The Power to Protect at high Performance.

S800P

S800P - High Performance Miniature Circuit Breaker

- High rated current offering
- High performance up to 50kA
- AC and DC performance
- Wide range of compatible accessories

The S800P is the right fit when both, size and Performance are required. It is definitely a Powerful device for Protecting our customers' installations at a high Performance level.

Due to its intrinsic characteristics and together with a wide range of available accessories, it is a suitable solution for different types of applications in different segments such as: railway, data centers, telecommunications, renewables and general industrial installations.

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S800P
Product at a glance

Interchangeable terminals
Possibility of having failsafe cage or ringlug terminal connections

Product marking
Clear and easy identification of product name and relevant characteristics

QR code
Quick access to product main details and relevant documentation

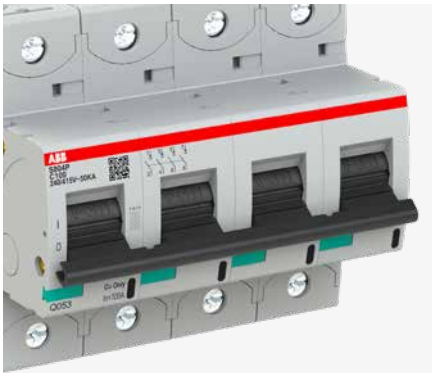
Suitable for upgrading your applications
Compatible with a wide range of accessories

Toggle position indication (TPI)
Clear identification of the moving contact (ON-OFF-TRIP)

Contact position indication (CPI)
Clear visualization of the device status

Housing materials
The S800P range was designed with specific materials for traction. Classified with an Hazard level R26/ HL3 according to EN45545-2. Plastic materials are also compliant to fire and smoke according to EN45545-2.

Shock and vibration resistance
In addition to the high-quality standards and flammability requirements, rail applications also require vibration and shock resistance compliance. The S800P has been positively tested according to IEC 61373 for Rolling stock equipment – Shock and vibration tests: Category 1 / Class B.



Play it safe: display the operational state
The mechanical drive of the S800P is equipped with a trip-free release. The trip position display reliably indicates the exact position of the moving contact. The trip position provides additional trip detection allowing for easy identification of the reason for the cut-off.
The switch lever moves to the middle position in case of thermal or magnetic tripping.

Cage and ringlug terminals
The S800P counts with interchangeable terminal adapter for wires, cables and rigid conductors, which guarantees a high level of flexibility and comfort.
Fast and safe connection of the conductors is ensured by the integrated “onboard terminal shutter” that prevents incorrect underclamping of the connections.

Reliability at high performance
The S800P guarantees a complete safe electrical isolation of the circuit in compliance to IEC 60947-2.

Wide range of accessories
The S800P is compatible with a wide range of accessories that extend the functions of the MCB. Functioning not only as a protection device, but also for remote control and monitoring of the installation.
The range of accessories include auxiliary contacts, aux/signal contacts, remote switching unit, short circuit limiter, shunt operation releases, undervoltage releases, RCD block and busbars.

S800P
Main benefits

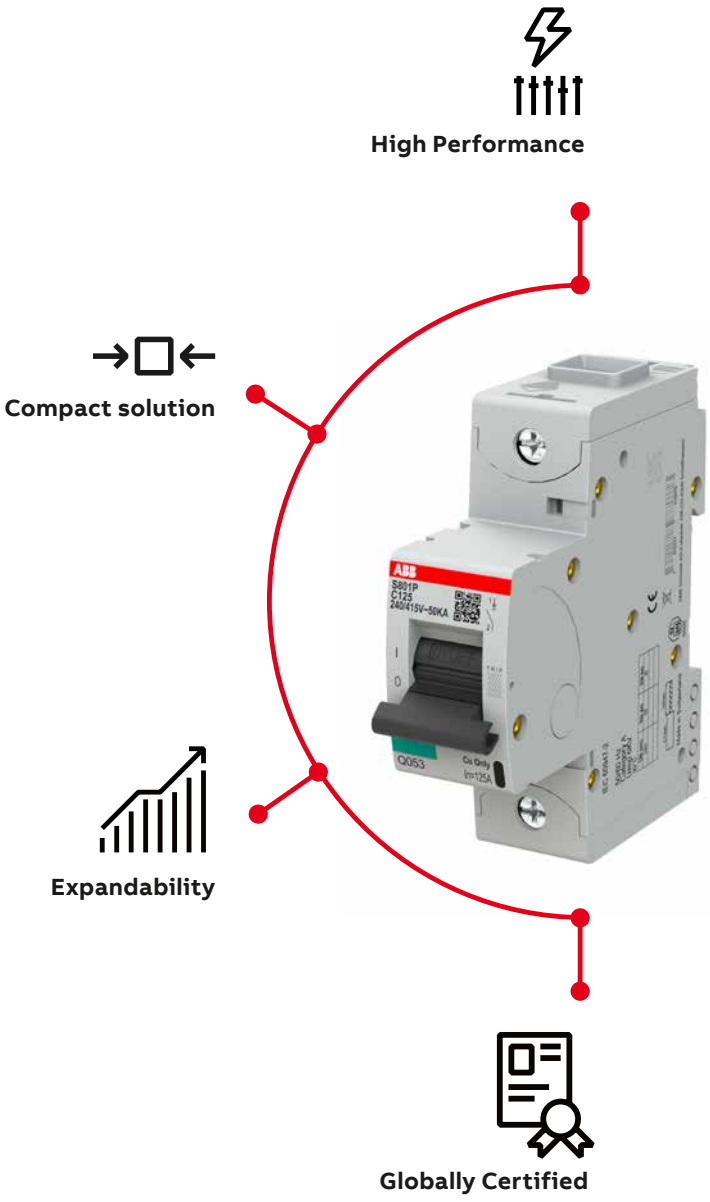
The S800P range offers high rated current protection (80A, 100A, 125A) at a high breaking capacity level up to 50kA. It is available in all pole configurations (1P, 2P, 3P, 4P) and B, C, D, K tripping curves.

High Performance
Breaking capacity up to 50 kA and rated current up to 125 A.
The first choice for satisfying heavy industrial applications worldwide.

Compact solution
S800P are the most compact devices able to protect lines up to 50 kA:
- Within 1.5 modules per pole*, 95 mm height and 82.5mm depth.
- Possibility to mount the device on the DIN – Rail with no need of adapter.

Expandability
Possibility of upgrading your applications with a wide range of available accessories.

Globally Certified
Certified according to main global and specific relevant standards:
- IEC60947-2
- EN45545-2 for Fire & Smoke
- IEC61373 for Vibration & Shock



* 125A multipole devices have an extra width of 9mm due to additional lateral spacers

S800P series offers the top class compact solution for line protection up to 50kA, with an unrivalled expandability for the most challenging heavy industrial applications worldwide.

S800P
Key segments

Buildings

To grant power continuity and best asset protection of general industrial, commercial or building applications.

Railway

The S800P has ideal characteristics for rolling stock applications:
- Up to 30kA for 125VDC/pole
- Compliant to main railway standards:
  - Hazard Level acc. to EN 45545-2;
  - R26/HL3. Shock and vibration - IEC 61373;
  - Category 1 - Class B - Body mounted.
- Cage and ringlug terminals available, with possibility to change them.

Datacenter

The S800P can be used together with scalable systems designed to enable system control and ensure 100% uptimes.

Renewables

The S800P is the ideal solution for protecting critical components of renewables installations such as:
- Auxiliary panels and internal mechanisms for turbines;
- Ventilation, lightning, signaling and air conditioning systems.

In addition, it is the right fit whenever space saving is required (e.g. In the wind segment space saving is key).

For most high demanding requirements
across a diverse range of segments
and industries, we have got you covered with
the globally certified S800P
and the extensive ABB portfolio offering.

S800P
Technical data

S800P

		S800P
Performance	Tripping characteristics	B, C, D, K
	Standards	IEC/EN 60947-2
	Poles	1, 2, 3, 4
	Rated current In	80 … 125 A
	Rated frequency f	50/60 Hz
	Rated insulation voltage Ui acc. to IEC/EN 60664-1 (V)	AC 690 V
	Rated impulse withstand voltage Uimp. (1.2/50 µs)	6 kV
	Overvoltage category	III
	Pollution degree	3
	Suitability for isolation	Yes
Data acc. to IEC/EN 60947-2	Rated operational voltage U_e	AC 400/690 V DC 125 V (1-pole) DC 250 V (2-pole) DC 375 V (3-pole) DC 500 V (4-pole)
	Min. operating voltage	AC 12 V
	Rated ultimate short-circuit capacity I_{cu}	AC 240/415 V = 50 kA AC 254/440 V = 30 kA AC 289/500 V = 15 kA (80 A) AC 289/500 V = 10 kA (100...125 A) AC 400/690 V = 6 kA (80 A) AC 400/690 V = 4.5 kA (100...125 A) DC 125 V (1-pole) = 30 kA DC 250 V (2-pole) = 30 kA DC 375 V (3-pole) = 30 kA DC 500 V (4-pole) = 30 kA
	Rated service short-circuit capacity I_{cs}	AC 240/415 V = 40 kA
	Reference temperature for tripping characteristics	30°C (Char. B, C, D) 40°C (Char. K)
	Electrical and Mechanical Endurance	80...100 A: 6000 electrical ops / 10000 mechanical ops 125 A: 4000 electrical ops / 8000 mechanical ops
Data acc. to IEC/EN 60898-1	Rated short-circuit capacity I_{cn}	Char. B, C, D: AC 230/400 V = 25 kA (80 A) AC 230/400 V = 15 kA (100...125 A)

S800P
Technical data

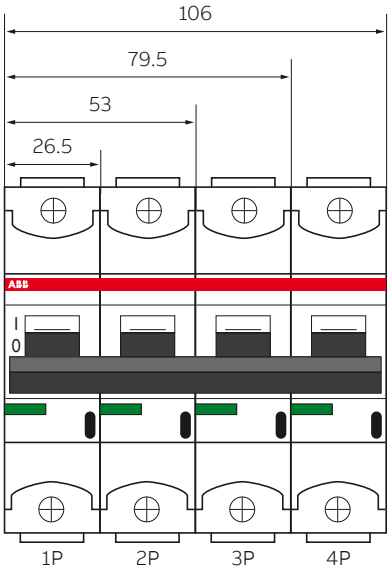
S800P

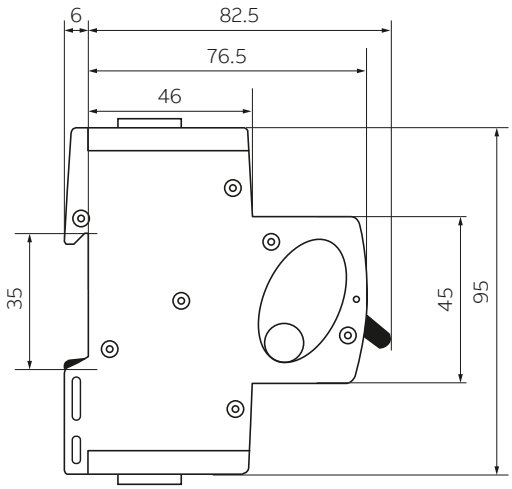
		S800P
Mechanical Data	Housing	Material group I, RAL 7035
	Toggle	Black, lockable
	Classification acc. to EN45545-2 component requirement / hazard level	R26 / HL3
	Protection degree acc. to EN 60529	IP20; IP40 (under the cover frame)
	Shock resistance acc. to IEC/EN 60068-2-27	5g / 30ms, Test Ea
	Shock resistance acc. To IEC/EN 61373	Cat 1 / Class B
	Vibration resistance acc. to IEC/EN 60068-2-6	5g / 30ms, Cat 1, Class B; Test Fc; 2 - 13.2Hz /1 mm 13.2 - 100Hz / 0.7g with load 100% x Ie
	Environmental condition (dry heat)	Acc. to IEC/EN 60068-2-2: 16 hours 70°C
	Environmental condition (damp heat)	Acc. to IEC/EN 60068-2-30: 2 cycles: 12h 55°C @98% rh; 12h 25°C @93% rh
	Environmental condition (low temp)	Acc. to IEC/EN 60068-2-1: 16 hours -25°C
	Ambient temperature	–25 … +60°C
	Storage temperature	–40 … +70°C
Installation	Terminal	Failsafe cage or ringlug terminal
	Connections (top/bottom) – Cu only	25 … 50 flexible mm² 25 … 70 Solid (Rigid / Stranded) mm²
	Tightening torque	3.5 (Nm) 31 (in-lbs)
	Screwdriver	POZI 2
	Mounting	EN 60715
	Mounting position	Any
	Supply	Any
Dimensions and Weight	Pole dimensions (H x L x W)	Please refer to dimensions diagrams pages
	Pole weight	Ca. 240 g

	S800-AUX	S800-AUX/ALT	S800-RSU-H	S800S-SCL-SR	S800-SOR	S800-UVR	DDA 800
Combination with aux. Elements	Yes	Yes	Yes	Yes	Yes	Yes	Yes

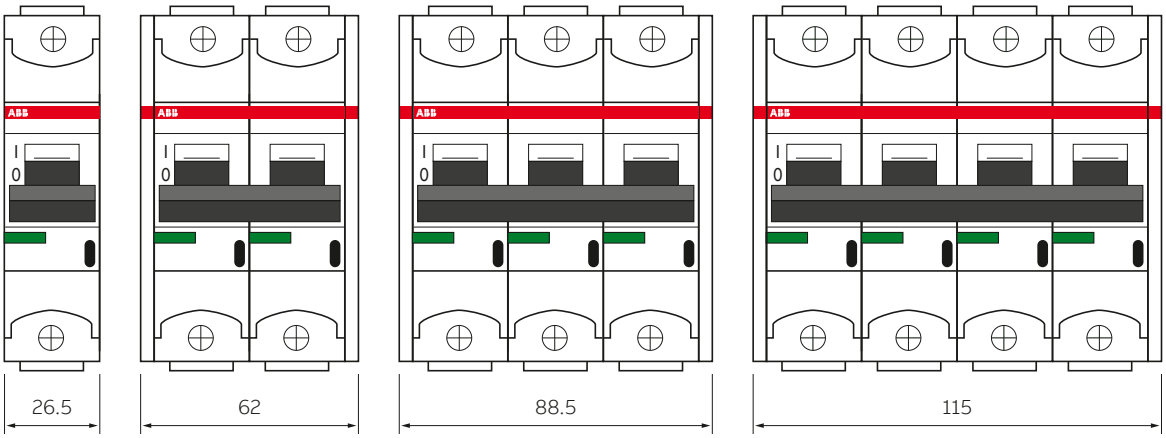
S800P
Dimension diagrams

S800P cage terminal versions





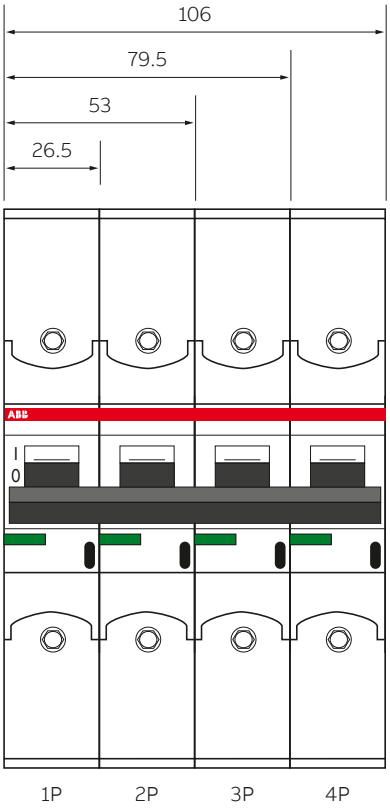
For S800P 80-100A

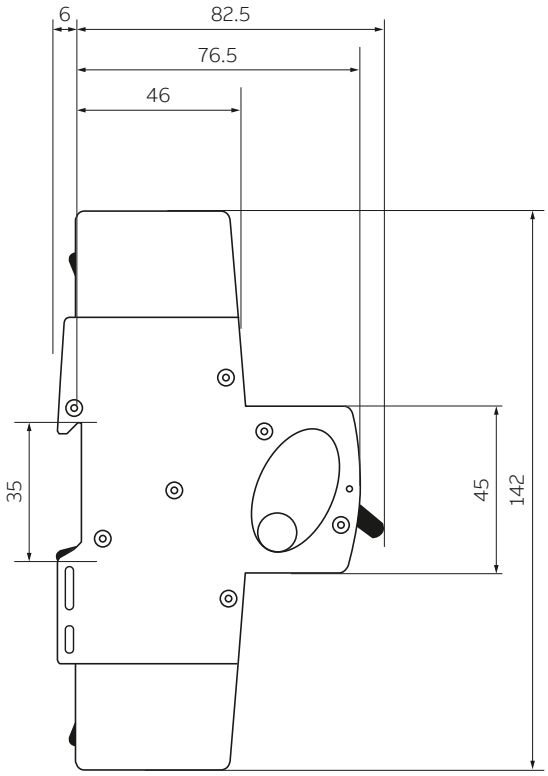


For S800P 125A

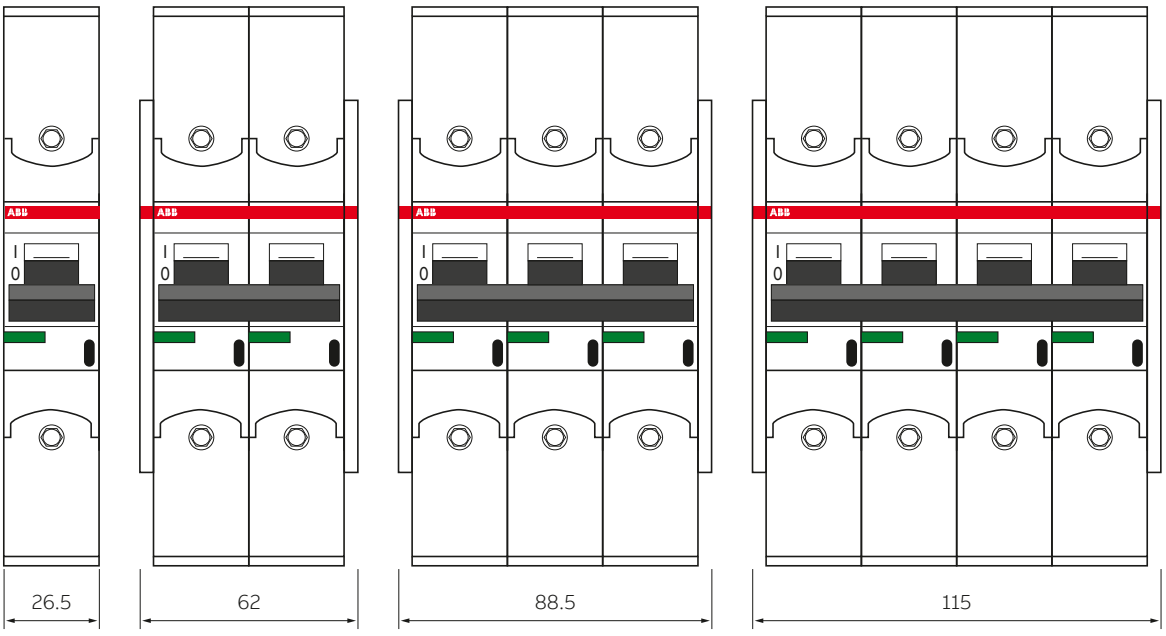
S800P
Dimension diagrams

S800P Ringlug terminal versions





For S800P-R 80-100A



For S800P-R 125A

MCBs technical details

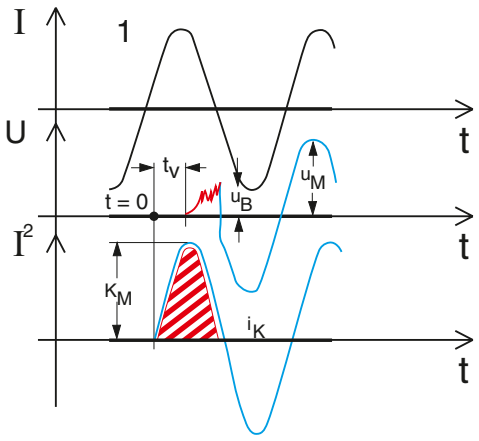
Limitation of specific let-through energy I²t

Limitation of specific let-through energy
Tripping of an installation circuit by circuit-breaker when there is a short-circuit requires a certain amount of time depending on the characteristics of the circuit-breaker and the entity of the short-circuit current. During this period of time, some or all of the short-circuit current flows into the installation; the parameter I^2t defines the "specific let-through energy", ie. the specific energy that the breaker allows through when there is a short-circuit current Icc during the tripping time t.
In this way, we can determine the capacity of a circuit-breaker to limit, ie. break high currents up to the rated breaking power of the device, by reducing the peak value of the above-mentioned currents to a value which is considerably lower than the estimated current.

Irms = perspective simmetrical short-circuit current

This can be achieved using mechanisms which open very rapidly and have the following advantages:
- they limit the thermal and dynamic effects both on the circuit-breaker and on the protected circuit;
- they reduce the dimensions of the current-limiting circuit-breaker without reducing breaking capacity;
- they considerably reduce ionized gases and sparklers emitted during the short-circuit and therefore they avoid the danger of ignition and fires.

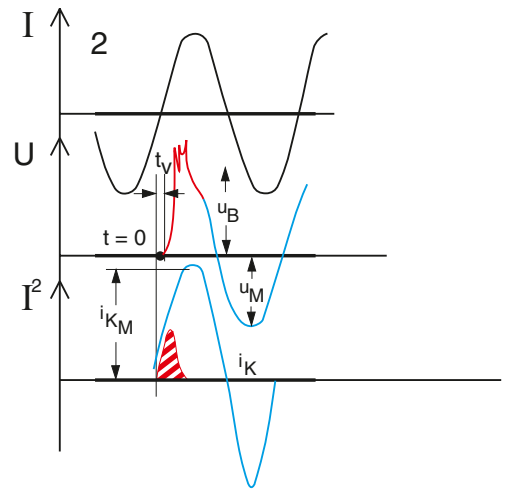
Visit catalogue
ABB ELSB Section B



Non-current limiting circuit-breaker

Oscillogram of short-circuit breaks on two circuit-breakers:

1 = traditional non-current limiting circuit-breaker
2 = current limiting circuit-breaker
u_B = arc voltage (red)
u_M = rest voltage (blue)

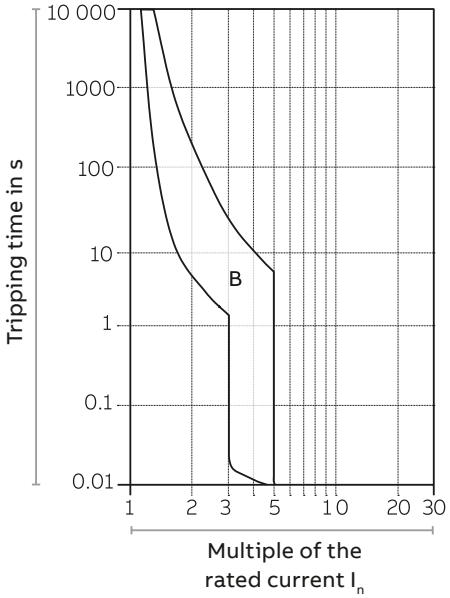


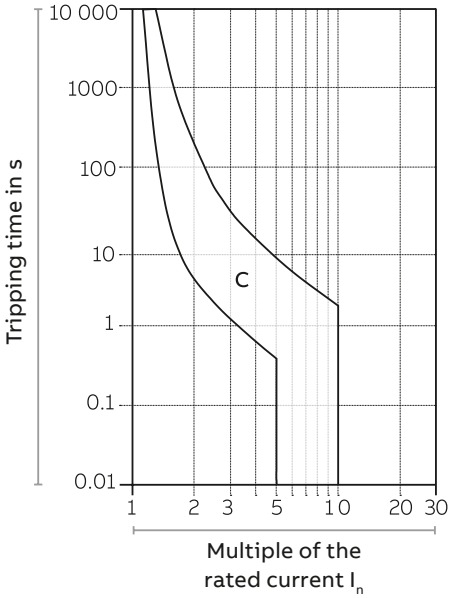
Current limiting circuit-breaker

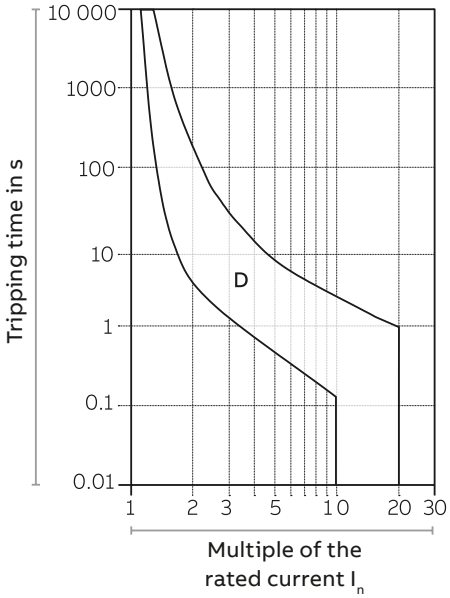
Short-circuit current
red = effective short-circuit current squared
blue = estimated short-circuit current squared (shunted circuit-breaker)
iK_M = maximum values of symmetrical component of short-circuit current squared shaded in
red = specific let-through energy in two cases

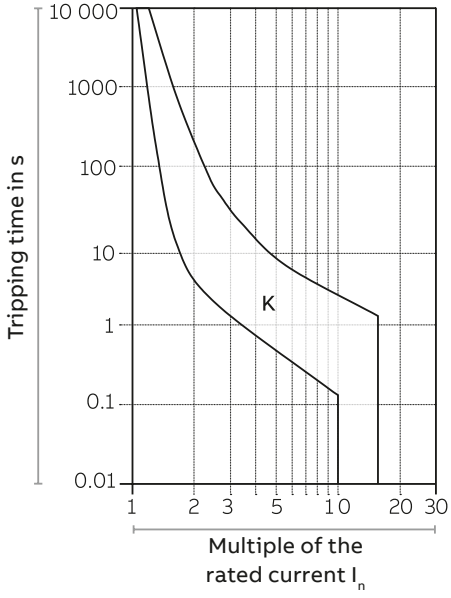
S800P

Tripping characteristics









S800P
Derating

Derating of load capacity of S800P
The table refers to the product standard IEC 60947-2. These values are only valid if the circuit-breaker is mounted in free air according to the test conditions of the standard IEC 60947-2.

The rated value of the current of the S800P refers to a calibration temperature of 30°C for characteristics B, C and D and 40°C for K characteristic.

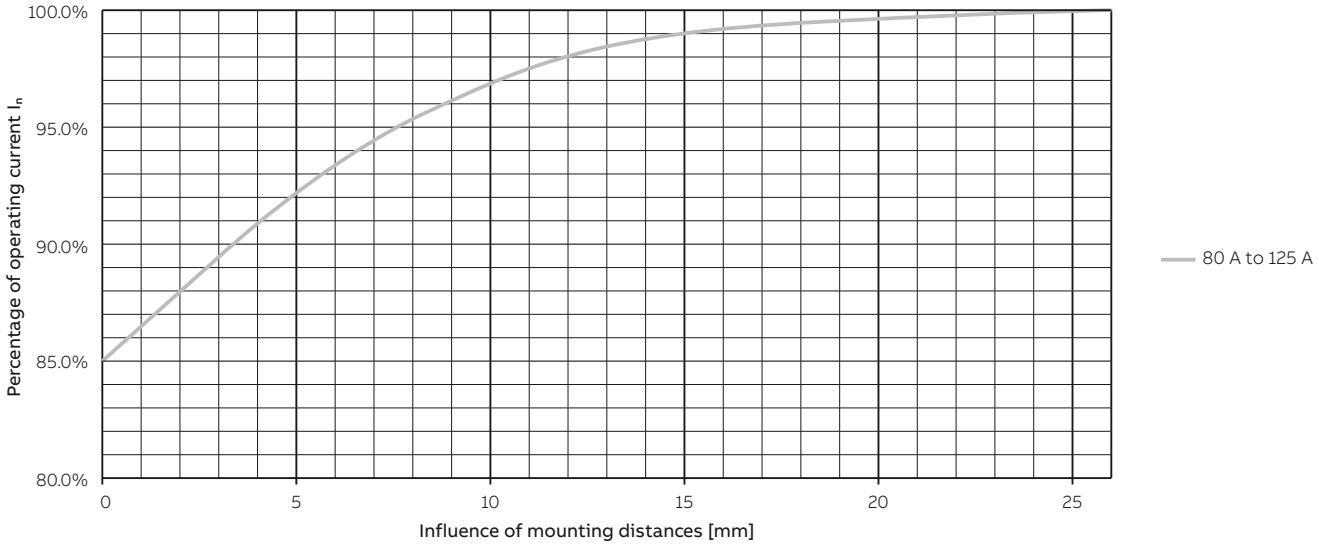
Max. Operating currents depending on the ambient temperature T (°C) for B, C, D characteristics:

B, C, D	Current Rating																							
In [A]	– 40	–35	–30	–25	–20	–15	–10	–5	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
80A	100,4	99,0	97,5	96,1	94,7	93,2	91,7	90,3	88,8	87,3	85,9	84,4	82,9	81,5	80,0	78,5	77,1	75,6	74,1	72,7	71,2	69,7	68,3
100A	125,8	123,9	122,0	120,2	118,4	116,5	114,7	112,8	111,0	109,2	107,3	105,5	103,7	101,8	100,0	98,2	96,3	94,5	92,7	90,8	89,0	87,2	85,3
125A	157,3	154,9	152,5	150,2	147,9	145,6	143,4	141,1	138,8	136,5	134,2	131,9	129,6	127,3	125,0	122,7	120,4	118,1	115,8	113,5	111,2	108,9	106,7

Max. Operating currents depending on the ambient temperature T (°C) for K characteristic:

K	Current Rating																						
In [A]	– 40	–35	–30	–25	–20	–15	–10	–5	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
80A	103,4	101,9	100,4	99,0	97,5	96,1	94,7	93,2	91,7	90,3	88,8	87,3	85,9	84,4	82,9	81,5	80,0	78,5	77,1	75,6	74,1	72,7	71,2
100A	129,6	127,7	125,8	123,9	122,0	120,2	118,4	116,5	114,7	112,8	111,0	109,2	107,3	105,5	103,7	101,8	100,0	98,2	96,3	94,5	92,7	90,8	89,0
125A	162,2	159,8	157,3	154,9	152,5	150,2	147,9	145,6	143,4	141,1	138,8	136,5	134,2	131,9	129,6	127,3	125,0	122,7	120,4	118,1	115,8	113,5	111,2

Influence of mounting distances between the devices:
Multiply the rated current referring to your max. occurrent temperature with the factor of “influence of mounting distances”.
Example: 2 x S802P-B125 at T = 40 °C with 5mm distance
I_n = 120.4 A x 92.1 % = 110.9 A

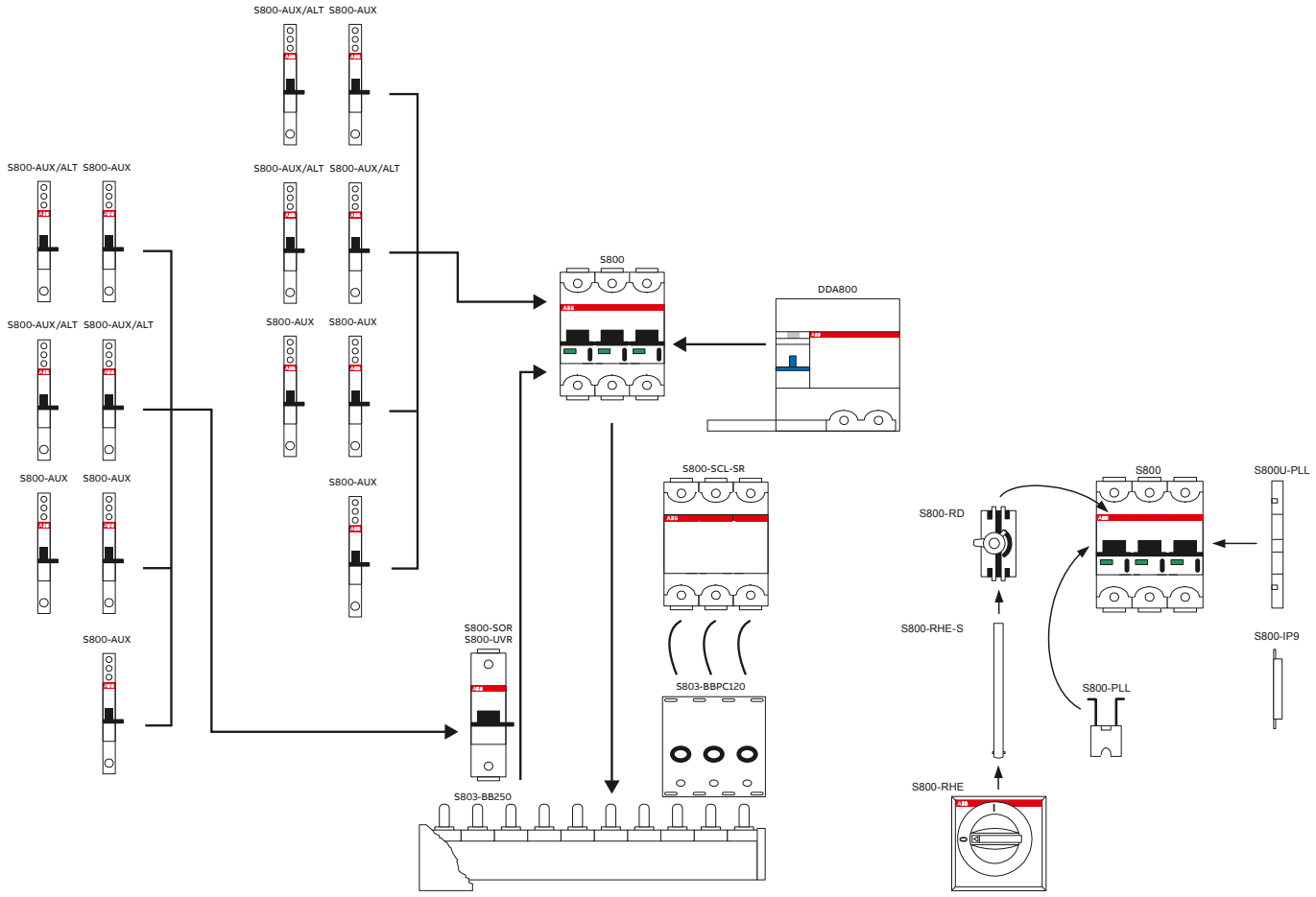


Further influencing factors, which can lead to a reduction of the maximum operating current, are:
- Shortening the cable lenght compared to IEC 60947-1/2
- Reducing the cable cross section compared to IEC 60947-1/2
- Accumulation of cables

S800P

Auxiliary elements and accessories

Combination between auxiliary elements and S800P

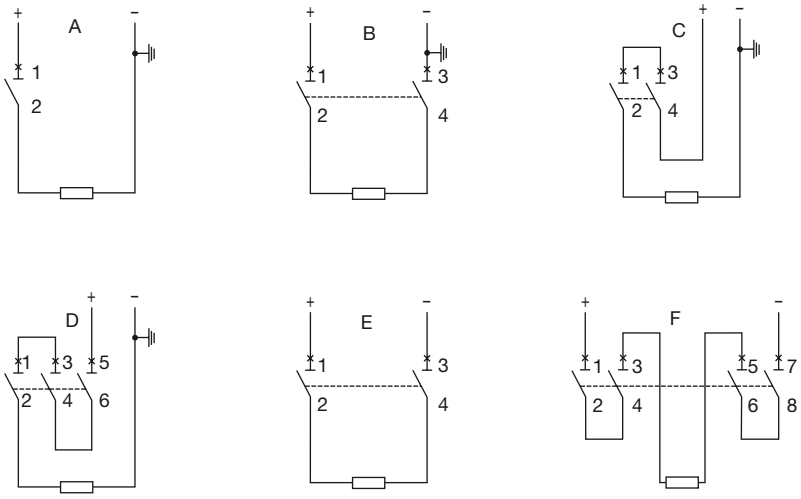


S800-AUX	Auxiliary contact for external display
S800-AUX/ALT	Combined auxiliary and signal contact for the external display
S800-SOR	Shunt opening release
S803-BB	Busbar system
DDA800	RCD Block
S800-RD	Rotary drive
S800-RHE	Rotary handle
S800-IP	Intermediate piece
S800-PLL/S800U-PLL	Padlock device/Locking device for American market
S800-UVR	Undervoltage release
S800-SCL-SR	Short-circuit current limiter self resetting

DS800P factory fitted version is also available

S800P
Wiring diagrams

S800P: Up to 125 V DC on each pole
The S800P range is also an interesting choice for DC applications up to 125 VDC per pole.



S800P

Graphic	Short-circuit between output terminals	Contact to ground between output terminals and - earth
A	125VDC	125VDC
B	250VDC	125VDC
C	250VDC	250VDC
D	375VDC	375VDC
E	250VDC	125VDC (double failure)
F	500VDC	125VDC (double failure)

S800P
B characteristic

S800P

S800P - B Characteristic
Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for people and big length cables in TN and IT systems; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2
Icu=50kA

Number of poles	Rated current [A]	Bbn 7612271 EAN	Order details		Weight [kg]	Pack. unit
			Type Code	Order code		
1	80	516833	S801P-B80	2CCG001214R0001	0.245	1
	100	516840	S801P-B100	2CCG001215R0001	0.245	1
	125	516857	S801P-B125	2CCG001216R0001	0.245	1
2	80	516864	S802P-B80	2CCG001217R0001	0.490	1
	100	516871	S802P-B100	2CCG001218R0001	0.490	1
	125	516888	S802P-B125	2CCG001219R0001	0.515	1
3	80	516895	S803P-B80	2CCG001220R0001	0.740	1
	100	516901	S803P-B100	2CCG001221R0001	0.740	1
	125	516918	S803P-B125	2CCG001222R0001	0.765	1
4	80	516925	S804P-B80	2CCG001223R0001	0.980	1
	100	516932	S804P-B100	2CCG001224R0001	0.980	1
	125	516949	S804P-B125	2CCG001225R0001	1.005	1

S800P

S800P - B Characteristic with ringlug terminal connection
Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for people and big length cables in TN and IT systems; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2
Icu=50kA

Number of poles	Rated current [A]	Bbn 7612271 EAN	Order details		Weight [kg]	Pack. unit
			Type Code	Order code		
1	80	517311	S801P-B80-R	2CCG001262R0001	0.255	1
	100	517472	S801P-B100-R	2CCG001278R0001	0.255	1
	125	517632	S801P-B125-R	2CCG001294R0001	0.255	1
2	80	517359	S802P-B80-R	2CCG001266R0001	0.510	1
	100	517519	S802P-B100-R	2CCG001282R0001	0.510	1
	125	517670	S802P-B125-R	2CCG001298R0001	0.535	1
3	80	517397	S803P-B80-R	2CCG001270R0001	0.761	1
	100	517557	S803P-B100-R	2CCG001286R0001	0.761	1
	125	517717	S803P-B125-R	2CCG001302R0001	0.790	1
4	80	517434	S804P-B80-R	2CCG001274R0001	1.015	1
	100	517595	S804P-B100-R	2CCG001290R0001	1.015	1
	125	517755	S804P-B125-R	2CCG001306R0001	1.045	1

S800P
C characteristic

S800P

S800P - 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 60947-2
Icu=50kA

Number of poles	Rated current [A]	Bbn 7612271 EAN	Order details		Weight [kg]	Pack. unit
			Type Code	Order code		
1	80	516956	S801P-C80	2CCG001226R0001	0.245	1
	100	516963	S801P-C100	2CCG001227R0001	0.245	1
	125	516970	S801P-C125	2CCG001228R0001	0.245	1
2	80	516987	S802P-C80	2CCG001229R0001	0.490	1
	100	516994	S802P-C100	2CCG001230R0001	0.490	1
	125	517007	S802P-C125	2CCG001231R0001	0.515	1
3	80	517014	S803P-C80	2CCG001232R0001	0.740	1
	100	517021	S803P-C100	2CCG001233R0001	0.740	1
	125	517038	S803P-C125	2CCG001234R0001	0.765	1
4	80	517045	S804P-C80	2CCG001235R0001	0.980	1
	100	517052	S804P-C100	2CCG001236R0001	0.980	1
	125	517069	S804P-C125	2CCG001237R0001	1.005	1

S800P

S800P - C Characteristic with ringlug terminal connection
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; ery useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2
Icu=50kA

Number of poles	Rated current [A]	Bbn 7612271 EAN	Order details		Weight [kg]	Pack. unit
			Type Code	Order code		
1	80	517328	S801P-C80-R	2CCG001263R0001	0.255	1
	100	517489	S801P-C100-R	2CCG001279R0001	0.255	1
	125	517649	S801P-C125-R	2CCG001295R0001	0.255	1
2	80	517366	S802P-C80-R	2CCG001267R0001	0.510	1
	100	517526	S802P-C100-R	2CCG001283R0001	0.510	1
	125	517687	S802P-C125-R	2CCG001299R0001	0.535	1
3	80	517403	S803P-C80-R	2CCG001271R0001	0.761	1
	100	517564	S803P-C100-R	2CCG001287R0001	0.761	1
	125	517724	S803P-C125-R	2CCG001303R0001	0.790	1
4	80	517441	S804P-C80-R	2CCG001275R0001	1.015	1
	100	517601	S804P-C100-R	2CCG001291R0001	1.015	1
	125	517762	S804P-C125-R	2CCG001307R0001	1.045	1

S800P
D characteristic

S800P

S800P - D Characteristic
Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for circuits which supply loads with high inrush current at the circuit closing (motors, LV / LV transformers, breakdown lamps); very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2
Icu=50kA

Number of poles	Rated current [A]	Bbn 7612271 EAN	Order details		Weight [kg]	Pack. unit
			Type Code	Order code		
1	80	517076	S801P-D80	2CCG001238R0001	0.245	1
	100	517083	S801P-D100	2CCG001239R0001	0.245	1
	125	517090	S801P-D125	2CCG001240R0001	0.245	1
2	80	517106	S802P-D80	2CCG001241R0001	0.490	1
	100	517113	S802P-D100	2CCG001242R0001	0.490	1
	125	517120	S802P-D125	2CCG001243R0001	0.515	1
3	80	517137	S803P-D80	2CCG001244R0001	0.740	1
	100	517144	S803P-D100	2CCG001245R0001	0.740	1
	125	517151	S803P-D125	2CCG001246R0001	0.765	1
4	80	517168	S804P-D80	2CCG001247R0001	0.980	1
	100	517175	S804P-D100	2CCG001248R0001	0.980	1
	125	517182	S804P-D125	2CCG001249R0001	1.005	1

S800P

S800P - D Characteristic with ringlug terminal connection
Function: protection and control of the circuits against overloads and short-circuits when a high breaking capacity is required; protection for circuits which supply loads with high inrush current at the circuit closing (motors, LV / LV transformers, breakdown lamps); very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2
Icu=50kA

Number of poles	Rated current [A]	Bbn 7612271 EAN	Order details		Weight [kg]	Pack. unit
			Type Code	Order code		
1	80	517335	S801P-D80-R	2CCG001264R0001	0.255	1
	100	517496	S801P-D100-R	2CCG001280R0001	0.255	1
	125	517656	S801P-D125-R	2CCG001296R0001	0.255	1
2	80	517373	S802P-D80-R	2CCG001268R0001	0.510	1
	100	517533	S802P-D100-R	2CCG001284R0001	0.510	1
	125	517694	S802P-D125-R	2CCG001300R0001	0.535	1
3	80	517410	S803P-D80-R	2CCG001272R0001	0.761	1
	100	517571	S803P-D100-R	2CCG001288R0001	0.761	1
	125	517731	S803P-D125-R	2CCG001304R0001	0.790	1
4	80	517458	S804P-D80-R	2CCG001276R0001	1.015	1
	100	517618	S804P-D100-R	2CCG001292R0001	1.015	1
	125	517779	S804P-D125-R	2CCG001308R0001	1.045	1

S800P
K characteristic

S800P - K Characteristic
Function: protection and control of the circuits like motors, transformer and auxiliary circuits, against overloads and short-circuits when a high breaking capacity is required; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.
Advantages: no nuisance tripping in the case of functional peak currents up to 10xIn, depending on the series; through its highly sensitive thermostatic bimetal trip, the K-type characteristic offers protection to damageable elements in the overcurrent range; it also provides the best protection to cables and lines.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2
Icu=50kA

S800P

Number of poles	Rated current [A]	Bbn 7612271 EAN	Order details		Weight [kg]	Pack. unit
			Type Code	Order code		
1	80	517199	S801P-K80	2CCG001250R0001	0.245	1
	100	517205	S801P-K100	2CCG001251R0001	0.245	1
	125	517212	S801P-K125	2CCG001252R0001	0.245	1
2	80	517229	S802P-K80	2CCG001253R0001	0.490	1
	100	517236	S802P-K100	2CCG001254R0001	0.490	1
	125	517243	S802P-K125	2CCG001255R0001	0.515	1
3	80	517250	S803P-K80	2CCG001256R0001	0.740	1
	100	517267	S803P-K100	2CCG001257R0001	0.740	1
	125	517274	S803P-K125	2CCG001258R0001	0.765	1
4	80	517281	S804P-K80	2CCG001259R0001	0.980	1
	100	517298	S804P-K100	2CCG001260R0001	0.980	1
	125	517304	S804P-K125	2CCG001261R0001	1.005	1

S800P - K Characteristic with ringlug terminal connection
Function: protection and control of the circuits like motors, transformer and auxiliary circuits, against overloads and short-circuits when a high breaking capacity is required; very useful when selectivity is needed vs an MCCB or back-up vs other MCBs wired downstream.
Advantages: no nuisance tripping in the case of functional peak currents up to 10xIn, depending on the series; through its highly sensitive thermostatic bimetal trip, the K-type characteristic offers protection to damageable elements in the overcurrent range; it also provides the best protection to cables and lines.
Applications: commercial and industrial.
Standard: IEC/EN 60947-2
Icu=50kA

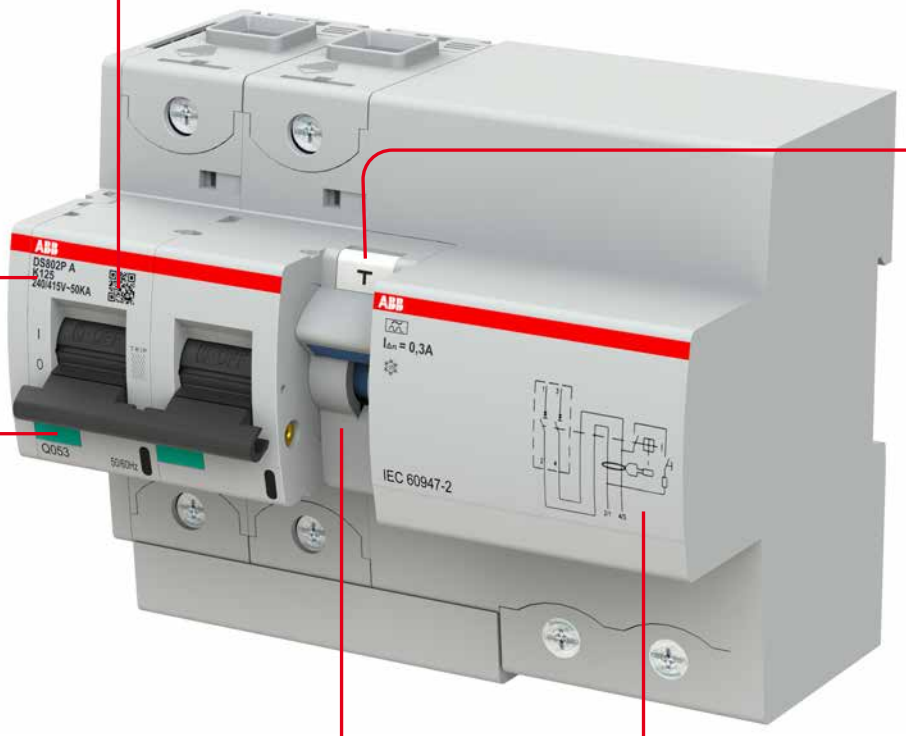
S800P

Number of poles	Rated current [A]	Bbn 7612271 EAN	Order details		Weight [kg]	Pack. unit
			Type Code	Order code		
1	80	517342	S801P-K80-R	2CCG001265R0001	0.255	1
	100	517502	S801P-K100-R	2CCG001281R0001	0.255	1
	125	517663	S801P-K125-R	2CCG001297R0001	0.255	1
2	80	517380	S802P-K80-R	2CCG001269R0001	0.510	1
	100	517540	S802P-K100-R	2CCG001285R0001	0.510	1
	125	517700	S802P-K125-R	2CCG001301R0001	0.535	1
3	80	517427	S803P-K80-R	2CCG001273R0001	0.761	1
	100	517588	S803P-K100-R	2CCG001289R0001	0.761	1
	125	517748	S803P-K125-R	2CCG001305R0001	0.790	1
4	80	517465	S804P-K80-R	2CCG001277R0001	1.015	1
	100	517625	S804P-K100-R	2CCG001293R0001	1.015	1
	125	517786	S804P-K125-R	2CCG001309R0001	1.045	1

DS800P
Product at a glance

Product marking
Clear and easy identification of product name and relevant characteristics

QR code
Quick access to product main details and relevant documentation



Test button
Test pushbutton to verify the correct functioning of the device

Contact Position Indication (CPI)
Clear visualization of the device status

RCD toggle Indication (CPI)
RCD block operating toggle can also be sealed into on/off position

Technical Details
RCD technical details quick reference (wiring diagram, sensitivity, type)

RCBOs

DS800P technical features

DS800P

	Standards		
Electrical features	Operating characteristic: type (wave form of the earth leakage sensed)		
	Poles		
	Rated sensitivity IΔn		A
	Rated current In		A
	Rated voltage Ue		V
	Insulation voltage Ui		V
	Operating voltage of circuit test Ut		V
	Rated frequency		Hz
	Rated ultimate short-circuit breaking capacity Icu	240/415 V AC	kA
		254/440 V AC	kA
		289/500 V AC	kA
		400/690 V AC	kA
	Rated service short-circuit breaking capacity Ics	240/415 V AC	kA
	Rated impulse withstand voltage (1.2/50) Uimp		kV
	Dielectric test voltage at ind. freq. for 1 min.		kV
	Thermomagnetic release characteristic	B: 3 In ≤ Im ≤ 5 In	
		C: 5 In ≤ Im ≤ 10 In	
		D**: 10 In ≤ Im ≤ 20 In	
		K**: 10 In ≤ Im ≤ 16 In	
	Surge current resistance acc. to VDE 0432 Part 2 (wave 8/20)		A
Mechanical features	Toggle		
	Electrical life		
	Mechanical life		
	Protection degree	housing	
		terminals	
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30		°C/RH
	Ambient temperature (with daily average ≤ + 35 °C)		°C
	Storage temperature		°C
Installation	Terminal size for cables	flexible	mm^2
		rigid	mm^2
	Tightening torque		Nm
	Mounting		
Dimensions and weight	Dimensions (H x D x W)	2P	mm
		3P	mm
		4P	mm
	Weight	2P	g
		3P	g
		4P	g
Combination with auxiliary elements	Combinable with:	auxiliary contact	
		signal contact/auxiliary switch	
		shunt trip	
		undervoltage release	

* 1A on 2P and 4P versions, while 0.3A only on 4P ones.
** as specified in standard IEC/EN 60947-2 the device withstands Im ≤ 6 In with guaranteed non intervention.

RCBOs
DS800P technical features

DS800P A	DS800P A S	DS800P A AP-R
IEC/EN 60947-2		
A	A	A
2P, 3P, 4P	2P,4P	2P, 3P, 4P
0.3	0.3-1(*)	0.03
125		
240/415-400/690		
690		
195-690		
50/60		
50	50	50
30	30	30
10	10	10
4.5	4.5	4.5
40	40	40
6		
2.5		
■	■	■
■	■	■
■	■	■
■	■	■
NA	5000	3000
black (MCB) sealable in ON-OFF position + blue (RCD) operating just from OFF position		
1000		
8000		
IP4X		
IP2X		
28 cycles with 55°C/90-96% and 25°C/95-100%		
-25...+60		
-40...+70		
25...50		
25...70		
3.5Nm		
on DIN rail EN 60715 (35 mm) by means of rapid fixing device		
108,2 x 82,3 x 138		
108,2 x 82,3 x 200,5		
108,2 x 82,3 x 227,5		
803		
1153		
1453		
yes		
yes		
yes		
yes		

DS800P
Type A / AS

DS800P A type

DS800P, A type
Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts; command and isolation of resistive and inductive loads.
Application: industrial.
Standard: IEC/EN 60947-2
Icu = 50 kA

Number of poles	Curve	Rated residual current IΔn mA	Rated current [A]	Bbn 7612271 EAN	Order details		Weight [kg]	Pack. unit
					Type Code	Order code		
2	B	300	125	517793	DS802P-B125/0.3A	2CCG001310R0001	0.803	1
	C	300	125	517809	DS802P-C125/0.3A	2CCG001311R0001	0.803	1
	D	300	125	517816	DS802P-D125/0.3A	2CCG001312R0001	0.803	1
	K	300	125	517823	DS802P-K125/0.3A	2CCG001313R0001	0.803	1
3	B	300	125	517830	DS803P-B125/0.3A	2CCG001314R0001	1.153	1
	C	300	125	517847	DS803P-C125/0.3A	2CCG001315R0001	1.153	1
	D	300	125	517854	DS803P-D125/0.3A	2CCG001316R0001	1.153	1
	K	300	125	517861	DS803P-K125/0.3A	2CCG001317R0001	1.153	1
4	B	300	125	517878	DS804P-B125/0.3A	2CCG001318R0001	1.453	1
	C	300	125	517885	DS804P-C125/0.3A	2CCG001319R0001	1.453	1
	D	300	125	517892	DS804P-D125/0.3A	2CCG001320R0001	1.453	1
	K	300	125	517908	DS804P-K125/0.3A	2CCG001321R0001	1.453	1

DS800P AS type

DS800P A Selective Type
Function: protection against overload and short-circuit currents; protection against the effects of sinusoidal alternating earth fault currents with an intentional tripping delay, which allows to realize the selectivity with downstream instantaneous devices (for more information about selectivity see the technical guide); protection against indirect contacts; command and isolation of resistive and inductive loads.
Application: industrial.
Standard: IEC/EN 60947-2
Icu = 50 kA

Number of poles	Curve	Rated residual current IΔn mA	Rated current [A]	Bbn 7612271 EAN	Order details		Weight [kg]	Pack. unit
					Type Code	Order code		
2	B	1000	125	517915	DS802P-B125/1AS	2CCG001322R0001	0.803	1
	C	1000	125	517922	DS802P-C125/1AS	2CCG001323R0001	0.803	1
	D	1000	125	517939	DS802P-D125/1AS	2CCG001324R0001	0.803	1
	K	1000	125	517946	DS802P-K125/1AS	2CCG001325R0001	0.803	1
4	B	300	125	517953	DS804P-B125/0.3AS	2CCG001326R0001	1.453	1
		1000	125	517960	DS804P-B125/1AS	2CCG001327R0001	1.453	1
	C	300	125	517977	DS804P-C125/0.3AS	2CCG001328R0001	1.453	1
		1000	125	517984	DS804P-C125/1AS	2CCG001329R0001	1.453	1
	D	300	125	517991	DS804P-D125/0.3AS	2CCG001330R0001	1.453	1
		1000	125	518004	DS804P-D125/1AS	2CCG001331R0001	1.453	1
	K	300	125	518011	DS804P-K125/0.3AS	2CCG001332R0001	1.453	1
		1000	125	518028	DS804P-K125/1AS	2CCG001333R0001	1.453	1

DS800P

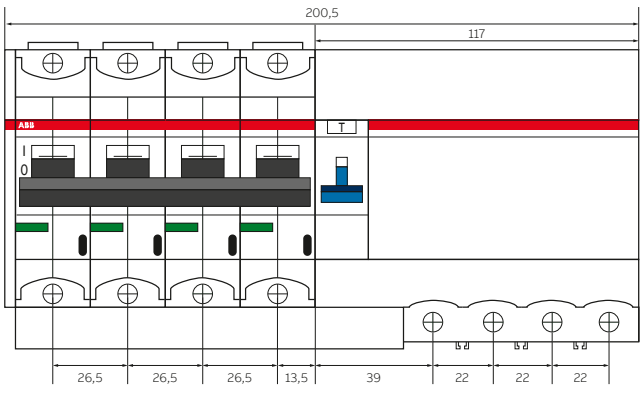
Type A AP-R

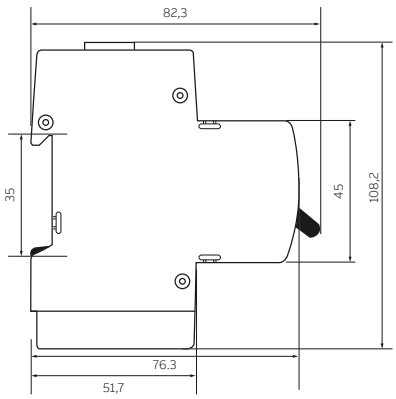
DS800S AP-R, A type
Function: protection against the effects of sinusoidal alternating earth fault currents, providing the best compromise between safety and continuity in the service thanks to the resistance to unwanted trippings; protection against indirect contacts and additional protection against direct contacts (IΔn=30 mA); protection and isolation of resistive and inductive loads.
Application: industrial.
Standard: IEC/EN 60947-2
Icu = 50 kA

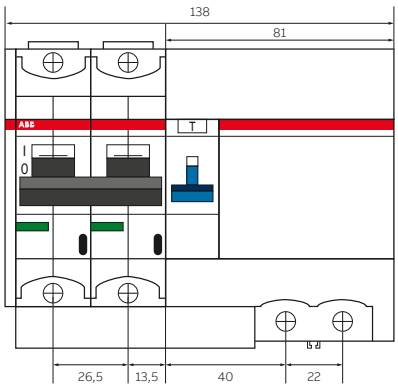
DS800P AP-R Type

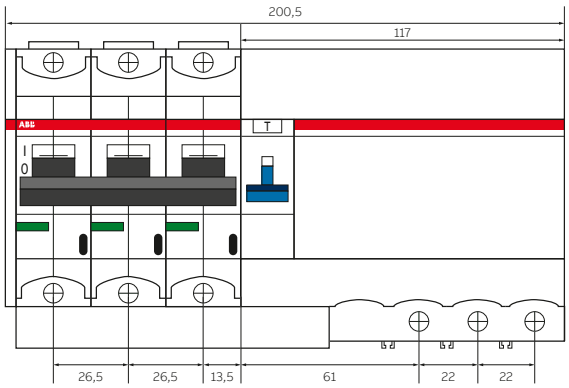
Number of poles	Curve	Rated residual current IΔn mA	Rated current [A]	Bbn 7612271 EAN	Order details		Weight [kg]	Pack. unit
					Type Code	Order code		
2	B	30	125	518073	DS802P-B125/ 0.03AP-R	2CCG001338R0001	0.803	1
	C	30	125	518080	DS802P-C125/ 0.03AP-R	2CCG001339R0001	0.803	1
	D	30	125	518097	DS802P-D125/ 0.03AP-R	2CCG001340R0001	0.803	1
	K	30	125	518103	DS802P-K125/ 0.03AP-R	2CCG001341R0001	0.803	1
3	B	30	125	518110	DS803P-B125/ 0.03AP-R	2CCG001342R0001	1.153	1
	C	30	125	518127	DS803P-C125/ 0.03AP-R	2CCG001343R0001	1.153	1
	D	30	125	518134	DS803P-D125/ 0.03AP-R	2CCG001344R0001	1.153	1
	K	30	125	518141	DS803P-K125/ 0.03AP-R	2CCG001345R0001	1.153	1
4	B	30	125	518158	DS804P-B125/ 0.03AP-R	2CCG001346R0001	1.453	1
	C	30	125	518165	DS804P-C125/ 0.03AP-R	2CCG001347R0001	1.453	1
	D	30	125	518172	DS804P-D125/ 0.03AP-R	2CCG001348R0001	1.453	1
	K	30	125	518189	DS804P-K125/ 0.03AP-R	2CCG001349R0001	1.453	1

DS800P Dimension Diagrams









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