			
4	B	30	125	211387	DS804SB125 /03AP-R	2CCB864004R0845	1.44	1	
	C	30	125	211394	DS804SC125 /03AP-R	2CCB864004R0844			
	D	30	125	211400	DS804SD125 /03AP-R	2CCB864004R0841			
	K	30	125	211417	DS804SK125 /03AP-R	2CCB864004R0647			

## RCBOs

DS800N series  $\boxed{36000}$  A  $\boxed{\text{A}}$  type, AP-R (high immunity) B, C and D characteristics



DS802N

### DS800N AP-R, A type

Function: protection against the effects of sinusoidal alternating earth fault currents, providing the best compromise between safety and continuity in the service thanks to the resistance to unwanted trippings; protection against indirect contacts and additional protection against direct contacts ( $I\Delta n=30$  mA); protection and isolation of resistive and inductive loads.

**Application: industrial.**

**Standard: IEC/EN 60947-2**

**Icu = 36 kA**



DS803N



DS804N

Number of poles	Curve	Rated residual current $I\Delta n$ mA	Rated current In A	Bbn 7612271 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
					Type code	Order code			
2	B	30	125	211424	DS802NB125/.03AP-R	2CCB892004R0845	0.790	1	
	C	30	125	211431	DS802NC125/.03AP-R	2CCB892004R0844			
	D	30	125	211448	DS802ND125/.03AP-R	2CCB892004R0841			

Number of poles	Curve	Rated residual current $I\Delta n$ mA	Rated current In A	Bbn 7612271 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
					Type code	Order code			
3	B	30	125	211455	DS803NB125/.03AP-R	2CCB893004R0845	1.14	1	
	C	30	125	211462	DS803NC125/.03AP-R	2CCB893004R0844			
	D	30	125	211479	DS803ND125/.03AP-R	2CCB893004R0841			

Number of poles	Curve	Rated residual current $I\Delta n$ mA	Rated current In A	Bbn 7612271 EAN	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
					Type code	Order code			
4	B	30	125	211486	DS804NB125/.03AP-R	2CCB894004R0845	1.44	1	
	C	30	125	211493	DS804NC125/.03AP-R	2CCB894004R0844			
	D	30	125	211509	DS804ND125/.03AP-R	2CCB894004R0841			

# eRCBO, the value of quality

## Made with attention to details

### Space for insulated screwdrivers

The larger neutral hole allows the use of an insulated screwdriver to tighten the screw of neutral terminals, ensuring maximum operation safety. All versions are equipped with cage type terminals (16mm<sup>2</sup> load side), with tightening torque of 1.2 Nm.

### Product coding

All the necessary technical and installation information can be found directly on the device.

Product range, tripping characteristics, rated currents, sensitivity, type, breaking capacity, rated voltage, order code, EAN code, electrical scheme, reference standards and many other specifications are laser printed on the front and side of units.

### Easy to install

Fast installation is supported by the two flying leads for neutral cable and functional earth, each integrated in the device, which can be directly connected to the main neutral bar and main earth bar.

### Anti counterfeiting

Each DSE201 is equipped with a RFID tag containing a unique serial number assigned by ABB according to ISO/IEC FCD 15693-3 standard in order to authenticate the product. Through this unique serial number, ABB can easily identify counterfeited products and verify the authenticity of each single device.

### In control

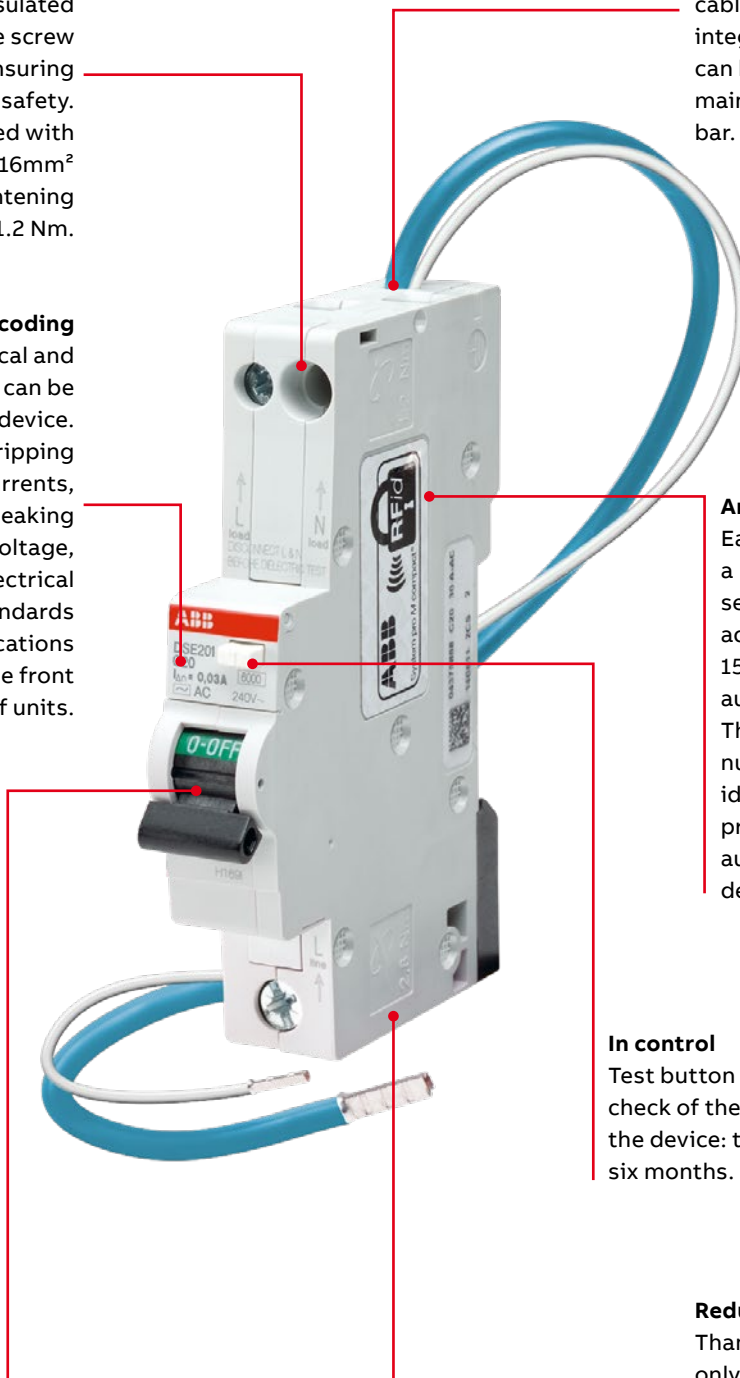
Test button allows the regular check of the functionality of the device: to be pushed every six months.

### Reduced height

Thanks to its reduced height, only 100 mm, DSE201 makes easier wiring operation inside the consumer unit or the distribution board.

### Real contact position indicator on toggle

Directly connected to the moving contact of the device, it indicates the exact position of the contacts at all times (red: closed contacts, green: open contacts).





With its breaking capacity of 6kA in only one module width and 100mm height, the DSE201 series is the perfect solution for a complete protection in residential and light commercial applications. At home, in the office or in a shop,

these devices are essential for the safety of people, utilities and equipment, protecting not only against earth fault residual currents - due to loss of isolation or accidental contact with live parts - but also against overcurrents.



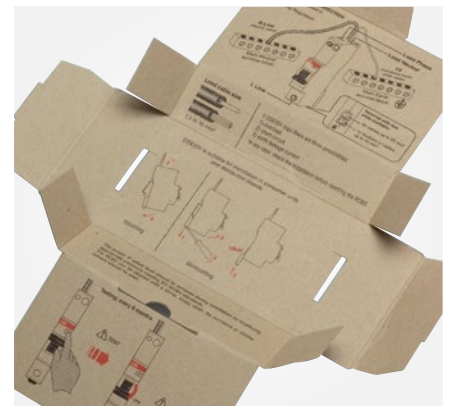
#### Double slot terminal

On the line side, the availability of a terminal with two slots allows to use different types of conductors: one housing is designed for cables up to 25 mm<sup>2</sup>, the other for busbars or cables up to 10 mm<sup>2</sup>.



#### Easy and flexible

The double clip eases dismounting even when the unit is installed in a high density system. A single device can be removed from the cluster without disconnecting other units. The same screwdriver used to tighten terminals can also be used to unlock the DIN rail fixing device of the unit.



#### Environmentally friendly

The user manual is an integral part of the package. The information have been printed inside the box to make easy the reading and to reduce consumption of paper.

## DSE201

### Technical features and overall dimensions

Electrical features		
Standards		IEC 61009-1; IEC 61009-2-2; AS/NZS 61009
Type (wave form of the earth leakage sensed)		AC, A
Number of poles		1P+N
Rated current $I_n$	A	$6 \leq I_n \leq 50$
Rated sensitivity $I_{\Delta n}$	mA	30
Rated voltage $U_e$	V	230-240
Insulation voltage $U_i$	V	500 V AC
Overvoltage category		III
Pollution degree		2
Max. operating voltage	V	264
Min. operating voltage for protection against $I_{\Delta n}$ residual sinusoidal alternating currents	V	85
Operating voltage of circuit test	V	195 - 264
Rated frequency	Hz	50/60
Rated breaking capacity acc. to IEC 61009	ultimate $I_{cn}$	A 6000
Rated residual breaking capacity $I_{\Delta m}$	kA	6
Rated impulse withstand voltage (1.2/50) $U_{imp}$	kV	4 kV (test voltage 6.2kV at sea level, 5kV at 2000m)
Dielectric test voltage at ind. freq. for 1 min.	kV	2.5 kV (50 / 60Hz, 1 min.)
Thermomagnetic release - characteristic	B: $3 I_n \leq I_m \leq 5 I_n$ C: $5 I_n \leq I_m \leq 10 I_n$	■ ■
Surge current resistance (wave 8/20)	A	NA
Mechanical data		
Housing		insulation group II, RAL 7035
Toggle		insulation group IIIA, black, sealable in ON-OFF positions
Contact position indication		CPI on toggle (I ON / 0 OFF)
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

## DSE201

### Technical features and overall dimensions

<b>Installation</b>			
Terminal type	top (load side)		failsafe cage (shock protected)
	bottom (line side)		failsafe bi-directional cylinder-lift terminal (shock protected)
Terminal size for cables	load side (top)	mm <sup>2</sup>	16
	line side (bottom)	mm <sup>2</sup>	25
Terminal size for busbars	load side (top)		only for wire connection
	line side (bottom)	mm <sup>2</sup>	10 (Standard ABB busbar / distribution board system)
Tightening torque	top (load side)	Nm	1.2
	bottom (line side)	Nm	2.8
Neutral load cable	Type		low smoke halogen free
	Lenght	mm	750
	Section	mm <sup>2</sup>	2.5 mm <sup>2</sup> up to 20 A; 4 mm <sup>2</sup> up to 50 A
	Color		blue
Functional earth cable	Type		low smoke halogen free
	Lenght	mm	750
	Section	mm <sup>2</sup>	0.75
	Color		white
Mounting			on DIN rail EN 60715 (35 mm) by means of fast clip device in consumer unit Type A according to IEC 61439-1&3, BS EN 61439-1&3, in distribution board Type B according to IEC 61439-1&3, BS EN 61439-1&3.
Supply from			bottom terminal
<b>Dimensions and weight</b>			
Dimensions (H x D x W)		mm	100 x 68.9 x 17.6
Weight		g	180
<b>Combination with auxiliary elements</b>			
Combinable with accessories and auxiliaries	no		

## eRCBOs

DSE201 series  $\boxed{6000}$  A  type, B and C characteristic



DSE201 ... A30

### DSE201 A type, B and 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 ( $I_{\Delta n} = 30$  mA).

Application: residential, light commercial

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

$I_{cn} = 6\ 000$  A

N. of poles	Rated residual current $I_{\Delta n}$ [mA]	Rated Current $I_n$ [A]	Bbn 8012542 EAN	Order details		Weight 1 piece [kg]	Pack unit pc.
				Type code	Order code		
<b>B characteristic</b>							
1P+N	30	6	399629	2CSR255151R1065	DSE201 B6 A30	0.180	1
		10	399728	2CSR255151R1105	DSE201 B10 A30	0.180	1
		16	658924	2CSR255151R1165	DSE201 B16 A30	0.180	1
		20	658429	2CSR255151R1205	DSE201 B20 A30	0.180	1
		25	659921	2CSR255151R1255	DSE201 B25 A30	0.180	1
		32	659426	2CSR255151R1325	DSE201 B32 A30	0.180	1
		40	658627	2CSR255151R1405	DSE201 B40 A30	0.180	1
		50	179337	2CSR255151R1505	DSE201 B50 A30	0.200	1
<b>C characteristic</b>							
1P+N	30	6	658122	2CSR255151R1064	DSE201 C6 A30	0.180	1
		10	659624	2CSR255151R1104	DSE201 C10 A30	0.180	1
		16	910923	2CSR255151R1164	DSE201 C16 A30	0.180	1
		20	659129	2CSR255151R1204	DSE201 C20 A30	0.180	1
		25	658726	2CSR255151R1254	DSE201 C25 A30	0.180	1
		32	658221	2CSR255151R1324	DSE201 C32 A30	0.180	1
		40	659723	2CSR255151R1404	DSE201 C40 A30	0.180	1
		50	349532	2CSR255151R1504	DSE201 C50 A30	0.200	1

## eRCBOs

DSE201 series  $\boxed{6000}$  AC  $\sim$  type, B and C characteristic



DSE201 ... A30

### DSE201 AC type, B and C characteristic

Function: protection of end user single-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: residential, light commercial**

**Standard: IEC 61009-1; IEC 61009-2-2**

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

N. of poles	Rated residual current $I_{\Delta n}$ [mA]	Rated Current $I_n$ [A]	Bbn 8012542 EAN	Order details		Weight 1 piece [kg]	Pack unit pc.
				Type code	Order code		
<b>B characteristic</b>							
1P+N	30	6	659228	2CSR255051R1065	DSE201 B6 AC30	0.180	1
		10	658825	2CSR255051R1105	DSE201 B10 AC30	0.180	1
		16	658320	2CSR255051R1165	DSE201 B16 AC30	0.180	1
		20	659822	2CSR255051R1205	DSE201 B20 AC30	0.180	1
		25	659327	2CSR255051R1255	DSE201 B25 AC30	0.180	1
		32	658528	2CSR255051R1325	DSE201 B32 AC30	0.180	1
		40	658023	2CSR255051R1405	DSE201 B40 AC30	0.180	1
		50	179238	2CSR255051R1505	DSE201 B50 AC30	0.200	1
<b>C characteristic</b>							
1P+N	30	6	659525	2CSR255051R1064	DSE201 C6 AC30	0.180	1
		10	910824	2CSR255051R1104	DSE201 C10 AC30	0.180	1
		16	659020	2CSR255051R1164	DSE201 C16 AC30	0.180	1
		20	660125	2CSR255051R1204	DSE201 C20 AC30	0.180	1
		25	660521	2CSR255051R1254	DSE201 C25 AC30	0.180	1
		32	660026	2CSR255051R1324	DSE201 C32 AC30	0.180	1
		40	660422	2CSR255051R1404	DSE201 C40 AC30	0.180	1
		50	349433	2CSR255051R1504	DSE201 C50 AC30	0.200	1

# DSE201 M, unique solution

## Features, which make operations friendly

### Space for insulated screwdrivers

The larger neutral hole allows the use of an insulated screwdriver to tighten the screw of neutral terminals, ensuring maximum operation safety. All versions are equipped with cage type terminals (16mm<sup>2</sup> load side), with tightening torque of 1.2 Nm.

### Earth fault indicator

Blue window in the front of the device to detect any earth fault trip: the cause of trip of the device can be identified in a short time, reducing the downtime for maintenance. DSE201M is the only device equipped with an earth fault indicator between one module width electronic RCBOs.

### Real contact position indicator below the toggle

Directly linked to the moving contact of the device, the green/red window in the front of the device can identify the current position of the contacts (open/closed) independently on the toggle position.

### Combination with auxiliary elements

A platform suitable for quick installation in combination with the standard auxiliary elements that can be mounted with RCDs and MCBs.

### Easy to install

Fast installation is supported by the two flying leads for neutral cable and functional earth, each integrated in the device, which can be directly connected to the main neutral bar and main earth bar.

### Anti counterfeiting

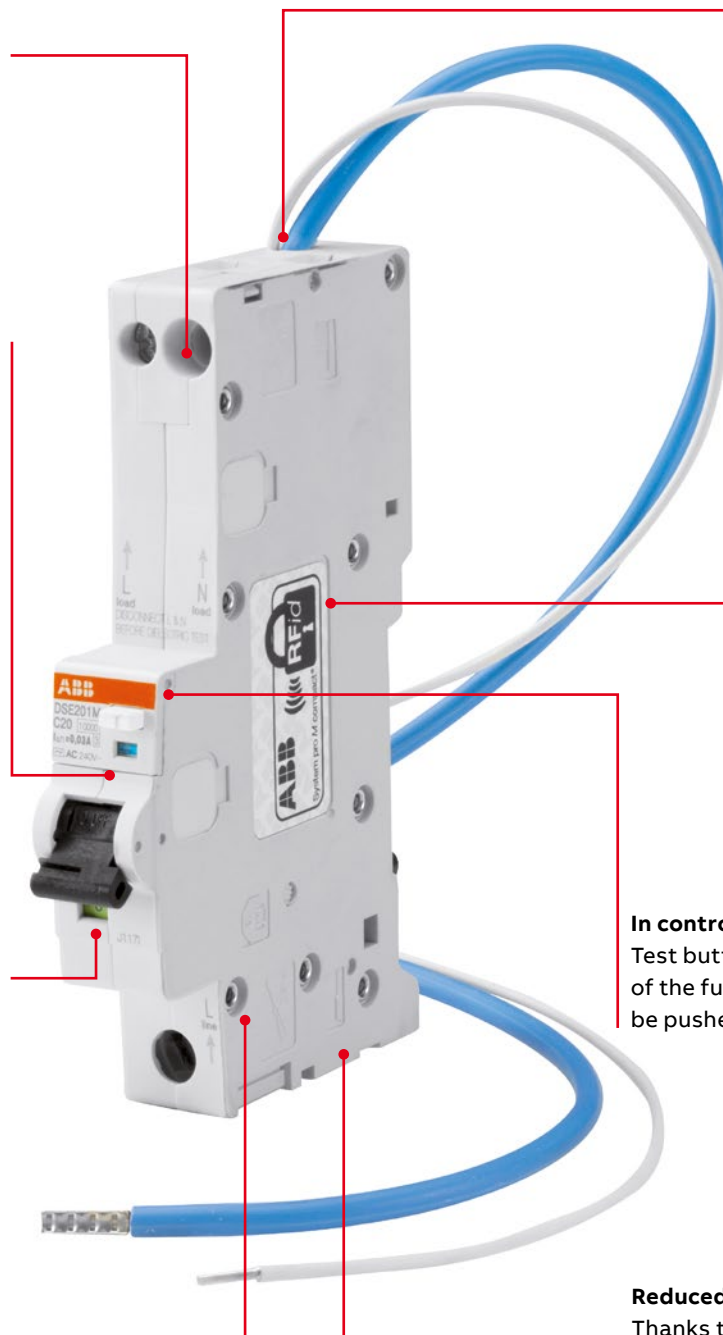
Each DSE201 is equipped with a RFID tag containing a unique serial number assigned by ABB according to ISO/IEC FCD 15693-3 standard in order to authenticate the product. Through this unique serial number, ABB can easily identify counterfeited products and verify the authenticity of each single device.

### In control

Test button allows the regular check of the functionality of the device: to be pushed every six months.

### Reduced height

Thanks to its reduced height, only 115 mm, DSE201M makes easier wiring operation inside the consumer unit or the distribution board.



# DSE201 M, unique solution

## Distinctive features

With its breaking capacity of 10kA in only one module width and 115mm height, DSE201 M series is the perfect solution for a complete protection in commercial and industrial applications, where space optimization is particu-

larly required. The unique earth fault indicator window identifies any earth fault trip, making easier the troubleshooting on the network and reducing the downtime for maintenance.



### Device status at a glance

Earth fault indicator: blue window above the toggle to immediately detect and identify any earth fault trip, reducing downtime for maintenance. Contact position indicator (CPI): green/red window below the toggle to identify the real position of the contacts independently on the toggle position.



### Double slot terminal

Easy to install. Fail-safe line side terminal to avoid improper connection. Two slots of different dimensions (35 mm<sup>2</sup> and 10 mm<sup>2</sup>) available to allow the connection both with cables and busbars.



### Load side

Load side terminal accepts cables, both rigid and flexible up to 16 mm<sup>2</sup>. Flying leads are straight instead of pigtail ones to reduce the space required for wiring operations.



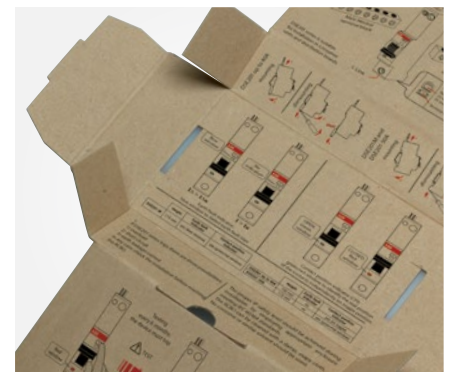
### Easy and flexible

Double and bistable clips with a design for a secure fixing in any type of consumer unit or distribution board. Easy removal from a cluster of RCBOs/ MCBs supplied with Busbars.



### Smart case

Main technical information are laser-printed on the front and left side of product to ensure long readability. On the right side, the tightening torque and the stripping length of the cable for a correct and safety installation of the unit are molded.



### Smart package

Instruction manual printed inside the box with no additional paper wasted. Packaging is glue-less and takes advantage of the adhesive label containing the order information.

## DSE201M

### Technical features and overall dimensions

Electrical features			
Standards			IEC 61009-1 ; IEC 61009-2-2; BS EN 61009-1; AS/NZS 61009
Type (wave form of the earth leakage sensed)			AC, A
Number of poles			1P+N
Rated current $I_n$	A		$6 \leq I_n \leq 50$
Rated sensitivity $I_{\Delta n}$	mA		10-30-100-300
Rated voltage $U_e$	V		230-240
Insulation voltage $U_i$	V		500 V AC
Overvoltage category			III
Pollution degree			2
Max. operating voltage	V		264
Min. operating voltage for protection against $I_{\Delta n}$ residual sinusoidal alternating currents	V		85
Operating voltage of circuit test	V		195-264
Rated frequency	Hz		50/60
Rated breaking capacity acc. to IEC 61009	ultimate $I_{cn}$	A	10000
Rated breaking capacity acc. to IEC 60947-2	ultimate $I_{cu}$	kA	15 ( for $6A \leq I_n \leq 40A$ )
		kA	10 (for $I_n = 50A$ )
	service $I_{cs}$	kA	7.5
Rated residual breaking capacity $I_{\Delta m}$		kA	10
Rated impulse withstand voltage (1.2/50) $U_{imp}$		kV	4 kV (test voltage 6.2kV at sea level, 5kV at 2000m)
Dielectric test voltage at ind. freq. for 1 min.		kV	2.5 kV (50 / 60Hz, 1 min.)
Thermomagnetic release - characteristic	B: $3 I_n \leq I_m \leq 5 I_n$		■
	C: $5 I_n \leq I_m \leq 10 I_n$		■
Surge current resistance (wave 8/20)		A	NA
Mechanical data			
Housing			insulation group II, RAL 7035
Toggle			insulation group II, black, sealable in ON-OFF positions
Earth fault indicator			blue window
Contact position indication			green/red Window
Electrical life		operations	10000
Mechanical life		operations	20000
Protection degree	in enclosure with cover		IP40
	terminals		IP20
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



## DSE201M

### Technical features and overall dimensions

<b>Installation</b>			
Terminal type	top (load side)		failsafe cage (shock protected)
	bottom (line side)		failsafe bi-directional cylinder-lift terminal (shock protected)
Terminal size for cables	load side	mm <sup>2</sup>	16
	line side (solid/flexible)	mm <sup>2</sup>	35/25
Terminal size for busbars	load side		only for wire connection
	line side	mm <sup>2</sup>	10 (Standard ABB busbar / distribution board system)
Tightening torque	top (load side)	Nm	1.2
	bottom (line side)	Nm	2.8
Neutral load cable	Type		low smoke halogen free
	Lenght	mm	750
	Section	mm <sup>2</sup>	2.5 mm <sup>2</sup> up to 20 A; 4 mm <sup>2</sup> up to 50 A
	Color		blue
Functional earth cable	Type		low smoke halogen free
	Lenght	mm	750
	Section	mm <sup>2</sup>	0.75
	Color		white
Mounting	on DIN rail EN 60715 (35 mm) by means of fast clip device in consumer unit Type A according to IEC 61439-1&3, BS EN 61439-1&3 in distribution board Type B according to IEC 61439-1&3, BS EN 61439-1&3		
Supply from	bottom terminal		
<b>Dimensions and weight</b>			
Dimensions (H x D x W)		mm	115 x 68.9 x 17.6
Weight		g	200
<b>Combination with auxiliary elements</b>			
Auxiliary contact	yes		
Signal contact / auxiliary switch	yes		
Shunt trip	yes		
Undervoltage release	yes		
Overvoltage release	yes		
Auxiliary contact for MCBs bottom fitting	yes		

## eRCBOs

DSE201 M series  $10000$  A  type, B characteristic



DSE201 M ... A30

### DSE201 M 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 ( $I_{\Delta n} = 30$  mA).

Application: commercial, industrial

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

$I_{cn} = 10\ 000$  A

N. of poles	Rated residual current $I_{\Delta n}$ [mA]	Rated Current $I_n$ [A]	Bbn 8012542 EAN	Order details		Weight 1 piece [kg]	Pack unit pc.
				Type code	Order code		
<b>B characteristic</b>							
1P+N	10	6	079231	2CSR275151R0065	DSE201 M B6 A10	0.200	1
		10	305033	2CSR275151R0105	DSE201 M B10 A10	0.200	1
		16	305132	2CSR275151R0165	DSE201 M B16 A10	0.200	1
		20	400233	2CSR275151R0205	DSE201 M B20 A10	0.200	1
		25	400035	2CSR275151R0255	DSE201 M B25 A10	0.200	1
		32	400134	2CSR275151R0325	DSE201 M B32 A10	0.200	1
		40	058830	2CSR275151R0405	DSE201 M B40 A10	0.200	1
		50	896531	2CSR275151R0505	DSE201 M B50 A10	0.200	1
1P+N	30	6	830832	2CSR275151R1065	DSE201 M B6 A30	0.200	1
		10	839835	2CSR275151R1105	DSE201 M B10 A30	0.200	1
		16	896739	2CSR275151R1165	DSE201 M B16 A30	0.200	1
		20	768432	2CSR275151R1205	DSE201 M B20 A30	0.200	1
		25	831136	2CSR275151R1255	DSE201 M B25 A30	0.200	1
		32	840138	2CSR275151R1325	DSE201 M B32 A30	0.200	1
		40	830733	2CSR275151R1405	DSE201 M B40 A30	0.200	1
		50	839736	2CSR275151R1505	DSE201 M B50 A30	0.200	1

## eRCBOs

DSE201 M series  $10000$  A  type, C characteristic



DSE201 M ... A300

### DSE201 M 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 ( $I\Delta n = 30$  mA).

Application: commercial, industrial

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

$I_{cn} = 10\ 000$  A

N. of poles	Rated residual current $I\Delta n$ [mA]	Rated Current In [A]	Bbn 8012542 EAN	Order details		Weight 1 piece [kg]	Pack unit pc.
				Type code	Order code		
<b>C characteristic</b>							
1P+N	10	6	768234	2CSR275151R0064	DSE201 M C6 A10	0.200	1
		10	830931	2CSR275151R0104	DSE201 M C10 A10	0.200	1
		16	839934	2CSR275151R0164	DSE201 M C16 A10	0.200	1
		20	768531	2CSR275151R0204	DSE201 M C20 A10	0.200	1
		25	831235	2CSR275151R0254	DSE201 M C25 A10	0.200	1
		32	840237	2CSR275151R0324	DSE201 M C32 A10	0.200	1
		40	896432	2CSR275151R0404	DSE201 M C40 A10	0.200	1
		50	768135	2CSR275151R0504	DSE201 M C50 A10	0.200	1
1P+N	30	6	896630	2CSR275151R1064	DSE201 M C6 A30	0.200	1
		10	768333	2CSR275151R1104	DSE201 M C10 A30	0.200	1
		16	831037	2CSR275151R1164	DSE201 M C16 A30	0.200	1
		20	840039	2CSR275151R1204	DSE201 M C20 A30	0.200	1
		25	631637	2CSR275151R1254	DSE201 M C25 A30	0.200	1
		32	376033	2CSR275151R1324	DSE201 M C32 A30	0.200	1
		40	629733	2CSR275151R1404	DSE201 M C40 A30	0.200	1
		50	375937	2CSR275151R1504	DSE201 M C50 A30	0.200	1
1P+N	100	6	779339	2CSR275151R2064	DSE201 M C6 A100	0.200	1
		10	769330	2CSR275151R2104	DSE201 M C10 A100	0.200	1
		16	631538	2CSR275151R2164	DSE201 M C16 A100	0.200	1
		20	375838	2CSR275151R2204	DSE201 M C20 A100	0.200	1
		25	779230	2CSR275151R2254	DSE201 M C25 A100	0.200	1
		32	631439	2CSR275151R2324	DSE201 M C32 A100	0.200	1
		40	940739	2CSR275151R2404	DSE201 M C40 A100	0.200	1
		50	941330	2CSR275151R2504	DSE201 M C50 A100	0.200	1
1P+N	300	6	620235	2CSR275151R3064	DSE201 M C6 A300	0.200	1
		10	021834	2CSR275151R3104	DSE201 M C10 A300	0.200	1
		16	021735	2CSR275151R3164	DSE201 M C16 A300	0.200	1
		20	021636	2CSR275151R3204	DSE201 M C20 A300	0.200	1
		25	021537	2CSR275151R3254	DSE201 M C25 A300	0.200	1
		32	021438	2CSR275151R3324	DSE201 M C32 A300	0.200	1
		40	021339	2CSR275151R3404	DSE201 M C40 A300	0.200	1
		50	021230	2CSR275151R3504	DSE201 M C50 A300	0.200	1

## eRCBOs

DSE201 M series  $\boxed{10000}$  AC  $\boxed{\sim}$  type, B characteristic



DSE201 M ... A30

### DSE201 M AC type, B characteristic

Function: protection of end user single-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 61009-1; IEC 61009-2-2; BS EN 61009-1

$I_{cn} = 10\,000 \text{ A}$

N. of poles	Rated residual current $I_{\Delta n}$ [mA]	Rated Current $I_n$ [A]	Bbn 8012542 EAN	Order details		Weight 1 piece [kg]	Pack unit pc.
				Type code	Order code		
<b>B characteristic</b>							
1P+N	10	6	938132	2CSR275051R0065	DSE201 M B6 AC10	0.200	1
		10	297734	2CSR275051R0105	DSE201 M B10 AC10	0.200	1
		16	373230	2CSR275051R0165	DSE201 M B16 AC10	0.200	1
		20	373131	2CSR275051R0205	DSE201 M B20 AC10	0.200	1
		25	077534	2CSR275051R0255	DSE201 M B25 AC10	0.200	1
		32	077435	2CSR275051R0325	DSE201 M B32 AC10	0.200	1
		40	077336	2CSR275051R0405	DSE201 M B40 AC10	0.200	1
		50	077237	2CSR275051R0505	DSE201 M B50 AC10	0.200	1
1P+N	30	6	076438	2CSR275051R1065	DSE201 M B6 AC30	0.200	1
		10	076339	2CSR275051R1105	DSE201 M B10 AC30	0.200	1
		16	076230	2CSR275051R1165	DSE201 M B16 AC30	0.200	1
		20	076131	2CSR275051R1205	DSE201 M B20 AC30	0.200	1
		25	076032	2CSR275051R1255	DSE201 M B25 AC30	0.200	1
		32	353430	2CSR275051R1325	DSE201 M B32 AC30	0.200	1
		40	353331	2CSR275051R1405	DSE201 M B40 AC30	0.200	1
		50	266334	2CSR275051R1505	DSE201 M B50 AC30	0.200	1

## eRCBOs

DSE201 M series  $\boxed{10000}$  AC  $\boxed{\sim}$  type, C characteristic



DSE201 M ... A300

### DSE201 M AC type, C characteristic

Function: protection of end user single-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 61009-1; IEC 61009-2-2; BS EN 61009-1

$I_{cn} = 10\,000 \text{ A}$

N. of poles	Rated residual current $I\Delta n$ [mA]	Rated Current In [A]	Bbn 8012542 EAN	Order details		Weight 1 piece [kg]	Pack unit pc.
				Type code	Order code		
<b>C characteristic</b>							
1P+N	10	6	077138	2CSR275051R0064	DSE201 M C6 AC10	0.200	1
		10	077039	2CSR275051R0104	DSE201 M C10 AC10	0.200	1
		16	076933	2CSR275051R0164	DSE201 M C16 AC10	0.200	1
		20	790532	2CSR275051R0204	DSE201 M C20 AC10	0.200	1
		25	076834	2CSR275051R0254	DSE201 M C25 AC10	0.200	1
		32	076735	2CSR275051R0324	DSE201 M C32 AC10	0.200	1
		40	076636	2CSR275051R0404	DSE201 M C40 AC10	0.200	1
		50	076537	2CSR275051R0504	DSE201 M C50 AC10	0.200	1
1P+N	30	6	266235	2CSR275051R1064	DSE201 M C6 AC30	0.200	1
		10	266136	2CSR275051R1104	DSE201 M C10 AC30	0.200	1
		16	266037	2CSR275051R1164	DSE201 M C16 AC30	0.200	1
		20	265931	2CSR275051R1204	DSE201 M C20 AC30	0.200	1
		25	790839	2CSR275051R1254	DSE201 M C25 AC30	0.200	1
		32	265832	2CSR275051R1324	DSE201 M C32 AC30	0.200	1
		40	353232	2CSR275051R1404	DSE201 M C40 AC30	0.200	1
		50	518235	2CSR275051R1504	DSE201 M C50 AC30	0.200	1
1P+N	100	6	186830	2CSR275051R2064	DSE201 M C6 AC100	0.200	1
		10	352235	2CSR275051R2104	DSE201 M C10 AC100	0.200	1
		16	186731	2CSR275051R2164	DSE201 M C16 AC100	0.200	1
		20	352136	2CSR275051R2204	DSE201 M C20 AC100	0.200	1
		25	263937	2CSR275051R2254	DSE201 M C25 AC100	0.200	1
		32	263838	2CSR275051R2324	DSE201 M C32 AC100	0.200	1
		40	263739	2CSR275051R2404	DSE201 M C40 AC100	0.200	1
		50	263630	2CSR275051R2504	DSE201 M C50 AC100	0.200	1
1P+N	300	6	263531	2CSR275051R3064	DSE201 M C6 AC300	0.200	1
		10	518334	2CSR275051R3104	DSE201 M C10 AC300	0.200	1
		16	263432	2CSR275051R3164	DSE201 M C16 AC300	0.200	1
		20	186038	2CSR275051R3204	DSE201 M C20 AC300	0.200	1
		25	352037	2CSR275051R3254	DSE201 M C25 AC300	0.200	1
		32	185932	2CSR275051R3324	DSE201 M C32 AC300	0.200	1
		40	185833	2CSR275051R3404	DSE201 M C40 AC300	0.200	1
		50	185734	2CSR275051R3504	DSE201 M C50 AC300	0.200	1

## Residual current relays

### RD2



RD2

Technical features		
Operating voltage	[V]	230÷400 a.c. (RD2) and 48÷150 a.c./d.c. (RD2-48)
Frequency	[Hz]	50÷60
Type		A
Operating temperature	[°C]	-5...+40
Power consumption	[W]	<3.4, 230 V a.c.
Sensitivity settings I $\Delta$ n	[A]	0.03; 0.1; 0.3; 0.5; 1; 2
Tripping time settings	[s]	Fast (instantaneous); 0.3; 0.5; 1; 2; 5
Contact capacity	[A]	10 at 250 V a.c. (ohmic)
Contact type		NC-C-NO
Modules	[No.]	2
Protection degree		IP20
Standards		IEC/EN 62020

#### RD2 residual current relays

Residual current relays with external toroidal transformer can detect leakage currents. Through minidip it is possible to set sensitivity and intervention time. RD2 residual current relays are designed to be used with external toroid belonging to TR family – see the dedicated section in page 2/134.

Operating voltage	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
[V]	EAN	Type code	Order code		[kg]	pc.
230...400 a.c.	058007	RD2	2CSM142120R1201		0.125	1
48...150 a.c./d.c.	537809	RD2-48	2CSM242120R1201		0.125	1

## Residual current relays

### RD3



RD3



RD3M



RD3P

Technical features	RD3/RD3-48	RD3M/RD3M-48	RD3P/RD3P-48
Operating voltage	RD3: 230-400 Vac +10% / -15%	RD3M: 230-400 Vac +10% / -15%	RD3P: 230-400 Vac +10% / -15%
	RD3-48: 12-48 Vac/ Vdc +10% / -15%	RD3M-48: 12-48 Vac/ Vdc +10% / -15%	RD3P-48: 12-48 Vac/ Vdc +10% / -15%
Auxiliary supply frequency	50-60 Hz		
Frequency filter	-	Yes	Yes
Type	A (up to $I_{\Delta n}=5$ A) AC (for higher current)		
Operating temperature	-25...+70 °C		
Power consumption	<3.6 W (RD3, RD3M, RD3P), <600 mW RD3-48, RD3M-48, RD3P-48)		
Sensitivity settings $I_{\Delta n}$	0.03-0.1-0.3-0.5-1-2-3-5-10-30 A		
Tripping time settings $\Delta t$	0-0.06-0.2-0.3-0.5-1-2-3-5-10 s		
Pre-alarm threshold	-	60%	60%
Max. resistance connection between toroidal transformer and relay	3 $\Omega$		
Max. length connection of remote reset button	15 m		
Output Contact capacity (7-8-9); (10-11-12)	8 A, 250 V a.c.		
Led bar indicator	-	-	Yes
Max. cable terminals section	2.5 mm <sup>2</sup>		
Modules	3		
Dimensions	52.8 × 85 × 64.7 mm		
Protection degree	IP20		
Standards	IEC/EN 60947-2 annex. M; IEC/EN 62020		

#### RD3 residual current relays

The RD3 family of electronic residual current relays provides residual current protection and monitoring functions according to IEC/EN 60947-2:2006 annex M when used in conjunction with external toroids belonging to TR family, all S 200 miniature circuit breakers and Tmax/XT range moulded case devices up to T5/XT4, for industrial installations. The RD3 residual current relays can provide status indications through two output contacts.

Operating voltage	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
[V]	EAN	Type code	Order code	[kg]	pc.	
12-48 a.c./d.c.	748236	RD3-48	2CSJ201001R0001	0.13	1	
230-400 a.c.	734833	RD3	2CSJ201001R0002	0.25	1	
12-48 a.c./d.c.	733935	RD3M-48	2CSJ202001R0001	0.13	1	
230-400 a.c.	747031	RD3M	2CSJ202001R0002	0.25	1	
12-48 a.c./d.c.	734734	RD3P-48	2CSJ203001R0001	0.13	1	
230-400 a.c.	733836	RD3P	2CSJ203001R0002	0.25	1	

## Front panel residual current relays

### ELR

Technical features		ELR48P	ELR72	ELR72P	ELR96	ELR96P	ELR96PF	ELR96PD
Operating voltage	[V]	24, 48, 110, 230 a.c./ 24, 48, 115 d.c.	24, 48, 110, 230 a.c./ 24, 48, 110 d.c.	24, 48, 110 230, 400 a.c./ 24, 48 d.c.	24, 48, 110, 230, 400 a.c./ 24, 48, 110 d.c.	24, 48, 110, 230, 400 a.c./ 24, 48 d.c.	110, 230, 400 a.c.	110, 230, 400 a.c.
Frequency	[Hz]	50 – 60						
Frequency filter		-	-	-	-	-	Yes	Yes
Type		A						
Operating temperature	[°C]	-10...+60						
Power consumption	[W]	<7						
Sensitivity setting I $\Delta$ n	[A]	from 0,03 to 30						
Tripping time setting Dt	[s]	from 0 to 5						
Contacts	[no.]	2	1	2	1	2	2	2
Contact capacity	[A]	5 (250 V a.c.)						
Dimensions	[mm]	48 x 48	72 x 72	72 x 72	96 x 96	96 x 96	96x96	96 x 96
Digital display		-	-	-	-	-	-	Yes
Protection degree (with cover)		IP52						
Protection degree (without cover)		IP40						
Protection degree (terminals)		IP20						
Standards		IEC EN 60947-2 Annex M						



## Front panel residual current relays

### ELR



ELR48P



ELR72



ELR96



ELR96PD

#### ELR front panel residual current relay

Front panel residual current relays are electronic devices used in combination with an external toroidal transformer. ELR devices are according to the protection standard IEC/EN 60947-2 Annex-M when used in conjunction with external toroids belonging to TR family, all S200 miniature circuit breakers and Tmax/XT range moulded case devices up to T5/XT4, for industrial installations.

The sensitivity can be set from 0.03 A to 30 A, while the tripping time from 0 to 5 seconds. Residual current relays are available in versions 48x48mm, 72x72 mm, and 96x96mm.

The Fail Safe function is available for versions ELR48P, ELR72P and ELR96P: the contacts switch when there is no auxiliary power.

The ELR96PF version is equipped with Fail Safe function, fault memory LED, and a frequency filter, that ensure continuity of service in the presence of harmonics.

ELR96PD has (in addition to these functions) a digital display for an instantaneous view of the residual current  $I_{\Delta n}$ .

Operating voltage	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
[V]	EAN	Type code	Order code		[kg]	pc.
110 V a.c./d.c. - 230 V a.c.	748229	ELR48P	2CSG252211R1202		0.112	1
24-48 V a.c./d.c.	734826	ELR48V24P	2CSG452211R1202		0.112	1
110 V a.c./d.c. - 230 V a.c.	733928	ELR72	2CSG252120R1202		0.322	1
24-48 V a.c./d.c.	747024	ELR72V24	2CSG452120R1202		0.322	1
110-230-400 V a.c.	734727	ELR72P	2CSG152424R1202		0.322	1
24-48 V a.c./d.c.	733829	ELR72V24P	2CSG452424R1202		0.322	1
110 V a.c./d.c.-230-400 V a.c.	734628	ELR96	2CSG152130R1202		0.383	1
24-48 V a.c./d.c.	733720	ELR96V24	2CSG452130R1202		0.383	1
110-230-400 V a.c.	734529	ELR96P	2CSG152434R1202		0.383	1
24-48 V a.c./d.c.	733621	ELR96V24P	2CSG452434R1202		0.383	1
110-230-400 V a.c.	734420	ELR96PF	2CSG152435R1202		0.383	1
110-230-400 V a.c.	733522	ELR96PD	2CSG152436R1202		0.383	1

## Toroidal transformers

TR



TR

### Toroidal transformers

Technical features	TRM	TR1	TR2	TR3	TR4	TR4A	TR160	TR160A	TR5	TR5A	TR6	TR6A
Core	closed	closed	closed	closed	closed	open	closed	open	closed	open	closed	open
Available internal diameter	[mm] 29	35	60	80	110	110	160	160	210	210	300	300
Weight	[kg] 0.17	0.22	0.28	0.45	0.52	0.6	1.35	1.6	1.45	1.85	2.1	2.3
Minimum measurable current	[mA] 30	30	30	100	100	300	300	500	300	500	500	1000
Installation position	Any											
Operating temperature	[°C] -10...+70											
Storage temperature	[°C] -20...+80											
Transformation ratio	500/1											
Dielectric test voltage at industrial freq. for 1 min.	[kV] 2.5											
Max. insulating voltage	[V a.c.] 1000											
Max. thermal overload	[kA] 40/1 sec.											
Connections	Screw terminal boards, max. section 2.5 mm <sup>2</sup>											
Protection degree	IP20											

Dimension Ø	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece	Pack unit
[mm]	EAN	Type code	Order code		[kg]	pc.
29 (modular version)	020707	TRM	2CSM029000R1211		0.170	1
35	020301	TR1	2CSG035100R1211		0.212	1
60	020400	TR2	2CSG060100R1211		0.274	1
80	020509	TR3	2CSG080100R1211		0.454	1
110	020608	TR4	2CSG110100R1211		0.530	1
110 (openable version)	743408	TR4/A	2CSG110200R1211		0.600	1
160	743507	TR160	2CSG160100R1211		1.350	1
160 (openable version)	743606	TR160A	2CSG160200R1211		1.600	1
210	024804	TR5	2CSG210100R1211		1.534	1
210 (openable version)	065708	TR5/A	2CSG210200R1211		1.856	1
300	185413	TR6	2CSG300100R1211		2.100	1
300 (openable version)	180715	TR6/A	2CSG300200R1211		2.300	1