

MCBs

S800 series technical features

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		S800S		S803S-KM	
General Data	Standards		IEC 60947-2, EN 60898-1		IEC / EN 60947-2
	Poles		1 ... 4		3
	Tripping characteristics		B, C, D, K,		KM
	Rated current I_n	A	6 ... 125		20 ... 80
	Rated frequency f	Hz	50 / 60 Hz		50/60 Hz
	Rated insulation voltage U_i acc. to IEC/EN 60664-1	V	690 V AC		690 V AC
	Rated impulse withstand voltage U_{imp} (1.2/50µs)	kV	8		8
	Overvoltage category		IV		IV
	Pollution degree		3		3
Data acc. to IEC/EN 60898-1	Suitability for isolation		yes		yes
	Rated operational voltage U_p	V	230/400V AC		-
	Min. operating voltage	V	12V AC		-
	Rated short-circuit capacity I_{cs}	kA	25kA (10 ... 80A)		-
	Energy limiting class		-		-
	Reference temperature for tripping characteristics	°C	B, C, D: 30° C		
	Electrical and Mechanical Endurance	ops.	10 ... 32A: 10'000 electrical / mechanical 40 ... 100A: 6'000 electrical / 4'000 mechanical 125A: 4'000 electrical / 6'000 mechanical		-
	Service short-circuit capacity I_{cs}	kA	12.5kA (10 ... 80A)		-
Data acc. to IEC/EN 60947-2	Rated operational voltage U_p	V	400/690V AC 1-pole: 125V DC; 2-pole: 250V DC; 3-pole: 375V DC; 4-pole: 500V DC		690V AC
	Min. operating voltage	V	12V AC		12V AC
	Rated ultimate short-circuit capacity I_{cu}	kA	AC 240/415V = 50kA		AC 240/415V = 50kA
			AC 254/440V = 30kA		AC 254/440V = 30kA
			AC 400/690V (up to 80A) = 6kA		AC 400/690V (up to 80A) = 6kA
			AC 400/690V (100 ... 125A) = 4.5kA		AC 400/690V (100 ... 125A) = 4.5kA
			DC 125V (1-pole) = 30kA		DC 375V (3-pole) = 30kA
			DC 250V (2-pole) = 30kA		
			DC 375V (3-pole) = 30kA		
	Rated service short-circuit capacity I_{cs}	kA	DC 500V (4-pole) = 30kA		
			240/415V = 40kA		
			254/440V (up to 80A) = 22.5kA		
			254/440V (100 ... 125A) = 15kA		
			400/690V (up to 80A) = 4kA		
			400/690V (100 ... 125A) = 3kA		
			DC 125V (1-pole) = 30kA		DC 375V (3-pole) = 30kA
	Dielectric test voltage	kV	DC 250V (2-pole) = 30kA		
			DC 375V (3-pole) = 30kA		
			DC 500V (4-pole) = 30kA		
			acc. to standard		acc. to standard
	Reference temperature for tripping characteristics	°C	B, C, D: 30° K: 40° C		only magnetic release
	Electrical and Mechanical Endurance	ops.	6 ... 32A: 10'000 electrical / mechanical 40 ... 100A: 6'000 electrical / 4'000 mechanical 125A: 4'000 electrical / 6'000 mechanical		20 ... 32A: 10'000 electrical / mechanical 40 ... 80A: 6'000 electrical / 4'000 mechanical

① (DC) ≤ 100 A; S800-D125 only IEC 60947-2

S800S-UC	S800N	S800C	S800B
IEC / EN 60947-2	IEC 60947-2, EN 60898-1	EN 60947-2, EN 60898-1	IEC 60947-2
1 ... 4	1 ... 4	1 ... 4	1 ... 4
UCB, UCK	B, C, D	B, C, D, K	B, C, D, K
10 ... 125	6 ... 125	10 ... 125	32 ... 125 (Char. B, C) 32 ... 100 (Char. D, K)
DC	50/60 Hz	50/60 Hz	
750 V DC	690 V AC	500 V AC	440 V AC
8	8	8	4
IV	IV	IV	III
1- and 2-pole: 3 3- and 4-pole: 2	3	3	3
yes	yes	yes	yes
-	230/400V AC	230/400V AC	-
-	12V AC	12V AC	-
-	20kA (10 ... 80A)	15kA	-
-	-	-	-
-	B, C, D: 30° C	B, C, D: 30° C	
-	10 ... 32A: 10'000 electrical / mechanical 40 ... 100A: 6'000 electrical / 4'000 mechanical 125A: 4'000 electrical / 6'000 mechanical	10 ... 32A: 10'000 electrical / mechanical 40 ... 100A: 6'000 electrical / 4'000 mechanical 125A: 4'000 electrical / 6'000 mechanical	-
-	10kA (10 ... 80A)	7.5kA	-
1-pole: 250V DC 2-pole: 500V DC 3- and 4-pole 750V DC	400/690V AC 1-pole: 125V DC; 2-pole: 250V DC; 3-pole: 375V DC; 4-pole: 500V DC	400/690V AC 1-pole: 125V DC; 2-pole: 250V DC; 3-pole: 375V DC; 4-pole: 500V DC	230/400V AC
-	12V AC	12V AC	12V AC
DC 250V (1-pole) = 50kA	AC 240/415V = 36kA	AC 240/415V = 25kA	230/400V = 16kA
DC 500V (2-pole) = 50kA	AC 254/440V = 20kA	AC 254/440V = 15kA	
DC 750V (3-pole) = 50kA	AC 400/690V = 4.5kA		
DC 750V (4-pole) = 50kA			
	DC 125V (1-pole) = 20kA	DC 125V (1-pole) = 10kA	
	DC 250V (2-pole) = 20kA	DC 250V (2-pole) = 10kA	
	DC 375V (3-pole) = 20kA	DC 375V (3-pole) = 10kA	
	DC 500V (4-pole) = 20kA	DC 500V (4-pole) = 10kA	
DC 250V (1-pole) = 50kA	240/415V = 30kA	240/415V = 18kA	230/400V = 10kA
DC 500V (2-pole) = 50kA	254/440V (6 ... 80 A) = 15kA	254/440V = 10kA	
DC 750V (3-pole) = 50kA	254/440V (100 ... 125A) = 10kA		
DC 750V (4-pole) = 50kA	400/690V = 3kA		
	DC 125V (1-pole) = 20kA	DC 125V (1-pole) = 10kA	
	DC 250V (2-pole) = 20kA	DC 250V (2-pole) = 10kA	
	DC 375V (3-pole) = 20kA	DC 375V (3-pole) = 10kA	
	DC 500V (4-pole) = 20kA	DC 500V (4-pole) = 10kA	
acc. to standard	acc. to standard	acc. to standard	acc. to standard
UCB: 30°C; UCK: 40° C	B, C, D: 30°	B, C, D: 30° K: 40° C	B, C, D: 30° K: 40° C
10 ... 100A: 1500 electric; 8500 mechanic 125A: 1000 electric, 7000 mechanic	6 ... 32A: 10'000 electrical / mechanical 40 ... 100A: 6'000 electrical / 4'000 mechanical 125A: 4'000 electrical / 6'000 mechanical	10 ... 32A: 10'000 electrical / mechanical 40 ... 100A: 6'000 electrical / 4'000 mechanical 125A: 4'000 electrical / 6'000 mechanical	32 ... 100A: 1500 electric; 8500 mechanic 125A: 1000 electric, 7000 mechanic

MCBs

S800 series technical features

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S800

2CSC413001F0002

			S800S	S803S-KM	
Mechanical Data	Housing		Material group I, RAL 7035		
	Toggle		black, lockable		
	Classification acc. To NF F 126-101, NF F 16-102		I3, F2		
	Protection degree acc. to EN 60529		IP20; IP40(actuating end only)		
	Mechanical endurance	ops.	10'000 cycles		
	Shock resistance acc. to IEC/EN 60068-2-30		IEC 61373 Cat. 1 Class B, 5g / 30ms acc. To IEC 60068-27 Test Ea		
	Vibration resistance acc. to IEC/EN 60068-2-6		IEC 60068-2-6 Test Fc; 2 - 13.2Hz /1mm 13.2 - 100Hz / 0.7g with load 100% x 1e		
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30	°C/ RH	12 + 12 cycle with 55°C / 90-96% and 25% / 95-100%		
	Environmental conditions (dry heat) acc. to IEC/EN 60068-2-2 Test B	°C/ RH	16 hours 55°C / 2 hours 70°C with damp heat 55%		
	Ambient temperature	°C	-25... + 60		
	Storage temperature	°C	-40... + 70		
Installation	Terminal		Failsafe cage or ringlug terminal	Failsafe cage or ringlug terminal	
	Stranded Cross-section of conductors (top / bottom)	mm² AWG	1 ... 50	1 ... 50	
	Flexible Cross-section of conductors (top/bottom)	mm² AWG	1 ... 70	1 ... 70	
	Tightening torque	Nm in- lbs.	3,5 31		
	Screwdriver		POZI 2		
	Mounting		EN 60715		
	Mounting position		any		
	Supply		any		
Dimensions and weight	Pole dimensions (H x L x W)	mm	82.5 x 95 x 26.5		
	Pole weight	g	ca. 240 g	ca. 740 g	
Combination with aux. elements	Auxiliary contact		Yes		
	Combined auxiliary- / signal contact		Yes		
	Shunt trip		Yes		
	Undervoltage release		Yes		
	Shunt open release		Yes		
	Motor Operating Device		Yes		

① (DC)≤ 100 A; S800-D125 only IEC 60947-2

S800S-UC	S800N	S800C	S800B
Failsafe cage or ringlug terminal 1 ... 50	Failsafe cage or ringlug terminal 1 ... 50	Failsafe cage or ringlug terminal 1 ... 50	Failsafe cage or ringlug terminal 1 ... 50
1 ... 70	1 ... 70	1 ... 70	1 ... 70
ca. 240 g	ca. 240 g	ca. 250 g	ca. 240 g

High performance MCBs

S800N series 36000 with cage terminal, C characteristic



S801N

20CC0413223F0001



S802N

20CC0413224F0001

S800N-C characteristic

Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for resistive and inductive loads with low inrush current; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.

Applications: commercial and industrial.

Standard: IEC/EN 60898, IEC/EN 60947-2

Icn=20 kA (10 ... 80 A)

Icu=36 kA

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
1	10	204280	S801N-C10	2CCS891001R0104		0.24	1
	13	204297	S801N-C13	2CCS891001R0134		0.24	1
	16	204303	S801N-C16	2CCS891001R0164		0.24	1
	20	204310	S801N-C20	2CCS891001R0204		0.24	1
	25	204327	S801N-C25	2CCS891001R0254		0.24	1
	32	204334	S801N-C32	2CCS891001R0324		0.24	1
	40	204341	S801N-C40	2CCS891001R0404		0.24	1
	50	204358	S801N-C50	2CCS891001R0504		0.24	1
	63	204365	S801N-C63	2CCS891001R0634		0.24	1
	80	204372	S801N-C80	2CCS891001R0804		0.24	1
	100	204389	S801N-C100	2CCS891001R0824		0.24	1
	125	204396	S801N-C125	2CCS891001R0844		0.24	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
2	10	204402	S802N-C10	2CCS892001R0104		0.48	1
	13	204419	S802N-C13	2CCS892001R0134		0.48	1
	16	204426	S802N-C16	2CCS892001R0164		0.48	1
	20	204433	S802N-C20	2CCS892001R0204		0.48	1
	25	204440	S802N-C25	2CCS892001R0254		0.48	1
	32	204457	S802N-C32	2CCS892001R0324		0.48	1
	40	204464	S802N-C40	2CCS892001R0404		0.48	1
	50	204471	S802N-C50	2CCS892001R0504		0.48	1
	63	204488	S802N-C63	2CCS892001R0634		0.48	1
	80	204495	S802N-C80	2CCS892001R0804		0.48	1
	100	204501	S802N-C100	2CCS892001R0824		0.48	1
	125	204518	S802N-C125	2CCS892001R0844		0.48	1

High performance MCBs

S800N series 36000 with cage terminal, C characteristic

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S803N

2CC0413225F0001



S804N

2CC0413225F0001

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
3	10	204525	S803N-C10	2CCS893001R0104		0.72	1
	13	204532	S803N-C13	2CCS893001R0134		0.72	1
	16	204549	S803N-C16	2CCS893001R0164		0.72	1
	20	204556	S803N-C20	2CCS893001R0204		0.72	1
	25	204563	S803N-C25	2CCS893001R0254		0.72	1
	32	204570	S803N-C32	2CCS893001R0324		0.72	1
	40	204587	S803N-C40	2CCS893001R0404		0.72	1
	50	204594	S803N-C50	2CCS893001R0504		0.72	1
	63	204600	S803N-C63	2CCS893001R0634		0.72	1
	80	204617	S803N-C80	2CCS893001R0804		0.72	1
	100	204624	S803N-C100	2CCS893001R0824		0.72	1
	125	204631	S803N-C125	2CCS893001R0844		0.72	1

Number of poles	Rated current	Bbn 7612271	Order details		Price 1 piece	Weight 1 piece	Pack unit
	In A	EAN	Type code	Order code		kg	pc.
4	10	204648	S804N-C10	2CCS894001R0104		0.96	1
	13	204655	S804N-C13	2CCS894001R0134		0.96	1
	16	204662	S804N-C16	2CCS894001R0164		0.96	1
	20	204679	S804N-C20	2CCS894001R0204		0.96	1
	25	204686	S804N-C25	2CCS894001R0254		0.96	1
	32	204693	S804N-C32	2CCS894001R0324		0.96	1
	40	204709	S804N-C40	2CCS894001R0404		0.96	1
	50	204716	S804N-C50	2CCS894001R0504		0.96	1
	63	204723	S804N-C63	2CCS894001R0634		0.96	1
	80	204730	S804N-C80	2CCS894001R0804		0.96	1
	100	204747	S804N-C100	2CCS894001R0824		0.96	1
	125	204754	S804N-C125	2CCS894001R0844		0.96	1

Where to find more:

Coordination Tables for S 800N MCBs: p.10/37 for back-up and p.10/67 for selectivity.
For additional information download Back-up and Selectivity of S800 MCBs technical document (code 2CCC451039L0207)



Worldwide Marks and Approvals of MCBs p.11/92

Frequently asked question - FAQ:

Where can I get certificates and declaration?
You can find all of them on www.abb.com

Maybe you are also interested in:

Auxiliary Elements for S 800 MCBs p.4/53 and p.4/62