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The latest evolution in 90 years of safety
innovation
Circuit protection from ABB according to
UL 489 and UL 1077

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Table of contents

1	Introduction	3
2	Product selection guide	6
3	Accessories for MCB's of the S 200 series	8
4	Accessories for MCB's of the S 800 series	12
5	Trip curve information	14

We didn't just change the market
We created it
ABB mini circuit breakers, 90 years of trust

Then....

In 1923, Hugo Stotz combined a thermal and magnetic trip unit in a single device that could be screwed into regular fuse sockets. Stotz' invention opened a new world in electrical installation.

Now....

The next-generation ABB mini circuit breakers (MCBs) provide the highest safety solutions for nearly every electrical application and installation type—and meet all relevant standards worldwide.

System pro M compact® MCBs

Miniature circuit breakers protect installations against overload and short circuit to ensure reliability and safety for operations. They are selectively switchable, even under load, in the event of a fault or for maintenance purposes. Downtime is minimized, thanks to the devices' reclosing capability.

- Residential, commercial and industrial
- Multifunctional platform, completely compatible for maximum value and flexibility
- Comprehensive, fully integrated range of easy-to-install MCBs and accessories



Quality and sustainability

1

Our MCBs are built to last 30 years or more. We achieve this through an uncompromising commitment to quality. We use only the finest components and materials. All materials comply with EU (RoHS, REACH) standards for sustainability and are halogen-free. Every unit is inspected three times before it leaves our facilities.

Our reputation for innovation, quality and performance is built into every ABB circuit breaker with these patented features:

Terminal

Extended size with insulation for IP20 protection and new pressure plate for improved conductor connection—easier to handle, safer to use

Switching mechanism

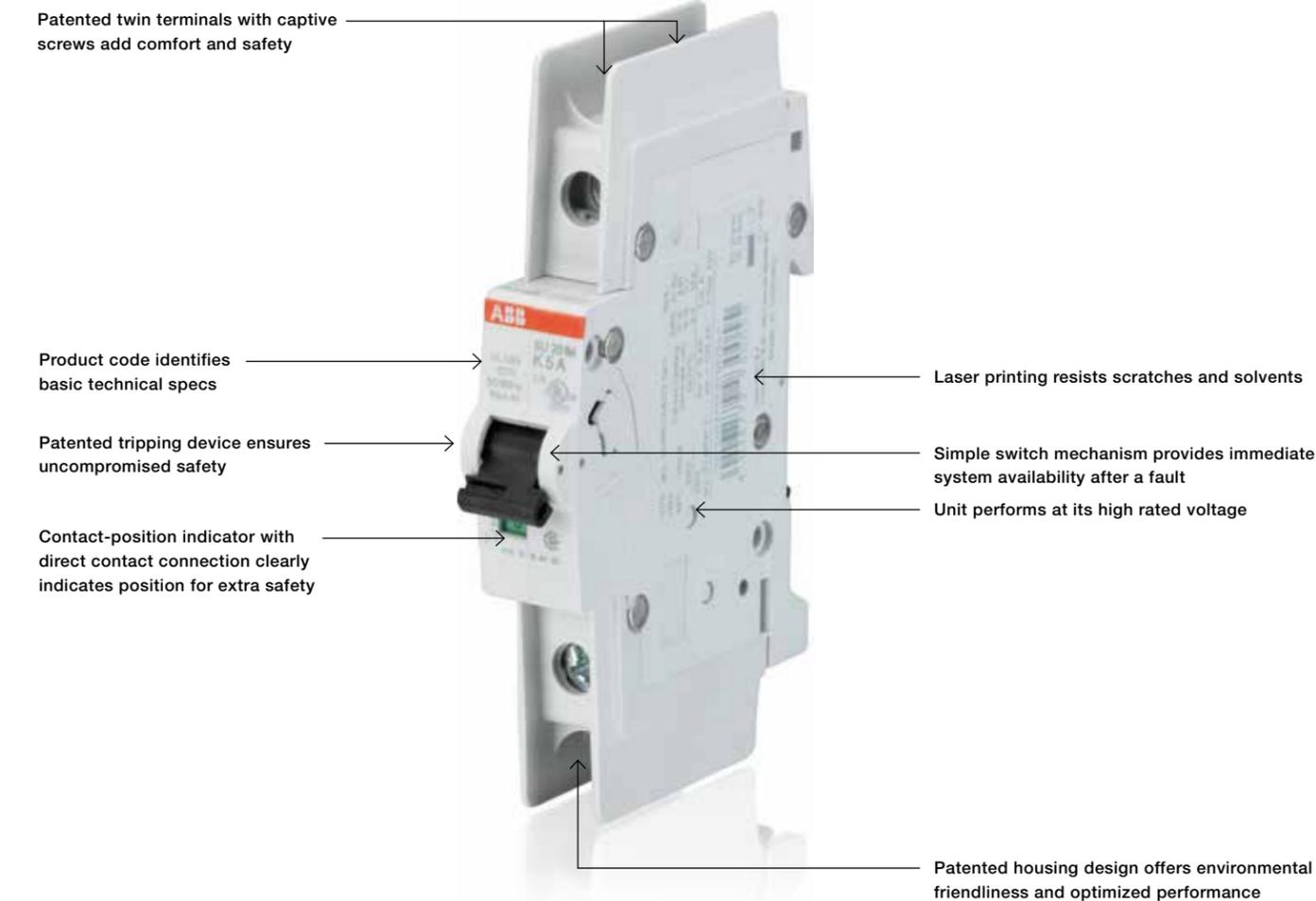
New design and assembly increases reliability of triggering—even under tough conditions

Contact design

With snap-action mechanism for improved arc movement and optimized switching

Tripping device

Optimized arc extinguishing system improves safety



The details make the difference Miniature Circuit breakers made by ABB

1

System pro *M* offers a complete assortment of first-class quality products including a variety of miniature circuit breakers that provide the right solution when both, size and performance matter.

Patented – IP 20 finger safe terminals

Extended size with insulation for IP20 protection and new pressure plate for improved conductor connection available for the S 200 series. Additionally our innovative ring-lug terminals are available (SU 200 MR and S 200 MR). MCBs of the S 800 U series are equipped with a convertible lug or ring-lug terminal.

Contact position indication

All System pro *M* compact® MCBs are equipped with real contact position indication (CPI). This allows for quick identification of the MCBs state, ON or OFF, if maintenance is required. Working together, both the position of the toggle and the color of the CPI, clear indication of the MCBs contact position provides additional security and safety. If an event has occurred, the device always provides reliable information on its state.

Approvals printed on the dome

SU 200 M MCBs comply with UL489/CSA 22.2 No. 5 and carry approvals for other relevant markets or segments that they may be used in. For ease of identification, certification markings are printed on the dome and side of the MCB.

Comfort connection

Dedicated busbars are available, depending on the application. The new cut to length UL Vario busbar is available for the SU 200 M. A special ring-lug busbar for the SU 200 MR and S 200 M was designed to fit these devices.

Maximum flexibility

Two independent openings allow to connect a busbar and a cable – or if necessary using the openings for two separate cables

Extra power needed?

The S 500 and S 800 series MCBs offer highest performance in terms of nominal currents, breaking capacity or accuracy.

1 IP 20 finger safe terminals (S 200 series) | 2 Contact position indication (S 200 series) | 3 Approvals printed on the dome (S 200 series) | 4 Comfort connection (S 200 series) | 5 Maximum flexibility (S 200 series) | 6 Extra power needed (S 800 series)



Product selection guide

MCB's per UL 489 / CSA 22.2 No. 5 – SU 200 M / SU 200 MR / S 200 U DC / S 800 U

UL 489

The requirements of this standard cover molded-case circuit breakers, circuit breaker and ground-fault circuit-interrupters, fused circuit breakers, and accessory high-fault protectors. These circuit breakers are specifically intended to provide service entrance, feeder, and branch circuit protection in accordance with the National Installation Codes in Annex B, Ref. No.1. This standard also covers instantaneous-trip circuit breakers (circuit interrupters) specifically intended for use as part of a combination motor controller in accordance with the National Installation Codes in Annex B, Ref. No. 1.

	SU 200 M	SU 200 MR	S 200 U DC	S 800 U
Voltage	480Y / 277 V AC (up to 40 A, C and Z curve; up to 35 A K curve); 240 V AC (up to 63 A) 48 V DC (1p) / 96 V DC (2, 3, 4p)	480Y / 277 V AC (up to 35 A); 240 V AC	60 VDC (1p) / 125 V DC (2, 3p)	240 V AC
Amperage	0.5 - 63 A (C, Z curve) 0.2 - 63 A (K curve)	0.2 - 35 A (480Y / 277 V AC); 40 - 63 A (240 V AC)	1 - 63 A	10 - 100 A
Poles	1P, 2P, 3P, 4P	1P, 2P, 3P, 4P	1P, 2P	1P, 2P, 3P, 4P
Trip Curves	C, K, Z	K	K, Z	K, Z
SCCR Rating	10 kA	10 kA	14 kA	30 kA (1p); 50 kA (2, 3, 4p)
Ambient Temperature	-25 to +55 °C	-25 to +55 °C	-25 to +70 °C	-25 to +60 °C
Reference Temperature for Trip Characteristics	40 °C	40 °C	25 °C	25 °C
Mounting Position	any	any	any	any
Terminal	Failsafe bidirectional cylinder lift	Insulated ringlug terminal; 12.2 mm (W) x M5 (int. dia.)	Failsafe bidirectional cylinder lift	Failsafe lug or ringlug terminal (convertible)
Wire Range	18 - 4 AWG	18 - 4 AWG	18 - 4 AWG	14-2 AWG (up to 30 A); 1-8 AWG (40 - 100 A)

Product selection guide

MCB's per UL1077 / CSA 22.2 No. 235 – S 200 / S 200 P / S 200 M UC / S 200 MT UC / S 200 MR / S 500 / S 500 UC

UL 1077

These requirements apply to supplementary protectors intended for use as overcurrent, or over- or under-voltage protection within an appliance or other electrical equipment where branch circuit overcurrent protection is already provided, or is not required. Compliance with this standard is acceptable for use as a component of an end product.

	S 200	S 200 P	S 200 M UC	S 200 MT UC	S 200 MR	S 500	S 500 UC
Voltage	480Y / 277 V AC; 60 VDC (1p) / 110 VDC (2 to 4p)	480Y / 277 V AC	250 / 500 VDC; 480Y / 277 V AC	250 / 500 VDC; 480Y / 277 V AC	480Y / 277 V AC	600 V AC	DC 250 V / pol, max. 600 V
Amperage	0.5 - 63 A (B curve, 6 - 63 A); (C curve, 1 - 63 A)	0.5 - 63 A (B curve, 6 - 63 A); (K curve, 0.2 - 63 A)	0.2 - 63 A (K curve) 0.5 - 63 A (C, Z curve) 6 - 63 A (B curve)	0.2 - 63 A (K curve) 0.5 - 63 A (C, Z curve) 6 - 63 A (B curve)	0.2 - 63 A	0.1 - 45 A	0.1 - 45 A
Poles	1P, 2P, 3P, 4P 1P+N, 3P+N	1P, 2P, 3P, 4P 1P+N, 3P+N	1P, 2P, 3P, 4P	1P, 2P, 3P, 4P	1P, 2P, 3P, 4P	1P, 2P, 3P	1P, 2P, 3P, 4P
Trip Curves	B, C, D, K, Z	B, C, D, K, Z	B, C, K, Z	B, C, K, Z	K	K	K
SCCR Rating	6 kA (AC); 10 kA (DC)	10 kA (up to 25 A); 6 kA (above 25 A)	6 kA (AC); 10kVA (DC)	6 kA (AC); 10 kA (DC)	10 kA	30 kA (up to 25 A); 18 kA (above 25 A)	30 kA
Ambient Temperature	-25 to +55 °C	-25 to +55 °C	-25 to +55 °C	-25 to +55 °C	-25 to +55 °C	-25 to +60 °C	-25 to +60 °C
Mounting Position	any	any	any	any	any	any	any
Terminal	Failsafe bidirectional cylinder lift	Failsafe bidirectional cylinder lift	Failsafe bidirectional cylinder lift	Failsafe bidirectional cylinder lift	Insulated ringlug terminal; 12.2 mm (W) x M5 (int. dia.)	Cage terminal	Cage terminal
Wire Range	18 - 4 AWG	18 - 4 AWG	14 - 4 AWG	14 - 4 AWG	18 - 4 AWG	18 - 4 AWG	18 - 4 AWG
Remarks						for traction applications	

SU 200 M



SU 200 MR



S 200 U DC



S 800 U



S 200 M UC



S 200



S 200 P



S 200 MR



Accessories for MCB's of the S 200 series UL 489 / CSA 22.2 No. 5

The System pro *M* offers all of the essential accessories such as shunt trips or auxiliary and signal contacts. In development of the SU 200 M assortment, the ability to use existing accessories was a key design requirement. Current accessories can be used with both current MCBs and the new SU 200 M MCB.

3

Auxiliary contact S2C-H6RU

The switching position of the auxiliary contact is dependent upon the toggle position of the MCB (On/Off). Being coupled to the switching mechanism, the auxiliary contact is used to indicate the state of the MCB.

Signal contact S2C-S6RU

In the event of an overload or short circuit, the signal contact will indicate that the MCB has tripped. When the MCB is operated manually, the signal contact will not provide an indication, as the signal contact is coupled to the trip mechanism of the MCB. The signal contact also allows for resetting of the signal contact independently of the MCB.

Shunt trip

When applying a voltage to the solenoid, this accessory allows remote opening of the device. Two different models are available for both AC and DC control voltages.

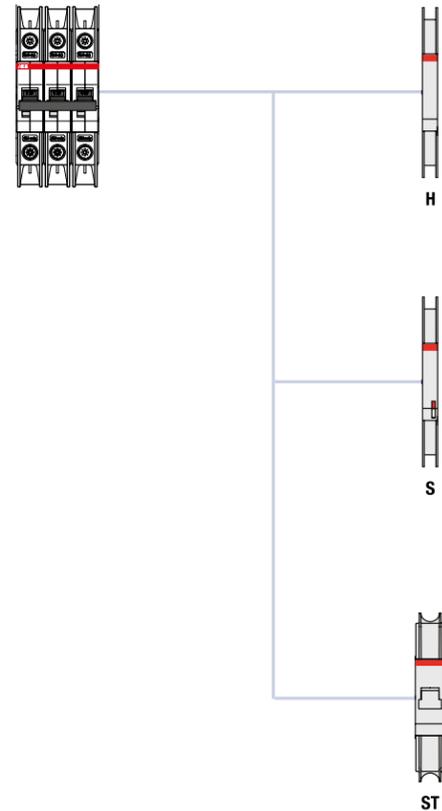
Busbar systems

Utilizing the patented twin-terminal design, busbars can be connected even after the device has been installed. For ring-lug MCBs a newly designed busbar is available.

Lockout / Tag Out device

Since safety is always at the forefront, the new S 200-LOTO devices can be added for use in a Lockout-Tagout program. The S 200-LOTO device is available in single and multi-pole versions.

SU 200 M, SU 200 MR, S 200 U DC



For UL/CSA applications, only one side mount accessory per MCB is allowed.

The number of electrical operations is limited to 4000 operations for the maximum combinations and the combinations including shunt trips.

Accessories	Description	Type code
H	Auxiliary contact (change-over contact)	S2C-H6RU
S	Signal contact	S2C-S6RU
ST	Shunt trip	S2C-A...U

Product details	Type code	Order code		
 Auxiliary contact and signal contact Auxiliary contact (switch) Signal contact (bell alarm)	S 2C-H6R U	2CDS200914R0001		
	S 2C-S6R U	2CDS200924R0001		
 Shunt trip Rated voltage 12 - 60 V AC/DC Rated voltage 110-415 V AC, 110-250V DC	S 2C-A1 U	2CDS200908R0001		
	S 2C-A2 U	2CDS200908R0002		
 Lockout / Tag Out device for Single-pole MCBs for Multi-pole MCBs	S2C-LOTO-S	2CDL200311R0001		
	S2C-LOTO-M	2CDL200311R0002		
 Busbar (no. phases, no. of pins, cross section) Cuttable busbar	1Ph., 57 Pins, 25 sqmm	PS 1/57/25 BP C	2CDL210489R5725	
	1Ph., 37 Pins, 25 sqmm	PS 1/37/25 BP C	2CDL210489R3725	
	2Ph., 56 Pins, 25 sqmm	PS 2/56/25 BP C	2CDL220489R5625	
	2Ph., 46 Pins, 25 sqmm	PS 2/46/25 BP C	2CDL220489R4625	
	3Ph., 57 Pins, 25 sqmm	PS 3/57/25 BP C	2CDL230489R5725	
	3Ph., 48 Pins, 25 sqmm	PS 3/48/25 BP C	2CDL230489R4825	
	3Ph., 39 Pins, 25 sqmm	PS 3/39/25 BP C	2CDL230489R3925	
	Accessories for cuttable busbars			
	Endcap	PS-END3BP-C	2CDL200489R0003	
	Ringlug busbar			
1Ph., 57 Ringlugs, 25 sqmm	PS 1/57/25 BP CR	2CDL211489R5725		
1Ph., 37 Ringlugs, 25 sqmm	PS 1/37/25 BP CR	2CDL211489R3725		
2Ph., 56 Ringlugs, 25 sqmm	PS 2/56/25 BP CR	2CDL221489R5625		
2Ph., 46 Ringlugs, 25 sqmm	PS 2/46/25 BP CR	2CDL221489R4625		
3Ph., 57 Ringlugs, 25 sqmm	PS 3/57/25 BP CR	2CDL231489R5725		
3Ph., 48 Ringlugs, 25 sqmm	PS 3/48/25 BP CR	2CDL231489R4825		
3Ph., 39 Ringlugs, 25 sqmm	PS 3/39/25 BP CR	2CDL231489R3925		

For further busbars and accessories please refer to the main catalogue!

3

Accessories for MCB's of the S 200 series UL 1077 / CSA 22.2 No. 235

S 200, S 200 P, S 200 M UC, S 200 MT UC, S 200 MR

Bottom-fitted auxiliary contact

The unique auxiliary contact is mounted on the bottom of the MCB. And therefore is very space-saving in the installation. Being coupled to the MCB, the auxiliary contact is used to indicate the state of the MCB.

Auxiliary contact

The switching position of the auxiliary contact is dependent upon the toggle position of the MCB (On/Off). Being coupled to the switching mechanism, the auxiliary contact is used to indicate the state of the MCB.

Auxiliary / Signal contact

The device has an integrated auxiliary contact (see above) and a signal contact. In the event of an overload or short circuit, the signal contact will indicate that the MCB has tripped. When the MCB is operated manually, the signal contact will not provide an indication, as the signal contact is coupled to the trip mechanism of the MCB. The signal contact also allows for resetting of the signal contact independently of the MCB.

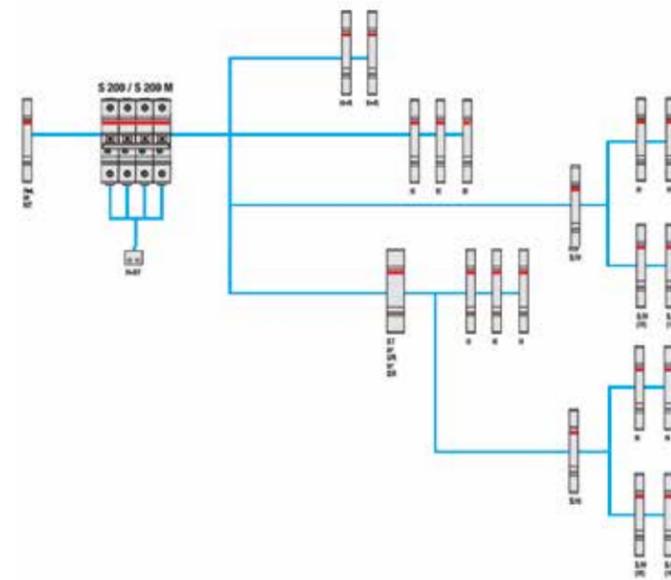
Shunt trip

When applying a voltage to the solenoid, this accessory allows remote opening of the device. Two different models are available for both AC and DC control voltages.

Undervoltage release

Protection of the load in the event of a voltage drop (between 70 % and 35 % of its rated value); positive safety (device is tripping when the voltage is disconnected); emergency stop by means of a button.

Combination of auxiliary elements with S 200



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 S 200 MCB	S2C-A
UR	Undervoltage release	S2C-UA
OR	Overvoltage release	S2C-OVP
H-L	Auxiliary contact for S 200 MCBs to be mouted on the left	S2C-H...L
H-BF	Auxiliary contact for MCBs bottom fitting (1 for each pole of MCB)	S2C-H01/S2C-H10

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

Product details	Type code	Order code
Signal / auxiliary contacts mounting on the left side		
Signal contact/ auxiliary switch 1CO	S2C-S/H6R	2CDS200922R0001
Auxiliary contact 1CO	S2C-H6R	2CDS200912R0001
Auxiliary contact 1NO/1NC	S2C-H6-11R	2CDS200946R0001
Auxiliary contact 2NO	S2C-H6-20R	2CDS200946R0002
Auxiliary contact 2NC	S2C-H6-02R	2CDS200946R0003
Auxiliary contacts mounting on the left side		
Auxiliary contact 1 NO/1NC	S2C-H11L	2CDS200936R0001
Auxiliary contact 2 NO	S2C-H20L	2CDS200936R0002
Auxiliary contact 2 NC	S2C-H02L	2CDS200936R0003
Bottom-fitted auxiliary contact		
Auxiliary contact 1 NC	S 2C-H01	2CDS 200 970 R0001
Auxiliary contact 1 NO	S 2C-H10	2CDS 200 970 R0002
Shunt trip		
Rated voltage AC/DC 12...60 V	S2C-A1	2CDS200909R0001
Rated voltage AC 110...415 V/ DC110...250 V	S2C-A2	2CDS200909R0002
Undervoltage releases		
Rated voltage 12VDC	S2C-UA 12 DC	2CSS200911R0001
Rated voltage 24VAC	S2C-UA 24 AC	2CSS200911R0002
Rated voltage 24VDC	S2C-UA 24 DC	2CSS200911R0007
Rated voltage 48VAC	S2C-UA 48 AC	2CSS200911R0003
Rated voltage 48VDC	S2C-UA 48 DC	2CSS200911R0008
Rated voltage 110VAC	S2C-UA 110 AC	2CSS200911R0004
Rated voltage 110VDC	S2C-UA 110 DC	2CSS200911R0009
Rated voltage 230VAC	S2C-UA 230 AC	2CSS200911R0005
Rated voltage 230VDC	S2C-UA 230 DC	2CSS200911R0010
Rated voltage 400VAC	S2C-UA 400 AC	2CSS200911R0006

Accessories for MCB's of the S 800 series UL 489 / CSA 22.2 No. 5

Auxiliary contact S800-AUX

The switching position of the auxiliary contact is dependent upon the toggle position of the MCB (On/Off). Being coupled to the switching mechanism, the auxiliary contact is used to indicate the state of the MCB.

Auxiliary / Signal contact S800-AUX/ALT

The device has an integrated auxiliary contact (see above) and a signal contact. In the event of an overload or short circuit, the signal contact will indicate that the MCB has tripped. When the MCB is operated manually, the signal contact will not provide an indication, as the signal contact is coupled to the trip mechanism of the MCB. The signal contact also allows for resetting of the signal contact independently of the MCB.

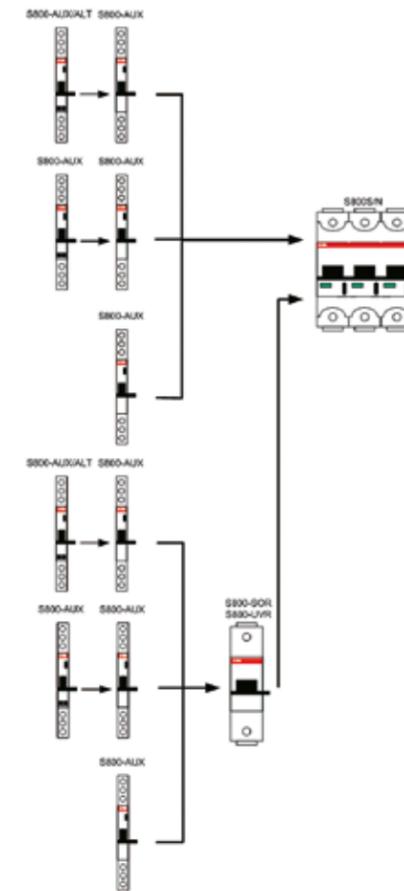
Shunt trip

When applying a voltage to the solenoid, this accessory allows remote opening of the device. Two different models are available for both AC and DC control voltages.

Undervoltage release

Protection of the load in the event of a voltage drop (between 70 % and 35 % of its rated value); positive safety (device is tripping when the voltage is disconnected); emergency stop by means of a button.

Combination of auxiliary elements and S 800



H	Auxiliary contact
S/H	Signal/Auxiliary contact
UR	Undervoltage release
ST	Shunt trip



Product details	Type code	Order code
Auxiliary contact and combined auxiliary and signal contact		
Auxiliary contact	S 800-AUX	2CCS800900R0011
Combined auxiliary and signal contact	S 800-AUX / ALT	2CCS800900R0021



Shunt operation releases		
Nominal Voltage 12 VAC/DC	S 800-SOR12	2CCS800900R0191
Nominal Voltage 24 VAC/DC	S 800-SOR24	2CCS800900R0191
Nominal Voltage 48...130 VAC/DC	S 800-SOR130	2CCS800900R0221
Nominal Voltage 110...250 VAC/DC	S 800-SOR250	2CCS800900R0211
Nominal Voltage 220...400 VAC/DC	S 800-SOR400	2CCS800900R0231



Undervoltage releases		
Nominal Voltage 24...36 VAC/DC	S 800-UVR36	2CCS800900R0241
Nominal Voltage 48...60 VAC/DC	S 800-UVR60	2CCS800900R0251
Nominal Voltage 110...130VAC/DC	S 800-UVR130	2CCS800900R0261
Nominal Voltage 220...250 VAC/DC	S 800-UVR250	2CCS800900R0271

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> Low Voltage Products and Systems

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