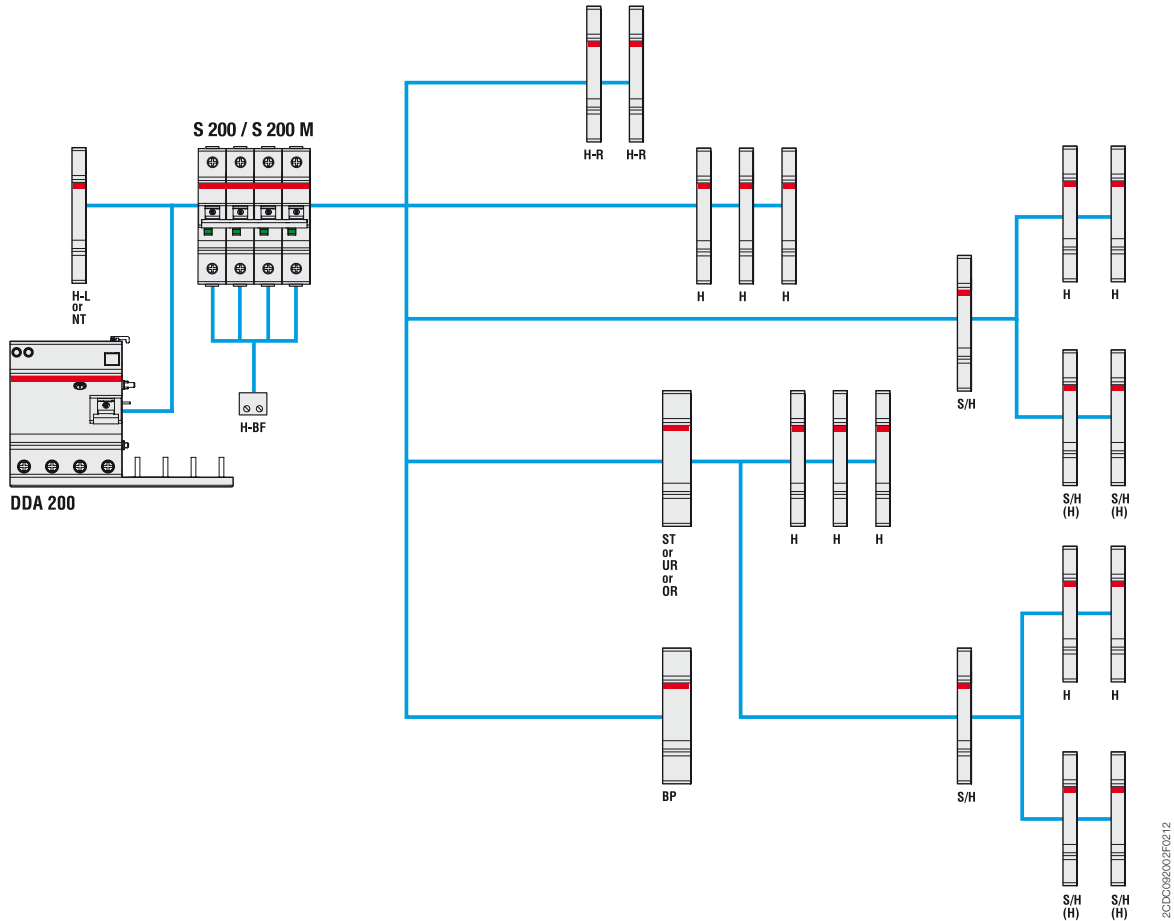


# Auxiliary elements and accessories for MCBs and RCDs

## Selection tables

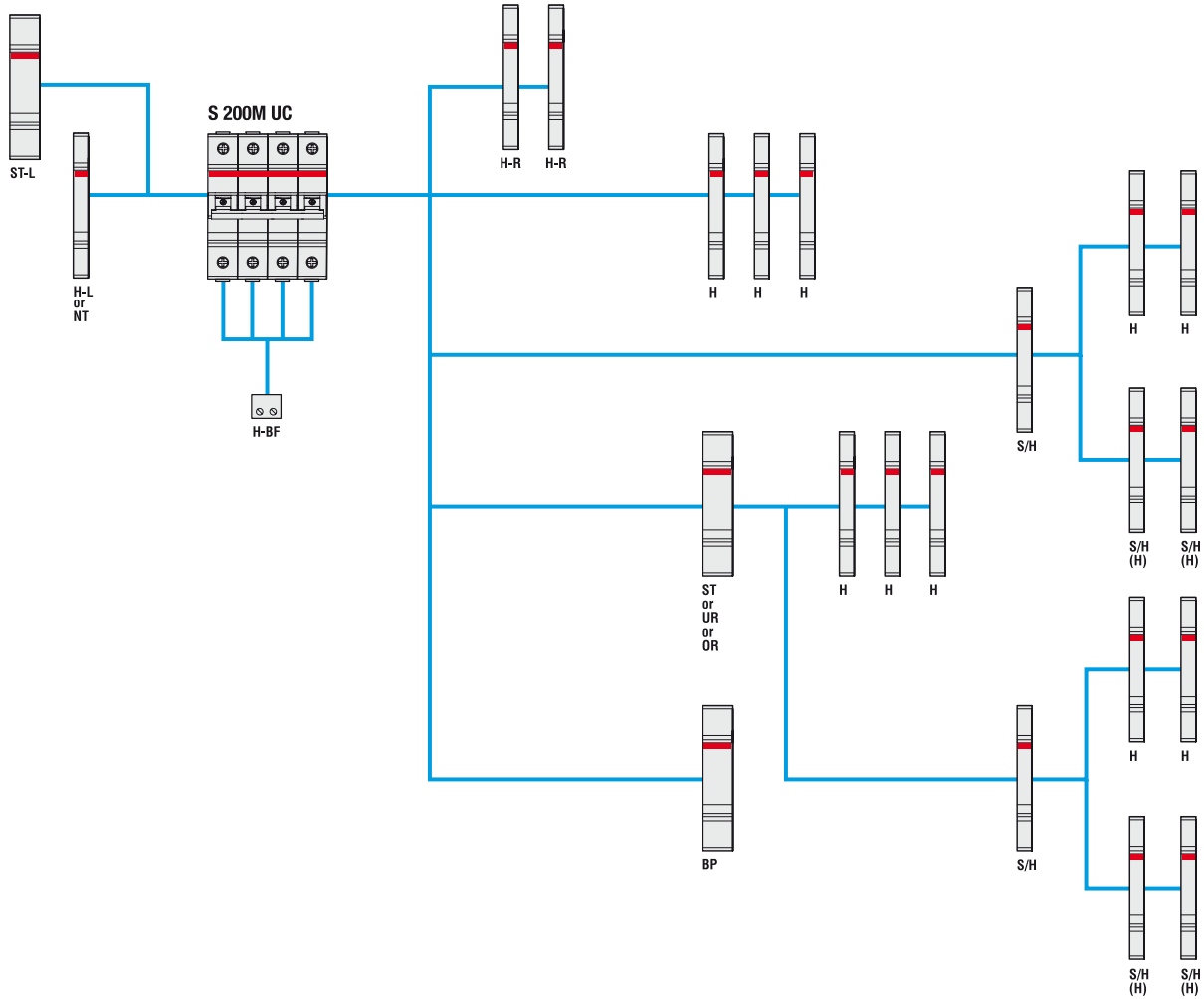
Combination of auxiliary elements with S200, S200M, S200P, DDA200 + S200 or DS200



<b>H</b>	Auxiliary contact	S2C-H6R
<b>H-R</b>	Auxiliary contact	S2C-H6-...R
<b>S/H</b>	Signal/Auxiliary contact	S2C-S/H6R
<b>S/H (H)</b>	Signal/Auxiliary contact used as auxiliary contact	S2C-S/H6R
<b>ST</b>	Shunt trip for S 200 MCB	S2C-A...
<b>UR</b>	Undervoltage release	S2C-UA
<b>OR</b>	Overvoltage release	S2C-OVP
<b>H-L</b>	Auxiliary contact for S 200 MCBs to be mounted on the left	S2C-H...L
<b>H-BF</b>	Auxiliary contact for MCBs bottom fitting (1 for each pole of MCB)	S2C-H01/S2C-H10
<b>BP</b>	Mechanical tripping device	S2C-BP
<b>NT</b>	Switched neutral	S2C-Nt

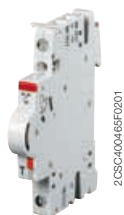
In case of using rotary operating mechanism S2C-DH (only right side mountable) the auxiliary devices left side and bottom fitting auxiliary contact could be used.

## Combination of auxiliary elements with S200M, S200MUC



<b>H</b>	Auxiliary contact	S2C-H6R
<b>H-R</b>	Auxiliary contact	S2C-H6-...R
<b>S/H</b>	Signal/Auxiliary contact	S2C-S/H6R
<b>S/H (H)</b>	Signal/Auxiliary contact used as auxiliary contact	S2C-S/H6R
<b>ST</b>	Shunt trip for S 200 MCB	S2C-A...
<b>ST-L</b>	Shunt trip to be mounted on the left	
<b>UR</b>	Undervoltage release	S2C-UA
<b>OR</b>	Overvoltage release	S2C-OVP
<b>H-L</b>	Auxiliary contact for S 200 MCBs to be mounted on the left	S2C-H...L
<b>H-BF</b>	Auxiliary contact for MCBs bottom fitting (1 for each pole of MCB)	S2C-H01/S2C-H10
<b>BP</b>	Mechanical tripping device	S2C-BP
<b>NT</b>	Switched neutral	S2C-Nt

# Auxiliary elements for MCBs S 200, SN 201, RCDs F 200, DS 200 and Switch Disconnectors SD 200 series



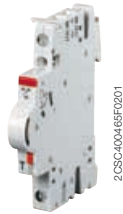
Auxiliary elements

4

Auxiliary contact and signal/auxiliary contact		
		<b>S2C-S/H6R, S2C-H6R, S2C-H11L, S2C-H20L and S2C-H02L</b>
Utilization category		AC14 1A/400V, 2A/230V - DC12 1A/220V, 1,5A/110V - DC13 2A/60V, 4A/24V
Conventional free air thermal current	A	10
Min. operational current/voltage*		10 mA at 12 V; 5 mA at 24 V
Rated conditional short-circuit current	V	230 V AC 1,000 A with S201 K4
Overvoltage category		III
Rated impuls withstand voltage (1.2/50µs)	kV	4
Cross-section of conductors	mm <sup>2</sup>	0.75...2.5 (up to 2 x 1.5 mm <sup>2</sup> for S2C-H11L, S2C-H20L and S2C-H02L)
Tightening torque	Nm	1.2 (max. 0.8 for S2C-H11L, S2C-H20L and S2C-H02L)
Contact stability in vibration test according to IEC/EN 60 068-2-6		5g, 20 sweep cycles 5...150...5 Hz at 24 V AC/DC, 5 mA automatic reclosing < 10 ms
Mechanical service life		10000 operations
Dimensions (H x D x W)	mm	85 x 69 x 8.8

Auxiliary contact and signal/auxiliary contact		
		<b>S2C-H6-11R, S2C-H6-20R, S2C-H6-02R</b>
Utilization category		AC14: 1A/400V, 2A/230V DC12/DC13: 1A/50V, 2A/30V
Conventional free air thermal current	A	10
Min. rated operational current/voltage*		10 mA at 12 V; 5 mA at 24 V
Rated conditional short-circuit current	V	230 V AC 1,000 A with S201 K4
Overvoltage category		III
Rated impuls withstand voltage (1.2/50µs)	kV	4
Cross-section of conductors	mm <sup>2</sup>	0.75...2.5
Tightening torque	Nm	1.2
Contact stability in vibration test according to IEC/EN 60068-2-6		5g, 20 sweep cycles 5...150...5 Hz at 24 V AC/DC. 5mA automatic reclosing < 10 ms
Mechanical service life		10000 operations
Dimensions (H x D x W)	mm	85 x 69 x 8.8

\* ensures safe contacting without current interruption by pollution layer



S2C-S/H6R



S2C-H6...

### Signal/auxiliary contacts

Signal contacts indicate if a device tripped due to a failure (overcurrent/short-circuit for MCBs and RCBOs; earth fault for RCCBs and RCBOs).

Auxiliary contacts indicate the position of the contacts, independent if a failure occurred or the device was operated manually.

**S2C-S/H6R:** choice through a selector between signal and auxiliary contact.

**S2C-H6R and S2C-HxxR:** Auxiliary contacts with contact configuration according to the following table.

All right-side mounted contacts are suitable for MCBs, RCDs and switch disconnectors SD200 according to the "Selection tables" which are displayed in the beginning of chapter 4.

**S2C-HxxL:** Auxiliary contacts with contact configuration according to the following table. These contacts are left-side mounted and fit to S200 MCBs and switch disconnectors SD200 according to the "Selection tables" which are displayed in the beginning of chapter 4. Especially when using a motor operating device this is a possibility to add a contact as the right side mounted ones do not fit within this combination.

**S2C-Hxx:** Unique bottom-fitting contact for the S200 compact range and SD200 switch disconnectors. Simple and space-saving solution. Also intended for retrofitting.

Description	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code			
Signal contact/ auxiliary switch 1CO	563819	S2C-S/H6R	2CDS200922R0001		0.04	1
Auxiliary contact 1CO	563826	S2C-H6R	2CDS200912R0001		0.04	1
Auxiliary contact 1NO/1NC	697941	S2C-H6-11R	2CDS200946R0001		0.04	1
Auxiliary contact 2NO	697958	S2C-H6-20R	2CDS200946R0002		0.04	1
Auxiliary contact 2NC	697965	S2C-H6-02R	2CDS200946R0003		0.04	1

### Auxiliary contacts mounting on the left side

Description	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
	EAN	Type code	Order code			
Auxiliary contact 1 NO/1NC	648820	S2C-H11L	2CDS200936R0001		0.04	1
Auxiliary contact 2 NO	648837	S2C-H20L	2CDS200936R0002		0.04	1
Auxiliary contact 2 NC	648844	S2C-H02L	2CDS200936R0003		0.04	1

# Auxiliary elements for MCBs S 200, SN 201, RCDs F 200, DS 200 and Switch Disconnectors SD 200 series



S2C-H

2CSC400155F0201

Bottom-fitting auxiliary contact		
S2C-H10 and S2C-H01		
Conventional free air thermal current	A	7.5
Utilization category		AC14 2A/230V - DC 12 identical DC13 1A /50V, 2A/30V
Min. operational current/voltage*	V	10 mA at 12 V AC/DC
Rated conditional short-circuit current		230 VAC 1000 A, fault protection with S 201-K2 or Z2
Tightening torque	Nm	0.5
Cross-section of conductors	mm <sup>2</sup>	0.75 to 2.5
Mechanical service life		10000 operations
Dimensions (HxDxW)		19 x 17 x 17.5

\* ensures safe contacting without current interruption by pollution layer

## Bottom-fitting auxiliary contacts for S 200, S 200 M, S 200 P, S 200 S, SD 200

Description	Bbn	Order details		Price 1 piece	Weight 1 piece	Pack unit
	4016779	Type code	Order code			
	EAN				kg	pc.
1 NC	64551 5	S 2C-H01	2CDS 200 970 R0001		0.01	1
1 NO	64552 2	S 2C-H10	2CDS 200 970 R0002		0.01	1

## packing unit 15 parts

Description	Bbn	Order details		Price 1 piece	Weight 1 piece	Pack unit
	4016779	Type code	Order code			
	EAN				kg	pc.
1 NC	64677 2	S 2C-H01 15x	2CDS 200 970 R0011		0.01	15
1 NO	64681 9	S 2C-H10 15x	2CDS 200 970 R0012		0.01	15

## Auxiliary contact bridge for bottom-fitting auxiliary contacts

Wire jumper for integrated auxiliary contact S2C-H01/S2C-H10 for series connections (HKB) or parallel connections (HKB1).

Description	Bbn	Order details		Price 1 piece	Weight 1 piece	Pack unit
	8012542	Type code	Order code			
	EAN				kg	pc.
1/2 mod.	523134	HKB	GH V036 0504 R0100		0.001	1000
1 mod.	524209	HKB 1	GH V036 0504 R0101		0.001	1000

## Signal and auxiliary contacts

		SN201-S	SN201-IH
Terminals	mm <sup>2</sup>	2x1,5	
Tightening torque	N	1.2	
Dimensions	mm	H: 85 x D: 68 x W: 8.9	H: 85 x D: 68,7 x W: 8.9
Rated voltage	V	230	
Rated current	A	2	



SN201-S

2CSC400889F0001



SN201-IH

2CSC400881F0001

**Utilization category / contact capacity**

SN201-S, SN201-IH				
AC14	Ue	V	400	230
	Ie	A	1	2
DC12	Ue	V	220	110
	Ie	A	1	1,5
DC13	Ue	V	60	24
	Ie	A	2	4

**Signal contact for SN201 MCBs**

Function: indication of the device contact positions only after the automatic release of the MCBs due to overcurrent.

Description	Bbn	Order details		Price	Weight	Pack
	8012542	Type code	Order code	1 piece	1 piece	unit
	EAN				kg	pc.
Signal contact 1CO	104957	SN201-S	2CSS200924R0001		0.040	1

**Auxiliary contact / interface module for SN201 MCBs**

Function: indication of the device contact positions. The auxiliary contact can be used as an interface module between SN201 and other compact auxiliary elements.

Description	Bbn	Order details		Price	Weight	Pack
	8012542	Type code	Order code	1 piece	1 piece	unit
	EAN				kg	pc.
Interface module/Aux. Contact 1CO	104858	SN201-IH	2CSS200923R0001		0.050	1

**Signal and auxiliary contacts for F 200 125A and F 200 B**

				F2 125A-S/H	
Rated current	AC	A	6		
	DC	A	1		
Min. rated voltage Ub min	AC	V	230		
	DC	V	110		
Connection cross section		mm <sup>2</sup>	1...1.5		
Tightening torque		Nm	0.8		
Dimensions (H x D x W)		mm	85 x 69 x 8.8		

**Auxiliary/Signal contact for F 200 125A and F 200 B**

Function: choice through a selector between indication of the position of the device's contacts and signalling of the earth fault. Suitable for RCCBs F 200 125A and F 200 B series

Description	Bbn	Order details		Price	Weight	Pack
	8012542	Type code	Order code	1 piece	1 piece	unit
	EAN				kg	pc.
Auxiliary/Signal contact 1CO+1NC	600527	F2-125A-B-S/H	2CSF200922R0001		0.04	1

**Clamping cover for F200 125A-F200 B type**

Description	Bbn	Order details		Price	Weight	Pack
	4016779	Type code	Order code	1 piece	1 piece	unit
	EAN				kg	pc.
	999638	CPV B	2CSF200988R0001			1

# Auxiliary elements for MCBs S 200, SN 201, RCDs F 200, DS 200 and Switch Disconnectors SD 200 series



S2C-A

2CSC-000471F0201

4

Shunt trip for S 200 MCBs								
S2C-A1								
Rated voltage	AC	V	12...60					
	DC	V	12...60					
Max release duration		ms	<10					
Min. release voltage	AC	V	7					
	DC	V	10					
Power consumption	Ub	V	12	12	24	24	60	60
		DC	AC	DC	AC	DC	AC	
	Ib max	A	2.2	2.5	4.5	5	14	8.8
Coil resistance		Ω	3.7					
Terminals	Fail-safe bi-directional cylinder-lift-terminal							
Tightening torque		Nm	2.8					
Dimensions (H x D x W)		mm	85 x 69 x 17.5					
S2C-A2								
Rated voltage	AC	V	110...415					
	DC	V	110...250					
Max release duration		ms	<10					
Min. release voltage	AC	V	55					
	DC	V	80					
Power consumption	Ub	V	110	110	220	230	415	
		DC	AC	DC	AC	AC		
	Ib max	A	0.4	0.5	1.1	1.0	2.7	
Coil resistance		Ω	225					
Terminals	Fail-safe bi-directional cylinder-lift-terminal							
Tightening torque		Nm	2.8					
Dimensions (H x D x W)		mm	85 x 69 x 17.5					

## Shunt trips

Function: remote opening of the device when a voltage is applied. Suitable for MCBs S 200 series, RCBOs DS 200 series, SD 200 switch disconnectors series.

Shunt trips use a coil like MCBs for tripping. To trip a shunt it is necessary to choose the right voltage and make sure the corresponding Ibmax (as mentioned in the table above) is provided by the power supply used. If the power supply can provide higher currents the shunt trip will reduce the current to Ibmax due to its internal resistance.

As soon as the shunt tripped, the contact inside is open – the electrical circuit is disconnected even if the shunt trip is still powered on. The free-tripping mechanism of the shunt trip allows a restart of the MCB only after the shunt trip gets no external release signal anymore.

Rated voltage	Bbn	Order details		Price	Weight	Pack
	4016779	Type code	Order code	1 piece	1 piece	unit
	EAN				kg	pc.
AC/DC 12...60 V	570992	S2C-A1	2CDS200909R0001		0.15	1
AC 110...415 V/DC110...250 V	571005	S2C-A2	2CDS200909R0002		0.15	1



### Shunt trip for F 200 RCCBs

				<b>F2C-A1</b>				
Rated voltage	AC	V	12...60					
	DC	V	12...60					
Max release duration		ms	10					
Min. release voltage	AC	V	6					
	DC	V	4.5					
Consumption on release	Ub	V	12 DC	12 AC	24 DC	60 DC	60 AC	
	Ib max	A	0.88	0.65	1.58	5.8	5	
Coil resistance		Ω	5.5					
Terminals		mm <sup>2</sup>	2x1.5					
Tightening torque		Nm	0.2					
Dimensions (H x D x W)		mm	85 x 69 x 17.5					
				<b>F2C-A2</b>				
Rated voltage	AC	V	110...415					
	DC	V	110...250					
Max release duration		ms	10					
Min. release voltage	AC	V	75					
	DC	V	55					
Consumption on release	Ub	V	110 DC	110 AC	250 DC	415 AC		
	Ib max	A	0.05	0.03	0.1	0.16		
Coil resistance		Ω	1355					
Terminals		mm <sup>2</sup>	2x1.5					
Tightening torque		Nm	0.2					
Dimensions (H x D x W)		mm	85 x 69 x 17.5					

Function: remote opening of the device when a voltage is applied. Suitable for RCCBs F 200 series and RCBOs DS201 and DS202C.

It can be used with MCBs SN201 series by means of SN201-IH interface module.

Rated voltage	Bbn	Order details		Price	Weight	Pack
	8012542	Type code	Order code	1 piece	1 piece	unit
	EAN				kg	pc.
AC/DC 12...60V	974901	F2C-A1	2CSS200933R0011		0.15	1
AC 110...415V / DC 110...250V	975007	F2C-A2	2CSS200933R0012		0.15	1



# Auxiliary elements for MCBs S 200, SN 201, RCDs F 200, DS 200 and Switch Disconnectors SD 200 series



2CSC400025F0201

S2C-UA

4

Undervoltage release			S2C-UA 12 DC	S2C-UA 24 AC	S2C-UA 24 DC	S2C-UA 48 AC	S2C-UA 48 DC
Standards			IEC/EN 60947-1				
Rated voltage	AC	V		24		48	
	DC	V	12		24		48
Frequency		Hz	50...60				
Release trip		V	0.35 Un ≥ V ≥ 0.7 Un				
Terminals		mm <sup>2</sup>	2x1.5				
Consumption		VA	2.2	3.6	2	3.6	2.1
Resistance to corrosion		°C/ RH	constant atmosphere: 23/83 - 40/93 - 55/20; variable atmosphere: 25/95 - 40/93				
Protection degree			IPXXB/IP2X				
Tightening torque		Nm	0.4				
Dimensions (H x D x W)		mm	85 x 69 x 17.5				
			S2C-UA 110 AC	S2C-UA 110 DC	S2C-UA 230 AC	S2C-UA 230 DC	S2C-UA 400 AC
Standards			IEC/EN 60947-1				
Rated voltage	AC	V	110		230		400
	DC	V		110		230	
Frequency		Hz	50...60				
Release trip		V	0.35 Un M V M 0.7 Un				
Terminals		mm <sup>2</sup>	2x1.5				
Consumption		VA	3.5	2.2	3.7	2.3	2.4
Resistance to corrosion		°C/ RH	constant atmosphere: 23/83 - 40/93 - 55/20; variable atmosphere: 25/95 - 40/93				
Protection degree			IPXXB/IP2X				
Tightening torque		Nm	0.4				
Dimensions (H x D x W)		mm	85 x 69 x 17.5				

## Undervoltage releases

Function: protection of the load in the event of a voltage drop (between 70% and 35% of its rated value); positive safety (device's tripping when the voltage is disconnected) emergency stop by means of a button. Suitable for MCBs S 200 series, RCCBs F200 series and RCBOs DS201, DS202C, DS 200 series, SD 200 switch disconnectors series. It can be used with MCBs SN201 series by means of SN201-IH interface module.

Rated voltage	Bbn 8012542	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
	EAN	Type code	Order code			
12VDC	839705	S2C-UA 12 DC	2CSS200911R0001		0.09	1
24VAC	839804	S2C-UA 24 AC	2CSS200911R0002		0.09	1
24VDC	896401	S2C-UA 24 DC	2CSS200911R0007		0.09	1
48VAC	839903	S2C-UA 48 AC	2CSS200911R0003		0.09	1
48VDC	896500	S2C-UA 48 DC	2CSS200911R0008		0.09	1
110VAC	840008	S2C-UA 110 AC	2CSS200911R0004		0.09	1
110VDC	896609	S2C-UA 110 DC	2CSS200911R0009		0.09	1
230VAC	840107	S2C-UA 230 AC	2CSS200911R0005		0.09	1
230VDC	896708	S2C-UA 230 DC	2CSS200911R0010		0.09	1
400VAC	840206	S2C-UA 400 AC	2CSS200911R0006		0.09	1



2CSC400677R0001

S2C-OVP



2CSC400655F0201

S2C-Nt

Overvoltage release		S2C - OVP2		S2C - OVP1	
Rated voltage	VAC	230			
Rated frequency	Hz	50			
Max non-tripping voltage AC	V	253			
Max tripping voltage AC	V	290		275	
Tripping time	@ 290V AC	s	t<1		
	@ 380V AC	s	t<0.1		
Peak current	@ 315V AC	A	1		
	@ 440V AC	A	1.8		
Max duration of impulse command	ms	7			
Operating temperature	°C	-5...+40			

**Overvoltage releases**

Function: monitoring voltage between the neutral and phase; when an overvoltage reaches the threshold value, the OVP device causes the tripping of the associated MCB or RCCB. Suitable for MCBs of the S200 series up to 63 A, and RCCBs of the F200 series up to 100 A and RCBOs DS201 and DS202C series. Suitable for SD 200 switch disconnectors series.

Description	Bbn	Order details		Price 1 piece	Weight 1 piece	Pack unit
	8012542	Type code	Order code			
	EAN				kg	pc.
Overvoltage release (max tripping voltage AC: 275V)	748137	S2C-OVP1	2CSS200910R0005		0.100	1/5
Overvoltage release (max tripping voltage AC: 290V)	952039	S2C-OVP2	2CSS200993R0005		0.100	1/5

**Hand operated neutral left side mounted**

		S2C-Nt	
Rated current	A	max.	40
Terminal	mm <sup>2</sup>	10;	cage terminal
Tightening torque	Nm	1.2	
Dimensions (H x D x W)	mm	85 x 69 x 8.8	

**Hand operated neutral**

The hand operated neutral has to be mounted to the left side of the MCB and be snapped on the DIN rail. It is used for measuring duties where the neutral conductor must be in the open position. Due to the special design of the handle - when switching ON the MCB – the neutral will make before the MCB is closed. Suitable for SD 200 switch disconnectors series. The S2C - Nt is not to switch with a tool (screw driver).

Description	Bbn	Order details		Price 1 piece	Weight 1 piece	Pack unit
	4016779	Type code	Order code			
	EAN				kg	pc.
Max 40A	647625	S2C-Nt	2CDS200918R0001		0.06	1

# Auxiliary elements for MCBs S 200, SN 201, RCDs F 200, DS 200 and Switch Disconnectors SD 200 series



2CSC400028F0201

S 2C-S6R U

4



2CSC400024F0201

S 2C-H6R U

Auxiliary contact and signal contact		
S2C-H6R U, S2C-S6RU		
Rating according UL 489 / CSA22-2 No.5		1A / 480 VAC 2A / 277 VAC 1.5 A / 125 VDC 2A / 60 VDC 4 A / 24 VDC
Conventional free air thermal current	A	10
Min. operational current/voltage*		10 mA at 12 V; 5 mA at 24 V
Rated conditional short-circuit current	V	230 V AC, 1,000 A with S201 K4
Overvoltage category		III
Rated impuls withstand voltage (1.2/50µs)	kV	4
Cross section of conductors	mm <sup>2</sup>	0.75...2.5
Tightening torque	Nm	1.2
Contact stability in vibration test according to IEC/EN60068-2-6		5g, 20 sweep cycles 5...150...5 Hz according to DIN IEC 68-2-6 at 24 V AC/DC, 5 mA automatic reclosing < 10 ms
Mechanical service life		10000 operations
Dimensions (H x D x W)	mm	100 x 69 x 8.8

\* ensures safe contacting without current interruption by pollution layer.

## Accessories for S 200 U/S 200 UP/S 200 UDC

### Auxiliary contact (switch)

Description	Bbn	Order details		Price	Weight	Pack
	4016779	Type code	Order code	1 piece	1 piece	unit
	EAN				kg	pc.
only for range U/UP/UDC	61561 7	S 2C-H6R U	2CDS 200 914 R0001		0.035	1

### Signal contact (bell alarm)

Description	Bbn	Order details		Price	Weight	Pack
	4016779	Type code	Order code	1 piece	1 piece	unit
	EAN				kg	pc.
only for range U/UP/UDC	64677 2	S 2C-S6R U	2CDS 200 924 R0001		0.035	1



### Shunt trip

				<b>S2C-A1 U</b>				
Rated voltage	AC	V	12...60					
	DC	V	12...60					
Max release duration		ms	<10					
Min. release voltage	AC	V	7					
	DC	V	10					
Power consumption	Ub	V	12	12	24	24	60	60
			DC	AC	DC	AC	DC	AC
	lb max	A	2.2	2.5	4.5	5	14	8.8
Coil resistance		Ω	3.7					
Terminals	Fale-safe bi-directional cylinder-lift-terminal							
Tightening torque		Nm	2.8					
Dimensions (H x D x W)		mm	100 x 69 x 17.5					
				<b>S2C-A2 U</b>				
Rated voltage	AC	V	110..415					
	DC	V	110...250					
Max release duration		ms	<10					
Min. release voltage	AC	V	55					
	DC	V	80					
Power consumption	Ub	V	110	110	220	230	415	
			DC	AC	DC	AC	AC	
	lb max	A	0.4	0.5	1.1	1.0	2.7	
Coil resistance		Ω	225					
Terminals	Fale-safe bi-directional cylinder-lift-terminal							
Tightening torque		Nm	2.8					
Dimensions (H x D x W)		mm	100 x 69 x 17.5					

### Shunt trip only for range U/UP/UDC

Description	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece kg	Pack unit pc.
	EAN	Type code	Order code			
12 - 60 V AC/DC	64472 3	S 2C-A1 U	2CDS 200 908 R0001		0.15	1
110-415 V AC,110-250V DC	64473 0	S 2C-A2 U	2CDS 200 908 R0002		0.15	1

# Accessories for MCBs, RCDs and Switch Disconnectors



2CDC021024S0011

S 2C-TC20 U

IP20 Terminal cover						
Description	Bbn	Order details		Price	Weight	Pack
	4016779	Type code	Order code	1 piece	1 piece	unit
	EAN				kg	pc.
only for range U/UP/UDC	87756 5	S 2C-TC20 U	2CDS 200 917 R0001		0.0002	20

## Mechanical tripping device

Function: it causes the automatic tripping of the circuit-breakers which it is associated to, when the panel or the door of the electrical switchboard are opened or removed.

Suitable for MCBs S 200 series (on both sides of the devices) and for DS 200 (only on the right side, because on the left side there's RCD-block DDA 200). Suitable for SD 200 switch disconnectors series.

Rated voltage	Bbn	Order details		Price	Weight	Pack
	8012542	Type code	Order code	1 piece	1 piece	unit
	EAN				kg	pc.
Mechanical tripping device	941309	S2C-BP	2CSS200998R0001		0.048	1

## Plug-in base

Function: it is possible to transform a standard circuit-breaker of the S 200 and F 200 range in a plug-in device which can be pulled out of the circuit where it is installed in one operation.

Suitable for MCBs S 200 series and for RCCBs F 200 series up to 63 A and RCBOs DS201 and DS202C.

Rated voltage	Bbn	Order details		Price	Weight	Pack
	8012542	Type code	Order code	1 piece	1 piece	unit
	EAN				kg	pc.
Plug-in base	940708	S2C-EST	2CSS200999R0001		0.115	1



2CSC400579F0201

S 2C-BP



2CSC400588F0201

S 2C-EST

# Busbar systems

## Selection table

### Short description

ABB busbar systems enable the safe and economic cross connection of MCBs, RCCBs and RCBOs.

For a correct busbar selection the following points need to be considered:

- MCB terminal type (Twin terminal or cage terminal)
- Number of poles (1, 2, 3, 4, 1+N or 3+N)
- Device type (MCB, RCCB or RCBO)
- Combinations (e.g. RCCB + MCB or RCCB 3+N + RCCB 1+N)
- Use of side mounted auxiliary elements on MCB \*)
- Busbar diameter (for current carrying capacity calculation)
- Number of modules (choice of standard busbar or busbar for cutting)

### Coding of PS busbars

	PS	/		/				
	1	2	3	4	5	6	7	7
<b>Phases</b>								
1 phase	1							
2 phases	2							
3 phases	3							
4 phases	4							
<b>Number of pins</b>								
<b>Diameter</b>								
10 mm <sup>2</sup>				-	-			
6 mm <sup>2</sup>				6	-			
16 mm <sup>2</sup>				1	6			
30 mm <sup>2</sup>				3	0			
<b>Application</b>								
Cross connection of RCCB and MCB (4th pin removed for RCCB 3+N)						F	I	
Use of neutral conductor (phase sequence e.g. L1-N-L2-N-L3-N-L1...)					N			
Space for 1 side mounted auxiliary contact					H			
Space for 2 side mounted auxiliary contacts						H	2	
Pins for breaking off								A
Cross connection of devices 3P+N + 1P+N (phase sequence L1-L2-L3-N-L1-N-L2-N-L1-N-...)						N	N	
Busbars for IT networks						I	T	
Busbars acc. to UL 489 (Branch Protection)						B	P	
Busbars acc. to UL 1077 (Supplementary Protection)						S	P	
<b>Note:</b> Combinations of above applications are possible								

\*) only right side mounted auxiliary elements and bottom fixed auxiliary contacts can be considered for busbar connection

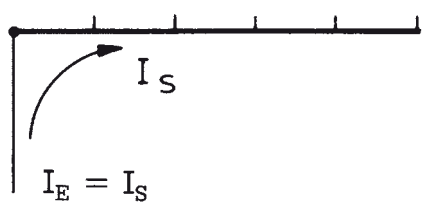
# Busbars and accessories for MCBs S 200, RCDs F 200 and DS 200 series

4

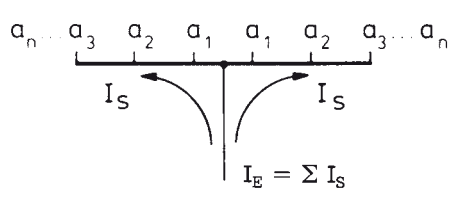
		<b>Busbars PS</b>			
Suitable for		MCB: S200, S200M, S200P RCD: F200, DDA-blocks			
Electrical Data	Standards	for IEC applications DIN EN 60947-1 VDE 0660 Part 100 = IEC 60947-1:2004			
	Approvals	—			
	Rated voltage U <sub>e</sub>	1P, 2P, 3P, 4P: 690 V AC, 690 V DC			
	Rated frequency	Hz	50 / 60 Hz, DC		
	Current carrying capacity / Phase (35°C ambient temperature)	A	10 mm <sup>2</sup>	16 mm <sup>2</sup>	30 mm <sup>2</sup>
			End feeding ①	63 A	80 A
Non-end feeding ①			100 A	130 A	160 A
Short-circuit withstand capacity	kA	25 kA in series with fuse NH3 355 A gG 500 V			
Mechanical Data	Housing	light grey, RAL 7035			
	Environmental conditions acc. to	DIN EN 60068			
	Overvoltage category	III			
	Pollution degree	2			
Installation	Cross-Section Busbar	10 mm <sup>2</sup> , 16 mm <sup>2</sup> , 30 mm <sup>2</sup>			
	Mounting position	optional			
	Supply	Feed on terminal of the device (supply side optional) or use of feeder terminal range AST; SZ-ESK			
Accessories	Shock-protection caps	BSK, SZ-BSK			
	Feeder terminals	range AST, SZ-ESK			
	End caps	range END, PS-END, PSB-END			
		<b>Feeder Terminals AST , SZ-ESK</b>			
Electrical Data	Max. operating voltage	V	690 V AC, 690 V DC		
	Current carrying capacity / phase	A	see below ①		
	Cross-Section	mm <sup>2</sup>	SZ-ESK	6 - 35 mm <sup>2</sup>	100 A
				6 - 50 mm <sup>2</sup>	125 A
		mm <sup>2</sup>	AST	6 - 25 mm <sup>2</sup>	80 A
			6 - 50 mm <sup>2</sup>	125 A	
Instruction of installation		When cutting the busbar, ensure that the insulation profile exceeds the copper bar by approx. 10 mm on each side. Shock protection only with mounted end caps ensured. For DC applications the required increased clearance and creepage distances needs to be ensured.			

① In case of feed in from the middle of the busbar it needs to be ensured, that the sum of junction currents per side must not exceed the max busbar current I<sub>g</sub>/phase. Irrespective of the current carrying capacity (I<sub>g</sub>) of the busbar, the max. rated current of the devices terminal may not be exceeded.

Busbars PS...SP			Busbars PS...BP		
MCB: S200, S200P			MCB: S200U, S200UP		
UL1077 DIN EN 60947-1 VDE 0660 Part 100 = IEC 60947-1:2004			UL489 DIN EN 60947-1 VDE 0660 Part 100 = IEC 60947-1:2004		
UL 1077			UL 489		
1P, 2P, 3P, 4P: 480 V AC			1P, 2P, 3P: 480 V AC		
50 / 60 Hz			50 / 60 Hz		
	10 mm <sup>2</sup>	16 mm <sup>2</sup>	16 mm <sup>2</sup>		
End feeding ①	63 A	80 A	80 A (115A for cubicle size ≥ 30"x30"x10")		
Non-end feeding ①	100 A	130 A			
10 kA in series with fuse NH3 355 A gG 500 V			10 kA in series with fuse NH3 355 A gG 500 V		
10 mm <sup>2</sup> , 16 mm <sup>2</sup>			16 mm <sup>2</sup>		
Feed on terminal of the device (supply side optional) or use of feeder terminals AST 35/15 SP; SZ-ESK SP			Feed on terminal of the device (supply side optional) or use of feeder terminals AST 35/15 BP; SZ-ESK BP		
BSK SP			BSK BP		
AST 35/15 SP SZ-ESK SP			AST 35/15 BP SZ-ESK BP		
PS-END SP; PS-END1 SP			-		
<b>Feeder Terminals AST 35/15 SP and SZ-ESK SP</b>			<b>Feeder Terminals AST 35/15 BP and SZ-ESK BP</b>		
480 V AC			480 V AC		
115 A ①			115 A ①		
SZ-ESK SP	35 mm <sup>2</sup> / 2AWG flexible with ferrules 50 mm <sup>2</sup> / 1AWG solid / stranded		SZ-ESK BP	35 mm <sup>2</sup> / 2AWG flexible with ferrules 50 mm <sup>2</sup> / 1AWG solid / stranded	
AST 35/15 SP	25 mm <sup>2</sup> / 3AWG flexible with ferrules 35 mm <sup>2</sup> / 2AWG solid / stranded		AST 35/15 BP	25 mm <sup>2</sup> / 3AWG flexible with ferrules 35 mm <sup>2</sup> / 2AWG solid / stranded	
When cutting the busbar, ensure that the installation profile exceeds the copper bar by approx. 10 mm on each side. Shock protection only with mounted end caps ensured.			Cutting of busbar is not permitted.		



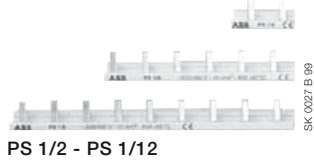
Feed in from the end of the busbar



Feed in from the middle of the busbar

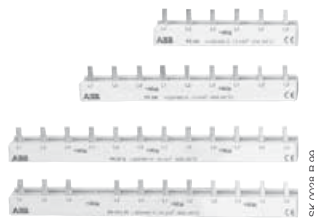


# Busbars and accessories for MCBs S 200, RCDs F 200 and DS 200 series



PS 1/2 - PS 1/12

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PS 3/6 - PS 3/12

## Pre-assembled busbars (not to be cut)

### 1-phase busbars, pin distance 17.6 mm, end caps PS-END 0

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	4016779	Type code	Order code			
2	1	10	0.01	463003	PS1/2	2CDL 210 001 R1002		0.01	180
3	1	10	0.03	514651	PS1/3	2CDL 210 001 R1003		0.03	120
4	1	10	0.03	648233	PS1/4	2CDL 210 001 R1004		0.03	100
6	1	10	0.03	463102	PS1/6	2CDL 210 001 R1006		0.03	60
9	1	10	0.04	463201	PS1/9	2CDL 210 001 R1009		0.04	30
12	1	10	0.05	463300	PS1/12	2CDL 210 001 R1012		0.05	30
12	1	10a	0.05	682985	PS1/12A ②	2CDL 210 010 R1012		0.05	30

### 3-phase busbars, pin distance 17.6 mm

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	4016779	Type code	Order code			
6	3	10	0.04	463409	PS3/6	2CDL 231 001 R1006		0.04	60
9	3	10	0.07	463508	PS3/9	2CDL 231 001 R1009		0.07	30
12	3	10	0.10	463607	PS3/12	2CDL 231 001 R1012		0.10	30
12	3	10	0.10	463706	PS3/12FI *	2CDL 231 002 R1012		0.09	50

\* phase sequence: L1, L2, L3, free, L2, L3, L1, ...

## Busbars suitable for cutting

### 1-phase busbars, pin distance 17.6 mm, end caps PS-END 0

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	4016779	Type code	Order code			
60	1	10	0.26	514668	PS1/60	2CDL 210 001 R1060		0.26	20
60	1	10	0.26	682992	PS1/60A ②	2CDL 210 010 R1060		0.28	50
60	1	16	0.41	516655	PS1/60/16	2CDL 210 001 R1660		0.41	20
60	1	16	0.41	683005	PS1/60/16A ②	2CDL 210 010 R1660		0.39	50
5	1	30	0.04	653244	PS1/5/30 ①	2CDL 210 001 R3005		0.04	100
10	1	30	0.09	653268	PS1/10/30 ①	2CDL 210 001 R3010		0.09	100
11	1	30	0.09	653275	PS1/11/30 ①	2CDL 210 001 R3011		0.10	100
14	1	30	0.120	653282	PS1/14/30 ①	2CDL 210 001 R3014		0.120	50
15	1	30	0.130	653299	PS1/15/30 ①	2CDL 210 001 R3015		0.130	50
18	1	30	0.150	653305	PS1/18/30 ①	2CDL 210 001 R3018		0.150	50
19	1	30	0.160	653312	PS1/19/30 ①	2CDL 210 001 R3019		0.160	50
60	1	30	0.520	653596	PS1/60/30	2CDL 210 001 R3060		0.520	20

### 1-phase busbars, connection of 1-pole devices with auxiliary, end caps PS-END 0

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	4016779	Type code	Order code			
38	1	10	0.27	586139	PS1/38H	2CDL 210 001 R1038		0.27	30
38	1	16	0.45	586146	PS1/38/16H	2CDL 210 001 R1638		0.45	30

### 1-phase busbars, connection of neutral (blue insulation), end caps END 1.1

① inclusive of end caps  
② pre-cutted pins

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code			
28	1	10	0.24	629546	PS1/28N	2CDL 210 001 R1028		0.14	50
28	1	16	0.32	629560	PS1/28/16N	2CDL 210 001 R1628		0.20	50
57	1	10	0.24	579728	PS1/57NA ②	2CDL 210 011 R1057		0.14	50
57	1	10	0.24	629539	PS1/57N	2CDL 210 001 R1057		0.14	50
57	1	16	0.32	579735	PS1/57/16NA ②	2CDL 210 011 R1657		0.20	50
57	1	16	0.32	629553	PS1/57/16N	2CDL 210 001 R1657		0.20	50

#### 1-phase busbars, connection of auxiliaries, end caps END 1.1 except PS 1/57/6

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code			
23	1	6	0.16	584739	PS1/23/6	2CDL 210 005 R0623		0.09	50
29	1	6	0.14	580823	PS1/29/6	2CDL 210 005 R0629		0.10	50
38	1	6	0.14	580816	PS1/38/6	2CDL 210 005 R0638		0.09	50
57	1	6	0.11	585309	PS1/57/6	2CDL 210 005 R0657		0.08	50

#### 1-phase busbars, connection of hand operated neutral S2C-Nt (blue insulation), end caps END 1.1

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code			
38	1	10	0.410	655361	PS1/38 NT	2CDL 210 002 R1038			10

#### 2-phase busbars, pin distance 17.6 mm, end caps PS-END

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code			
12	2	10	0.07	556521	PS2/12 ①	2CDL 220 001 R1012		0.08	50
12	2	10	0.07	584616	PS2/12A ①②	2CDL 220 010 R1012		0.08	50
12	2	16	0.11	646918	PS2/12/16	2CDL 220 001 R1612		0.09	50
58	2	10	0.32	556552	PS2/58	2CDL 220 001 R1058		0.36	10
58	2	16	0.55	556569	PS2/58/16	2CDL 220 001 R1658		0.49	10
58	2	16	0.55	584746	PS2/58/16A ②	2CDL 220 010 R1658		0.49	10
58	2	30	1.81	654272	PS2/58/30 ③④	2CDL 220 001 R3058		1.81	10

Note: PS...A is a busbar with removable pin

#### 2-phase busbars, connection of 2-pole devices with auxiliary, end caps PS-END

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code			
48	2	10	0.47	556538	PS2/48H	2CDL 220 001 R1048		0.35	10
48	2	16	0.68	556545	PS2/48/16H	2CDL 220 001 R1648		0.48	10
48	2	16	0.68	584630	PS2/48/16HA ②	2CDL 220 012 R1648		0.48	10

#### 3-phase busbars, pin distance 17.6 mm, end caps PS-END

- ① inclusive of end caps
- ② pre-cutted pins
- ③ use end cap PS-END 3
- ④ removal of installed MCB not possible

# Busbars and accessories for MCBs S 200, RCDs F 200 and DS 200 series

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No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code			
11	3	10	0.10	649926	PS3/11 ①	2CDL 230 001 R1011		0.08	50
12	3	10	0.09	576116	PS3/12 ①	2CDL 230 001 R1012		0.09	50
12	3	10	0.09	584647	PS3/12A ①②	2CDL 230 010 R1012		0.09	50
12	3	16	0.16	562805	PS3/12/16 ①	2CDL 230 001 R1612		0.12	50
60	3	10	0.51	514699	PS3/60	2CDL 230 001 R1060		0.47	10
60	3	10	0.51	563758	PS3/60A ②	2CDL 230 010 R1060		0.47	10
60	3	16	0.76	514705	PS3/60/16	2CDL 230 001 R1660		0.65	10
60	3	16	0.76	563765	PS3/60/16A ②	2CDL 230 010 R1660		0.65	10
60	3	30	2.65	654289	PS3/60/30 ③⑤	2CDL 230 001 R3060		2.65	10

### 3-phase busbars, connection of 1-pole devices with auxiliary, end caps PS-END

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code			
39	3	10	0.51	556590	PS3/39H	2CDL 230 001 R1039		0.43	10
39	3	16	0.76	556606	PS3/39/16H	2CDL 230 001 R1639		0.60	10

### 3-phase busbars, connection of 2-pole devices (Phase+N) with auxiliary, end caps PS-END

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code			
24	3	10	0.80	556576	PS3/24H	2CDL 230 001 R1024		0.41	10

### 3-phase busbars, connection of 2-pole devices (Phase+Phase) with auxiliary, end caps PS-END

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code			
46	3	16	0.98	662109	PS3/46/16H-IT	2CDL 230 006 R1648		0.98	10

### 3-phase busbars, connection of 3-pole devices with auxiliary, end caps PS-END

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code			
48	3	10	0.51	556613	PS3/48H	2CDL 230 001 R1048		0.43	10
48	3	16	0.76	556644	PS3/48/16H	2CDL 230 001 R1648		0.60	10
48	3	16	0.76	584654	PS3/48/16HA ②	2CDL 230 012 R1648		0.60	10

### 3-phase busbars, connection of 1+N or RCBOs, end caps PS-END

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code			
30	3	10	0.50	556583	PS3/30	2CDL 230 001 R1030		0.42	10

### 3-phase busbars, N of the RCD omitted, end caps PS-END

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- ① inclusive of end caps
- ② pre-cutted pins
- ③ use end cap PS-END 3
- ④ use end cap PS-END 3.1
- ⑤ removal of installed MCB not possible

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code			
9	3	10	0.10	517515	PS3/9FI ①	2CDL 230 002 R1009		0.06	50
10	3	10	0.10	517522	PS3/10FI ①	2CDL 230 002 R1010		0.07	50
12	3	10	0.11	571074	PS3/12FI ①	2CDL 230 002 R1012		0.09	50
57	3	10	0.55	556651	PS3/57FI	2CDL 230 002 R1057		0.46	10

**3-phase busbars, N of the RCD omitted, with auxiliary at RCD end caps PS-END**

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code			
12	3	10	0.11	571081	PS3/12FIH ①	2CDL 230 003 R1012		0.09	50

**4-phase busbars, pin distance 17.6 mm, end caps PS-END 1**

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code			
12	4	10	0.12	656054	PS4/12 ①	2CDL 240 101 R1012		0.11	30
12	4	10	0.12	656061	PS4/12A ①②	2CDL 240 110 R1012		0.11	30
12	4	16	0.24	656078	PS4/12/16 ①	2CDL 240 101 R1612		0.16	30
60	4	10	0.80	656085	PS4/60	2CDL 240 101 R1060		0.64	10
60	4	16	1.21	656092	PS4/60/16	2CDL 240 101 R1660		0.89	10
60	4	16	1.21	656108	PS4/60/16A ②	2CDL 240 110 R1660		0.89	10
60	4	30	3.37	654296	PS4/60/30 ④⑤	2CDL 240 001 R3060		3.37	10

Note: PS...A is a busbar with removable pin

**4-phase busbars, connection of 4-pole devices with auxiliary, end caps PS-END 1**

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code			
52	4	16	1.30	656115	PS4/52/16H	2CDL 240 101 R1652		0.78	10
52	4	16	1.30	656122	PS4/52/16HA ②	2CDL 240 212 R1652		0.78	10

**4-phase busbars, connection of 1+N or RCBOs, end caps PS-END 1**

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
			kg	EAN	Type code	Order code			
12	4	10	0.14	656139	PS4/12NA ①②	2CDL 240 213 R1012		0.10	30
58	4	10	0.80	656146	PS4/58N	2CDL 240 101 R1058		0.59	10
58	4	16	1.21	656153	PS4/58/16N	2CDL 240 101 R1658		0.77	10
58	4	16	1.21	656221	PS4/58/16NA ②	2CDL 240 213 R1658		0.77	10

**4-phase busbars, connection of 1+N or RCBOs with auxiliary, end caps PS-END 1**

- ① inclusive of end caps
- ② pre-cutted pins
- ③ use end cap PS-END 3
- ④ use end cap PS-END 3.1
- ⑤ removal of installed MCB not possible

# Busbars and accessories for MCBs S 200, RCDs F 200 and DS 200 series

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
				kg	EAN	Type code			
48	4	16	1.48	656160	PS4/48/16NHA ②	2CDL 240 114 R1648		0.76	10

#### 4-phase busbars, connection of 4-pole RCD with 1+N , end caps PS-END 1

No. of pins	Phases	mm <sup>2</sup>	Cu-No.	Bbn 4016779	Order details		Price 1 piece	Weight 1 piece	Pack unit
				kg	EAN	Type code			
58	4	10	0.80	656177	PS4/58NNA ②	2CDL 240 110 R1058		0.58	10
58	4	16	1.21	656184	PS4/58/16NNA ②	2CDL 240 110 R1658		0.80	10

- ① inclusive of end caps
- ② pre-cutted pins
- ③ use end cap PS-END 3
- ④ use end cap PS-END 3.1
- ⑤ removal of installed MCB not possible