

Miniature circuit breakers

System Pro M Compact

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General electrical data	
Series	S220-K
Standards and approvals	IEC/EN 60898-1, IEC/EN 60947-2, CSA C22.2 No. 235, UL1077
Poles	1P, 2P, 3P
Tripping characteristics	K
Rated current I_n	[A] 0.2 ... 63A
Rated voltage U_n IEC/EN 60898-1	[V] 1P: 400/690VAC, 2-3P: 690VAC
Rated voltage U_n IEC/EN 60947-2	[V] 1P: 400/690VAC, 2-3P: 690VAC
Rated voltage UL/CSA	[V] 1P: 347VAC, 2-3P: 600Y/347VAC
Insulation voltage U_i IEC/EN	[V] -
Max. operating voltage U_{dmax} IEC/EN	[V] 690VAC
Min. operating voltage	[V] 12VAC
Rated Frequency	[Hz] 50/60Hz
Rated short circuit capacity I_{cn} IEC/EN 60898-1	[kA] -
Ultimate short circuit capacity I_{cu} IEC/EN 60947-2	[kA] -
Service short circuit capacity I_{cs} IEC/EN 60947-2	[kA] 3kA
Rated interrupting capacity UL1077 / CSA C22.2 No.235	[kA] 3kA
Energy limiting class IEC/EN 60898-1	-
Overvoltage category IEC/EN	III
Pollution degree IEC/EN 60898-1 / 60947-2	2 / 3
Rated impulse withstand voltage U_{imp} IEC/EN	[kV] -
Dielectric test voltage	[kV] -
General mechanical and installation data	
Series	S220-K
Housing	Insulation group I, RAL 7035
Toggle	Insulation group II, black, sealable
Contact position indication	Marking on toggle I-ON / 0-OFF, real CPI (red-ON / green-OFF)
Protection degree EN 60529	IP20 / IPXXB, IP40 in enclosure with cover
Electrical life	[ops] -
Mechanical life	[ops] 20,000
Shock resistance IEC/EN 60068-2-27	10g - 20 shocks - 13 ms
Vibration resistance IEC/EN 60068-2-6	5g - 20 cycles at 5...150...5 Hz with load $0.8x I_n$
Tropicalization (damp heat cyclic) IEC/EN 60068-2-30	[°C/RH] -
Ambient temperature	[°C] -25...+55°C
Storage temperature	[°C] -40...+70°C
Reference temperature for tripping characteristics UL/CSA	[°C] K: 20°C
Terminal	Cage (shock protected)
Cross section of conductors (top / bottom)	[mm²] 25 mm² [AWG] 18-4 AWG
Cross section of busbars (top / bottom)	[mm²] 10 mm² [AWG] 18-8 AWG
Torque	[Nm] 2.8 Nm [in-lbs] 25 in-lbs
Screwdriver	No. 2 pozidrive
Mounting	On 35mm Din rail
Supply	Optional
Mounting dimensions DIN 43880	-
Pole dimensions (H x D x W)	[mm] 90 x 69 x 17.5
Pole weight	[g] 160 g
Auxiliary contact combination	YES
Signal contact / auxiliary contact combination	NO
Shunt trip combination	NO
Undervoltage release combination	NO

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K type trip curve

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S221-K10



S221-K According to CSA C22.2 No. 235 / UL1077 (Supplementary protectors)

Poles	I_n	U_n AC	I_{cn} AC	U_n DC	I_{cn} DC	Part number	Discount schedule	Weight
[Nbr]	[A]	[V]	[kA]	[V]	[kA]			[g]
1	0.2	347	3	-	-	S221-K0.2	DS-CB	180
1	0.3	347	3	-	-	S221-K0.3	DS-CB	180
1	0.5	347	3	-	-	S221-K0.5	DS-CB	180
1	0.75	347	3	-	-	S221-K0.75	DS-CB	180
1	1	347	3	-	-	S221-K1	DS-CB	180
1	1.6	347	3	-	-	S221-K1.6	DS-CB	180
1	2	347	3	-	-	S221-K2	DS-CB	180
1	3	347	3	-	-	S221-K3	DS-CB	180
1	4	347	3	-	-	S221-K4	DS-CB	180
1	6	347	3	-	-	S221-K6	DS-CB	180
1	8	347	3	-	-	S221-K8	DS-CB	180
1	10	347	3	-	-	S221-K10	DS-CB	180
1	16	347	3	-	-	S221-K16	DS-CB	180
1	20	347	3	-	-	S221-K20	DS-CB	180
1	25	347	3	-	-	S221-K25	DS-CB	180
1	32	347	3	-	-	S221-K32	DS-CB	180
1	40	347	3	-	-	S221-K40	DS-CB	180
1	50	347	3	-	-	S221-K50	DS-CB	180
1	63	347	3	-	-	S221-K63	DS-CB	180



S222-K10



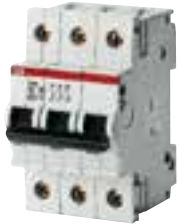
S222-K According to CSA C22.2 No. 235 / UL1077 (Supplementary protectors)

Poles	I_n	U_n AC	I_{cn} AC	U_n DC	I_{cn} DC	Part number	Discount schedule	Weight
[Nbr]	[A]	[V]	[kA]	[V]	[kA]			[g]
2	0.2	600Y/347	3	-	-	S222-K0.2	DS-CB	360
2	0.3	600Y/347	3	-	-	S222-K0.3	DS-CB	360
2	0.5	600Y/347	3	-	-	S222-K0.5	DS-CB	360
2	0.75	600Y/347	3	-	-	S222-K0.75	DS-CB	360
2	1	600Y/347	3	-	-	S222-K1	DS-CB	360
2	1.6	600Y/347	3	-	-	S222-K1.6	DS-CB	360
2	2	600Y/347	3	-	-	S222-K2	DS-CB	360
2	3	600Y/347	3	-	-	S222-K3	DS-CB	360
2	4	600Y/347	3	-	-	S222-K4	DS-CB	360
2	6	600Y/347	3	-	-	S222-K6	DS-CB	360
2	8	600Y/347	3	-	-	S222-K8	DS-CB	360
2	10	600Y/347	3	-	-	S222-K10	DS-CB	360
2	16	600Y/347	3	-	-	S222-K16	DS-CB	360
2	20	600Y/347	3	-	-	S222-K20	DS-CB	360
2	25	600Y/347	3	-	-	S222-K25	DS-CB	360
2	32	600Y/347	3	-	-	S222-K32	DS-CB	360
2	40	600Y/347	3	-	-	S222-K40	DS-CB	360
2	50	600Y/347	3	-	-	S222-K50	DS-CB	360
2	63	600Y/347	3	-	-	S222-K63	DS-CB	360

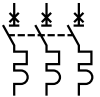
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K type trip curve



S223-K10



S223-K According to CSA C22.2 No. 235 / UL1077 (Supplementary protectors)

Poles	I_n	U_n AC	I_{cn} AC	U_n DC	I_{cn} DC	Part number	Discount schedule	Weight
[Nbr]	[A]	[V]	[kA]	[V]	[kA]			[g]
3	0.2	600Y/347	3	-	-	S223-K0.2	DS-CB	540
3	0.3	600Y/347	3	-	-	S223-K0.3	DS-CB	540
3	0.5	600Y/347	3	-	-	S223-K0.5	DS-CB	540
3	0.75	600Y/347	3	-	-	S223-K0.75	DS-CB	540
3	1	600Y/347	3	-	-	S223-K1	DS-CB	540
3	1.6	600Y/347	3	-	-	S223-K1.6	DS-CB	540
3	2	600Y/347	3	-	-	S223-K2	DS-CB	540
3	3	600Y/347	3	-	-	S223-K3	DS-CB	540
3	4	600Y/347	3	-	-	S223-K4	DS-CB	540
3	6	600Y/347	3	-	-	S223-K6	DS-CB	540
3	8	600Y/347	3	-	-	S223-K8	DS-CB	540
3	10	600Y/347	3	-	-	S223-K10	DS-CB	540
3	16	600Y/347	3	-	-	S223-K16	DS-CB	540
3	20	600Y/347	3	-	-	S223-K20	DS-CB	540
3	25	600Y/347	3	-	-	S223-K25	DS-CB	540
3	32	600Y/347	3	-	-	S223-K32	DS-CB	540
3	40	600Y/347	3	-	-	S223-K40	DS-CB	540
3	50	600Y/347	3	-	-	S223-K50	DS-CB	540
3	63	600Y/347	3	-	-	S223-K63	DS-CB	540