

# Electrical installation solutions for buildings

## Residual current devices

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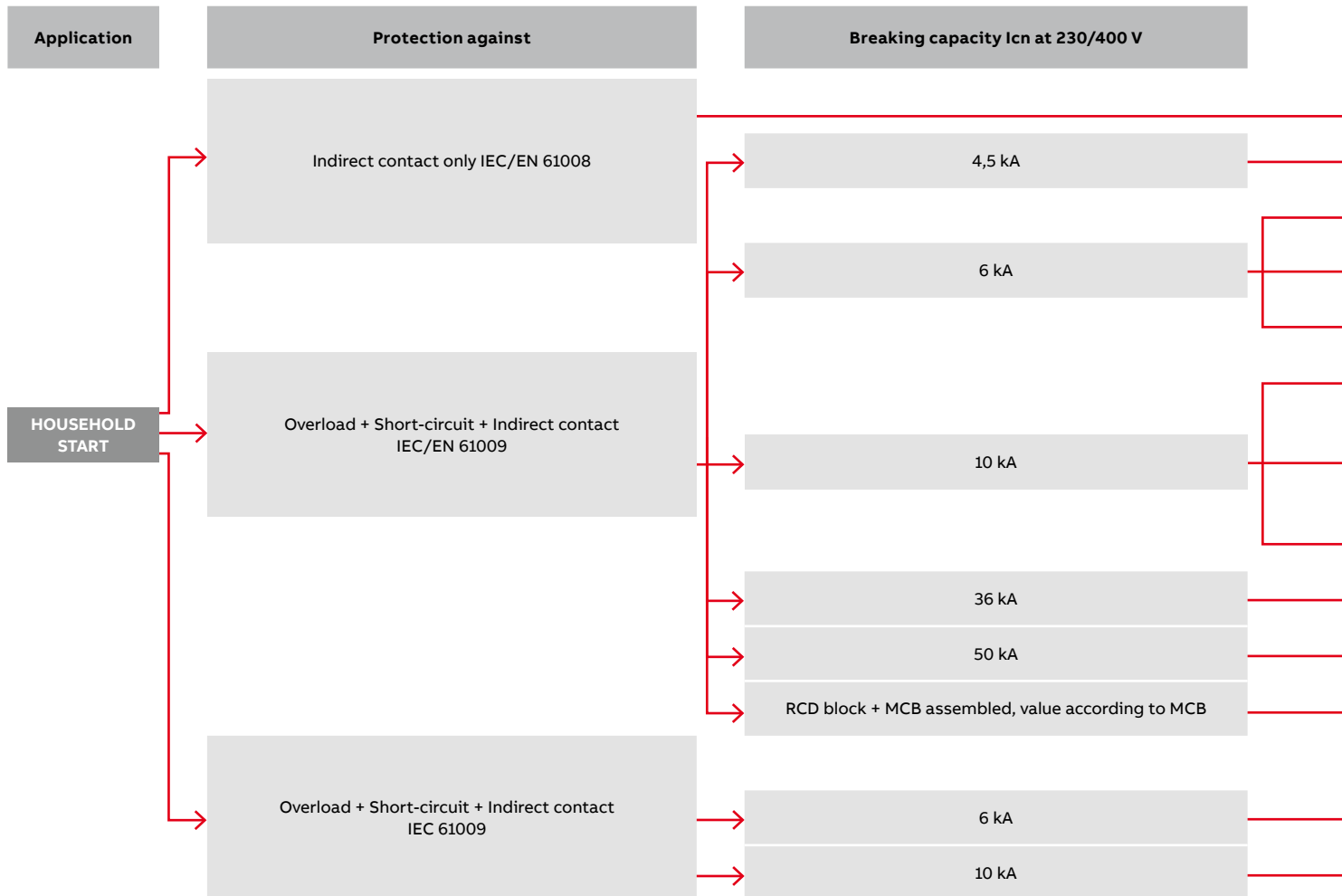
### Residual current relays

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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®

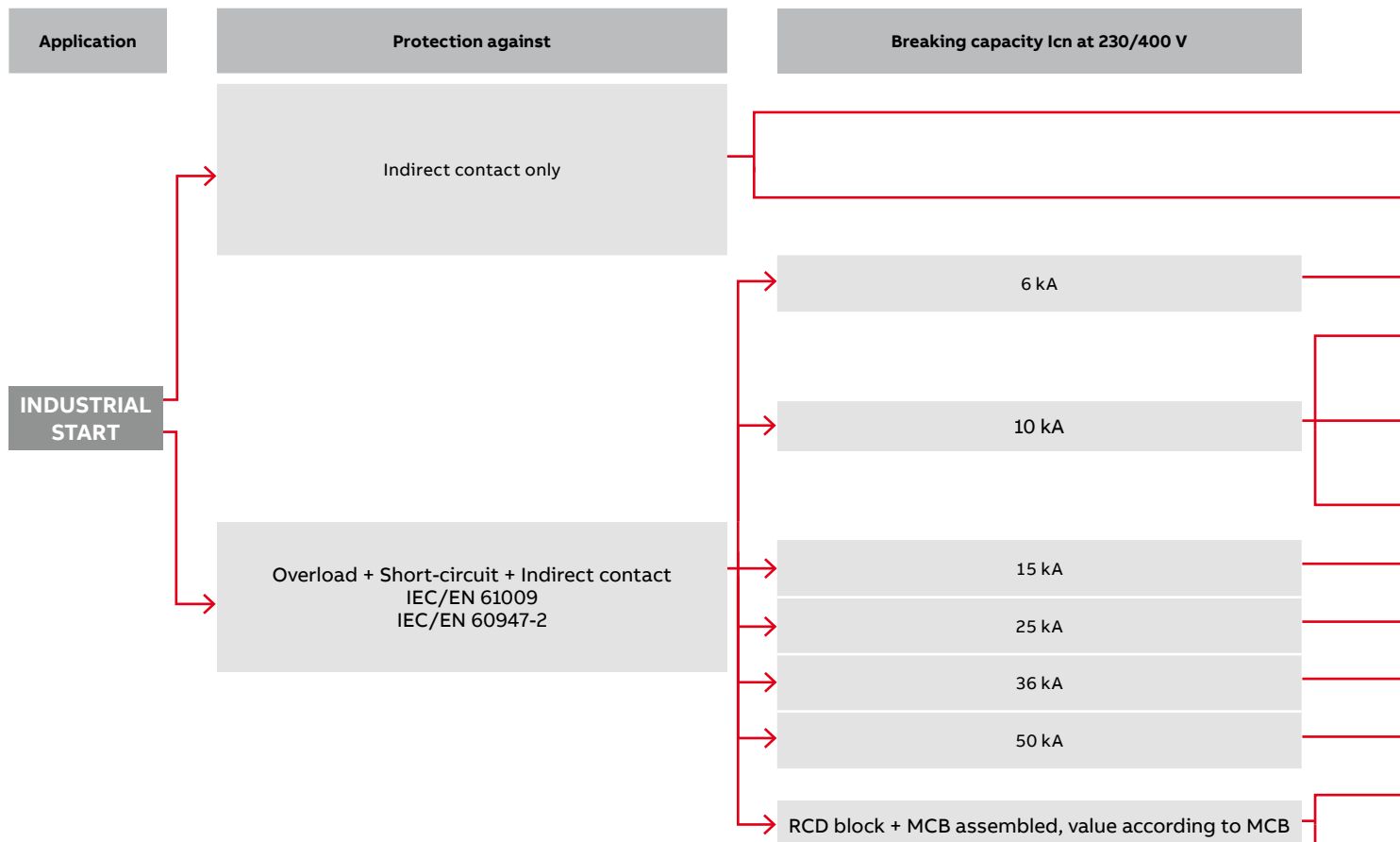
Quick selection of RCDs for household and industrial applications

Rated current	Remark	Poles	Solution	Page
Up to 125 A		All poles	F200	2/10
Up to 32 A		1P+N	DS201 L	2/52
Up to 32 A	Reduced size	2P	DS202C	2/70
Up to 40 A	Reduced size	1P+N	DS201	2/52
Up to 63 A	Standard size	All poles	DS 200	2/96
Up to 32 A	Reduced size	2P	DS202C M	2/72
Up to 40 A	Reduced size	1P+N	DS201 M	2/62
Up to 63 A	Standard size	All poles	DS 200 M	2/101
Up to 125 A		All poles	DS800N	2/109
Up to 125 A		All poles	DS800S	2/108
Up to 63 A	RCD: IEC/EN 61009 Ann. G	All poles	DDA 200 + S200	2/32 + 1/26
Up to 50 A	Voltage dependent	1P+N	DSE201	2/114
Up to 50 A	Voltage dependent	1P+N	DSE201 M	2/120

# 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®

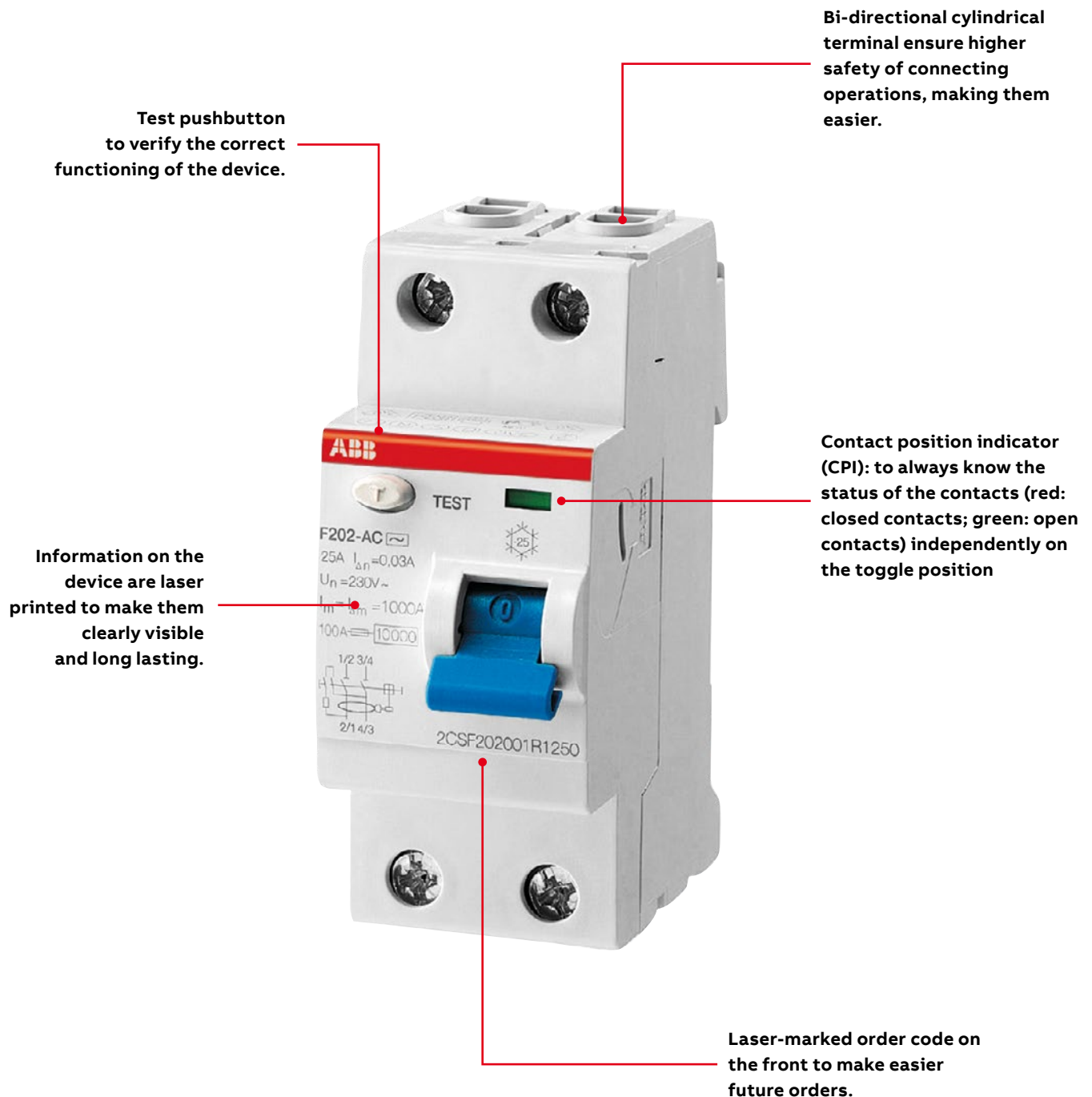
Quick selection of RCDs for household and industrial applications

Rated current	Remark	Poles	Solution	Page
Up to 125 A	IEC/EN 61008	All poles	F200	2/10
According to MCB	IEC/EN 62020	All poles	RD2	2/128
	IEC/EN 60947-2 Ann. M	All poles	RD3	2/129
Up to 32 A		1P+N	DS201 L	2/52
Up to 32 A		2P	DS202C, DS202C M	2/70, 2/72
Up to 40 A		1P+N	DS201, DS201 M	2/52, 2/62
Up to 63 A		All poles	DS 200	2/96
Up to 63 A		All poles	DS 200 M	2/101
Up to 100 A		All poles	DDA 800	2/44
Up to 125 A		All poles	DS800N	2/109
Up to 125 A		All poles	DS800S	2/108
Up to 63 A	RCD: IEC/EN 61009 Ann. G	All poles	DDA 200 + S200	2/32 + 1/26
Up to 100 A	RCD: IEC/EN 60947-2 Ann. B	All poles	DDA 800 + S800	2/44 + 1/124

## RCCB F 200.

### The details make the difference

A range designed to ensure efficiency and protection





Two terminals are available, the front 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.



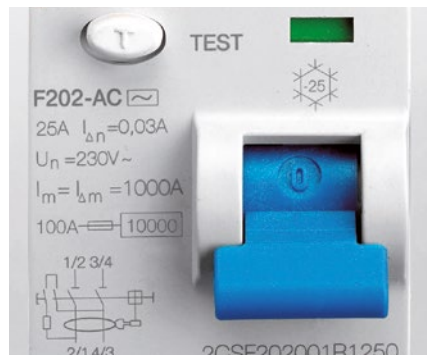
RCCBs F200 can be used in ambient conditions where the temperature of the surrounding atmosphere has values between -25 °C (snowflake laser printed on the front of the device) and +55°C.



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
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
AC	A	A	A	A	A	A
2P ⑥, 4P (for 125 A only 4P)				2P, 4P	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
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
230/400 - 240/415						
480Y/277 (up to 100 A)				-	-	
500						
In ≤ 100; Right neutral: 110 (170 for 30mA) - 254 ⑤; Left neutral: 195 (250 for 30 mA) - 440 ⑤				110-254	170-254	110 (170 for 30 mA) - 254
In = 125 A; Right neutral: 185 (150 for 30 mA) - 440 (250 for 30 mA) ⑤; Left neutral: 195 (250 for 30 mA) - 440						
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
10 (for 125 A fuse is gG 125 A)						
1 (1.25 for 125 A)						
4						
2.5						
III, disconnecter abilities						
NA		3000	5000	NA	NA	NA
blue sealable in ON-OFF position						
yes						
10000 (2000 for 125 A)				10000	10000	10000
20000 (5000 for 125 A)				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
-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
18-4 (up to 63 A)				-	-	
10/10 (not for In = 80-100 A)					10/10	10/10
18-8 (up to 63 A)				-	-	
2.8 (3 for In = 125 A)				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 70 (85 x 69.5 x 72 for 125 A)					85 x 69 x 70	85 x 69 x 70
200					-	
350 (380 for In = 80 and 100 A and 460 for In = 125A)					350	350
yes (no for 125 A)					yes	yes
yes					yes	yes
yes (no for 125 A)					yes	yes
yes (no for 125 A)					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	
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
	30	25	814702	F202 AC-25/0.03	2CSF202005R1250		0.225	1/6
		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		0.375	1/3
		63	817307	F204 AC-63/0.03	2CSF204005R1630		0.375	1/3
		80	936701	F204 AC-80/0.03	2CSF204005R1800		0.405	1/3
		100	936800	F204 AC-100/0.03	2CSF204005R1900		0.405	1/3
100	25	25	817406	F204 AC-25/0.1	2CSF204005R2250		0.375	1/3
		40	817505	F204 AC-40/0.1	2CSF204005R2400		0.375	1/3
		63	817604	F204 AC-63/0.1	2CSF204005R2630		0.375	1/3
		80	936909	F204 AC-80/0.1	2CSF204005R2800		0.405	1/3
		100	937005	F204 AC-100/0.1	2CSF204005R2900		0.405	1/3
300	25	25	817703	F204 AC-25/0.3	2CSF204005R3250		0.375	1/3
		40	817802	F204 AC-40/0.3	2CSF204005R3400		0.375	1/3
		63	817901	F204 AC-63/0.3	2CSF204005R3630		0.375	1/3
		80	937104	F204 AC-80/0.3	2CSF204005R3800		0.405	1/3
		100	937203	F204 AC-100/0.3	2CSF204005R3900		0.405	1/3
500	25	25	883609	F204 AC-25/0.5	2CSF204005R4250		0.375	1/3
		40	883609	F204 AC-40/0.5	2CSF204005R4400		0.375	1/3
		63	883807	F204 AC-63/0.5	2CSF204005R4630		0.375	1/3
		80	937302	F204 AC-80/0.5	2CSF204005R4800		0.405	1/3
		100	937401	F204 AC-100/0.5	2CSF204005R4900		0.405	1/3

## 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 In 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	
	100	125	125	941903	F204 A-125/0.03	2CSF204101R1950		0.500	1
			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
	300	100	100	918103	F204 A-100/0.1	2CSF204101R2900		0.405	1/3
			125	942009	F204 A-125/0.1	2CSF204101R2950		0.500	1
			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
500	125	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	
		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
		125	967804	F204 A-125/0.3	2CSF204123R3950		0.500	1
500	25	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	
			823001	F202 A S-63/0.1	2CSF202201R2630			
			916000	F202 A S-100/0.1	2CSF202201R2900			
300	40	40	784302	F202 A S-40/0.3	2CSF202201R3400	0.225	1/6	
			784401	F202 A S-63/0.3	2CSF202201R3630			
			916109	F202 A S-100/0.3	2CSF202201R3900			
500	40	40	784500	F202 A S-40/0.5	2CSF202201R4400	0.225	1/6	
			784609	F202 A S-63/0.5	2CSF202201R4630			
			916208	F202 A S-100/0.5	2CSF202201R4900			
1000	40	40	823100	F202 A S-40/1	2CSF202201R5400	0.225	1/6	
			823209	F202 A S-63/1	2CSF202201R5630			
			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	
			823407	F204 A S-63/0.1	2CSF204201R2630			
			919001	F204 A S-100/0.1	2CSF204201R2900			
300	40	40	784708	F204 A S-40/0.3	2CSF204201R3400	0.375	1/3	
			784807	F204 A S-63/0.3	2CSF204201R3630			
			919100	F204 A S-100/0.3	2CSF204201R3900			
500	40	40	968207	F204 A S-125/0.3	2CSF204201R3950	0.500	1	
			784906	F204 A S-40/0.5	2CSF204201R4400			
			785002	F204 A S-63/0.5	2CSF204201R4630			
1000	40	40	919209	F204 A S-100/0.5	2CSF204201R4900	0.405	1/3	
			968405	F204 A S-125/0.5	2CSF204201R4950			
			823506	F204 A S-40/1	2CSF204201R5400			
1000	63	63	823605	F204 A S-63/1	2CSF204201R5630	0.375	1/3	
			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

# 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



Easy to connect and compatible with busbars thanks to the System pro M compact clamps

Sole two-pole device in only two modules on the market

VDE approved

Green LED to monitor operation of the residual current circuit breaker

Indication of the position of the contacts



## F 200 series - B

### Details that make the difference

Cutting-edge features: safety, service continuity, compactness, integration. These are the characteristics of the F200 B RCCBs (residual current circuit breakers), the state-of-the-art technology by ABB which has been providing the best solutions for residential, commercial and industrial installations for over 120 years. The F200 B Type is the ultimate novelty of the System pro M compact offering. The most compact device in the market. Type B RCCBs can be adapted perfectly to all types of installation requirements and application fields. The F200 B Type can be perfectly integrated with all devices produced by ABB in terms of connection, selectivity data and coordination.

Compatible with all System pro M compact accessories of F200 series. Higher operational continuity thanks to auto-reclosing units and motor operating devices. Operating temperature from -25 to +60 °C with high immunity for extremely harsh weather conditions. F200 B can be installed either in two-phase and three-phase networks. A lot of space saving thanks to the two poles device in just two modules. Coordination and back-up with all ABB devices.



## RCCBs

### F 200 series - B 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 EN 62423				
Electrical features	Type (wave form of the earth leakage sensed)	B				
	Poles	2P	4P	4P		
	Rated current $I_n$	A	16, 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 $U_e$	IEC	V AC	230	230/400	
	Insulation voltage $U_i$		V	500		
	Operating voltage of circuit test $U_t$	IEC	V	110 - 253 V AC 170 - 253 V AC (30 mA)	110 - 254 V AC 170 - 254 V AC (30 mA)	110 - 254 V AC (80A) 170 - 254 V AC (80A, 30mA) 200 - 440 V AC (125A) 250 - 440 V AC (125A, 30mA)
	Min. operating voltage for detecting Type A/AC residual currents	V AC	0			
	Min. operating voltage for detecting Type B residual currents	V AC	50	50	50	
	Rated frequency	Hz	50/60		50	
	Frequency range of residual current	kHz	B: 2		B: 100	
	Rated conditional short-circuit current $I_{nc}=I_{\Delta}^3$	SCPD - fuse gG 100 A	kA	10 (for 125 A fuse is gG 125 A)		
	Rated residual breaking capacity $I_{\Delta m}=I_m$		kA	1	125 A: 1,25	
	Rated impulse withstand voltage (1.2/50) $U_{imp}$		kV	4		
	Dielectric test voltage at ind. freq. for 1 min.		kV	2,5		
	Overvoltage category		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	1,2	3,5	7,2	
	Mechanical features	Toggle	Blue sealable in ON-OFF position			
		Contact position indicator (CPI)	yes			
Electrical life		10.000		2.000		
Mechanical life		20.000		5.000		
Protection degree		housing	IP4X			
		terminals	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 (with daily average $\leq +35$ °C)		IEC	°C	-25...+60	-25...+40	
Storage temperature			°C	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		
	Terminal size top/bottom for busbar	IEC	Mm <sup>2</sup>	10/10		
	Tightening torque	IEC	Nm	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 x D x W)	2P	Mm	85 x 69 x 35	85 x 69 x 70	85 x 69,5 x 72
	Weight	2P	g	200	380	460
Combination with auxiliary elements	Combinable with:					
	auxiliary contact	yes		no		
	signal contact/auxiliary switch	yes				
	motor operating device	yes		no		
	shunt trip	yes		no		
undervoltage release	yes		no			



<sup>1</sup> Ground-Fault Sensing and Relaying Equipment™ (F200 up to 100 A)

<sup>2</sup> Prior to connection of aluminium conductors ( $\geq 4 \text{ mm}^2$ ) 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 for continuous, selective continuous type fault currents technical features



F202 B



F204 B



F204 B 100, 125 A

### F200 B Type from 16 to 63 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	16	961932	F202 B-16/0,03	2CSF202592R1160	0,220	1	
		25	961734	F202 B-25/0,03	2CSF202592R1250			
		40	960737	F202 B-40/0,03	2CSF202592R1400			
		63	629634	F202 B-63/0,03	2CSF202592R1630			
3	300	16	372233	F202 B-16/0,3	2CSF202592R3160	0,220	1	
		25	372738	F202 B-25/0,3	2CSF202592R3250			
		40	372639	F202 B-40/0,3	2CSF202592R3400			
		63	372530	F202 B-63/0,3	2CSF202592R3630			
4	30	25	348139	F204 B-25/0,03	2CSF204592R1250	0,380	1	
		40	358336	F204 B-40/0,03	2CSF204592R1400			
		63	348030	F204 B-63/0,03	2CSF204592R1630			
	300	25	347934	F204 B-25/0,3	2CSF204592R3250	0,380	1	
		40	358138	F204 B-40/0,3	2CSF204592R3400			
		63	347835	F204 B-63/0,3	2CSF204592R3630			
	300 S	40	347736	F204 B S-40/0,3	2CSF204892R3400	0,380	1	
		63	357933	F204 B S-63/0,3	2CSF204892R3630			
	500	40	776932	F204 B-40/0,5	2CSF204592R4400	0,380	1	
		63	347637	F204 B-63/0,5	2CSF204592R4630			
	500 S	40	357834	F204 B S-40/0,5	2CSF204892R4400	0,380	1	
		63	347538	F204 B S-63/0,5	2CSF204892R4630			

### F200 B Type high ratings

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	80	988601	F204B-80/0,03	2CSF204501R1800	0,500	1	
		125	988700	F204B-125/0,03L <sup>1</sup>	2CSF204523R1950			
	300	80	989103	F204B-80/0,3	2CSF204501R3800	0,500	1	
		125	989202	F204B-125/0,3L <sup>1</sup>	2CSF204523R3950			
	300 S	125	989509	F204BS-125/0,3L <sup>1</sup>	2CSF204823R3950	0,500	1	
	500	125	730439	F204B-125/0,5L <sup>1</sup>	2CSF204523R4950	0,500	1	
500 S	125	731238	F204BS-125/0,5L <sup>1</sup>	2CSF204823R4950	0,500	1		

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

## 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, 900 g	
<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 $\Delta$ 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			
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 $\Delta$ 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			
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> 8012542	<b>Order details</b>	<b>Price</b> 1 piece	<b>Weight</b> 1 piece	<b>Pack</b> unit
	<b>EAN</b>	<b>Type code</b>	<b>Order code</b>	<b>kg</b>	<b>pc.</b>
ARBus	293354		2CSF300130R1989	0.180	1

## 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 200 L  
S 200  
S 200 M  
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 B
IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1					IEC/EN 61009-1 Ann. G; IEC/EN 61009-2-1, IEC EN 62423
AC	A	A	A	A	B
25, 40, 63 ①		25, 40, 63 ①	63 ②	63 ①	25-40-63
2P, 3P, 4P					2P, 3P, 4P
230 (400 for special execution @400 V)			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)	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 (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					
10000					
20000					
IP4X					
IP2X					
28 cycles with 55°C/90-96% and 25°C/95-100%					
-25...+55					
-40...+70					
bi-directional cylinder-lift					
cage type					-
bi-directional cylinder-lift					
(rigid or flexible) up to 25					
(rigid or flexible) up to 16					-
(rigid or flexible) up to 25					
2.8					
1.2					-
2.8					
on DIN rail EN 60715 (35 mm) by means of fast clip device					
Any					
85 x 69 x 35					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					350
175					375
325					395
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 $I_{\Delta n}$ 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	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	25	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 Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
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 Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
2	30	25	079033	DDA202 A-25/0.03 110V	2CSB202199R1250		0.180	1
		40	078937	DDA202 A-40/0.03 110V	2CSB202199R1400		0.180	1
		63 ①	078838	DDA202 A-63/0.03 110V	2CSB202199R1630		0.180	1
3	30	40	811701	DDA 203 A-40/0.03 110V	2CSB203199R1400		0.350	1
		63 ①	811800	DDA 203 A-63/0.03 110V	2CSB203199R1630		0.350	1
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 Type code	Order code	Price 1 piece	Weight 1 piece kg	Pack unit pc.
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 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 <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	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	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 <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	63	733225	DDA203 B APR-63/0,03	2CSB203592R1630		0.375	1
	300	63	732327	DDA203 B APR-63/0,3	2CSB203592R3630		0.375	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	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	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**



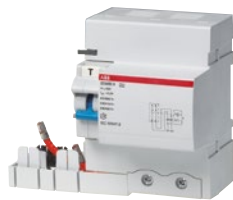
DDA 204

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

Application: commercial, industrial.

Standard: IEC/EN 60947-2 Ann. B

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	Pack unit
				Type code	Order code			
2	30	63	919704	DDA802AC-63/0.03	2CSB802001R1630		0.300	1
	300	63	919902	DDA802AC-63/0.3	2CSB802001R3630		0.300	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	Pack unit
				Type code	Order code			
3	30	63	922001	DDA803AC-63/0.03	2CSB803001R1630		0.400	1
	300	63	922209	DDA803AC-63/0.3	2CSB803001R3630		0.400	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	Pack unit
				Type code	Order code			
4	30	63	924401	DDA804AC-63/0.03	2CSB804001R1630		0.460	1
	300	63	924609	DDA804AC-63/0.3	2CSB804001R3630		0.460	1

## 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			



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			

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			

## RCD-blocks

DDA 800 A  type selective for MCBs S800



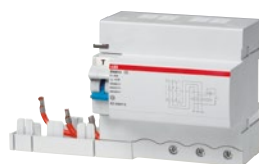
DDA 802

### 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 and DS202C.

## The details make the difference

A range designed to ensure efficiency and protection







Any earth fault can be immediately identified through the blue indicator, that signals the differential tripping and which cannot be activated in case of manual operation on the toggle. This prevents any misinterpretations of the device and system status.



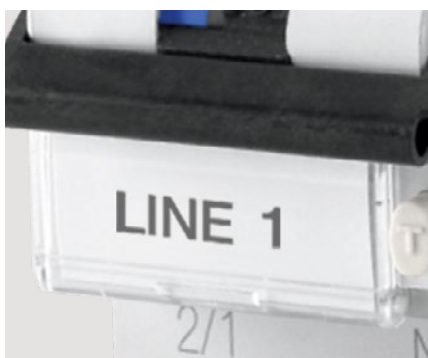
Contact position indicator (CPI): to always know the status of the contacts (red: closed contacts; green: open contacts).



The terminals available on DS201-DS202C make easier the supply operation in parallel with 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.



All the devices of the DS201 and DS202C series have been tested in a wide range of temperatures: from -25 °C (as indicated by the snowflake marked on the front side) up to +55°C.



Label carrier for clear and reliable identification. With the practical label carrier fitted in the circuit breakers you can give maximum visibility to the information relating to the protected loads.



All the quality ensured by the main international marks is clearly visible on the device even if installed in the switchboard.



Product description and EAN code laser printed on the lateral side of the device for an easier stock management.

## RCBOs

### DS201 technical features



DS201 L


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 acc. to IEC/EN 61009 ultimate $I_{cn}$	A
	Rated breaking capacity acc. to IEC/EN 60947-2 ultimate $I_{cu}$	kA
	1P+N @230 VAC 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
	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
		Flag indicators
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
	Terminal size top/bottom for cables	mm <sup>2</sup>
	Terminal size top/bottom for busbar	mm <sup>2</sup>
	Tightening torque top/bottom	Nm
	Mounting	
	Mounting position	
	Connection	
Dimensions and weight	Dimensions (H x D x W)	mm
	Weight	g
Combination with auxiliary elements	Combinable with:	auxiliary contact signal contact shunt trip undervoltage release

## RCBOs

### DS201 technical features

DS201 L			DS201			DS201 T		DS201 M			DS201 M 110V
IEC/EN 61009-1; IEC/EN 61009-2-1											IEC 61009-1; IEC 61009-2-1
AC	A	APR	AC	A	APR	A	APR	AC	A	APR	A
1P+N											
6 ≤ In ≤ 32			1 ≤ In ≤ 40			6 ≤ In ≤ 40		4 ≤ In ≤ 40			6 ≤ In ≤ 40
0.03-0.3	0.01-0.03-0.3	0.03	0.03-0.1-0.3-1	0.01-0.03-0.1-0.3	0.03-0.1-0.3	0.03		0.03-0.1-0.3	0.01-0.03-0.1-0.3	0.03-0.1-0.3	0.03
230-240											
500											
110 (170 for 30 mA) - 254			110 (170 for 30 mA) - 254			170 - 254		110 (170 for 30 mA) - 254			110-254
50...60											
4500			6000			6000		10000			10000
6			10			10		10			10
4.5			6			6		7.5			7.5
4.5			6			6		6			6
4											
2.5											
			■	■		■	■	■	■		■
■	■	■	■	■	■	■	■	■	■	■	■
				■		■	■		■		
NA for A, AC versions; 3000 for APR version											
black sealable in ON-OFF position											
differential trip indicator (blue)											
contact position indicator (green/red)											
10000											
20000											
IP4X											
IP2X											
28 cycles with 55°C/90-96% and 25°C/95-100%											
30											
-25...+55											
-40...+70											
failsafe bi-directional cylinder-lift terminal at top and bottom (shock protected)											
failsafe bi-directional cylinder-lift terminal at top and bottom (shock protected)											
25/25											
10/10											
2.8											
on DIN rail EN 60715 (35 mm) by means of fast clip device											
Any											
from top and bottom											
85 x 69 x 35											
239											
yes											
yes											
yes											
yes											

## RCBOs

DS201 L series 4500 AC  type, C characteristic



DS201 L

### DS201 L 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 ( $I_{\Delta n}=30$  mA).

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

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

**$I_{cn} = 4\ 500$  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				
1+N	30	6	171201	DS201 L C6 AC30	2CSR245040R1064		0.240	5	
		10	171300	DS201 L C10 AC30	2CSR245040R1104		0.240	5	
		16	171409	DS201 L C16 AC30	2CSR245040R1164		0.240	5	
		20	171508	DS201 L C20 AC30	2CSR245040R1204		0.240	5	
		25	171607	DS201 L C25 AC30	2CSR245040R1254		0.240	5	
		32	171706	DS201 L C32 AC30	2CSR245040R1324		0.240	5	
	300	300	6	171805	DS201 L C6 AC300	2CSR245040R3064		0.240	5
			10	171904	DS201 L C10 AC300	2CSR245040R3104		0.240	5
			16	172000	DS201 L C16 AC300	2CSR245040R3164		0.240	5
			20	172109	DS201 L C20 AC300	2CSR245040R3204		0.240	5
			25	172208	DS201 L C25 AC300	2CSR245040R3254		0.240	5
			32	172307	DS201 L C32 AC300	2CSR245040R3324		0.240	5

## RCBOs

DS201 L series 4500 A  type, C characteristic



DS201 L

### DS201 L 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**

**$I_{cn} = 4\ 500$  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			
1+N	10	6	163404	DS201 L C6 A10	2CSR245140R0064		0.240	5
		10	171003	DS201 L C10 A10	2CSR245140R0104		0.240	5
		16	171102	DS201 L C16 A10	2CSR245140R0164		0.240	5
	30	6	172406	DS201 L C6 A30	2CSR245140R1064		0.240	5
			172505	DS201 L C10 A30	2CSR245140R1104		0.240	5
			172604	DS201 L C16 A30	2CSR245140R1164		0.240	5
			172703	DS201 L C20 A30	2CSR245140R1204		0.240	5
			173809	DS201 L C25 A30	2CSR245140R1254		0.240	5
			173908	DS201 L C32 A30	2CSR245140R1324		0.240	5
300	6	174004	DS201 L C6 A300	2CSR245140R3064		0.240	5	
		174103	DS201 L C10 A300	2CSR245140R3104		0.240	5	
		174202	DS201 L C16 A300	2CSR245140R3164		0.240	5	
		174301	DS201 L C20 A300	2CSR245140R3204		0.240	5	
		174707	DS201 L C25 A300	2CSR245140R3254		0.240	5	
		174806	DS201 L C32 A300	2CSR245140R3324		0.240	5	

## RCBOs

DS201 L series 4500 APR type, C characteristic



DS201 L

### DS201 L APR type, C characteristic

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 ( $I_{\Delta n}=30\text{mA}$ ); protection and isolation of resistive and inductive loads.

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

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

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

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			
1+N	30	6	174905	DS201 L C6 APR30	2CSR245440R1064	0.240	5	
		10	175001	DS201 L C10 APR30	2CSR245440R1104			
		16	175100	DS201 L C16 APR30	2CSR245440R1164			
		20	175209	DS201 L C20 APR30	2CSR245440R1204			
		25	175605	DS201 L C25 APR30	2CSR245440R1254			
		32	175704	DS201 L C32 APR30	2CSR245440R1324			

## RCBOs

DS201 series  $\boxed{6000}$  AC  $\boxed{\sim}$  type, B characteristic



DS201

### DS201 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 ( $I_{\Delta n}=30$  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			
1+N	30	6	279709	DS201 B6 AC30	2CSR255040R1065		0.240	5
		10	280309	DS201 B10 AC30	2CSR255040R1105		0.240	5
		13	285205	DS201 B13 AC30	2CSR255040R1135		0.240	5
		16	285304	DS201 B16 AC30	2CSR255040R1165		0.240	5
		20	285403	DS201 B20 AC30	2CSR255040R1205		0.240	5
		25	285502	DS201 B25 AC30	2CSR255040R1255		0.240	5
		32	285601	DS201 B32 AC30	2CSR255040R1325		0.240	5
		40	285700	DS201 B40 AC30	2CSR255040R1405		0.240	5
	100	6	285809	DS201 B6 AC100	2CSR255040R2065		0.240	5
		10	285908	DS201 B10 AC100	2CSR255040R2105		0.240	5
		13	286004	DS201 B13 AC100	2CSR255040R2135		0.240	5
		16	286103	DS201 B16 AC100	2CSR255040R2165		0.240	5
		20	286202	DS201 B20 AC100	2CSR255040R2205		0.240	5
		25	286301	DS201 B25 AC100	2CSR255040R2255		0.240	5
		32	286400	DS201 B32 AC100	2CSR255040R2325		0.240	5
		40	286509	DS201 B40 AC100	2CSR255040R2405		0.240	5
	300	6	286608	DS201 B6 AC300	2CSR255040R3065		0.240	5
		10	286707	DS201 B10 AC300	2CSR255040R3105		0.240	5
		13	293903	DS201 B13 AC300	2CSR255040R3135		0.240	5
		16	294009	DS201 B16 AC300	2CSR255040R3165		0.240	5
		20	294108	DS201 B20 AC300	2CSR255040R3205		0.240	5
		25	294207	DS201 B25 AC300	2CSR255040R3255		0.240	5
		32	294306	DS201 B32 AC300	2CSR255040R3325		0.240	5
		40	294405	DS201 B40 AC300	2CSR255040R3405		0.240	5

## RCBOs

DS201 series  $\boxed{6000}$  AC  $\boxed{\sim}$  type, C characteristic



DS201

### DS201 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 ( $I_{\Delta n}=30$  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			
1+N	30	6	294504	DS201 C6 AC30	2CSR255040R1064	0.240	5	
		10	294603	DS201 C10 AC30	2CSR255040R1104			
		13	294702	DS201 C13 AC30	2CSR255040R1134			
		16	294801	DS201 C16 AC30	2CSR255040R1164			
		20	294900	DS201 C20 AC30	2CSR255040R1204			
		25	295006	DS201 C25 AC30	2CSR255040R1254			
		32	296003	DS201 C32 AC30	2CSR255040R1324			
		40	296102	DS201 C40 AC30	2CSR255040R1404			
	100	6	296201	DS201 C6 AC100	2CSR255040R2064	0.240	5	
		10	296409	DS201 C10 AC100	2CSR255040R2104			
		13	370802	DS201 C13 AC100	2CSR255040R2134			
		16	370901	DS201 C16 AC100	2CSR255040R2164			
		20	371601	DS201 C20 AC100	2CSR255040R2204			
		25	371700	DS201 C25 AC100	2CSR255040R2254			
		32	371809	DS201 C32 AC100	2CSR255040R2324			
		40	498100	DS201 C40 AC100	2CSR255040R2404			
	300	6	498209	DS201 C6 AC300	2CSR255040R3064	0.240	5	
		10	498308	DS201 C10 AC300	2CSR255040R3104			
		13	505907	DS201 C13 AC300	2CSR255040R3134			
		16	506003	DS201 C16 AC300	2CSR255040R3164			
		20	506102	DS201 C20 AC300	2CSR255040R3204			
		25	506201	DS201 C25 AC300	2CSR255040R3254			
		32	618300	DS201 C32 AC300	2CSR255040R3324			
		40	638407	DS201 C40 AC300	2CSR255040R3404			
	1000	6	996606	DS201 C6 AC1000	2CSR255040R5064	0.240	5	
		10	996705	DS201 C10 AC1000	2CSR255040R5104			
		16	996804	DS201 C16 AC1000	2CSR255040R5164			
		20	996903	DS201 C20 AC1000	2CSR255040R5204			
		25	997009	DS201 C25 AC1000	2CSR255040R5254			
		32	997108	DS201 C32 AC1000	2CSR255040R5324			
		40	997207	DS201 C40 AC1000	2CSR255040R5404			



## RCBOs

DS201 series 6000 APR type, C characteristic



DS201

### DS201 APR type, C characteristic

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**

**$I_{cn} = 6\ 000$  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			
1+N	30	6	997306	DS201 C6 APR30	2CSR255440R1064	0.240	5	
		10	997405	DS201 C10 APR30	2CSR255440R1104			
		13	997504	DS201 C13 APR30	2CSR255440R1134			
		16	997603	DS201 C16 APR30	2CSR255440R1164			
		20	997702	DS201 C20 APR30	2CSR255440R1204			
		25	997801	DS201 C25 APR30	2CSR255440R1254			
		32	997900	DS201 C32 APR30	2CSR255440R1324			
		40	998006	DS201 C40 APR30	2CSR255440R1404			
100	30	6	126454	DS201 C6 APR100	2CSR255440R2064	0.240	5	
		10	126553	DS201 C10 APR100	2CSR255440R2104			
		13	126652	DS201 C13 APR100	2CSR255440R2134			
		16	126751	DS201 C16 APR100	2CSR255440R2164			
		20	126850	DS201 C20 APR100	2CSR255440R2204			
		25	126959	DS201 C25 APR100	2CSR255440R2254			
		32	127055	DS201 C32 APR100	2CSR255440R2324			
		40	127154	DS201 C40 APR100	2CSR255440R2404			
300	30	6	998105	DS201 C6 APR300	2CSR255440R3064	0.240	5	
		10	998204	DS201 C10 APR300	2CSR255440R3104			
		13	998303	DS201 C13 APR300	2CSR255440R3134			
		16	998402	DS201 C16 APR300	2CSR255440R3164			
		20	998501	DS201 C20 APR300	2CSR255440R3204			
		25	998600	DS201 C25 APR300	2CSR255440R3254			
		32	998709	DS201 C32 APR300	2CSR255440R3324			
		40	998808	DS201 C40 APR300	2CSR255440R3404			

## RCBOs

DS201 series 6000 A  type, B characteristic



DS201

### DS201 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 $I_n$ 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	995708	DS201 B10 A10	2CSR255140R0105		0.240	5	
		13	995807	DS201 B13 A10	2CSR255140R0135		0.240	5	
		16	995906	DS201 B16 A10	2CSR255140R0165		0.240	5	
	30	6	6	638506	DS201 B6 A30	2CSR255140R1065		0.240	5
			10	647805	DS201 B10 A30	2CSR255140R1105		0.240	5
			13	655503	DS201 B13 A30	2CSR255140R1135		0.240	5
			16	655602	DS201 B16 A30	2CSR255140R1165		0.240	5
			20	655701	DS201 B20 A30	2CSR255140R1205		0.240	5
			25	766902	DS201 B25 A30	2CSR255140R1255		0.240	5
			32	814504	DS201 B32 A30	2CSR255140R1325		0.240	5
	100	40	40	910602	DS201 B40 A30	2CSR255140R1405		0.240	5
			6	990307	DS201 B6 A100	2CSR255140R2065		0.240	5
			10	990406	DS201 B10 A100	2CSR255140R2105		0.240	5
			13	990505	DS201 B13 A100	2CSR255140R2135		0.240	5
			16	990604	DS201 B16 A100	2CSR255140R2165		0.240	5
			20	990703	DS201 B20 A100	2CSR255140R2205		0.240	5
25			990802	DS201 B25 A100	2CSR255140R2255		0.240	5	
32			990901	DS201 B32 A100	2CSR255140R2325		0.240	5	
300	40	40	991007	DS201 B40 A100	2CSR255140R2405		0.240	5	
		6	991908	DS201 B6 A300	2CSR255140R3065		0.240	5	
		10	992004	DS201 B10 A300	2CSR255140R3105		0.240	5	
		13	992103	DS201 B13 A300	2CSR255140R3135		0.240	5	
		16	992202	DS201 B16 A300	2CSR255140R3165		0.240	5	
		20	992301	DS201 B20 A300	2CSR255140R3205		0.240	5	
		25	992400	DS201 B25 A300	2CSR255140R3255		0.240	5	
		32	992509	DS201 B32 A300	2CSR255140R3325		0.240	5	
	40	992608	DS201 B40 A300	2CSR255140R3405		0.240	5		

## RCBOs

DS201 series  $\boxed{6000}$  A  type, C characteristic



DS201

### DS201 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				
1+N	10	10	996002	DS201 C10 A10	2CSR255140R0104		0.240	5	
		13	996101	DS201 C13 A10	2CSR255140R0134		0.240	5	
		16	996200	DS201 C16 A10	2CSR255140R0164		0.240	5	
	30	30	2	123958	DS201 C2 A30	2CSR255140R1024		0.240	5
			4	942306	DS201 C4 A30	2CSR255140R1044		0.240	5
			6	942405	DS201 C6 A30	2CSR255140R1064		0.240	5
			8	124054	DS201 C8 A30	2CSR255140R1084		0.240	5
			10	952503	DS201 C10 A30	2CSR255140R1104		0.240	5
			13	976004	DS201 C13 A30	2CSR255140R1134		0.240	5
			16	976103	DS201 C16 A30	2CSR255140R1164		0.240	5
			20	976202	DS201 C20 A30	2CSR255140R1204		0.240	5
			25	976301	DS201 C25 A30	2CSR255140R1254		0.240	5
			32	990109	DS201 C32 A30	2CSR255140R1324		0.240	5
			40	990208	DS201 C40 A30	2CSR255140R1404		0.240	5
	100	100	6	991106	DS201 C6 A100	2CSR255140R2064		0.240	5
			10	991205	DS201 C10 A100	2CSR255140R2104		0.240	5
			13	991304	DS201 C13 A100	2CSR255140R2134		0.240	5
			16	991403	DS201 C16 A100	2CSR255140R2164		0.240	5
			20	991502	DS201 C20 A100	2CSR255140R2204		0.240	5
			25	991601	DS201 C25 A100	2CSR255140R2254		0.240	5
			32	991700	DS201 C32 A100	2CSR255140R2324		0.240	5
			40	991809	DS201 C40 A100	2CSR255140R2404		0.240	5
	300	300	2	124153	DS201 C2 A300	2CSR255140R3024		0.240	5
			4	124252	DS201 C4 A300	2CSR255140R3044		0.240	5
6			992707	DS201 C6 A300	2CSR255140R3064		0.240	5	
8			124351	DS201 C8 A300	2CSR255140R3084		0.240	5	
10			992806	DS201 C10 A300	2CSR255140R3104		0.240	5	
13			992905	DS201 C13 A300	2CSR255140R3134		0.240	5	
16			993001	DS201 C16 A300	2CSR255140R3164		0.240	5	
20			993100	DS201 C20 A300	2CSR255140R3204		0.240	5	
25			993209	DS201 C25 A300	2CSR255140R3254		0.240	5	
32			993308	DS201 C32 A300	2CSR255140R3324		0.240	5	
40			993407	DS201 C40 A300	2CSR255140R3404		0.240	5	

## RCBOs

DS201 series  $\boxed{6000}$  A  type, K characteristic



DS201

### DS201 A type, K 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			
1+N	10	10	996309	DS201 K10 A10	2CSR255140R0107	0.240	5	
		13	996408	DS201 K13 A10	2CSR255140R0137			
		16	996507	DS201 K16 A10	2CSR255140R0167			
	30	30	1	993506	DS201 K1 A30	2CSR255140R1017	0.240	5
			2	993605	DS201 K2 A30	2CSR255140R1027		
			4	993704	DS201 K4 A30	2CSR255140R1047		
			6	993803	DS201 K6 A30	2CSR255140R1067		
			8	123750	DS201 K8 A30	2CSR255140R1087		
			10	993902	DS201 K10 A30	2CSR255140R1107		
			13	994008	DS201 K13 A30	2CSR255140R1137		
			16	994107	DS201 K16 A30	2CSR255140R1167		
			20	994206	DS201 K20 A30	2CSR255140R1207		
			25	994305	DS201 K25 A30	2CSR255140R1257		
	300	300	1	994602	DS201 K1 A300	2CSR255140R3017	0.240	5
			2	994701	DS201 K2 A300	2CSR255140R3027		
			4	994800	DS201 K4 A300	2CSR255140R3047		
			6	994909	DS201 K6 A300	2CSR255140R3067		
			8	123859	DS201 K8 A300	2CSR255140R3087		
			10	995005	DS201 K10 A300	2CSR255140R3107		
			13	995104	DS201 K13 A300	2CSR255140R3137		
16			995203	DS201 K16 A300	2CSR255140R3167			
20	995302	DS201 K20 A300	2CSR255140R3207					
25	995401	DS201 K25 A300	2CSR255140R3257					
32	995500	DS201 K32 A300	2CSR255140R3327					
40	995609	DS201 K40 A300	2CSR255140R3407					

## RCBOs

DS201 T series 6000 A  type, B, C and K characteristics



DS201 T

### DS201 T A type

Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact ( $I_{\Delta n} = 30$  mA). DS201 T range is able to meet the most strict requirements for railway application in the rolling stock traction business (classification according to EN 45545-1:2013 and EN 45545-2:2013+A1:2015: R26/HL3. Shock and vibrations according to EN 61373: Category 1, class B).

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

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

**Icn = 6 000 A**

### B characteristic

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			
1+N	30	6	002031	DS201T B6 A30	2CSR255148R1065	0.240	1	
		10	001935	DS201T B10 A30	2CSR255148R1105			
		13	031437	DS201T B13 A30	2CSR255148R1135			
		16	001836	DS201T B16 A30	2CSR255148R1165			
		20	001737	DS201T B20 A30	2CSR255148R1205			
		25	031338	DS201T B25 A30	2CSR255148R1255			
		32	001638	DS201T B32 A30	2CSR255148R1325			
		40	001539	DS201T B40 A30	2CSR255148R1405			

### C characteristic

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			
1+N	30	6	001430	DS201T C6 A30	2CSR255148R1064	0.240	1	
		10	001331	DS201T C10 A30	2CSR255148R1104			
		13	001232	DS201T C13 A30	2CSR255148R1134			
		16	629832	DS201T C16 A30	2CSR255148R1164			
		20	648437	DS201T C20 A30	2CSR255148R1204			
		25	648338	DS201T C25 A30	2CSR255148R1254			
		32	297031	DS201T C32 A30	2CSR255148R1324			
		40	953234	DS201T C40 A30	2CSR255148R1404			

### K characteristic

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			
1+N	30	6	959434	DS201T K6 A30	2CSR255148R1067	0.240	1	
		10	959137	DS201T K10 A30	2CSR255148R1107			
		13	958833	DS201T K13 A30	2CSR255148R1137			
		16	958536	DS201T K16 A30	2CSR255148R1167			
		20	960539	DS201T K20 A30	2CSR255148R1207			
		25	960331	DS201T K25 A30	2CSR255148R1257			
		32	960133	DS201T K32 A30	2CSR255148R1327			
		40	959731	DS201T K40 A30	2CSR255148R1407			

## RCBOs

DS201 M series  $\boxed{10000}$  AC  $\boxed{\sim}$  type, B characteristic



DS201 M

### DS201 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 ( $I_{\Delta n}=30$  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			
1+N	30	6	998907	DS201 M B6 AC30	2CSR275040R1065		0.240	5
		10	999003	DS201 M B10 AC30	2CSR275040R1105		0.240	5
		13	999102	DS201 M B13 AC30	2CSR275040R1135		0.240	5
		16	999201	DS201 M B16 AC30	2CSR275040R1165		0.240	5
		20	999300	DS201 M B20 AC30	2CSR275040R1205		0.240	5
		25	999409	DS201 M B25 AC30	2CSR275040R1255		0.240	5
		32	999508	DS201 M B32 AC30	2CSR275040R1325		0.240	5
		40	999607	DS201 M B40 AC30	2CSR275040R1405		0.240	5
	100	6	106159	DS201 M B6 AC100	2CSR275040R2065		0.240	5
		10	106258	DS201 M B10 AC100	2CSR275040R2105		0.240	5
		13	106357	DS201 M B13 AC100	2CSR275040R2135		0.240	5
		16	106456	DS201 M B16 AC100	2CSR275040R2165		0.240	5
		20	106555	DS201 M B20 AC100	2CSR275040R2205		0.240	5
		25	106654	DS201 M B25 AC100	2CSR275040R2255		0.240	5
		32	106753	DS201 M B32 AC100	2CSR275040R2325		0.240	5
		40	106852	DS201 M B40 AC100	2CSR275040R2405		0.240	5
	300	6	107750	DS201 M B6 AC300	2CSR275040R3065		0.240	5
		10	107859	DS201 M B10 AC300	2CSR275040R3105		0.240	5
		13	107958	DS201 M B13 AC300	2CSR275040R3135		0.240	5
		16	108054	DS201 M B16 AC300	2CSR275040R3165		0.240	5
		20	108153	DS201 M B20 AC300	2CSR275040R3205		0.240	5
		25	108252	DS201 M B25 AC300	2CSR275040R3255		0.240	5
		32	108351	DS201 M B32 AC300	2CSR275040R3325		0.240	5
		40	108450	DS201 M B40 AC300	2CSR275040R3405		0.240	5

## RCBOs

DS201 M series  $\boxed{10000}$  AC  $\boxed{\sim}$  type, C characteristic



DS201 M

### DS201 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 ( $I_{\Delta n}=30$  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			
1+N	30	6	999706	DS201 M C6 AC30	2CSR275040R1064		0.240	5
		10	999805	DS201 M C10 AC30	2CSR275040R1104		0.240	5
		13	999904	DS201 M C13 AC30	2CSR275040R1134		0.240	5
		16	105657	DS201 M C16 AC30	2CSR275040R1164		0.240	5
		20	105756	DS201 M C20 AC30	2CSR275040R1204		0.240	5
		25	105855	DS201 M C25 AC30	2CSR275040R1254		0.240	5
		32	105954	DS201 M C32 AC30	2CSR275040R1324		0.240	5
		40	106050	DS201 M C40 AC30	2CSR275040R1404		0.240	5
	100	6	106951	DS201 M C6 AC100	2CSR275040R2064		0.240	5
		10	107057	DS201 M C10 AC100	2CSR275040R2104		0.240	5
		13	107156	DS201 M C13 AC100	2CSR275040R2134		0.240	5
		16	107255	DS201 M C16 AC100	2CSR275040R2164		0.240	5
		20	107354	DS201 M C20 AC100	2CSR275040R2204		0.240	5
		25	107453	DS201 M C25 AC100	2CSR275040R2254		0.240	5
32		107552	DS201 M C32 AC100	2CSR275040R2324		0.240	5	
40		107651	DS201 M C40 AC100	2CSR275040R2404		0.240	5	
300	6	108559	DS201 M C6 AC300	2CSR275040R3064		0.240	5	
	10	108658	DS201 M C10 AC300	2CSR275040R3104		0.240	5	
	13	108757	DS201 M C13 AC300	2CSR275040R3134		0.240	5	
	16	108856	DS201 M C16 AC300	2CSR275040R3164		0.240	5	
	20	108955	DS201 M C20 AC300	2CSR275040R3204		0.240	5	
	25	109051	DS201 M C25 AC300	2CSR275040R3254		0.240	5	
	32	109150	DS201 M C32 AC300	2CSR275040R3324		0.240	5	
	40	109259	DS201 M C40 AC300	2CSR275040R3404		0.240	5	

## RCBOs

DS201 M series 10000 APR type, C characteristic



DS201 M

### DS201 M APR type, C characteristic

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**

**$I_{cn} = 10\,000$  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			
1+N	30	6	114154	DS201 M C6 APR30	2CSR275440R1064		0.240	5
		10	114253	DS201 M C10 APR30	2CSR275440R1104		0.240	5
		13	114352	DS201 M C13 APR30	2CSR275440R1134		0.240	5
		16	114451	DS201 M C16 APR30	2CSR275440R1164		0.240	5
		20	114550	DS201 M C20 APR30	2CSR275440R1204		0.240	5
		25	114659	DS201 M C25 APR30	2CSR275440R1254		0.240	5
		32	114758	DS201 M C32 APR30	2CSR275440R1324		0.240	5
		40	114857	DS201 M C40 APR30	2CSR275440R1404		0.240	5
	100	6	127253	DS201 M C6 APR100	2CSR275440R2064		0.240	5
		10	127352	DS201 M C10 APR100	2CSR275440R2104		0.240	5
		13	127451	DS201 M C13 APR100	2CSR275440R2134		0.240	5
		16	127550	DS201 M C16 APR100	2CSR275440R2164		0.240	5
		20	127659	DS201 M C20 APR100	2CSR275440R2204		0.240	5
		25	127758	DS201 M C25 APR100	2CSR275440R2254		0.240	5
		32	127857	DS201 M C32 APR100	2CSR275440R2324		0.240	5
		40	127956	DS201 M C40 APR100	2CSR275440R2404		0.240	5
300	6	114956	DS201 M C6 APR300	2CSR275440R3064		0.240	5	
	10	115052	DS201 M C10 APR300	2CSR275440R3104		0.240	5	
	13	115151	DS201 M C13 APR300	2CSR275440R3134		0.240	5	
	16	115250	DS201 M C16 APR300	2CSR275440R3164		0.240	5	
	20	115359	DS201 M C20 APR300	2CSR275440R3204		0.240	5	
	25	115458	DS201 M C25 APR300	2CSR275440R3254		0.240	5	
	32	115557	DS201 M C32 APR300	2CSR275440R3324		0.240	5	
	40	115656	DS201 M C40 APR300	2CSR275440R3404		0.240	5	



## RCBOs

DS201 M series  $10000$  A  type, B characteristic



DS201 M

### DS201 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				
1+N	10	10	124450	DS201 M B10 A10	2CSR275140R0105		0.240	5	
		16	124559	DS201 M B16 A10	2CSR275140R0165		0.240	5	
	30	6	109358	DS201 M B6 A30	2CSR275140R1065		0.240	5	
		10	109457	DS201 M B10 A30	2CSR275140R1105		0.240	5	
		13	109556	DS201 M B13 A30	2CSR275140R1135		0.240	5	
		16	109655	DS201 M B16 A30	2CSR275140R1165		0.240	5	
		20	109754	DS201 M B20 A30	2CSR275140R1205		0.240	5	
		25	109853	DS201 M B25 A30	2CSR275140R1255		0.240	5	
	100	30	32	109952	DS201 M B32 A30	2CSR275140R1325		0.240	5
			40	110057	DS201 M B40 A30	2CSR275140R1405		0.240	5
		100	6	111054	DS201 M B6 A100	2CSR275140R2065		0.240	5
			10	111153	DS201 M B10 A100	2CSR275140R2105		0.240	5
			13	111252	DS201 M B13 A100	2CSR275140R2135		0.240	5
			16	111351	DS201 M B16 A100	2CSR275140R2165		0.240	5
20			111450	DS201 M B20 A100	2CSR275140R2205		0.240	5	
25			111559	DS201 M B25 A100	2CSR275140R2255		0.240	5	
300	30	32	111658	DS201 M B32 A100	2CSR275140R2325		0.240	5	
		40	111757	DS201 M B40 A100	2CSR275140R2405		0.240	5	
	300	6	112556	DS201 M B6 A300	2CSR275140R3065		0.240	5	
		10	112655	DS201 M B10 A300	2CSR275140R3105		0.240	5	
		13	112754	DS201 M B13 A300	2CSR275140R3135		0.240	5	
		16	112853	DS201 M B16 A300	2CSR275140R3165		0.240	5	
		20	112952	DS201 M B20 A300	2CSR275140R3205		0.240	5	
		25	113058	DS201 M B25 A300	2CSR275140R3255		0.240	5	
		32	113157	DS201 M B32 A300	2CSR275140R3325		0.240	5	
		40	113256	DS201 M B40 A300	2CSR275140R3405		0.240	5	

## RCBOs

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



DS201 M

### DS201 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						
1+N	10	10	124658	DS201 M C10 A10	2CSR275140R0104	0.240	5				
		16	124757	DS201 M C16 A10	2CSR275140R0164						
	30	4	4	110156	DS201 M C4 A30	2CSR275140R1044	0.240	5			
			6	110255	DS201 M C6 A30	2CSR275140R1064					
			10	110354	DS201 M C10 A30	2CSR275140R1104					
			13	110453	DS201 M C13 A30	2CSR275140R1134					
			16	110552	DS201 M C16 A30	2CSR275140R1164					
			20	110651	DS201 M C20 A30	2CSR275140R1204					
			25	110750	DS201 M C25 A30	2CSR275140R1254					
			32	110859	DS201 M C32 A30	2CSR275140R1324					
	40	110958	40	110958	DS201 M C40 A30	2CSR275140R1404	0.240	5			
			100	6	111856	DS201 M C6 A100			2CSR275140R2064	0.240	5
				10	111955	DS201 M C10 A100			2CSR275140R2104		
				16	112051	DS201 M C16 A100			2CSR275140R2164		
				20	112150	DS201 M C20 A100			2CSR275140R2204		
				25	112259	DS201 M C25 A100			2CSR275140R2254		
32				112358	DS201 M C32 A100	2CSR275140R2324					
40				112457	DS201 M C40 A100	2CSR275140R2404					
300	6	6		113355	DS201 M C6 A300	2CSR275140R3064	0.240	5			
		10	113454	DS201 M C10 A300	2CSR275140R3104						
		13	113553	DS201 M C13 A300	2CSR275140R3134						
		16	113652	DS201 M C16 A300	2CSR275140R3164						
		20	113751	DS201 M C20 A300	2CSR275140R3204						
		25	113850	DS201 M C25 A300	2CSR275140R3254						
		32	113959	DS201 M C32 A300	2CSR275140R3324						
		40	114055	DS201 M C40 A300	2CSR275140R3404						

## RCBOs

DS201 M series 10000 A  type, K characteristic



DS201 M

### DS201 M A type, K 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.


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

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

**I<sub>cn</sub> = 10 000 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			
1P+N	100	6	299455	DS201 M K6 A100	2CSR275140R2067		0.240	5
		10	299554	DS201 M K10 A100	2CSR275140R2107		0.240	5
		13	299653	DS201 M K13 A100	2CSR275140R2137		0.240	5
		16	299752	DS201 M K16 A100	2CSR275140R2167		0.240	5
		20	299851	DS201 M K20 A100	2CSR275140R2207		0.240	5
		25	299950	DS201 M K25 A100	2CSR275140R2257		0.240	5
		32	300052	DS201 M K32 A100	2CSR275140R2327		0.240	5
		40	300151	DS201 M K40 A100	2CSR275140R2407		0.240	5

## RCBOs

DS201 M series  $10000$  A  type, B and C characteristic



DS201 M 110V

### DS201 M 110V 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). 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**

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

B characteristic								
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			
1+N	30	6	077930	DS201 M B6 A30 110V	2CSR275199R1065		0.240	5
		10	077831	DS201 M B10 A30 110V	2CSR275199R1105		0.240	5
		13	077732	DS201 M B13 A30 110V	2CSR275199R1135		0.240	5
		16	077633	DS201 M B16 A30 110V	2CSR275199R1165		0.240	5
		20	080336	DS201 M B20 A30 110V	2CSR275199R1205		0.240	5
		25	080237	DS201 M B25 A30 110V	2CSR275199R1255		0.240	5
		32	080138	DS201 M B32 A30 110V	2CSR275199R1325		0.240	5
		40	080039	DS201 M B40 A30 110V	2CSR275199R1405		0.240	5

C characteristic								
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			
1+N	30	6	078739	DS201 M C6 A30 110V	2CSR275199R1064		0.240	5
		10	078630	DS201 M C10 A30 110V	2CSR275199R1104		0.240	5
		13	078531	DS201 M C13 A30 110V	2CSR275199R1134		0.240	5
		16	078432	DS201 M C16 A30 110V	2CSR275199R1164		0.240	5
		20	078333	DS201 M C20 A30 110V	2CSR275199R1204		0.240	5
		25	078234	DS201 M C25 A30 110V	2CSR275199R1254		0.240	5
		32	078135	DS201 M C32 A30 110V	2CSR275199R1324		0.240	5
		40	078036	DS201 M C40 A30 110V	2CSR275199R1404		0.240	5

## 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 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	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	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

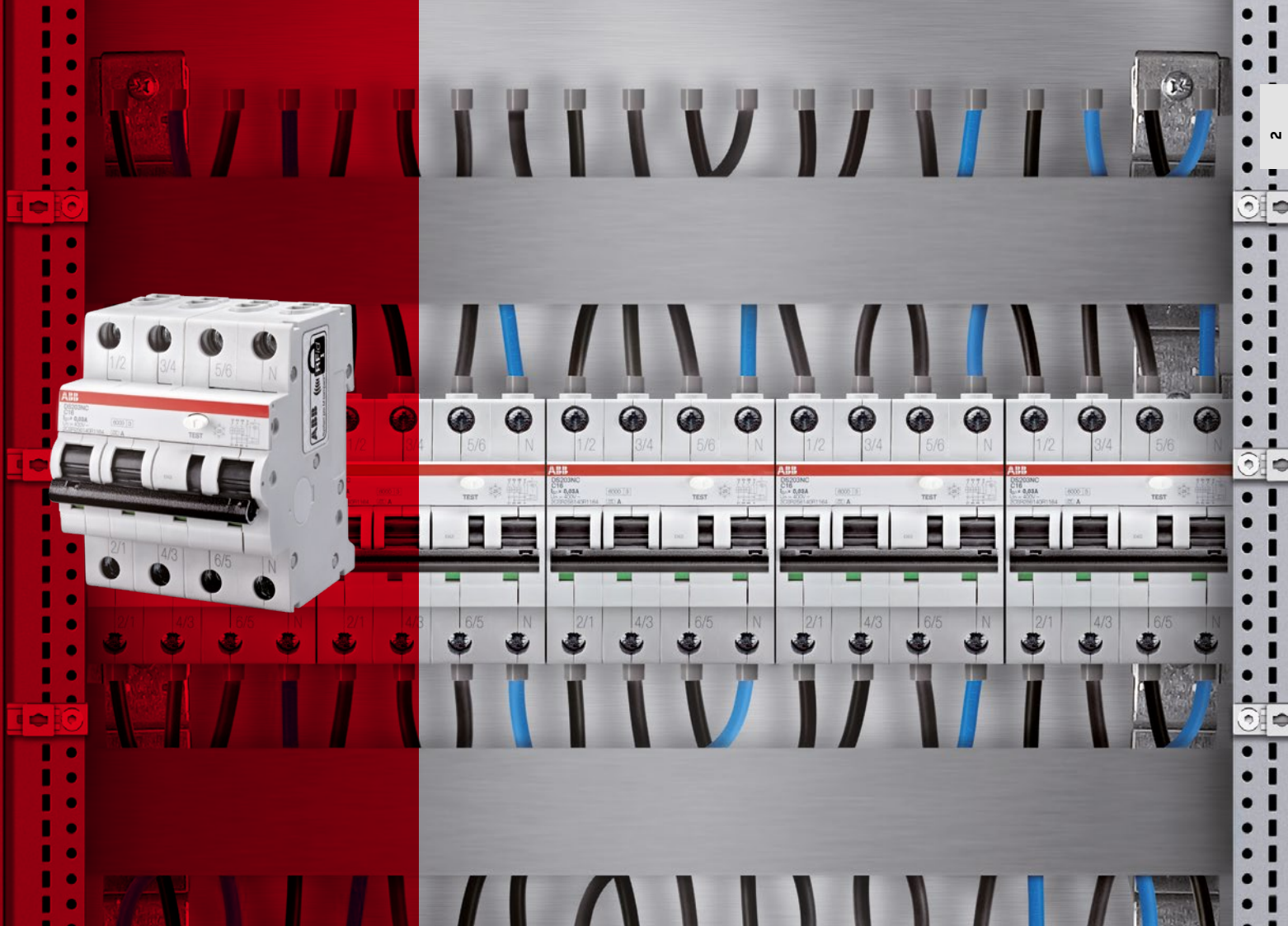
Function: protection of end user single-phase circuits against overload and short-circuit currents; protection against the effects of sinusoidal alternating and direct pulsating earth fault currents; protection against indirect contact and additional protection against direct contact ( $I_{\Delta n} = 30 \text{ mA}$ ). 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		0.240	5
		13	079330	DS202C M C13 A30 110V	2CSR272199R1134		0.240	5
		16	079736	DS202C M C16 A30 110V	2CSR272199R1164		0.240	5
		20	079637	DS202C M C20 A30 110V	2CSR272199R1204		0.240	5
		25	079538	DS202C M C25 A30 110V	2CSR272199R1254		0.240	5
		32	079439	DS202C M C32 A30 110V	2CSR272199R1324		0.240	5



## Minimum space, maximum protection.

DS203NC: 3P+N RCBOs  
in 4 modules.

Designed to be compact, DS203NC 3P+N RCBOs are suitable in all those applications where size can be an obstacle. They provide reliable and complete protection from over-current and earth fault currents. DS203NC RCBOs are available in two ranges with different breaking capacities to cover all the applications in commercial and industrial installations; DS203NC L with 4.5kA and DS203NC with 6kA breaking capacity according to IEC/EN 61009. The range includes types AC, A, APR and S and tripping curves B, C or K.

[www.abb.com/lowvoltage](http://www.abb.com/lowvoltage)

**ABB**

# 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.

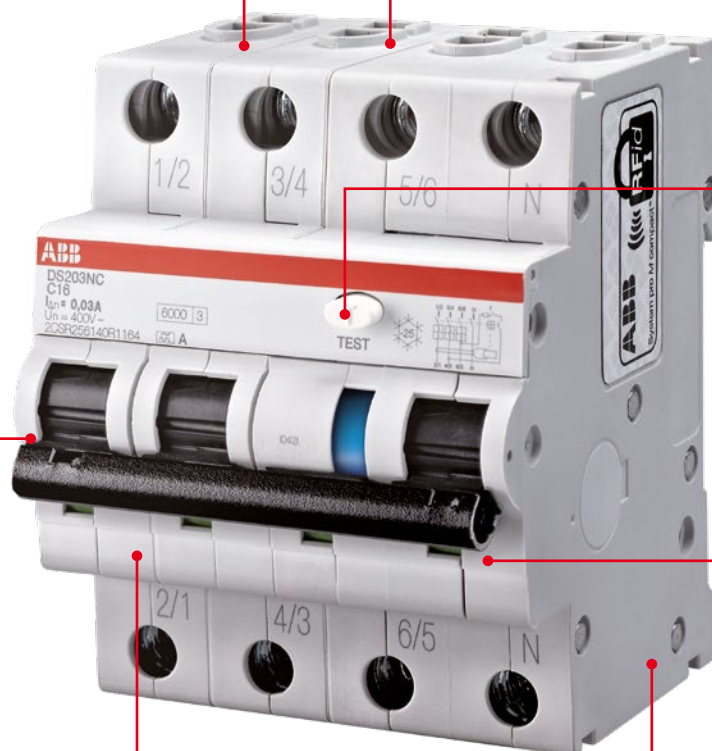
Operating toggle can be sealed into on/off position to ensure maintenance in complete safety.

Test pushbutton to verify the correct functioning of the device.

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
		kA	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	1
		8	079026	DS203NC L C8 APR30	2CSR246440R1084			
		10	078920	DS203NC L C10 APR30	2CSR246440R1104			
		13	078821	DS203NC L C13 APR30	2CSR246440R1134			
		16	078722	DS203NC L C16 APR30	2CSR246440R1164			
		20	078623	DS203NC L C20 APR30	2CSR246440R1204			
		25	078524	DS203NC L C25 APR30	2CSR246440R1254			
		32	078425	DS203NC L C32 APR30	2CSR246440R1324			

## 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	
		32	779223	DS203NC K32 A30	2CSR256140R1327		0.480	1	
	100	100	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 200 M AC	DS 200 M 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 200 M AC	DS 200 M 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	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	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	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  $\boxed{\sim}$  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 I <sub>n</sub> A	Bbn 8012542		Price 1 piece	Weight 1 piece	Pack unit
			EAN	Type code			
2	30	40	858201	DS202 A-B40/0.03	2CSR252101R1405	0.440	1
		50 ①	858300	DS202 A-B50/0.03	2CSR252101R1505	0.440	1
		63 ①	858409	DS202 A-B63/0.03	2CSR252101R1635	0.440	1



DS 204

Number of poles	Rated residual current I $\Delta$ n mA	Rated current I <sub>n</sub> A	Bbn 8012542		Price 1 piece	Weight 1 piece	Pack unit
			EAN	Type code			
3	30	6	858508	DS203 A-B6/0.03	2CSR253101R1065	0.610	1
		10	858607	DS203 A-B10/0.03	2CSR253101R1105	0.610	1
		13	858706	DS203 A-B13/0.03	2CSR253101R1135	0.610	1
		16	858805	DS203 A-B16/0.03	2CSR253101R1165	0.610	1
		20	858904	DS203 A-B20/0.03	2CSR253101R1205	0.610	1
		25	859000	DS203 A-B25/0.03	2CSR253101R1255	0.610	1
		32	859109	DS203 A-B32/0.03	2CSR253101R1325	0.610	1
		40	859208	DS203 A-B40/0.03	2CSR253101R1405	0.610	1
		50 ①	859307	DS203 A-B50/0.03	2CSR253101R1505	0.650	1
63 ①	859406	DS203 A-B63/0.03	2CSR253101R1635	0.650	1		

Number of poles	Rated residual current I $\Delta$ n mA	Rated current I <sub>n</sub> A	Bbn 8012542		Price 1 piece	Weight 1 piece	Pack unit
			EAN	Type code			
4	30	6	859505	DS204 A-B6/0.03	2CSR254101R1065	0.780	1
		10	859604	DS204 A-B10/0.03	2CSR254101R1105	0.780	1
		13	859703	DS204 A-B13/0.03	2CSR254101R1135	0.780	1
		16	859802	DS204 A-B16/0.03	2CSR254101R1165	0.780	1
		20	859901	DS204 A-B20/0.03	2CSR254101R1205	0.780	1
		25	860006	DS204 A-B25/0.03	2CSR254101R1255	0.780	1
		32	860105	DS204 A-B32/0.03	2CSR254101R1325	0.780	1
		40	860204	DS204 A-B40/0.03	2CSR254101R1405	0.780	1
		50 ①	860303	DS204 A-B50/0.03	2CSR254101R1505	0.825	1
63 ①	860402	DS204 A-B63/0.03	2CSR254101R1635	0.825	1		

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

Icn = 6 kA



DS 203

Number of poles	Rated residual current I $\Delta$ n mA	Rated current In A	Bbn 8012542		Price 1 piece	Weight 1 piece	Pack unit
			EAN	Type code			
2	30	40	861201	DS202 A-C40/0.03	2CSR252101R1404	0.440	1
		50 ①	861300	DS202 A-C50/0.03	2CSR252101R1504	0.440	1
		63 ①	861409	DS202 A-C63/0.03	2CSR252101R1634	0.440	1



DS 204

Number of poles	Rated residual current I $\Delta$ n mA	Rated current In A	Bbn 8012542		Price 1 piece	Weight 1 piece	Pack unit
			EAN	Type code			
3	30	6	861508	DS203 A-C6/0.03	2CSR253101R1064	0.610	1
		10	861607	DS203 A-C10/0.03	2CSR253101R1104	0.610	1
		13	861706	DS203 A-C13/0.03	2CSR253101R1134	0.610	1
		16	861805	DS203 A-C16/0.03	2CSR253101R1164	0.610	1
		20	861904	DS203 A-C20/0.03	2CSR253101R1204	0.610	1
		25	862000	DS203 A-C25/0.03	2CSR253101R1254	0.610	1
		32	862109	DS203 A-C32/0.03	2CSR253101R1324	0.610	1
		40	862208	DS203 A-C40/0.03	2CSR253101R1404	0.610	1
		50 ①	862307	DS203 A-C50/0.03	2CSR253101R1504	0.650	1
63 ①	862406	DS203 A-C63/0.03	2CSR253101R1634	0.650	1		

Number of poles	Rated residual current I $\Delta$ n mA	Rated current In A	Bbn 8012542		Price 1 piece	Weight 1 piece	Pack unit
			EAN	Type code			
4	30	6	862505	DS204 A-C6/0.03	2CSR254101R1064	0.780	1
		10	862604	DS204 A-C10/0.03	2CSR254101R1104	0.780	1
		13	862703	DS204 A-C13/0.03	2CSR254101R1134	0.780	1
		16	862802	DS204 A-C16/0.03	2CSR254101R1164	0.780	1
		20	862901	DS204 A-C20/0.03	2CSR254101R1204	0.780	1
		25	863007	DS204 A-C25/0.03	2CSR254101R1254	0.780	1
		32	863106	DS204 A-C32/0.03	2CSR254101R1324	0.780	1
		40	863205	DS204 A-C40/0.03	2CSR254101R1404	0.780	1
		50 ①	863304	DS204 A-C50/0.03	2CSR254101R1504	0.825	1
63 ①	863403	DS204 A-C63/0.03	2CSR254101R1634	0.825	1		

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

$I_{cn} = 10 \text{ kA}$



DS 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	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 $I_{\Delta n}$ 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	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	Mounting	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					

## 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.

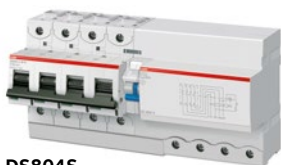
Standard: IEC/EN 60947-2

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		0.790	1
	D	300	125	211745	DS802S-D125/0.3A	2CCA862005R0841		0.790	1
	K	300	125	211752	DS802S-K125/0.3A	2CCA862005R0647		0.790	1



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		1.14	1
	D	300	125	211783	DS803S-D125/0.3A	2CCA863005R0841		1.14	1
	K	300	125	211790	DS803S-K125/0.3A	2CCA863005R0647		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	211806	DS804S-B125/0.3A	2CCA864005R0845		1.44	1
	C	300	125	211813	DS804S-C125/0.3A	2CCA864005R0844		1.44	1
	D	300	125	211820	DS804S-D125/0.3A	2CCA864005R0841		1.44	1
	K	300	125	211837	DS804S-K125/0.3A	2CCA864005R0647		1.44	1

## RCBOs

DS800N series 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.**

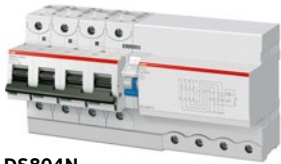
**Standard: IEC/EN 60947-2**

**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.

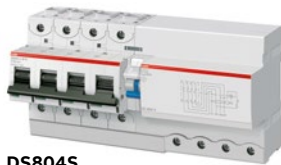
**Application: industrial.**

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

**Icu = 50 kA**



DS803S



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	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			

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	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		1.44	1
		1000	125	211608	DS804S-C125/1AS	2CCC864006R0844			
	D	300	125	211578	DS804S-D125/0.3AS	2CCC864005R0841		1.44	1
		1000	125	211615	DS804S-D125/1AS	2CCC864006R0841			
	K	300	125	211685	DS804S-K125/0.3AS	2CCC864005R0647		1.44	1
		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.**

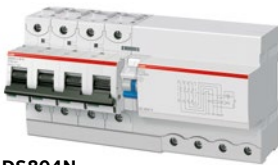
**Standard: IEC/EN 60947-2**

**Icu = 36 kA**



DS803N

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			



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			
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.

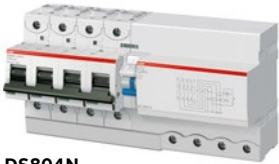
**Application: industrial.**

**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

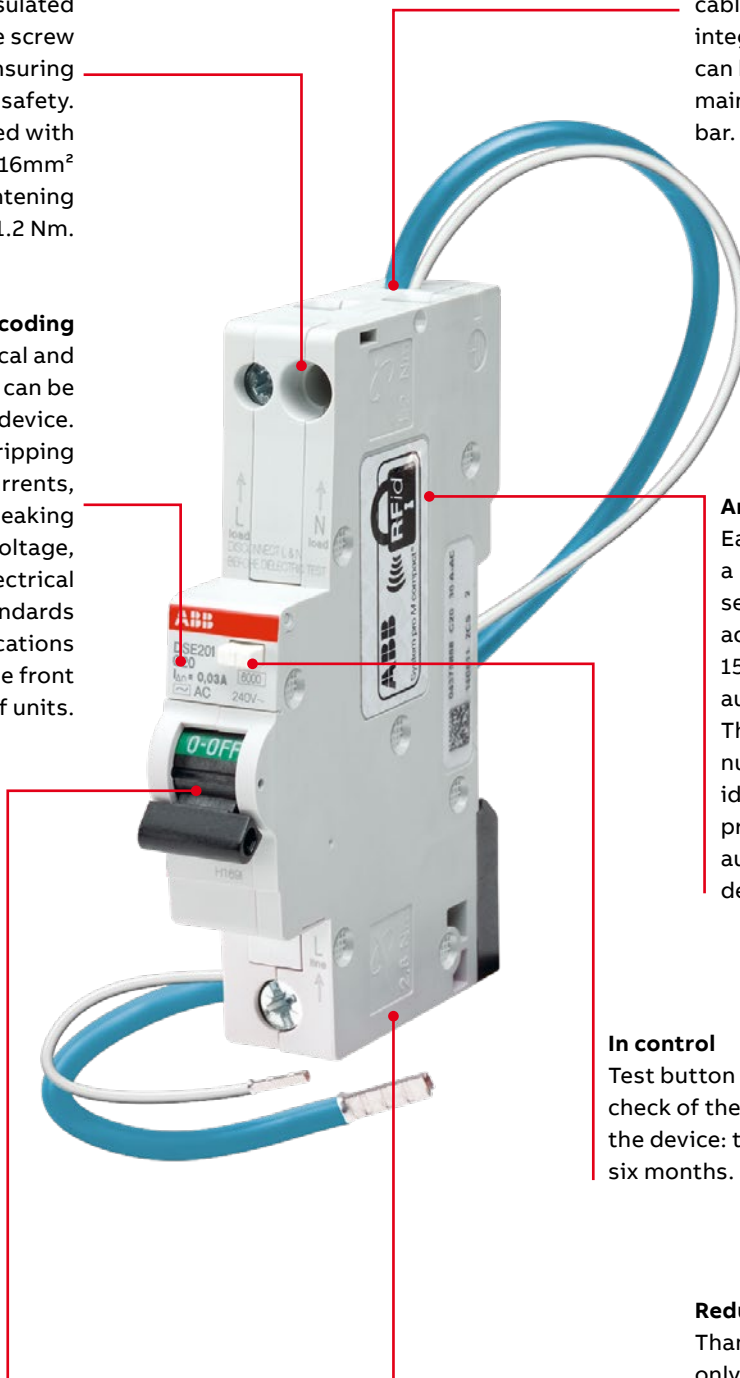
Test button allows the regular check of the functionality of the device: to be pushed every six months.

### 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.



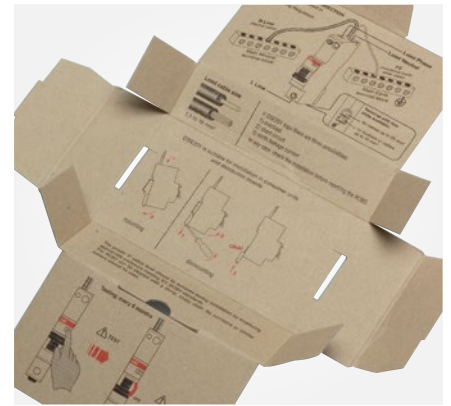
#### Double slot terminal

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
	Length	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
	Length	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. DSE201 M 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

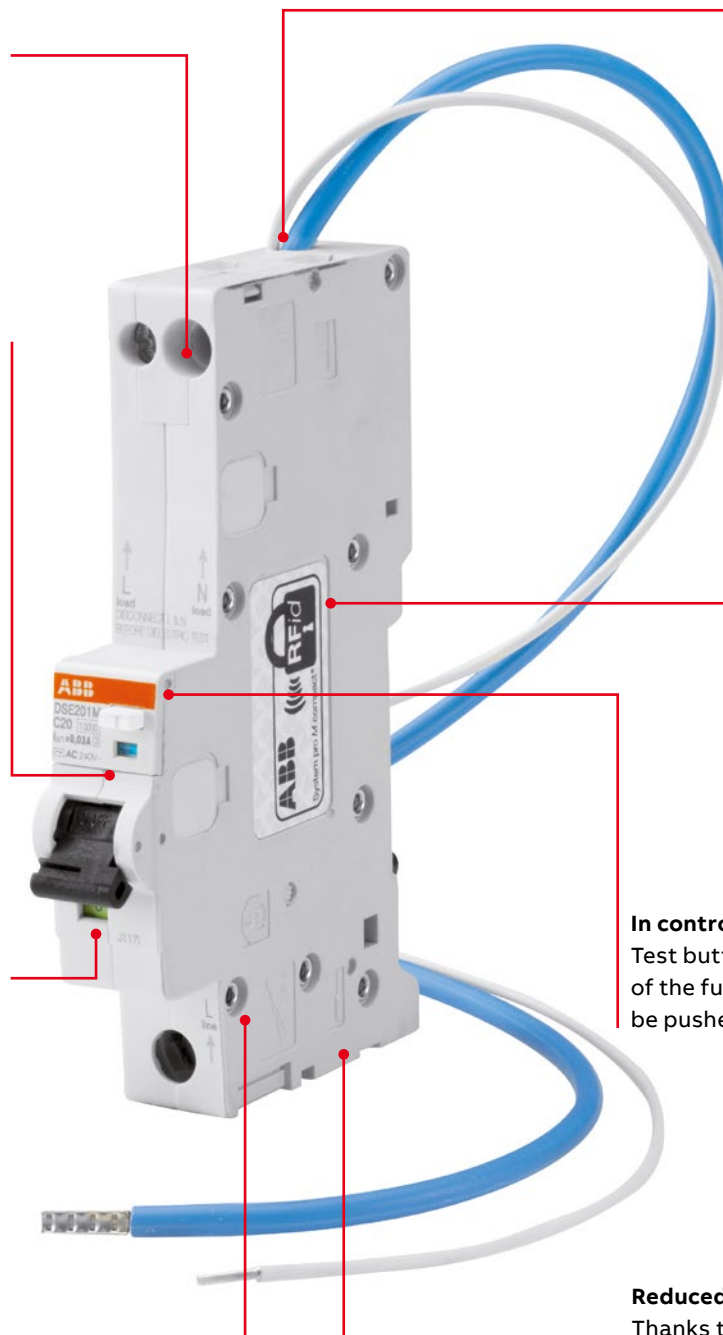
Each DSE201 is equipped with a RFID tag containing a unique serial number assigned by ABB according to ISO/IEC FCD 15693-3 standard in order to authenticate the product. Through this unique serial number, ABB can easily identify counterfeited products and verify the authenticity of each single device.

### 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, DSE201 M 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.



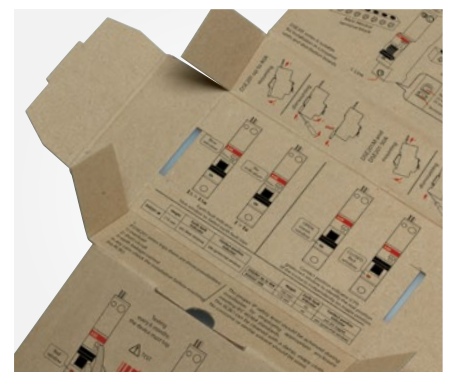
### Easy and flexible

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.

## DSE201 M

### 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

## DSE201 M

### 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  $\boxed{10000}$  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 ( $I_{\Delta n} = 30 \text{ mA}$ ).

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	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  $\boxed{\text{~}}$  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  $\boxed{\text{C}}$  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 48x48 mm, 72x72 mm, and 96x96 mm.

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	