

Uncompromising safety and comfort The next generation of miniature circuit breakers – MCB S 200/S 200 M

# The details make the difference MCB S 200/S 200 M

### A range designed to ensure efficiency and protection

Our MCBs are advanced for more than 120 years in the history and mindset of Hugo Stotz. Today we offer feasible MCB solutions for all kind of applications, which are developed in close touch to market requirements from various branches.

#### Facts which speak for themselves

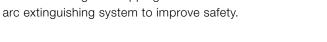
Numerous patents have been made during this time and ensure our market position as the "original" and innovation leader.

**Terminal:** The extended terminal size with insulating part for IP20 protection and the new pressure plate for improved conductor connection facilitate the handling and increase safety.

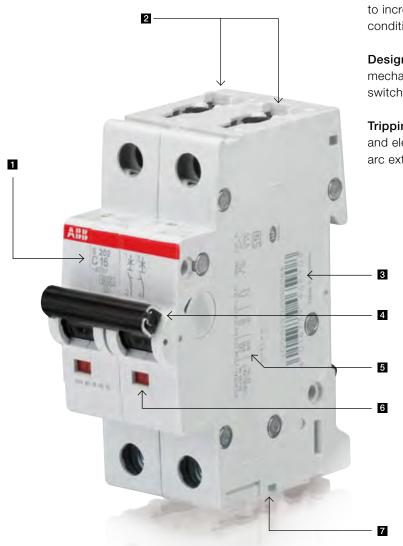
**Switching mechanism:** A new functional design and the assembly of the switching mechanism was developed to increase the reliability of triggering even under tough conditions.

**Design of contacts:** Contact design with snap action mechanism for improved arc movement and for an optimized switching behavior.

**Tripping device:** Optimized arrangement of the thermal and electromagnetic tripping device in consideration of the arc extinguishing system to improve safety.



- 1 Easy product coding easy identification: basic technical information already integrated into the name
- 2 New, patented twin terminals with captive screws: highest comfort, safety and flexibility
- 3 Laser printing: scratch and solvent resistant marking
- 4 Immediate system availability after fault by simply switching on the MCB, even by unskilled people
- 5 High rated voltage with same performance
- 6 Real contact position indication, directly connected to the moving contact, for more comfort and safety
- New, patented housing design: environmental friendly and performance-optimized
- 8 Patented tripping device: uncompromising safety



# In 1923 the first of its kind – today the best

In 1923, Hugo Stotz combined a thermal and a magnetic trip unit in a single device and thereby invented a new and innovative circuit breaker, which was a revolution in electrical installation. As it could simply be screwed into usual fuse sockets it was a big success for the company, which is located in Germany for more than 120 years.



# Technical data

	S 200	S 200 M
Conoral Data		
General Data Standards	IEC/EN 60898-1, IEC/EN 60947-2	IEC/EN 60898-1, IEC/EN 60947-
Statituarus	UL 1077	UL 1077, CSA 22.2 No. 235
Poles	1P, 2P, 3P, 4P, 1P+N, 3P+N	
Tripping Characteristics	B, C, D, K, Z	
Rated current In	0.563 A	
Rated frequency	50/60 Hz	
EC/EN 60898-1		
Rated operational voltage Un	1P: 230/400 V AC; 1P+N: 230 V AC; 2P, 3P, 4P: 400 V AC; 3P+N: 400 V AC	
Power frequency recovery voltage U <sub>may</sub>	1P: 253 V AC; 1P+N: 253 V AC; 2P, 3P, 4P: 440 V AC; 3P+N: 440 V AC;	
. , , , , , , , , , , , , , , , , , , ,	1P: 72 V DC; 2P: 125 V DC	
Min. operating voltage	12 V AC, 12 V DC	
Rated short-circuit capacity I <sub>ca</sub>	6 kA	10 kA
Energy limiting class (B, C up to 40 A)		3
Electrical endurance	$I_{n} < 32A$ : 20,000 ops. (AC), $I_{n} \ge 32A$	A: 10,000 ops. (AC); 1,000 ops. (DC);
	1 cycle (2s - ON, 13s - OFF, I <sub>n</sub> ≤ 32A), 1 cyle (2s - ON, 28s - OFF, I <sub>n</sub> > 32A)	
EC/EN 60947-2	.,,	,, ., .,
Rated operational voltage U <sub>e</sub>	1P: 230 V AC; 1P+N: 230 V AC; 2P, 3P, 4P: 440 V AC; 3P+N: 440 V AC	
Power frequency recovery voltage U <sub>may</sub>	1P: 253 V AC; 1P+N: 253 V AC; 2P, 3P, 4P: 462 V AC; 3P+N: 462 V AC;	
High High	1P: 72 V DC; 2P: 125 V DC	
Min. operating voltage	12 V AC, 12 V DC	
Rated ultimate short-circuit breaking capacity I	10 kA	15 kA
Rated service short-circuit breaking capacity I <sub>cs</sub>	7.5 kA	≤ 40 A: 11.2 kA
riated 361 vice short circuit breaking capacity 1cs	1.5 10	50, 63 A: 7.5 kA
Electrical endurance	1 < 32A · 20 000 ops (AC) 1 > 32	··•
Electrical endurance	I <sub>n</sub> < 32A: 20,000 ops. (AC), I <sub>n</sub> ≥ 32A: 10,000 ops. (AC); 1,000 ops. (DC); 1 cycle (2s - ON, 13s - OFF, I <sub>n</sub> ≤ 32A), 1 cycle (2s - ON, 28s - OFF, I <sub>n</sub> > 32A	
UL1077 / CSA 22.2 No. 235	1 0y010 (25 014, 105 011, in 3 021	1, 1 0,000 (23 014, 200 011, 1 <sub>n</sub> > 021
Rated voltage	480Y / 277 V AC	
Rated interrupting capacity	6 kA	
Application	Suppl. prot. for general use. Application codes: TC2, OL0, SC: U1	
Electrical endurance	6,000 ops (AC), 6,000 ops. (DC); 1 cycle (1s - ON, 9s - OFF)	
Mechanical data		
Housing	Insulation group II, RAL 7035 Insulation group I, RAL 7035	
Contact position indication	Marking on toggle (I ON / 0 OFF), Real CPI (red ON / green 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, 3 shocks, 11 ms	
Vibration resistance acc. to IEC/EN 60068-2-6	5g – 20 cycles at 51505 Hz with load 0.8 l <sub>n</sub>	
Environmental conditions (damp heat cyclic) 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	Failsafe bi-directional cylinder-lift terminal	
Cross-section of conductors (top/bottom)	35 mm² / 35 mm²	
` · · /	18 – 4 AWG	
Cross-section of busbars (top/bottom)	10 mm² / 10 mm²	
	18 – 8 AWG	
Torque	2.8 Nm	
	25 in-lbs.	
Screwdriver	No. 2 Pozidrive	
Mounting	On DIN rail 35 mm acc. to EN 60715 by fast clip	
Mounting position	,	any

 $<sup>^{\</sup>star}$  Also fulfilling the requirement acc. to the protection degree IPXXB

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# S200 Wizard S200 Wizard S200 miniature circuit breakers family Uncompromising security and comfort:



# MCB S 200/S 200 M – technical data sheet download

Get the technical data sheet with all detailed information of the new MCB S 200 and S 200 M device as a PDF file with this QR code. Find the technical data, information about the tripping characteristics and accessories as well as a dimensional drawing for your planning.



#### S200 Wizard -

#### The right choice always in your hand

With S200 Wizard only 5 easy questions result in one single solution. After answering those 5 questions, a short overview shows all mandatory information for choosing the right product. If necessary, a link is routing you to the ABB products detail page for all technical details, certificates, brochures and others. S200 Wizard app is available for download in iTunes store, versions for Android Market and Windows Market-place coming soon. Stay tuned for more news on ABB Wizard Apps!



# MCB S 200/S 200 M – additional information

This QR-code links you directly to our website where you can find a lot of additional information you may need for your decision. Also see the available accessories and your country contact information to our sales force.



## Contact us

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You can find the address of your local sales organization on the ABB home page http://www.abb.com/contacts -> Low Voltage Products and Systems

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