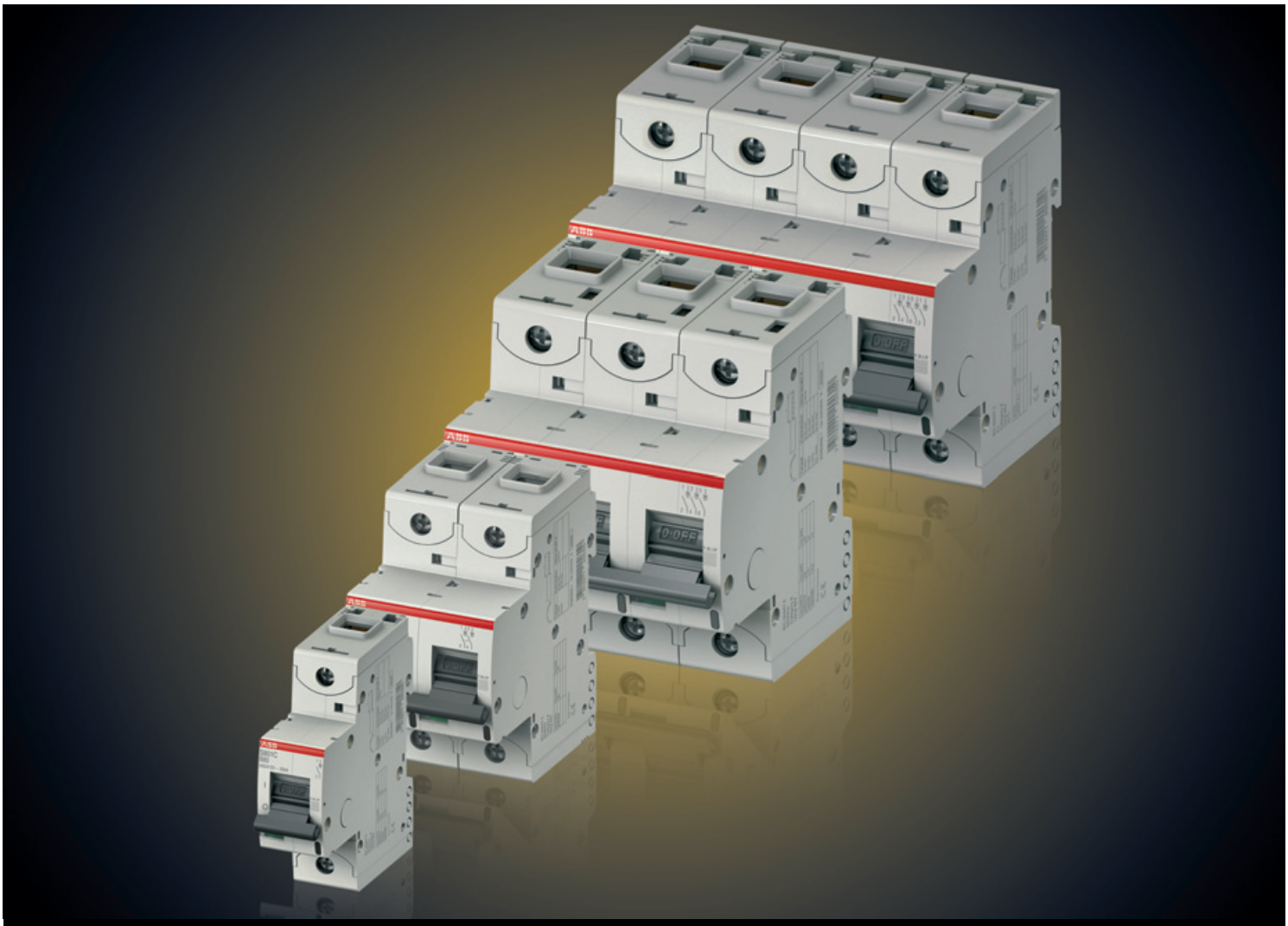


At a glance
S800 High performance MCB

Power and productivity
for a better world™

Worldwide at home

The S800 has multitude approvals for various applications and countries.

Convince yourself!

High performance MCBs S800
S800S

S800S					
Characteristic		B, C, D	K	KM	UC-B, UC-K
Rated operational current I_e	[A]	6 … 125	6 … 125	20 … 80	10 … 125
Pole		1 … 4	1 … 4	3	1 … 4
Rated operational voltage **Ue**					
(AC) 50/60 Hz	[V]	400/690	400/690	400/690	–
(DC) per pole	[V]	max. 125	max. 125	–	max. 250
Rated insulation voltage U_i	[V]	690	690	690	250
Rated impulse withstand voltage U_{imp}	[kV]	8	8	8	8
Rated ultimate short-circuit breaking capacity I_{cu}					
acc. to IEC 60947-2					
(AC) 50/60 Hz 240/415 V	[kA]	50	50	50	–
(DC) 250 V per pole	[kA]	–	–	–	50
Rated short-circuit capacity I_{cn}					
acc. to EN/IEC 60898-1					
(AC) 50/60 Hz 240/415 V (10 … 80 A)	[kA]	25	–	–	–
Disconnector properties			yes		
Standard			IEC 60947-2		
		EN/IEC 60898-1	–	–	–

Overview approvals

S800 High performance MCB										
S800S-B, C, D, K	■		■		■	■	■	■	■	■
S800S-UCB, UCK	■		■		■					
S800N-B, C, D	■		■		■					
S800C-B, C, D	■									
S800B-B, C, D	□									
S800U-K, Z				■						
S800PV-S		■	■							
S800PV-M		■	■							

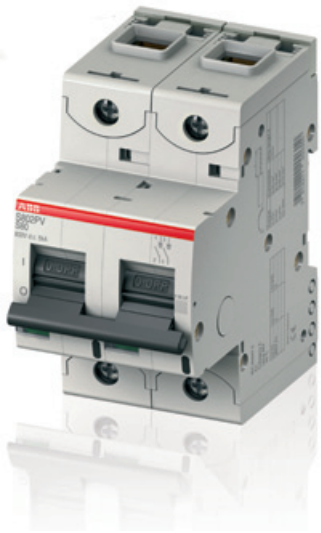
S800 Accessory										
S800-RSU	■			■						
S800-SCL-SR	■			■		■				
Auxiliary contact	■	■	■	■	■	■	■	■	■	■
Combined auxiliary and signal contact	■	■	■	■	■	■	■	■	■	■
Disconnectable neutral conductor	■									
Shunt operation release				■						
Undervoltage release				■						

High performance MCBs S800
S800N, S800C, S800B

		S800N	S800C	S800B
Characteristic		B, C, D	B, C, D, K	B, C, D, K
Rated operational current I_e	[A]	6 … 125	10 … 125	32 … 100/125*3
Pole		1 … 4	1 … 4	1 … 4
Rated operational voltage U_e				
(AC) 50/60 Hz	[V]	400 / 690	254 / 440	230 / 400
(DC) per pole	[V]	max. 125	max. 125	–
Rated insulation voltage U_i	[V]	690	500	440
Rated impulse withstand voltage U_{imp}	[kV]	8	8	4
Rated ultimate short-circuit breaking capacity I_{cu}				
acc. to 60947-2				
(AC) 50/60 Hz 230/400 V	[kA]	–	–	16
(AC) 50/60 Hz 240/415 V	[kA]	36	25	–
Rated short-circuit capacity I_{cn}				
acc. to EN/IEC 60898-1				
(AC) 50/60 Hz 240/415 V	[kA]	20*2	15*1	–
Disconnector properties			yes	
Standard		IEC 60947-2	–	IEC 60947-2
		EN/IEC 60898-1	EN/IEC 60898-1	–

*1 applies for characteristick B, C, D
*2 applies for 10 ... 80 A
*3 applies for characteristic B, C

High performance MCBs S800
S800PV, S800U



S800PV

		S800PV-S		S800PV-M
Rated operational current **I_e**		10 … 80	100, 125	32, 63, 125
Pole		2 … 4		2 … 4
Rated operational voltage **U_e**				
(DC) 2-pole	[V]	800	600	800
(DC) 3-pole	[V]	1200	1000	1200
(DC) 4-pole	[V]	1200	1200	1200
Rated insulation voltage **U_i**	[V]	1500		1500
Rated impulse withstand voltage **U_{imp}**	[kV]	8		8
Rated ultimate short-circuit breaking capacity **I_{cu}**				
acc. to IEC 60947-2				
(DC) 800 V 2-pole	[kA]	5		–
(DC) 1200 V 3-pole	[kA]	5		–
(DC) 1200 V 4-pole	[kA]	5		–
Rated ultimate short-circuit breaking capacity **I_{cw}**				
nach IEC 60947-3				
(DC) 800 V 2-pole	[kA]	–		1.5
(DC) 1200 V 3-pole	[kA]	–		1.5
(DC) 1200 V 4-pole	[kA]	–		1.5
Disconnector properties		yes		yes
Standard		IEC 60947-2		IEC 60947-3

S800U

Characteristic			K, Z
Rated operational current **I_e**			10 … 100
Pole			1 … 4
Rated operational voltage **U_e**			
(AC) 50/60 Hz **acc. to UL489**		[V]	240
(AC) 50/60 Hz **acc. to IEC 60947-2**		[V]	240/415
Rated insulation voltage **U_i**		[V]	8
Rated impulse withstand voltage **U_{imp}**		[kV]	8
Rated ultimate short-circuit breaking capacity **I_{cu} acc. to UL489**			
(AC) 50/60 Hz 240 V 1-pole		[kA]	30
(AC) 50/60 Hz 240 V multipolar		[kA]	50
Rated ultimate short-circuit breaking capacity **I_{cu} acc. to IEC 60947-2**			
(AC) 50/60 Hz 240/415 V 1-pole		[kA]	30
(AC) 50/60 Hz 240/415 V multipolar		[kA]	50
Standard			UL489, CSA22.2 NO.5-02, IEC 60947-2

High performance MCBs S800
Accessories

S800-RSU Remote Switching Unit		
Rated operational voltage **U_e**		
(DC)	[V]	24
Current consumption **I_{rms}**	[A]	2,5
Stand-by-current	[mA]	< 50
Switching time OFF-ON	[ms]	< 500
Switching time ON-OFF	[ms]	< 250
Switching Cycles over Lifetime		10000
Protection		IP20
Weight	[g]	300
Connection		10 pole Micro Fit 3.0
Standard		IEC 60947-2 Annex N

Self-resetting short-circuit limitor			S800S-SCL-SR	S803W-SCL-SR
Rated operational current **I_e**		[A]	32, 63, 100	
Pole			1, 2, 3	3
Rated operational voltage **U_e**				
(AC) **acc. to IEC 60947-2**	50/60 Hz	[V]	400/690	–
(AC) **acc. to UL 508**	50/60 Hz	[V]	–	600
Rated insulation voltage **U_i**		[V]	690	
Rated impulse withstand voltage **U_{imp}**		[kV]	8	
Rated ultimate short-circuit breaking capacity				
I_{cu} = I_{cs} acc to IEC 60947-2*				
(AC) 50/60 Hz 240/415 V		[kA]	100	
(AC) 50/60 Hz 254/440 V		[kA]	100	
(AC) 50/60 Hz 289/500 V		[kA]	65	
(AC) 50/60 Hz 400/690 V		[kA]	50	
Rated ultimate short-circuit breaking capacity **acc. to UL508, CSA 22.2***				
(AC) 50/60 Hz 480 V		[kA]	65	
(AC) 50/60 Hz 600 V		[kA]	65	

*) Valid only for approved combinations
Please have a look to separate coordination tables 2CCC413009B0101

The S800 range includes also
- Auxiliary contact S800-AUX
- Combined auxiliary and signal contact S800-AUX/ALT
- Shunt open release S800-SOR
- Unvervoltage release S800-UVR
- Interchangeable ring terminal connection
- Residual current device DDA800
- ...

S800 – The large one of the small ones
High-performance circuit breaker S800

High-performance circuit breakers are circuit breakers featuring particularly high switching capacity and excellent selectivity and energy-limiting properties. They are especially suitable as protective devices for overload and short-circuit protection in power distribution systems.
Wherever high power demand is distributed across several levels, the deployment of these high-performance circuit breakers is preferably appropriate in the last but one. Rated currents up to 125 A and rated switching capacity up to 50 kA meet these requirements common on this distribution level.
Low size of switching stations as demanded today by operators of electrical systems combined with low investment costs, high degree of availability and simple operability at low running costs can be ideally met through these protective devices.
Use of fusible cut-outs in low-voltage distribution systems is not longer required. Power circuit breakers possibly being at higher investment cost levels can be partly substituted through high-performance circuit breakers since they can be simply switched back on to take up their work after a fault has occurred.
The S800 product portfolio comprises the following type range at the moment:

- S800S I_{cu} of max. 50 kA
- S800N I_{cu} of max. 36 kA
- S800C I_{cu} of max. 25 kA
- S800B I_{cu} of max. 16 kA

- S800U tested to UL 489
  - I_{cu} 1-pole max. 30 kA
  - I_{cu} multipole max. 50 kA

- S800PV for photovoltaics
  - S800PV-S string protection
  - S800PV-M disconnector

In addition to the new S800B, the range of accessories was extended by the following devices:

- S800-RSU Remote-controllable switchgear unit
  The S800-RSU can be mounted onto all multipole S800 units and enables switching from a distance

- S800-SCL-SR Self-resetting short-circuit current limiter

The S800-SCL-SR is a current-limiting module that limits the short-circuit current until the downstream protective device triggers. Continual current availability makes this switch unique as group protection can thus be realized. This means a whole group of motor circuit breakers can be operated or protected using one S800-SCL-SR. In the case of a fault, all downstream protective devices would not stop as would be the case with the usual short-circuit current limiters. Only the circuit breaker located next to the fault would trip and all remaining devices continue being operational.

Contact

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In consideration of modification to standards and materials, the characteristics and overall dimensions indicated in this catalogue may be binding only following confirmation by ABB.

2CCC413005L0201 – Subject to alterations

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