

Accessories

S200, S200P & S200PR

UL 1077, CSA 22.2, No. 235

Auxiliary contacts

The auxiliary contacts will signal whether the breaker is in the ON or OFF position.

Description	Catalog number
For field mounting; right side	S2C-H6R



S2C-H6R

Bell alarm - signal contact

The bell alarm includes a set of contacts that will only signal when the breaker has tripped. Typically the contacts would be connected to an alarm or bell to signal the operator that an overcurrent trip has occurred. The bell alarm also includes a test button for testing the alarm contacts without opening the breaker.

Description	Catalog number
For field mounting; right side	S2C-S/H6R ①

Shunt trip

For remote tripping of breaker, a shunt trip device can be added to the MCB. The solenoid device opens the breaker after control voltage is applied.

Description	Catalog number
For field mounting; right side	
A1-12-60 VAC (12 – 60 VDC)	S2C-A1
A2-110-415 VAC (110 – 250 VDC)	S2C-A2



S2C-A

Undervoltage release

When control voltage drops below approximately 50 % of rated voltage, the UVR opens the breaker. The breaker can not be operated unless proper control voltage is first applied to the UVR coil.

Description	Catalog number
For field mounting; right side	
12 VDC	S2C-UA 12
24 VAC/VDC	S2C-UA 24
48 VAC/VDC	S2C-UA 48
110 VAC/VDC	S2C-UA 110
220 VAC/VDC	S2C-UA 230
380 VAC	S2C-UA 400



S2C-UA

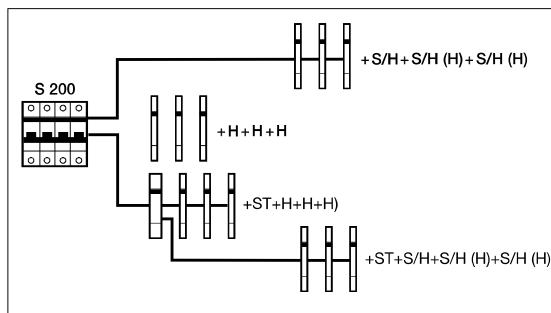


SA 1



SA 2

Possible mounting arrangements of MCB accessories



Legend	
Auxiliary contact	H
Bell alarm/Auxiliary contact	S/H
Bell alarm/Auxiliary contact used as auxiliary contact	S/H (H)
Shunt trip	ST
Undervoltage release	UR

Locking devices

Description	Catalog number
Locking devices, 3 mm	SA1
Padlock with 2 keys	SA2

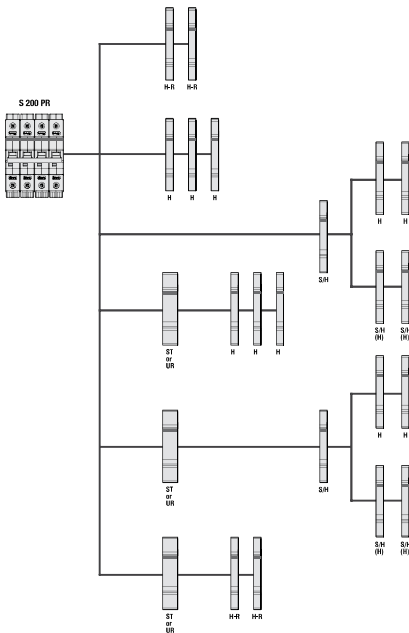
① Combination bell alarm/auxiliary contact.

Accessories

S200PR

UL 1077, CSA 22.2, No. 235

S200PR Accessory overview



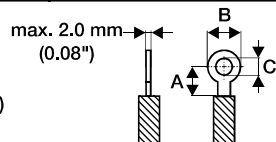
- H Auxiliary contact S2C-H6R
- H-R Auxiliary contact S2C-H6-...R
- S/H Signal/Auxiliary contact S2C-S/H6R
- S/H (H) Signal/Auxiliary contact S2C-S/H6R used as auxiliary contact
- ST Shunt trip S2C-A...
- UR Undervoltage release S2C-UA

S200PR Instructions for use

Ring Tongue Details

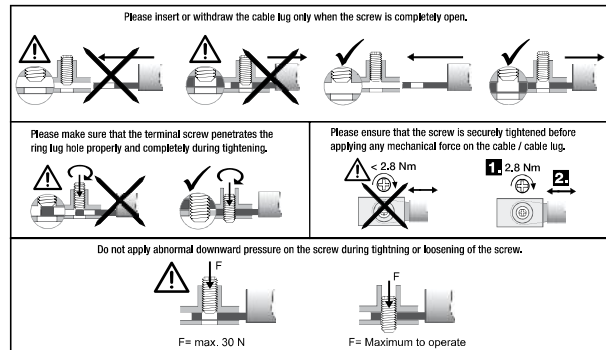
Only or ring cable lugs	Insulated only 	A	B	C
	Rated voltage 480Y/277 V AC	max. 11.0 mm (0.43")	max. 12.2 mm (0.48")	Suitable for M5 (0.20")
	Insulated only 	A	B	C
	Rated voltage 240/240 V AC	max. 14.0 mm (0.55")	max. 12.2 mm (0.48")	Suitable for M5 (0.20")

CU only
60/75°C
(140/167°F)
PZ 2 Torque: 2.8 Nm (25lb-in)



Ring Tongue Terminal, Special purpose - Not for general use

Installation Instructions



Please follow the Ring Tongue Details on the rear of this sheet.

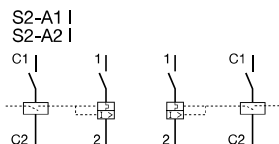
Accessories

S280UC

UL 1077, CSA 22.2, No. 235



S2-A1



Shunt trips

Function: remote opening of the device when a voltage is applied
Suitable for MCBs S 280 and S 280 UC series.

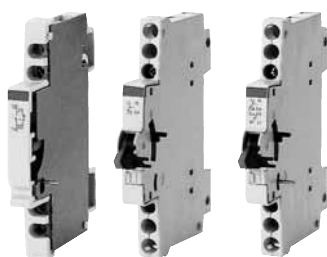
Description	Catalog number
12-60 VAC/VDC shunt trip	S2-A1
110-415 VAC and 110-250 VDC shunt trip	S2-A2

Auxiliary contacts

Function: indication of the position of the device's contacts
Suitable for MCBs S 280 and S 280 UC series

Signal contacts

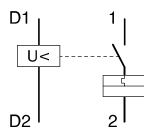
Function: indication of the position of the device's contacts only after the automatic release of the MCBs and RCBOs due to an overload or a short-circuit
Suitable for MCBs S 280 and S 280 UC series



Description	Catalog number
Auxiliary contact 1 NO + 1 NC (1/2 module)	S2-H11
Auxiliary contact 2 NO (1/2 module)	S2-H20
Auxiliary contact 2 NC (1/2 module)	S2-H02
Auxiliary contact 1 NO + 1 NC (1/2 module) with Faston connections	S2-H11X
Auxiliary contact 2 NO (1/2 module) with Faston connections	S2-H20X
Auxiliary contact 2 NC (1/2 module) with Faston connections	S2-H02X
Auxiliary contact 2 NO + 1 NC (1/2 module)	S2-H21
Auxiliary contact 1 NO + 2 NC (1/2 module)	S2-H12
Auxiliary contact 3 NO (1/2 module)	S2-H30
Auxiliary contact 3 NC (1/2 module)	S2-H03
Signal contact (1/2 module)	S2-S
Signal contact + Auxiliary contact (1/2 module)	S2-S/H



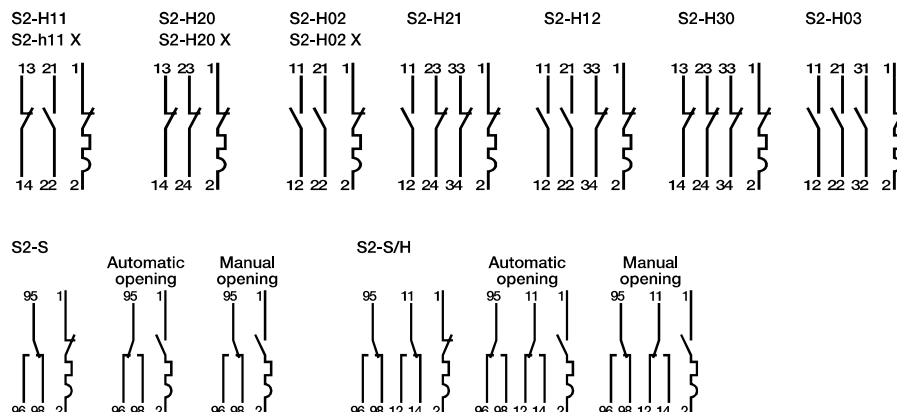
S2-UA12



Undervoltage release

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 280 and S 280 UC series.

Description	Catalog number
Undervoltage release 12V DC (1 module)	S2-UA12
Undervoltage release 24V AC/DC (1 module)	S2-UA24
Undervoltage release 48V AC/DC (1 module)	S2-UA48
Undervoltage release 110V AC/DC (1 module)	S2-UA110
Undervoltage release 220V AC/DC (1 module)	S2-UA220
Undervoltage release 380V AC (1 module)	S2-UA380



Accessories

S280UC

UL 1077, CSA 22.2, No. 235

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. The S2C - Nt is not to switch with a tool (screw driver).

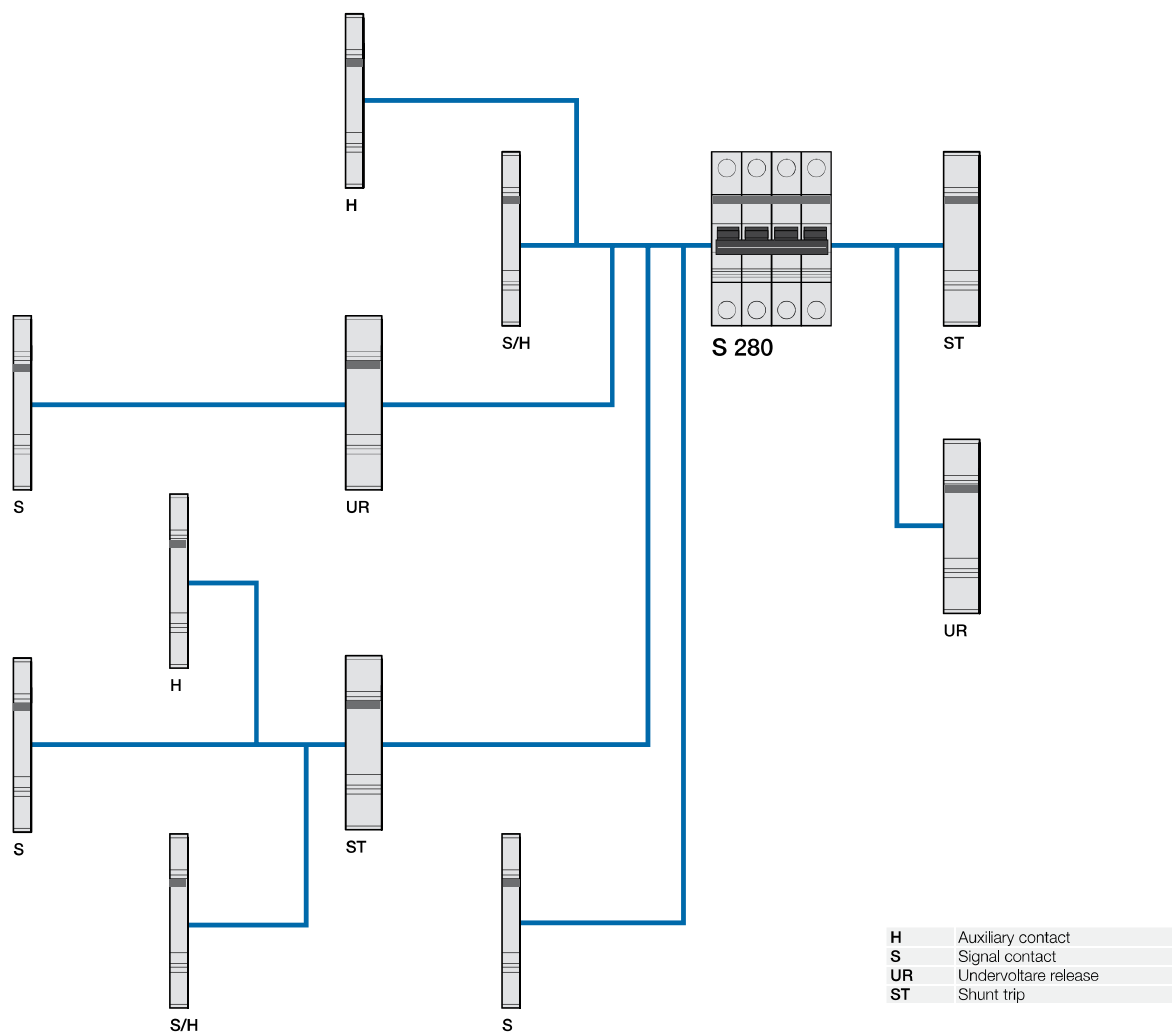
Description	Catalog number
Hand operated neutral	S2-NT

Schemes for combination and technical features

Auxiliary elements for MCBs S 280 series

Miniature
circuit breakers
S200

Combination between auxiliary elements and S 280



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

15

Technical characteristics of auxiliary and signal contacts

Type		S2-H11 I S2-H11 X	S2-H20 I S2-H20 X	S2-H02 I S2-H02 X	S2-H21	S2-H12	S2-H30	S2-H03
Description		1NO+1NC	2NO	2NC	2NO+1NC	1NO+2NC	3NO	3NC
Alternating current	Ue [V] Ie [A]				240 415 6 2			
Direct current	Ue [V] Ie [A]			24 60 110 250 4 2 1.5 1				
Min. operating voltage	[V]				12 a.c.-12 d.c.			
Min. operating current	[mA]				12			
Terminals	[mm ²]				up to 2x1.5			
Dielectric strength	[kV]				3			
Resistance to short-circuit at 240 V a.c.	[A]				1000 (protected with S 2 breaker characteristic K - 6 A)			
Impulse voltage withstand capacity	[kV]				4			
Tightening torque	[Nm]				0.7			
Dimensions (WxDxH)	[mm]				8.75x68x90			

NB: the auxiliary contacts S2-H11 X, S2-H20 X, S2-H02 X differ from the contacts S2-H11, S2-H20, S2-H02 in that they do not have a terminal to tighten the cable which is replaced by a bayonet for the Faston connection.

Technical features

Auxiliary elements for MCBs S 280 series

Technical characteristics of shunt trips

Type		S2-A1	S2-A2
Rated voltage	[V]		
	a.c.	12 - 60	110 - 415
	d.c.	12 - 60	110 - 250
Max. release duration	[ms]	<10	<10
Min. release voltage	[V]		
	a.c.	7	55
	d.c.	10	80
Consumption on release	[VA]		
	12 V a.c.	35	
	12 V d.c.	30	
	24 V a.c.	140	
	24 V d.c.	100	
	48 V a.c.	600	
	48 V d.c.	330	
	110 V a.c.		40
	110 V d.c.		40
	220 V a.c.		180
	220 V d.c.		170
Coil resistance	[Ω]	3.7	225
Terminals	[mm ²]	25	25
Tightening torque	[Nm]	2	2
Dimens.(WxDxH)	[mm]	17,5x68x90	17,5x68x90

Technical characteristics of undervoltage releases

Type		S2-UA 12	S2-UA 24	S2-UA 48	S2-UA 110	S2-UA 220	S2-UA 380
Standards		VDE0660 part I - IEC EN 60947.1					
Rated voltage	[V] a.c.	-	24	48	110	220-240	380
	[V] d.c.	12	24	-	110	220-240	380
Frequency	[Hz]	50...60					
Release trip	[V]	0.35 Un ≤ V ≤ 0.7 Un					
Terminals	[mm ²]	2 x 1.5					
Consumption	[mA]	10					
Resistance to corrosion	[°C/RH]	const. climatic cond.: 23/83-40/93-55/20; var. climatic cond.: 25/95-40/93					
Protection degree		IP20					
Tightening torque	[Nm]	0.4					
Dimensions (WxDxH)	[mm]	17,5x68x90					

S2-S

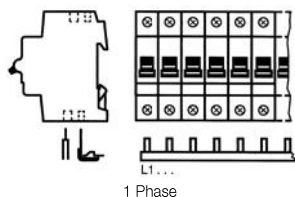
S2-SH

1 change over	2 change over
240	415
6	2
250	110
0.5	1
1	1
24	4
12 a.c.-12 d.c.	
12	
up to 2x1.5	
3	
1000 (protected with S 2 breaker characteristic K - 6 A)	
4	
0.7	
8.75x68x90	

Accessories

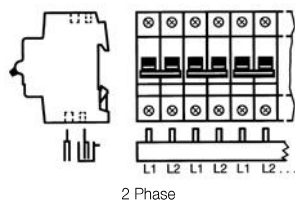
S200 & S200P

UL 1077, CSA 22.2, No. 235 (suitable for cutting)



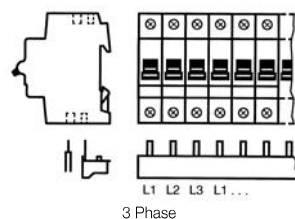
1 Phase

For use on:	Amp rating	Number of poles	Phases	Busbar length (mm)	End cap catalog number	Catalog number
S200	63	60	1	986	PS-END0	PS1/60SP
S200 P	80	60	1	986	PS-END0	PS1/60/16SP



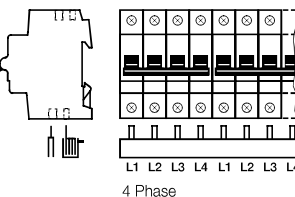
2 Phase

For use on:	Amp rating	Number of poles	Phases	Busbar length (mm)	End cap catalog number	Catalog number
S200	63	58	2	1035	PS-ENDSP	PS2/58SP
S200 P	80	58	2	1035	PS-ENDSP	PS2/58/16SP



3 Phase

For use on:	Amp rating	Number of poles	Phases	Busbar length (mm)	End cap catalog number	Catalog number
S200	63	60	3	1065	PSB-ENDSP	PS3/60SP
S200 P	80	60	3	1065	PSB-ENDSP	PS3/60/16SP



4 Phase

For use on:	Amp rating	Number of poles	Phases	Busbar length (mm)	End cap catalog number	Catalog number
S200	80	60	4	1056	PS-END1	PS4/60/16SP

NOTE

ALL BUSBARS MAY BE CENTER FED IN ORDER TO INCREASE AMPACITY UP TO 130 A.

NOTE

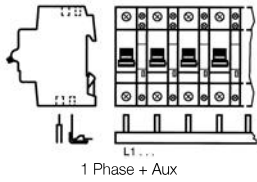
BUSBARS MAY BE USED ON LINE OR LOAD SIDE OF MCBS

Accessories

S200 & S200P

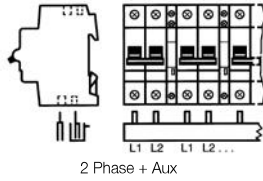
UL 1077, CSA 22.2, No. 235

1 Phase with 1 auxiliary



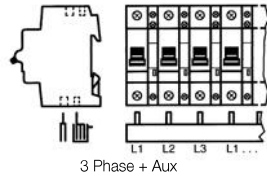
For use on:	Amp rating	Number of poles	Phases	Busbar length (mm)	End cap catalog number	Catalog number
S200 & S200 P	63	38	1	1044	—	PS1/38H
	80	38	1	1044	—	PS1/38/16H

2 Phase with 1 auxiliary



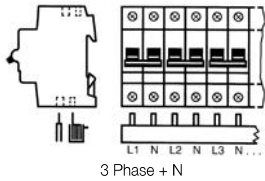
For use on:	Amp rating	Number of poles	Phases	Busbar length (mm)	End cap catalog number	Catalog number
S200 & S200 P	80	48	2	1065	PS-ENDSP	PS2/48/16SP

3 Phase with 1 auxiliary



For use on:	Amp rating	Number of poles	Phases	Busbar length (mm)	End cap catalog number	Catalog number
S200 & S200 P	80	39	3	980	PS-ENDSP	PS3/39/16SP

3 Phase + N, for use with 2 pole-MCBs on 3 phase/4W system



For use on:	Amp rating	Number of poles	Phases	Busbar length (mm)	End cap catalog number	Catalog number
S200 & S200 P	80	58	4	1048	PS-END1SP	PS4/58/16NSP

NOTE

ALL BUSBARS MAY BE CENTER FED IN ORDER TO INCREASE AMPACITY UP TO 130 A.

NOTE

BUSBARS MAY BE USED ON LINE OR LOAD SIDE OF MCBS

Accessories

S200 & S200P

UL 1077, CSA 22.2, No. 235



BSK-SP

Busbar tooth covers

Description	Catalog number
Covers five unused poles of busbar	BSK-SP



PS2/6/16 SP

Feeder terminals

Description	Catalog number
Insulated with pin contact, 35mm sq.	AST35/15SP
For side by side mounting; feed on pin of busbar, 50mm sq.	SZ-ESKSP



AST35/15SP



SZ-ESK SP