



Complete protection and safety made easy

New system pro *M*
MCBs telecom range



- Safety and reliability at its best
- One portfolio – easy selection
- Uncompromised fulfilling of local requirements
- Technology leadership

The System pro *M* portfolio offers a complete solution of line protection, designed to work across all applications; delivering an uncompromised level of performance and safety.

This series of devices including Miniature Circuit Breaker (MCBs) are conforms to IEC 60947-2 Icu at 10kA and innovated with the same expertise and technological know-how as the original MCB first invented by ABB almost one hundred years ago.

System pro *M* portfolio is an easy choice, thanks to its compact portfolio, simplified yet intuitive design and full functionality. Furthermore, this universal range of products compliments a wide assortment of accessories.

Table of contents

06–11	Miniature Circuit Breaker (MCB)-SB200 M
12–13	Accessories
14–19	Auxiliary elements
20–24	Co-ordination tables
25	Wiring diagram

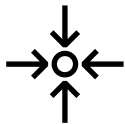
Value Proposition

Complete protection and safety
made easy



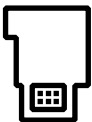
Safety and reliability at its best

- Protection from over-currents
- Guaranteed safety and reliability, thanks to multiple automated testing of each single product



One portfolio – easy selection

- Single and complete portfolio with a high rated voltage (AC 240/415 V and DC 250/500 V)
- Easy selection of products



Technology leadership

- Original technology invented and established by ABB
- Patented in 1924 and continuously further improving the technology

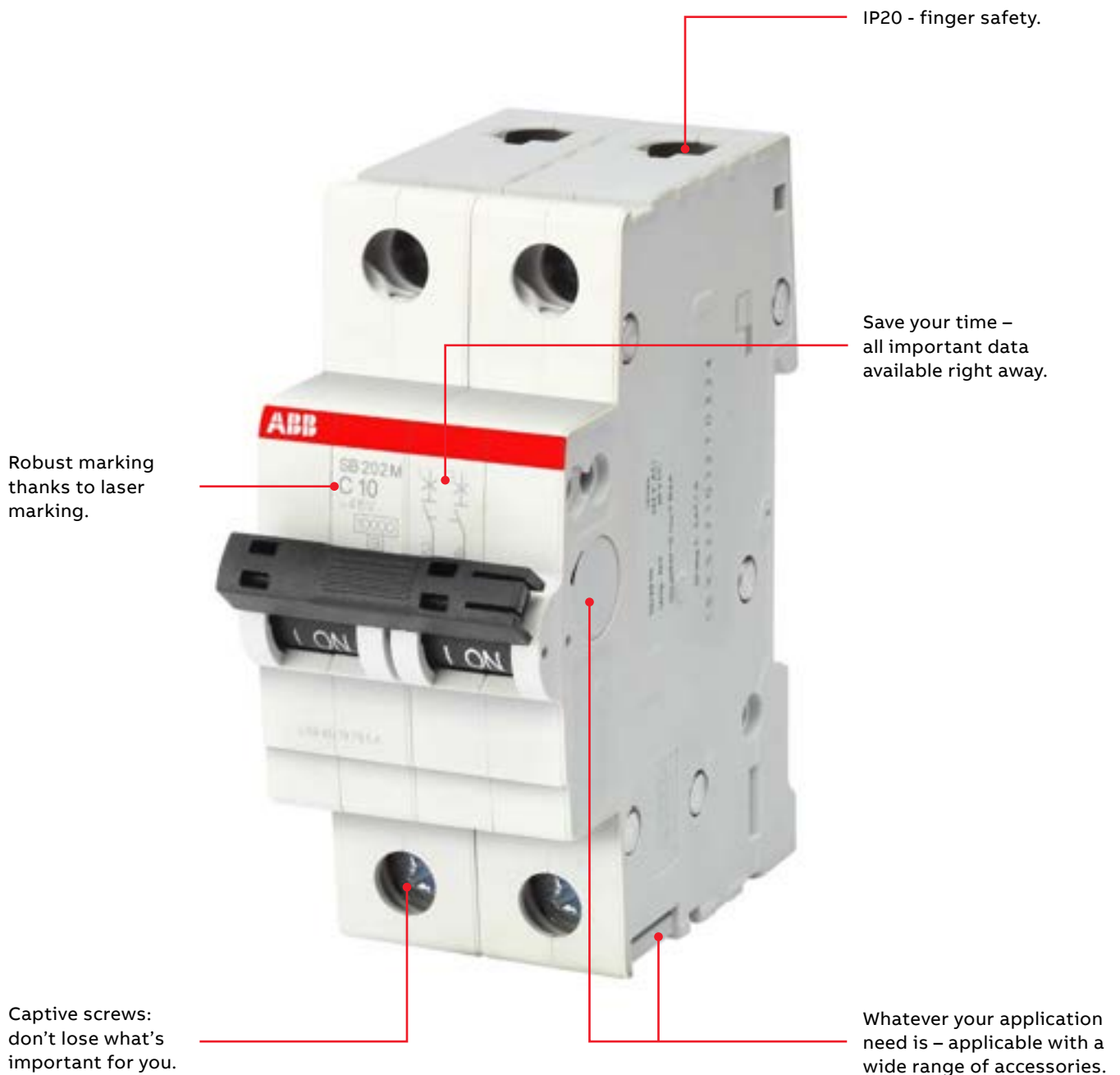
Complete portfolio

New system pro MCBs
telecom range

-
- Portfolio overview
 - Technical data
 - Ordering data

Miniature Circuit Breaker SB200 M

The details make the difference





State-of-the-art design (Aesthetics & Ergonomics)

Elegant in appearance. Knob designed for easy operation.



Laser marking

All printing of the SB200 M MCBs, like the approvals on the product identification, are printed by a laser. Laser printing ensures a friction, scratch and solvent resistant marking on the MCBs. Easy identification of the products in case of maintenance or replacement, due to safe laser printing.



Housing cover with fire retardant material

High performance 100% recyclable plastic material with fire retardant, high melting point, low water absorption & high dielectric strength properties. ABB is taking care of the environment... with the latest generation of thermoplastics, it is possible to recycle the MCBs – especially the thermoplastic housing material can be re-used. SB200 is 100% free of halogens.



IP20 protection

IP 20 - finger safe terminals. The System pro M compact® MCBs are equipped with 25 mm² cylinder lift twin terminals, a well-proven and reliable technology - designed for sophisticated industrial use. The cross wiring can easily be done by inserting the System pro M compact® busbars into the rear terminal part and then the incoming wires into the front part of the terminal.



Labelling area

Provision for providing label enables easy identification of circuit during installation, operation & maintenance.



Accessories mountable

Wide range of add-on accessories having 30 different types of accessories. Max possibility of Mounting: 4 different accessories on the right side and 1 on the left side ensures highest flexibility of functions. Universal contact, motorised unique accessory like mechanical tripping devices available only with ABB.

Miniature Circuit Breaker SB200 M

Technical data



General data	
Referred standards	IEC60947-2 (Icu: 10kA)
Poles	1P, 2P, 3P, 4P
Rated ultimate short-circuit breaking capacity Icu (acc.to IEC 60947-2)	10 kA
Tripping characteristics	C
Reference temperature for tripping characteristics	50°C (according to IEC60947-2)
Energy limiting class	3
Rated voltage Ue	1P : 240/415 V AC 2...4P : 415 V AC
Rated current In	6, 10, 16, 20, 25, 32, 40, 50, 63 A
Rated frequency	50/60 Hz
Max. Power frequency recovery voltage (Umax)	1P: 264 V AC; 60V DC; 2...4P : 457 V AC; 2P: 120V DC
Min. operating voltage	12 V AC
Rated insulation voltage Ui acc. to IEC/EN 60664-1	250 V AC (phase to ground) , 440 V AC (phase to phase)
Rated impulse withstand voltage Uimp. (1.2/50µs)	4 kV
Dielectric test voltage	2 kV (50 / 60Hz, 1 min.)
Utilization category	A
Pollution degree	3
Electrical endurance	In < 32A: 20,000 ops (AC), In ≥ 32A: 10,000 ops. (AC); (1 cycle 2s - ON, 13s - OFF, In ≤ 32A), (1 cyle 2s - ON, 28s - OFF, In > 32A)
Mechanical data	
Housing	Insulation group II
Toggle	Insulation group II, black, sealable
Contact position indication	White Marking on toggle (I ON / O OFF)
Protection degree acc. to EN 60529	IP20, IP40 in enclosure with cover
Mechanical endurance	20.000 ops.
Shock resistance acc. to IEC/EN 60068-2-27	25 g - 2 shocks - 13 ms
Vibration resistance acc. to IEC/EN 60068-2-6	5g - 20 cycles at 5...150...5 Hz with load 0.8In
Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30	28 cycles with 55°C/90-96% and 25°C/95-100%
Ambient temperature	-25 ... +55°C
Storage temperature	-40 ... +70°C

Installation	
Terminal	Cage terminal
Cross-section of conductors (top / bottom) Solid, Stranded	25 mm ² / 25 mm ²
Flexible	16 mm ² / 16 mm ²
Cross-section of busbars (top / bottom)	10 mm ²
Tightening torque	2 Nm
Screwdriver	No. 2 Pozidrive
Mounting	On DIN rail 35 mm acc. to EN 60715 by fast clip
Mounting position	Any
Supply	Optional
Dimensions and weight	
Mounting dimensions acc. to DIN 43880	Mounting dimension 1
Pole dimensions (H x D x W)	85 x 69 x 17.5 mm
Pole weight	ca. 115 g
Combination with aux. elements	
Auxiliary contact	yes
Signal contact	yes
Shunt trip	yes
Undervoltage release	yes
Overvoltage release	yes
Rotary handle	yes
Mechanical tripping device	yes
Padlock enabled	yes
Motor operating device	yes

MCB SB200 M C characteristic

Ordering data



SB201 M C 16

SB200 M C characteristic

Function: protection and control of the circuits against overloads and short-circuits.

Applications: Telecom

Standard: IEC 60947-2 (Icu: 10kA)

SB201 M C

Number of poles	Rated current	Order details		Weight 1 piece	Pack unit
	In A	Type code	Order code	kg.	pc.
1P	6 A	SB201 M-C6 T-Bulk pack (72 Nos)	1SYS271012T0064	0.115	72
	10 A	SB201 M-C10 T-Bulk pack (72 Nos)	1SYS271012T0104	0.115	72
	16 A	SB201 M-C16 T-Bulk pack (72 Nos)	1SYS271012T0164	0.115	72
	20 A	SB201 M-C20 T-Bulk pack (72 Nos)	1SYS271012T0204	0.115	72
	25 A	SB201 M-C25 T-Bulk pack (72 Nos)	1SYS271012T0254	0.115	72
	32 A	SB201 M-C32 T-Bulk pack (72 Nos)	1SYS271012T0324	0.115	72
	40 A	SB201 M-C40 T-Bulk pack (72 Nos)	1SYS271012T0404	0.115	72
	50 A	SB201 M-C50 T-Bulk pack (72 Nos)	1SYS271012T0504	0.115	72
	63 A	SB201 M-C63 T-Bulk pack (72 Nos)	1SYS271012T0634	0.115	72



SB202 M C 16

SB202 M C

Number of poles	Rated current	Order details		Weight 1 piece	Pack unit
	In A	Type code	Order code	kg.	pc.
2P	6 A	SB202 M-C6 T-Bulk pack (36 Nos)	1SYS272012T0064	0.235	36
	10 A	SB202 M-C10 T-Bulk pack (36 Nos)	1SYS272012T0104	0.235	36
	16 A	SB202 M-C16 T-Bulk pack (36 Nos)	1SYS272012T0164	0.235	36
	20 A	SB202 M-C20 T-Bulk pack (36 Nos)	1SYS272012T0204	0.235	36
	25 A	SB202 M-C25 T-Bulk pack (36 Nos)	1SYS272012T0254	0.235	36
	32 A	SB202 M-C32 T-Bulk pack (36 Nos)	1SYS272012T0324	0.235	36
	40 A	SB202 M-C40 T-Bulk pack (36 Nos)	1SYS272012T0404	0.235	36
	50 A	SB202 M-C50 T-Bulk pack (36 Nos)	1SYS272012T0504	0.235	36
	63 A	SB202 M-C63 T-Bulk pack (36 Nos)	1SYS272012T0634	0.235	36

MCB SB200 M C characteristic

Ordering data

SB203 M C

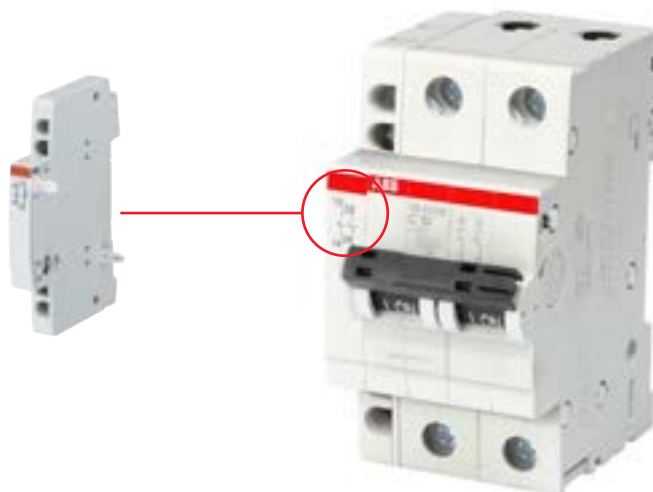
Number of poles	Rated current	Order details		Weight 1 piece	Pack unit
	In A	Type code	Order code	kg.	pc.
3P	6 A	SB203 M-C6 T-Bulk pack (24 Nos)	1SYS273012T0064	0.355	24
	10 A	SB203 M-C10 T-Bulk pack (24 Nos)	1SYS273012T0104	0.355	24
	16 A	SB203 M-C16 T-Bulk pack (24 Nos)	1SYS273012T0164	0.355	24
	20 A	SB203 M-C20 T-Bulk pack (24 Nos)	1SYS273012T0204	0.355	24
	25 A	SB203 M-C25 T-Bulk pack (24 Nos)	1SYS273012T0254	0.355	24
	32 A	SB203 M-C32 T-Bulk pack (24 Nos)	1SYS273012T0324	0.355	24
	40 A	SB203 M-C40 T-Bulk pack (24 Nos)	1SYS273012T0404	0.355	24
	50 A	SB203 M-C50 T-Bulk pack (24 Nos)	1SYS273012T0504	0.355	24
	63 A	SB203 M-C63 T-Bulk pack (24 Nos)	1SYS273012T0634	0.355	24

SB204 M C

Number of poles	Rated current	Order details		Weight 1 piece	Pack unit
	In A	Type code	Order code	kg.	pc.
4P	6 A	SB204 M-C6 T-Bulk pack (18 Nos)	1SYS274012T0064	0.465	18
	10 A	SB204 M-C10 T-Bulk pack (18 Nos)	1SYS274012T0104	0.465	18
	16 A	SB204 M-C16 T-Bulk pack (18 Nos)	1SYS274012T0164	0.465	18
	20 A	SB204 M-C20 T-Bulk pack (18 Nos)	1SYS274012T0204	0.465	18
	25 A	SB204 M-C25 T-Bulk pack (18 Nos)	1SYS274012T0254	0.465	18
	32 A	SB204 M-C32 T-Bulk pack (18 Nos)	1SYS274012T0324	0.465	18
	40 A	SB204 M-C40 T-Bulk pack (18 Nos)	1SYS274012T0404	0.465	18
	50 A	SB204 M-C50 T-Bulk pack (18 Nos)	1SYS274012T0504	0.465	18
	63 A	SB204 M-C63 T-Bulk pack (18 Nos)	1SYS274012T0634	0.465	18

System pro M

Accessories



Thanks to the variety of control and monitoring accessories which enable you to build different monitoring control logics of the protection devices.



— S2C-H6...
Auxiliary
contact



— S2C-S/H6R
Signal/auxiliary
contacts



— S2C-A
Shunt trip



— S2C-UA
Under voltage
release



— S2C-OVP
Over voltage
release



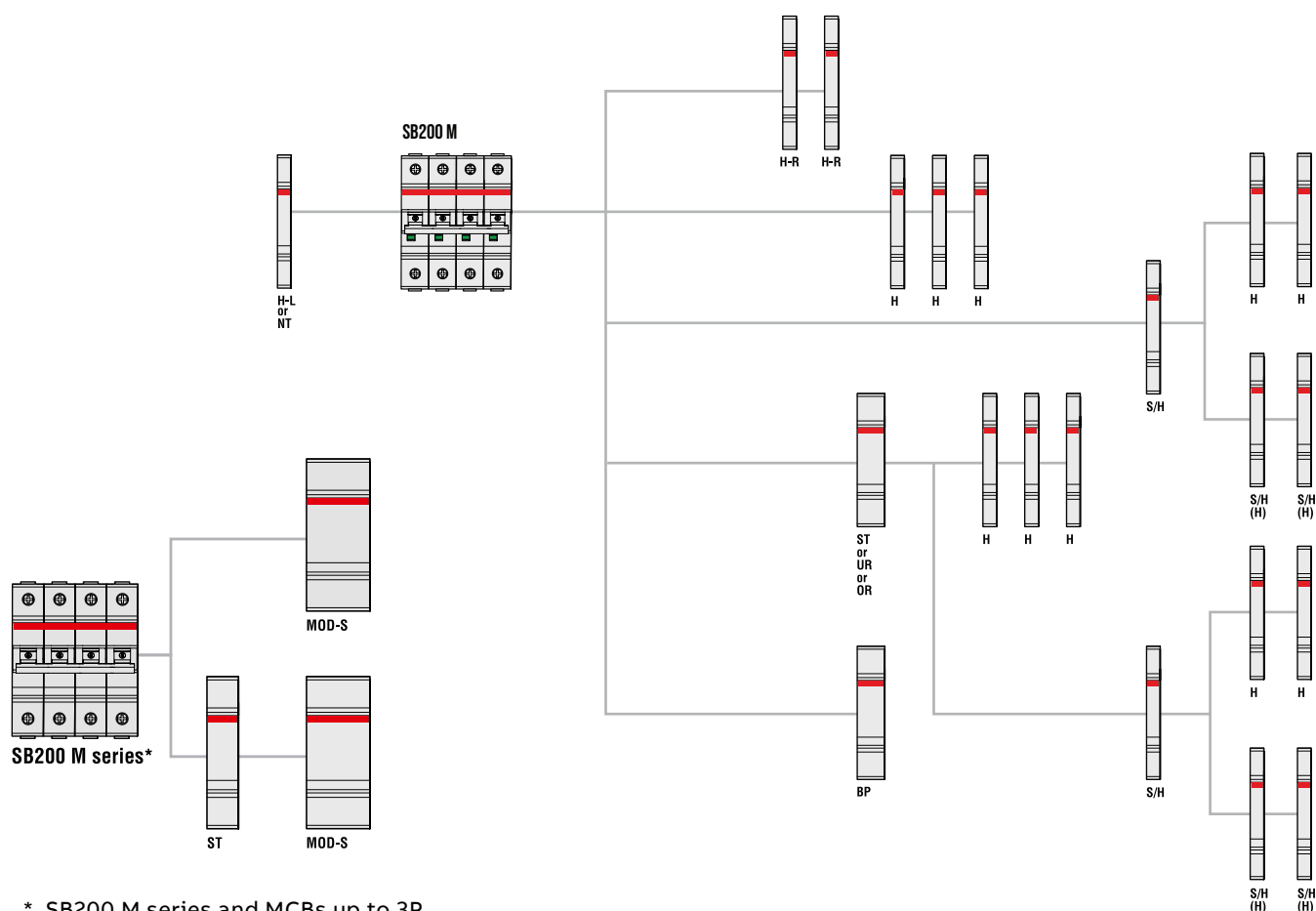
— S2C-CM4
Motor operating
device



— S2C-BP
Mechanical
tripping device

System pro M

Accessories for SB200 M



H	Auxiliary contact	S2C-H6R
H-R	Auxiliary contact	S2C-H6-...R
S/H	Signal/Auxiliary contact	S2C-S/H6R
S/H (H)	Signal/Auxiliary contact used as auxiliary contact	S2C-S/H6R
ST	Shunt trip for SB200 MCB	S2C-A...
UR	Undervoltage release	S2C-UA
OR	Overvoltage release	S2C-OVP
ST-L	Shunt trip for SB200 MCBs to be mounted on the left	S2C-A...L
H-L	Auxiliary contact for SB200 MCBs to be mounted on the left	S2C-H...L
BP	Mechanical tripping device	S2C-BP
NT	Switched neutral	S2C-Nt

Auxiliary elements for MCBs SB200 M



Auxiliary elements

2CSC40.0465F0201

Auxiliary contact and signal/auxiliary contact		
S2C-S/H6R, S2C-H6R, S2C-H11L, S2C-H20L and S2C-H02L		
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 impulse withstand voltage (1.2/50µs)	kV	4
Cross-section of conductors	mm ²	0.75... 2.5 (up to 2 x 1.5 mm ² 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		
S2C-H6-11R, S2C-H6-20R, S2C-H6-02R		
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 impulse withstand voltage (1.2/50µs)	kV	4
Cross-section of conductors	mm ²	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

Auxiliary elements for MCBs SB200 M



2CSC400465F0201

S2C-S/H6R

Signal/auxiliary contacts

Signal contacts indicate if a device tripped due to a failure (overcurrent/short-circuit for MCBs). 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 according to the "Selection tables".



2CSC400465F0201

S2C-H6-...

S2C-HxxL:

Auxiliary contacts with contact configuration according to the following table. These contacts are left-side mounted and fit to SB200 MCBs according to the "Selection tables". 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 SB200 compact range. Simple and space-saving solution. Also intended for retrofitting.

Description	Bbn 4016779	Order details		Weight 1 piece	Pack unit
	EAN	Type code	Order code	kg	pc.
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		Weight 1 piece	Pack unit
	EAN	Type code	Order code	kg	pc.
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 SB200 M



Shunt trip for S200 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 DC	12 AC	24 DC	24 AC	60 DC	60 AC
	Ib 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	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 DC	110 AC	220 DC	230 AC	415 AC	
	Ib 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	85 x 69 x 17.5					

Shunt trips

Function: remote opening of the device when a voltage is applied. Suitable for MCBs SB200 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 4016779	Order details		Weight 1 piece	Pack unit
		EAN	Type code		
AC/DC 12...60 V	570992	S2C-A1	2CDS200909R0001	0.15 kg	1 pc.
AC 110...415 V/DC110...250 V	571005	S2C-A2	2CDS200909R0002	0.15 kg	1 pc.

Auxiliary elements for MCBs SB200 M



S2C-UA

2CSS400325F0201

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		mm²	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		mm²	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 SB200 series.

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

Auxiliary elements for MCBs SB200 M



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 release

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. Suitable for MCBs of the SB200 series up to 63 A.

Description	Bbn 8012542	Order details		Weight 1 piece	Pack unit
		EAN	Type code	Order code	kg
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 ²	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 onto 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.

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

Auxiliary elements for MCBs SB200 M



Motor operating devices				
S2C-CM				
Supply		V	12 ... 30 V AC +10% - 15% (50-60Hz); 12 ... 48 V DC +10% - 15%	
Power consumption during the operation	12 V AC	VA	< 15	
	24 V AC	VA	< 22	
	30 V AC	VA	< 25	
	12 ... 48 V DC	VA	< 20	
Power consumption at rest		VA	< 1.5	
Make-time at ambient temperature		sec	< 1	
Opening time at ambient temperature		sec	< 0.5	
Number of operations			< 20000	
Operating temperature		°C	- 25 ... + 55	
Cables length of control circuit		m	< 1500	
Cables cross-section		mm ²	< 2.5	
Signal contact (terminals 3 – 4 – 5) Current carrying capacity			1NA + 1NC (change-over contact) 5 A (250 V AC) (inductive-ohmic load)	
Auxiliary contact (terminals 6 – 7 – 8) Current carrying capacity			1NA + 1NC (change-over contact) 3 A (250 V AC) (inductive-ohmic load)	
Remote control*			By means of dry contacts	
Remote control terminals			Terminal 9 = make contact; Terminal 10 = opening contact Terminal 11 = common reference for control contacts, +5V DC (supplied by the motor operating device)	

* Note: In case of the device opening due to a fault, please wait 8 seconds before attempting to reclose the motor operator.

Motor operating devices

Function: S2C-CM allow the remote control (opening or closing) of the coupled device. Suitable for SB200 series MCBs.

Description	Bbn 8012542	Order details		Weight 1 piece	Pack unit
	EAN	Type code	Order code	kg	pc.
Motor operating device for 1P SB200 series MCBs	026259	S2C-CM1	2CSS201997R0013	0.166	1
Motor operating device for 2P and 3P SB200 series MCBs	026358	S2C-CM2/3	2CSS203997R0013	0.166	1
Motor operating device for 4P SB200 MCBs	026457	S2C-CM4	2CSS204997R0013	0.166	1

Co-ordination tables: back-up MCB SB200M-MCCB Tmax XT

[illegible]

XT3							XT4						
B,C,N,S,H,L,V													
TM													
160	200	250	20	25	32	50	80	100	125	160	200	225	250
T	T	T	6.0	6.0	6.0	7.5	T	T	T	T	T	T	T
T	T	T	3.0	6.0	6.0	7.5	T	T	T	T	T	T	T
T	T	T	3.0	3.0	5.0	6.5	9.0	T	T	T	T	T	T
T	T	T		3.0	5.0	6.5	8.0	T	T	T	T	T	T
T	T	T		3.0	5.0	6.5	8.0	T	T	T	T	T	T
T	T	T				5.0	7.5	T	T	T	T	T	T
T	T	T				5.0	7.5	T	T	T	T	T	T
T	T	T					6.0	T	T	T	T	T	T
T	T	T					5.0	T	T	T	T	T	T
T	T	T					5.0	T	T	T	T	T	T
T	T	T						T	T	T	T	T	T

T3				T4									
B,C,N,S,H,L,V													
TM													
125	160	200	250	20	25	32	50	80	100	125	160	200	250
T	T	T	T	6	6	6	7.5	T	T	T	T	T	T
T	T	T	T	3	6	6	7.5	T	T	T	T	T	T
T	T	T	T	3	3	5	6.5	9	T	T	T	T	T
T	T	T	T		3	5	6.5	8	T	T	T	T	T
T	T	T	T		3	5	6.5	8	T	T	T	T	T
T	T	T	T				5	7.5	T	T	T	T	T
10	T	T	T				5	7.5	T	T	T	T	T
10	T	T	T					6	T	T	T	T	T
10	T	T	T					5	T	T	T	T	T
7.5	T	T	T					5	T	T	T	T	T
6	T	T	T						T	T	T	T	T



MCBs technical details

Co-ordination tables: back-up MCB SB200M-MCCB Tmax XT

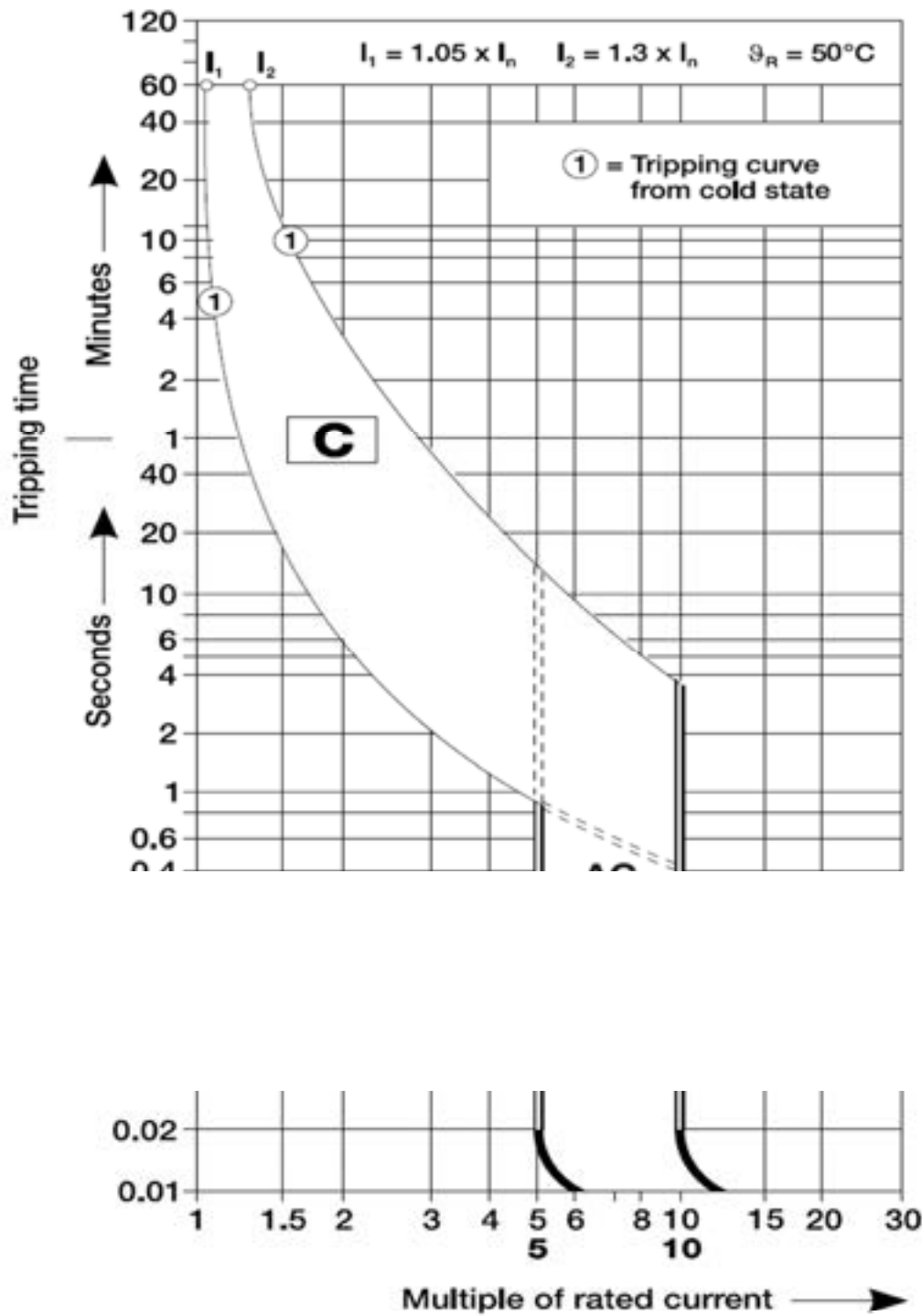
Supply Side				XT2					XT4
Version				N, S, H, L, V					
Release				EL					
Load side	Characteristics	Rating	Icu	10	25	63	100	160	250
SB200M	C	6		T	T	T	T	T	T
		8		T	T	T	T	T	T
		10		T	T	T	T	T	T
		13			T	T	T	T	T
		16				T	T	T	T
		20				T	T	T	T
		25				T	T	T	T
		32				T	T	T	T
		40					T	T	T
		50					T	T	T
		63						T	T

MCBs technical details

Tripping characteristics SB200M

Characteristics C

IEC 60947-2



Miniature Circuit Breakers

SB200 M

Performance at different ambient temperature

The rated value of the current of a miniature circuit breaker refers to a temperature of 50 °C characteristics C.

The following table contains the derating of load capability of SB200 M MCBs with temperature from -25 °C to 70 °C for the curves C.

Tripping charac- teristics	Rated current In A	Max. operating currents depending on the ambient temperature T (°C)																			
		-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
C Curve	6	7.4	7.3	7.2	7.1	7.0	6.9	6.8	6.7	6.6	6.5	6.5	6.4	6.3	6.2	6.1	6.0	5.9	5.8	5.7	5.6
	8	9.9	9.7	9.6	9.4	9.3	9.2	9.1	9.0	8.8	8.7	8.6	8.5	8.4	8.2	8.1	8.0	7.9	7.8	7.6	7.5
	10	12.4	12.1	12.0	11.8	11.7	11.5	11.4	11.2	11.1	10.9	10.8	10.6	10.5	10.3	10.2	10.0	9.9	9.7	9.6	9.4
	13	16.1	15.7	15.5	15.3	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.2	13.0	12.8	12.6	12.4	12.2
	16	19.9	19.4	19.2	18.9	18.7	18.4	18.2	17.9	17.7	17.4	17.2	17.0	16.8	16.5	16.3	16.0	15.8	15.5	15.3	15.0
	20	24.8	24.2	23.9	23.6	23.3	23.0	22.7	22.4	22.1	21.8	21.5	21.2	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.8
	25	31.1	30.3	29.9	29.5	29.2	28.8	28.4	28.0	27.7	27.3	26.9	26.5	26.2	25.8	25.4	25.0	24.7	24.3	23.9	23.5
	32	39.6	38.7	38.3	37.8	37.3	36.8	36.3	35.8	35.4	34.9	34.4	33.9	33.5	33.0	32.5	32.0	31.5	31.0	30.6	30.1
	40	49.6	48.4	47.8	47.2	46.6	46.0	45.4	44.8	44.2	43.6	43.0	42.4	41.8	41.2	40.6	40.0	39.4	38.8	38.2	37.6
	50	62.0	60.5	59.8	59.0	58.3	57.5	56.8	56.0	55.3	54.5	53.8	53.0	52.3	51.5	50.8	50.0	49.3	48.5	47.8	47.0
	63	78.1	76.2	75.3	74.3	73.4	72.5	71.6	70.6	69.7	68.7	67.8	66.8	65.9	64.9	64.0	63.0	62.1	61.1	60.2	59.2

Wiring diagram

System Pro *M*

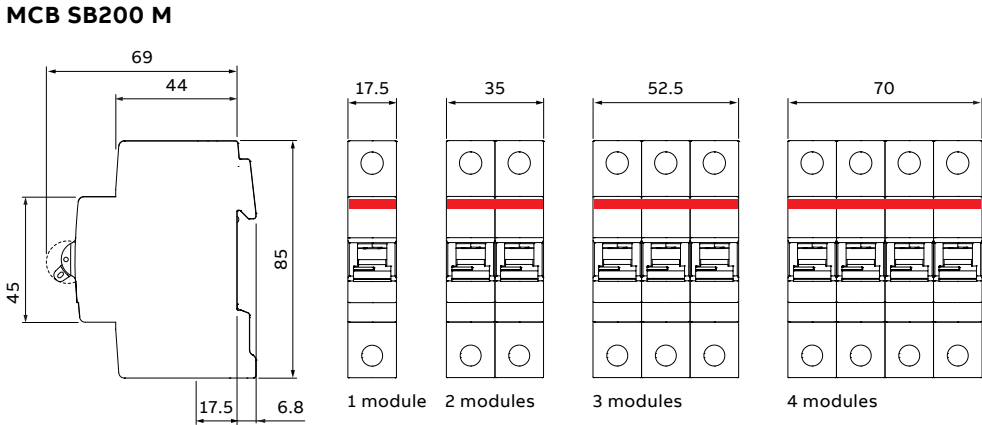
MCBs			
SB201 M	SB202 M	SB203 M	SB204 M

Auxiliary elements									
S2C-S/H6R			S2C-H6R		S2C-H-11R			S2C-H6-20R	
Used as signal contact	Automatic opening	Manual opening	Used as auxiliary contact	Automatic opening	Used as auxiliary contact	Automatic opening	Used as auxiliary contact	Automatic opening	

Auxiliary elements
S2C-H6-02R
Opening

Overall dimensions

System Pro *M*



Additional information

We reserve the right to make technical changes or modify the contents of this document without prior notice.

With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein.

Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without the prior written consent of ABB.



ABB India Helpline.

Technical Telephone support for
customers and channel partners.
Toll Free: (BSNL) +91 1800 420 07 07.

new.abb.com/low-voltage

