Technical Data

Miniature circuit-breakers for branch circuit protection according to UL 489, CSA C 22.2 No. 5



ABB

When connecting aluminum conductors, ensure that the contact surfaces of the conductors are cleaned, brushed and greased.

For finely stranded conductors, use a connector sleeve for best results.

Conditions for Delivery and Sale
For domestic business, the Standard Terms for Delivery of Products and Services of the Electrical Industry (ABB Form 2292) shall apply in connection with the Standard Sale Terms (ABB Form 2327) in their then applicable version. For foreign business, the Standard Terms for Delivery of Products and Services of the Electrical Industry (ABB Form 2293 German-English, or ABB-Form 2294 German- French) shall apply in connection with the Standard Sale Terms (ABB-Form 2381 English) in their then applicable version.

Warranty
We assume warranty in accordance with the Standard Sale and Delivery Terms.
Complaints shall be made in writing within eight days following receipt of the goods.

Technical information and illustrations are not binding and subject to change without notice.

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The new generation of miniature circuit breakers.
System pro *M* compact® S 200 Series.



The new S 200 Series cover all your circuit breaker needs up to 63 amps. We have redesigned our popular supplementary protectors and additionally introduce now a brand new range of miniature molded case circuit breakers suitable for use as branch circuit protection according to UL 489.

Alongside the redesigned S 200 and S 200 P supplementary protectors; the new S 200 U and S 200 UP miniature MCCBs offer the familiar ABB advantages; small size, exemplary protection and easy installation with double terminal technologie.

S200 U and UP series are UL 489, CSA C 22.2 No. 5 approved as well as IEC 947-2. For the first time one circuit breaker fulfills North American and global approval requirements.
Global circuit breakers for OEMs building global equipment.



The new S 200 Series is the first truly compact and modular full circuit breaker solution for use in both North American and global markets.

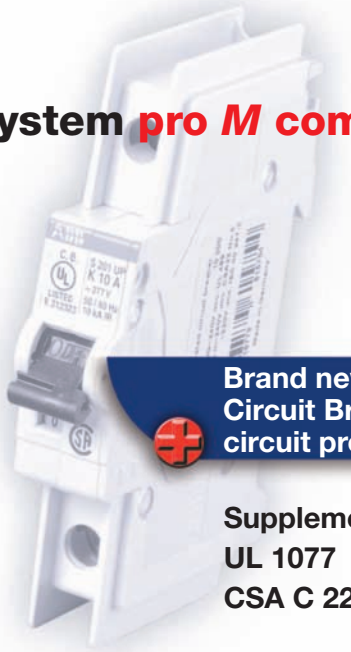
Signal contacts S2C-S6RU
It signals the tripping caused by overload earth fault or short circuit current however there is no signal when the M.C.B. is switched OFF manually. With a red handle which allows resetting of the trip signal without the M.C.B. being switched on.





Auxiliary contact S2C-H6RU
The switching position of the auxiliary contact depends on the position of the M.C.B. (ON-OFF). Because of coupling to the switching mechanism of the M.C.B. the auxiliary contact offers an trip free feature.

System pro *M* compact® - all you need ...



Brand new Miniature Moulded Case Circuit Breakers for use as branch circuit protection devices

Supplemental Protective Device
UL 1077
CSA C 22.2 No. 235

Branch Circuit Protector
UL 489 / UL 489 A
CSA C 22.2 No. 5

The S 200 U/S 200 UP components are modular and cover voltages and currents used worldwide, including 240 VΔ (S 200 U), 480Y/277 V (S 200 UP) in the US and the 230/400 V IEC standard, with models catering to the full range of current 0.2 – 63 A. For control circuits of the production range S 201 DC to 60 V AC/DC.





	S 200	S 200 P	S 201 DC	S 200 U	S 200 UP
Amperage	0.5 – 63 A	0.2 – 63 A	1 – 25 A	0.2 – 63 A	0.2 – 25 A
Voltage	480Y /277 V AC	480Y /277 V AC	60 V AC DC	240 V AC	480Y /277 V AC
Poles	1-, 2-, 3-, 4-poles	1-, 2-, 3-, 4-poles	1-poles	1-, 2-, 3-, 4-poles	1-, 2-, 3-, 4-poles
Trip characteristics	B, C, D, K, Z	B, C, D, K, Z	K, Z	K, Z	K, Z
Approvals	6 kA: IEC 60898* 6 kA: CSA C22.2 No. 235 6 kA: UL 1077	>10 kA: IEC 947-2* 10 kA: CSA C22.2 No. 235 10 kA: UL 1077	10 kA : IEC 947-2 10 kA : UL 489	10 kA : IEC 947-2* 10 kA : CSA C22.2 No. 5 10 kA : UL 489	10 kA : IEC 947-2* 10 kA : CSA C22.2 No. 5 10 kA : UL 489

* IEC ratings at 230 / 400 V AC

Miniature circuit breakers
S 201 DC series
acc. to UL 489 A

60 V DC/AC



2CDC 021 408 F0003

S201 DC-K 25



2CDC 021 409 F0003

S201 DC-Z 4 H10

Selection table

No. of poles	Rated current I_n A	Ordering details Type No.	Order code	bbn 40 16779 EAN	Price 1 piece €	Price group	Weight 1 piece kg	Pack. unit pcs.
1	1	**S201 DC-K 1**	2CDS 271 217 R0217	**58412 8**			0.125	10
	1.6	**S201 DC-K 1.6**	2CDS 271 217 R0257	**58466 1**			0.125	10
	2	**S201 DC-K 2**	2CDS 271 217 R0277	**58413 5**			0.125	10
	3	**S201 DC-K 3**	2CDS 271 217 R0317	**58414 2**			0.125	10
	4	**S201 DC-K 4**	2CDS 271 217 R0337	**58415 9**			0.125	10
	6	**S201 DC-K 6**	2CDS 271 217 R0377	**58416 6**			0.125	10
	8	**S201 DC-K 8**	2CDS 271 217 R0407	**58417 3**			0.125	10
	10	**S201 DC-K 10**	2CDS 271 217 R0427	**58418 0**			0.125	10
	13	**S201 DC-K 13**	2CDS 271 217 R0447	**58419 7**			0.125	10
U_{Bmax}	16	**S201 DC-K 16**	2CDS 271 217 R0467	**58420 3**			0.125	10
60 V~	20	**S201 DC-K 20**	2CDS 271 217 R0487	**58421 0**			0.125	10
60 V ⎓	25	**S201 DC-K 25**	2CDS 271 217 R0517	**58422 7**			0.125	10
1	1	**S201 DC-Z 1**	2CDS 271 217 R0218	**58425 8**			0.125	10
	1.6	**S201 DC-Z 1.6**	2CDS 271 217 R0258	**58426 5**			0.125	10
	2	**S201 DC-Z 2**	2CDS 271 217 R0278	**58427 2**			0.125	10
	3	**S201 DC-Z 3**	2CDS 271 217 R0318	**58428 9**			0.125	10
	4	**S201 DC-Z 4**	2CDS 271 217 R0338	**58429 6**			0.125	10
	6	**S201 DC-Z 6**	2CDS 271 217 R0378	**58430 2**			0.125	10
	8	**S201 DC-Z 8**	2CDS 271 217 R0408	**58431 9**			0.125	10
	10	**S201 DC-Z 10**	2CDS 271 217 R0428	**58432 6**			0.125	10
U_{Bmax}	16	**S201 DC-Z 16**	2CDS 271 217 R0468	**58433 3**			0.125	10
60 V~	20	**S201 DC-Z 20**	2CDS 271 217 R0488	**58434 0**			0.125	10
60 V ⎓	25	**S201 DC-Z 25**	2CDS 271 217 R0518	**58435 7**			0.125	10
1	1	**S201 DC-K 1 H10**	2CDV 271 217 R0217	**58436 4**			0.125	6
	1.6	**S201 DC-K 1.6 H10**	2CDV 271 217 R0257	**58437 1**			0.125	6
	2	**S201 DC-K 2 H10**	2CDV 271 217 R0277	**58438 8**			0.125	6
	3	**S201 DC-K 3 H10**	2CDV 271 217 R0317	**58439 5**			0.125	6
	4	**S201 DC-K 4 H10**	2CDV 271 217 R0337	**58440 1**			0.125	6
	6	**S201 DC-K 6 H10**	2CDV 271 217 R0377	**58441 8**			0.125	6
	8	**S201 DC-K 8 H10**	2CDV 271 217 R0407	**58442 5**			0.125	6
	10	**S201 DC-K 10 H10**	2CDV 271 217 R0427	**58443 2**			0.125	6
	13	**S201 DC-K 13 H10**	2CDV 271 217 R0447	**58444 9**			0.125	6
U_{Bmax}	16	**S201 DC-K 16 H10**	2CDV 271 217 R0467	**58445 6**			0.125	6
60 V~	20	**S201 DC-K 20 H10**	2CDV 271 217 R0487	**58446 3**			0.125	6
60 V ⎓	25	**S201 DC-K 25 H10**	2CDV 271 217 R0517	**58447 0**			0.125	6
1	1	**S201 DC-Z 1 H10**	2CDV 271 217 R0218	**58448 7**			0.125	6
	1.6	**S201 DC-Z 1.6 H10**	2CDV 271 217 R0258	**58449 4**			0.125	6
	2	**S201 DC-Z 2 H10**	2CDV 271 217 R0278	**58450 0**			0.125	6
	3	**S201 DC-Z 3 H10**	2CDV 271 217 R0318	**58494 4**			0.125	6
	4	**S201 DC-Z 4 H10**	2CDV 271 217 R0338	**58495 1**			0.125	6
	6	**S201 DC-Z 6 H10**	2CDV 271 217 R0378	**58451 7**			0.125	6
	8	**S201 DC-Z 8 H10**	2CDV 271 217 R0408	**58452 4**			0.125	6
	10	**S201 DC-Z 10 H10**	2CDV 271 217 R0428	**58453 1**			0.125	6
U_{Bmax}	16	**S201 DC-Z 16 H10**	2CDV 271 217 R0468	**58496 8**			0.125	6
60 V~	20	**S201 DC-Z 20 H10**	2CDV 271 217 R0488	**58454 8**			0.125	6
60 V ⎓	25	**S201 DC-Z 25 H10**	2CDV 271 217 R0518	**58455 5**			0.125	6

Miniature Moulded Case Circuit Breakers S 200 U-K
S 200 U series
acc. to UL 489, CSA C 22.2 No. 5
240 V AC

K

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2CDC 021 314 F0004



2CDC 021 315 F0004

Selection table

No. of poles	Rated current I_n A	Ordering details Type No.	Order code	bbn 40 16779 EAN	Price 1 piece €	Price group	Weight 1 piece kg	Pack. unit pcs.
1	0.2	**S 201 U-K 0.2**	2CDS 271 417 R0087	**61922 6**			0.14	10
	0.3	**S 201 U-K 0.3**	2CDS 271 417 R0117	**61923 3**			0.14	10
	0.5	**S 201 U-K 0.5**	2CDS 271 417 R0157	**61924 0**			0.14	10
	0.75	**S 201 U-K 0.75**	2CDS 271 417 R0187	**61925 7**			0.14	10
	1	**S 201 U-K 1**	2CDS 271 417 R0217	**61926 4**			0.14	10
	1.6	**S 201 U-K 1.6**	2CDS 271 417 R0257	**61927 1**			0.14	10
	2	**S 201 U-K 2**	2CDS 271 417 R0277	**61928 8**			0.14	10
	3	**S 201 U-K 3**	2CDS 271 417 R0317	**61929 5**			0.14	10
	4	**S 201 U-K 4**	2CDS 271 417 R0337	**61930 1**			0.14	10
	5	**S 201 U-K 5**	2CDS 271 417 R0357	**61931 8**			0.14	10
	6	**S 201 U-K 6**	2CDS 271 417 R0377	**61932 5**			0.14	10
	8	**S 201 U-K 8**	2CDS 271 417 R0407	**61933 2**			0.14	10
	10	**S 201 U-K 10**	2CDS 271 417 R0427	**61934 9**			0.14	10
	15	**S 201 U-K 15**	2CDS 271 417 R0457	**61936 3**			0.14	10
	16	**S 201 U-K 16**	2CDS 271 417 R0467	**61937 0**			0.14	10
	20	**S 201 U-K 20**	2CDS 271 417 R0487	**61938 7**			0.14	10
	25	**S 201 U-K 25**	2CDS 271 417 R0517	**61939 4**			0.14	10
	30	**S 201 U-K 30**	2CDS 271 417 R0527	**61940 0**			0.14	10
	32	**S 201 U-K 32**	2CDS 271 417 R0537	**61941 7**			0.14	10
	40	**S 201 U-K 40**	2CDS 271 417 R0557	**61942 4**			0.14	10
	50	**S 201 U-K 50**	2CDS 271 417 R0577	**61943 1**			0.14	10
	60	**S 201 U-K 60**	2CDS 271 417 R0587	**61944 8**			0.14	10
	63	**S 201 U-K 63**	2CDS 271 417 R0607	**61945 5**			0.14	10
2	0.2	**S 202 U-K 0.2**	2CDS 272 417 R0087	**61946 2**			0.28	5
	0.3	**S 202 U-K 0.3**	2CDS 272 417 R0117	**61947 9**			0.28	5
	0.5	**S 202 U-K 0.5**	2CDS 272 417 R0157	**61948 6**			0.28	5
	0.75	**S 202 U-K 0.75**	2CDS 272 417 R0187	**61949 3**			0.28	5
	1	**S 202 U-K 1**	2CDS 272 417 R0217	**61950 9**			0.28	5
	1.6	**S 202 U-K 1.6**	2CDS 272 417 R0257	**61951 6**			0.28	5
	2	**S 202 U-K 2**	2CDS 272 417 R0277	**61952 3**			0.28	5
	3	**S 202 U-K 3**	2CDS 272 417 R0317	**61953 0**			0.28	5
	4	**S 202 U-K 4**	2CDS 272 417 R0337	**61954 7**			0.28	5
	5	**S 202 U-K 5**	2CDS 272 417 R0357	**61955 4**			0.28	5
	6	**S 202 U-K 6**	2CDS 272 417 R0377	**61956 1**			0.28	5
	8	**S 202 U-K 8**	2CDS 272 417 R0407	**61957 8**			0.28	5
	10	**S 202 U-K 10**	2CDS 272 417 R0427	**61958 5**			0.28	5
	15	**S 202 U-K 15**	2CDS 272 417 R0457	**61960 8**			0.28	5
	16	**S 202 U-K 16**	2CDS 272 417 R0467	**61961 5**			0.28	5
	20	**S 202 U-K 20**	2CDS 272 417 R0487	**61962 2**			0.28	5
	25	**S 202 U-K 25**	2CDS 272 417 R0517	**61963 9**			0.28	5
	30	**S 202 U-K 30**	2CDS 272 417 R0527	**61964 6**			0.28	5
	32	**S 202 U-K 32**	2CDS 272 417 R0537	**61965 3**			0.28	5
	40	**S 202 U-K 40**	2CDS 272 417 R0557	**61966 0**			0.28	5
	50	**S 202 U-K 50**	2CDS 272 417 R0577	**61967 7**			0.28	5
	60	**S 202 U-K 60**	2CDS 272 417 R0587	**61968 4**			0.28	5
	63	**S 202 U-K 63**	2CDS 272 417 R0607	**61969 1**			0.28	5

Miniature Moulded Case Circuit Breakers S 200 U-K
S 200 U series
acc. to UL 489, CSA C 22.2 No. 5
240 V AC

K

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2CDC 021 316 F0004



2CDC 021 317 F0004

Selection table

No. of poles	Rated current I_n A	Ordering details Type No.	Order code	bbn 40 16779 EAN	Price 1 piece €	Price group	Weight 1 piece kg	Pack. unit pcs.
3	0.2	**S 203 U-K 0.2**	2CDS 273 417 R0087	**61970 7**			0.42	3
	0.3	**S 203 U-K 0.3**	2CDS 273 417 R0117	**61971 4**			0.42	3
	0.5	**S 203 U-K 0.5**	2CDS 273 417 R0157	**61972 1**			0.42	3
	0.75	**S 203 U-K 0.75**	2CDS 273 417 R0187	**61973 8**			0.42	3
	1	**S 203 U-K 1**	2CDS 273 417 R0217	**61974 5**			0.42	3
	1.6	**S 203 U-K 1.6**	2CDS 273 417 R0257	**61975 2**			0.42	3
	2	**S 203 U-K 2**	2CDS 273 417 R0277	**61976 9**			0.42	3
	3	**S 203 U-K 3**	2CDS 273 417 R0317	**61977 6**			0.42	3
	4	**S 203 U-K 4**	2CDS 273 417 R0337	**61978 3**			0.42	3
	5	**S 203 U-K 5**	2CDS 273 417 R0357	**61979 0**			0.42	3
	6	**S 203 U-K 6**	2CDS 273 417 R0377	**61980 6**			0.42	3
	8	**S 203 U-K 8**	2CDS 273 417 R0407	**61981 3**			0.42	3
	10	**S 203 U-K 10**	2CDS 273 417 R0427	**61982 0**			0.42	3
	15	**S 203 U-K 15**	2CDS 273 417 R0457	**61984 4**			0.42	3
	16	**S 203 U-K 16**	2CDS 273 417 R0467	**61985 1**			0.42	3
	20	**S 203 U-K 20**	2CDS 273 417 R0487	**61986 8**			0.42	3
	25	**S 203 U-K 25**	2CDS 273 417 R0517	**61987 5**			0.42	3
	30	**S 203 U-K 30**	2CDS 273 417 R0527	**61988 2**			0.42	3
	32	**S 203 U-K 32**	2CDS 273 417 R0537	**61989 9**			0.42	3
	40	**S 203 U-K 40**	2CDS 273 417 R0557	**61990 5**			0.42	3
	50	**S 203 U-K 50**	2CDS 273 417 R0577	**61991 2**			0.42	3
	60	**S 203 U-K 60**	2CDS 273 417 R0587	**61992 9**			0.42	3
	63	**S 203 U-K 63**	2CDS 273 417 R0607	**61993 6**			0.42	3
4	0.2	**S 204 U-K 0.2**	2CDS 274 417 R0087	**61994 3**			0.56	2
	0.3	**S 204 U-K 0.3**	2CDS 274 417 R0117	**61995 0**			0.56	2
	0.5	**S 204 U-K 0.5**	2CDS 274 417 R0157	**61996 7**			0.56	2
	0.75	**S 204 U-K 0.75**	2CDS 274 417 R0187	**61997 4**			0.56	2
	1	**S 204 U-K 1**	2CDS 274 417 R0217	**61998 1**			0.56	2
	1.6	**S 204 U-K 1.6**	2CDS 274 417 R0257	**61999 8**			0.56	2
	2	**S 204 U-K 2**	2CDS 274 417 R0277	**62000 0**			0.56	2
	3	**S 204 U-K 3**	2CDS 274 417 R0317	**62001 7**			0.56	2
	4	**S 204 U-K 4**	2CDS 274 417 R0337	**62002 4**			0.56	2
	5	**S 204 U-K 5**	2CDS 274 417 R0357	**62003 1**			0.56	2
	6	**S 204 U-K 6**	2CDS 274 417 R0377	**62004 8**			0.56	2
	8	**S 204 U-K 8**	2CDS 274 417 R0407	**62005 5**			0.56	2
	10	**S 204 U-K 10**	2CDS 274 417 R0427	**62006 2**			0.56	2
	15	**S 204 U-K 15**	2CDS 274 417 R0457	**62008 6**			0.56	2
	16	**S 204 U-K 16**	2CDS 274 417 R0467	**62009 3**			0.56	2
	20	**S 204 U-K 20**	2CDS 274 417 R0487	**62010 9**			0.56	2
	25	**S 204 U-K 25**	2CDS 274 417 R0517	**62011 6**			0.56	2
	30	**S 204 U-K 30**	2CDS 274 417 R0527	**62012 3**			0.56	2
	32	**S 204 U-K 32**	2CDS 274 417 R0537	**62013 0**			0.56	2
	40	**S 204 U-K 40**	2CDS 274 417 R0557	**62014 7**			0.56	2
	50	**S 204 U-K 50**	2CDS 274 417 R0577	**62015 4**			0.56	2
	60	**S 204 U-K 60**	2CDS 274 417 R0587	**62016 1**			0.56	2
	63	**S 204 U-K 63**	2CDS 274 417 R0607	**62017 8**			0.56	2

Miniature Moulded Case Circuit Breakers S 200 U-Z
S 200 U series
acc. to UL 489, CSA C 22.2 No. 5
240 V AC

Z

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2CDC 021 314 F0004



2CDC 021 315 F0004

Selection table

No. of poles	Rated current I_n A	Ordering details Type No.	Order code	bbn 40 16779 EAN	Price 1 piece €	Price group	Weight 1 piece kg	Pack. unit pcs.
1	0.5	**S 201 U-Z 0.5**	2CDS 271 417 R0158	**620185**			0.14	10
	1	**S 201 U-Z 1**	2CDS 271 417 R0218	**620192**			0.14	10
	1.6	**S 201 U-Z 1.6**	2CDS 271 417 R0258	**620208**			0.14	10
	2	**S 201 U-Z 2**	2CDS 271 417 R0278	**620215**			0.14	10
	3	**S 201 U-Z 3**	2CDS 271 417 R0318	**620222**			0.14	10
	4	**S 201 U-Z 4**	2CDS 271 417 R0338	**620239**			0.14	10
	5	**S 201 U-Z 5**	2CDS 271 417 R0358	**620246**			0.14	10
	6	**S 201 U-Z 6**	2CDS 271 417 R0378	**620253**			0.14	10
	8	**S 201 U-Z 8**	2CDS 271 417 R0408	**620260**			0.14	10
	10	**S 201 U-Z 10**	2CDS 271 417 R0428	**620277**			0.14	10
	15	**S 201 U-Z 15**	2CDS 271 417 R0458	**620291**			0.14	10
	16	**S 201 U-Z 16**	2CDS 271 417 R0468	**620307**			0.14	10
	20	**S 201 U-Z 20**	2CDS 271 417 R0488	**620314**			0.14	10
	25	**S 201 U-Z 25**	2CDS 271 417 R0518	**620321**			0.14	10
	30	**S 201 U-Z 30**	2CDS 271 417 R0528	**622851**			0.14	10
	32	**S 201 U-Z 32**	2CDS 271 417 R0538	**620345**			0.14	10
	40	**S 201 U-Z 40**	2CDS 271 417 R0558	**620352**			0.14	10
	50	**S 201 U-Z 50**	2CDS 271 417 R0578	**620369**			0.14	10
	60	**S 201 U-Z 60**	2CDS 271 417 R0588	**620376**			0.14	10
	63	**S 201 U-Z 63**	2CDS 271 417 R0608	**620383**			0.14	10
2	0.5	**S 202 U-Z 0.5**	2CDS 272 417 R0158	**620390**			0.28	5
	1	**S 202 U-Z 1**	2CDS 272 417 R0218	**620406**			0.28	5
	1.6	**S 202 U-Z 1.6**	2CDS 272 417 R0258	**620413**			0.28	5
	2	**S 202 U-Z 2**	2CDS 272 417 R0278	**620420**			0.28	5
	3	**S 202 U-Z 3**	2CDS 272 417 R0318	**620437**			0.28	5
	4	**S 202 U-Z 4**	2CDS 272 417 R0338	**620444**			0.28	5
	5	**S 202 U-Z 5**	2CDS 272 417 R0358	**620451**			0.28	5
	6	**S 202 U-Z 6**	2CDS 272 417 R0378	**620468**			0.28	5
	8	**S 202 U-Z 8**	2CDS 272 417 R0408	**620475**			0.28	5
	10	**S 202 U-Z 10**	2CDS 272 417 R0428	**620482**			0.28	5
	15	**S 202 U-Z 15**	2CDS 272 417 R0458	**620505**			0.28	5
	16	**S 202 U-Z 16**	2CDS 272 417 R0468	**620512**			0.28	5
	20	**S 202 U-Z 20**	2CDS 272 417 R0488	**620529**			0.28	5
	25	**S 202 U-Z 25**	2CDS 272 417 R0518	**620536**			0.28	5
	30	**S 202 U-Z 30**	2CDS 272 417 R0528	**620543**			0.28	5
	32	**S 202 U-Z 32**	2CDS 272 417 R0538	**620550**			0.28	5
	40	**S 202 U-Z 40**	2CDS 272 417 R0558	**620567**			0.28	5
	50	**S 202 U-Z 50**	2CDS 272 417 R0578	**620574**			0.28	5
	60	**S 202 U-Z 60**	2CDS 272 417 R0588	**620581**			0.28	5
	63	**S 202 U-Z 63**	2CDS 272 417 R0608	**620598**			0.28	5

Miniature Moulded Case Circuit Breakers
S 200 U series
acc. to UL 489, CSA C 22.2 No. 5

S 200 U-Z
240 V AC

Z

10 000



2CDC 021 316 F0004



2CDC 021 317 F0004

Selection table

No. of poles	Rated current I_n A	Ordering details Type No.	Order code	bbn 40 16779 EAN	Price 1 piece €	Price group	Weight 1 piece kg	Pack. unit pcs.
3	0.5	**S 203 U-Z 0.5**	2CDS 273 417 R0158	**620604**			0.42	3
	1	**S 203 U-Z 1**	2CDS 273 417 R0218	**620611**			0.42	3
	1.6	**S 203 U-Z 1.6**	2CDS 273 417 R0258	**620628**			0.42	3
	2	**S 203 U-Z 2**	2CDS 273 417 R0278	**620635**			0.42	3
	3	**S 203 U-Z 3**	2CDS 273 417 R0318	**620642**			0.42	3
	4	**S 203 U-Z 4**	2CDS 273 417 R0338	**620659**			0.42	3
	5	**S 203 U-Z 5**	2CDS 273 417 R0358	**620666**			0.42	3
	6	**S 203 U-Z 6**	2CDS 273 417 R0378	**620673**			0.42	3
	8	**S 203 U-Z 8**	2CDS 273 417 R0408	**620680**			0.42	3
	10	**S 203 U-Z 10**	2CDS 273 417 R0428	**620697**			0.42	3
	15	**S 203 U-Z 15**	2CDS 273 417 R0458	**620710**			0.42	3
	16	**S 203 U-Z 16**	2CDS 273 417 R0468	**620727**			0.42	3
	20	**S 203 U-Z 20**	2CDS 273 417 R0488	**620734**			0.42	3
	25	**S 203 U-Z 25**	2CDS 273 417 R0518	**620741**			0.42	3
	30	**S 203 U-Z 30**	2CDS 273 417 R0528	**620758**			0.42	3
	32	**S 203 U-Z 32**	2CDS 273 417 R0538	**620765**			0.42	3
	40	**S 203 U-Z 40**	2CDS 273 417 R0558	**620772**			0.42	3
	50	**S 203 U-Z 50**	2CDS 273 417 R0578	**620789**			0.42	3
	60	**S 203 U-Z 60**	2CDS 273 417 R0588	**620796**			0.42	3
	63	**S 203 U-Z 63**	2CDS 273 417 R0608	**620802**			0.42	3
4	0.5	**S 204 U-Z 0.5**	2CDS 274 417 R0158	**620819**			0.56	2
	1	**S 204 U-Z 1**	2CDS 274 417 R0218	**620826**			0.56	2
	1.6	**S 204 U-Z 1.6**	2CDS 274 417 R0258	**620833**			0.56	2
	2	**S 204 U-Z 2**	2CDS 274 417 R0278	**620840**			0.56	2
	3	**S 204 U-Z 3**	2CDS 274 417 R0318	**620857**			0.56	2
	4	**S 204 U-Z 4**	2CDS 274 417 R0338	**620864**			0.56	2
	5	**S 204 U-Z 5**	2CDS 274 417 R0358	**620871**			0.56	2
	6	**S 204 U-Z 6**	2CDS 274 417 R0378	**620888**			0.56	2
	8	**S 204 U-Z 8**	2CDS 274 417 R0408	**620895**			0.56	2
	10	**S 204 U-Z 10**	2CDS 274 417 R0428	**620901**			0.56	2
	15	**S 204 U-Z 15**	2CDS 274 417 R0458	**620925**			0.56	2
	16	**S 204 U-Z 16**	2CDS 274 417 R0468	**620932**			0.56	2
	20	**S 204 U-Z 20**	2CDS 274 417 R0488	**620949**			0.56	2
	25	**S 204 U-Z 25**	2CDS 274 417 R0518	**620956**			0.56	2
	30	**S 204 U-Z 30**	2CDS 274 417 R0528	**620963**			0.56	2
	32	**S 204 U-Z 32**	2CDS 274 417 R0538	**620970**			0.56	2
	40	**S 204 U-Z 40**	2CDS 274 417 R0558	**620987**			0.56	2
	50	**S 204 U-Z 50**	2CDS 274 417 R0578	**620994**			0.56	2
	60	**S 204 U-Z 60**	2CDS 274 417 R0588	**621007**			0.56	2
	63	**S 204 U-Z 63**	2CDS 274 417 R0608	**621014**			0.56	2

Miniature Moulded Case Circuit Breakers S 200 UP-K
S 200 UP series
acc. to UL 489, CSA C 22.2 No. 5
480Y/277 V AC

K

10 000


2CDC 021 318 F0004


2CDC 021 319 F0004


2CDC 021 320 F0004


2CDC 023 321 F0004

Selection table

No. of poles	Rated current I_n A	Ordering details Type No.	Order code	bbn 40 16779 EAN	Price 1 piece €	Price group	Weight 1 piece kg	Pack. unit pcs.
1	0.2	**S 201 UP-K 0.2**	2CDS 271 317 R0087	**61563 1**			0.14	10
	0.3	**S 201 UP-K 0.3**	2CDS 271 317 R0117	**61564 8**			0.14	10
	0.5	**S 201 UP-K 0.5**	2CDS 271 317 R0157	**61565 5**			0.14	10
	0.75	**S 201 UP-K 0.75**	2CDS 271 317 R0187	**61566 2**			0.14	10
	1	**S 201 UP-K 1**	2CDS 271 317 R0217	**61567 9**			0.14	10
	1.6	**S 201 UP-K 1.6**	2CDS 271 317 R0257	**61568 6**			0.14	10
	2	**S 201 UP-K 2**	2CDS 271 317 R0277	**61569 3**			0.14	10
	3	**S 201 UP-K 3**	2CDS 271 317 R0317	**61570 9**			0.14	10
	4	**S 201 UP-K 4**	2CDS 271 317 R0337	**61571 6**			0.14	10
	5	**S 201 UP-K 5**	2CDS 271 317 R0357	**61572 3**			0.14	10
	6	**S 201 UP-K 6**	2CDS 271 317 R0377	**61573 0**			0.14	10
	8	**S 201 UP-K 8**	2CDS 271 317 R0407	**61574 7**			0.14	10
	10	**S 201 UP-K 10**	2CDS 271 317 R0427	**61575 4**			0.14	10
	15	**S 201 UP-K 15**	2CDS 271 317 R0457	**61577 8**			0.14	10
	16	**S 201 UP-K 16**	2CDS 271 317 R0467	**61578 5**			0.14	10
	20	**S 201 UP-K 20**	2CDS 271 317 R0487	**61579 2**			0.14	10
	25	**S 201 UP-K 25**	2CDS 271 317 R0517	**61580 8**			0.14	10
2	0.2	**S 202 UP-K 0.2**	2CDS 272 317 R0087	**61587 7**			0.28	5
	0.3	**S 202 UP-K 0.3**	2CDS 272 317 R0117	**61588 4**			0.28	5
	0.5	**S 202 UP-K 0.5**	2CDS 272 317 R0157	**61589 1**			0.28	5
	0.75	**S 202 UP-K 0.75**	2CDS 272 317 R0187	**61590 7**			0.28	5
	1	**S 202 UP-K 1**	2CDS 272 317 R0217	**61591 4**			0.28	5
	1.6	**S 202 UP-K 1.6**	2CDS 272 317 R0257	**61592 1**			0.28	5
	2	**S 202 UP-K 2**	2CDS 272 317 R0277	**61593 8**			0.28	5
	3	**S 202 UP-K 3**	2CDS 272 317 R0317	**61594 5**			0.28	5
	4	**S 202 UP-K 4**	2CDS 272 317 R0337	**61595 2**			0.28	5
	5	**S 202 UP-K 5**	2CDS 272 317 R0357	**61596 9**			0.28	5
	6	**S 202 UP-K 6**	2CDS 272 317 R0377	**61597 6**			0.28	5
	8	**S 202 UP-K 8**	2CDS 272 317 R0407	**61598 3**			0.28	5
	10	**S 202 UP-K 10**	2CDS 272 317 R0427	**61599 0**			0.28	5
	15	**S 202 UP-K 15**	2CDS 272 317 R0457	**61601 0**			0.28	5
	16	**S 202 UP-K 16**	2CDS 272 317 R0467	**61602 7**			0.28	5
	20	**S 202 UP-K 20**	2CDS 272 317 R0487	**61603 4**			0.28	5
	25	**S 202 UP-K 25**	2CDS 272 317 R0517	**61604 1**			0.28	5
3	0.2	**S 203 UP-K 0.2**	2CDS 273 317 R0087	**61611 9**			0.42	3
	0.3	**S 203 UP-K 0.3**	2CDS 273 317 R0117	**61612 6**			0.42	3
	0.5	**S 203 UP-K 0.5**	2CDS 273 317 R0157	**61613 3**			0.42	3
	0.75	**S 203 UP-K 0.75**	2CDS 273 317 R0187	**61614 0**			0.42	3
	1	**S 203 UP-K 1**	2CDS 273 317 R0217	**61615 7**			0.42	3
	1.6	**S 203 UP-K 1.6**	2CDS 273 317 R0257	**61616 4**			0.42	3
	2	**S 203 UP-K 2**	2CDS 273 317 R0277	**61617 1**			0.42	3
	3	**S 203 UP-K 3**	2CDS 273 317 R0317	**61618 8**			0.42	3
	4	**S 203 UP-K 4**	2CDS 273 317 R0337	**61619 5**			0.42	3
	5	**S 203 UP-K 5**	2CDS 273 317 R0357	**61620 1**			0.42	3
	6	**S 203 UP-K 6**	2CDS 273 317 R0377	**61621 8**			0.42	3
	8	**S 203 UP-K 8**	2CDS 273 317 R0407	**61622 5**			0.42	3
	10	**S 203 UP-K 10**	2CDS 273 317 R0427	**61623 2**			0.42	3
	15	**S 203 UP-K 15**	2CDS 273 317 R0457	**61625 6**			0.42	3
	16	**S 203 UP-K 16**	2CDS 273 317 R0467	**61626 3**			0.42	3
	20	**S 203 UP-K 20**	2CDS 273 317 R0487	**61627 0**			0.42	3
	25	**S 203 UP-K 25**	2CDS 273 317 R0517	**61628 7**			0.42	3
4	0.2	**S 204 UP-K 0.2**	2CDS 274 317 R0087	**61635 5**			0.56	2
	0.3	**S 204 UP-K 0.3**	2CDS 274 317 R0117	**61636 2**			0.56	2
	0.5	**S 204 UP-K 0.5**	2CDS 274 317 R0157	**61637 9**			0.56	2
	0.75	**S 204 UP-K 0.75**	2CDS 274 317 R0187	**61638 6**			0.56	2
	1	**S 204 UP-K 1**	2CDS 274 317 R0217	**61639 3**			0.56	2
	1.6	**S 204 UP-K 1.6**	2CDS 274 317 R0257	**61640 9**			0.56	2
	2	**S 204 UP-K 2**	2CDS 274 317 R0277	**61641 6**			0.56	2
	3	**S 204 UP-K 3**	2CDS 274 317 R0317	**61642 3**			0.56	2
	4	**S 204 UP-K 4**	2CDS 274 317 R0337	**61643 0**			0.56	2
	5	**S 204 UP-K 5**	2CDS 274 317 R0357	**61644 7**			0.56	2
	6	**S 204 UP-K 6**	2CDS 274 317 R0377	**61645 4**			0.56	2
	8	**S 204 UP-K 8**	2CDS 274 317 R0407	**61646 1**			0.56	2
	10	**S 204 UP-K 10**	2CDS 274 317 R0427	**61647 8**			0.56	2
	15	**S 204 UP-K 15**	2CDS 274 317 R0457	**61649 2**			0.56	2
	16	**S 204 UP-K 16**	2CDS 274 317 R0467	**61650 8**			0.56	2
	20	**S 204 UP-K 20**	2CDS 274 317 R0487	**61651 5**			0.56	2
	25	**S 204 UP-K 25**	2CDS 274 317 R0517	**61652 2**			0.56	2

Miniature Moulded Case Circuit Breakers S 200 UP series acc. to UL 489, CSA C 22.2 No. 5

S 200 UP-Z

480Y/277 V AC

Z

10 000



2CDC 021 318 F0004



2CDC 021 319 F0004



2CDC 021 320 F0004



2CDC 021 321 F0004

Selection table

No. of poles	Rated current I_n A	Ordering details Type No.	Order code	bbn 40 16779 EAN	Price 1 piece €	Price group	Weight 1 piece kg	Pack. unit pcs.
1	0.5	**S 201 UP-Z 0.5**	2CDS 271 317 R0158	**61659 1**			0.14	10
	1	**S 201 UP-Z 1**	2CDS 271 317 R0218	**61660 7**			0.14	10
	1.6	**S 201 UP-Z 1.6**	2CDS 271 317 R0258	**61661 4**			0.14	10
	2	**S 201 UP-Z 2**	2CDS 271 317 R0278	**61662 1**			0.14	10
	3	**S 201 UP-Z 3**	2CDS 271 317 R0318	**61663 8**			0.14	10
	4	**S 201 UP-Z 4**	2CDS 271 317 R0338	**61664 5**			0.14	10
	5	**S 201 UP-Z 5**	2CDS 271 317 R0358	**61665 2**			0.14	10
	6	**S 201 UP-Z 6**	2CDS 271 317 R0378	**61666 9**			0.14	10
	8	**S 201 UP-Z 8**	2CDS 271 317 R0408	**61667 6**			0.14	10
	10	**S 201 UP-Z 10**	2CDS 271 317 R0428	**61668 3**			0.14	10
	15	**S 201 UP-Z 15**	2CDS 271 317 R0458	**61670 6**			0.14	10
	16	**S 201 UP-Z 16**	2CDS 271 317 R0468	**61671 3**			0.14	10
	20	**S 201 UP-Z 20**	2CDS 271 317 R0488	**61672 0**			0.14	10
	25	**S 201 UP-Z 25**	2CDS 271 317 R0518	**61673 7**			0.14	10
2	0.5	**S 202 UP-Z 0.5**	2CDS 272 317 R0158	**61680 5**			0.28	5
	1	**S 202 UP-Z 1**	2CDS 272 317 R0218	**61681 2**			0.28	5
	1.6	**S 202 UP-Z 1.6**	2CDS 272 317 R0258	**61682 9**			0.28	5
	2	**S 202 UP-Z 2**	2CDS 272 317 R0278	**61683 6**			0.28	5
	3	**S 202 UP-Z 3**	2CDS 272 317 R0318	**61684 3**			0.28	5
	4	**S 202 UP-Z 4**	2CDS 272 317 R0338	**61685 0**			0.28	5
	5	**S 202 UP-Z 5**	2CDS 272 317 R0358	**61686 7**			0.28	5
	6	**S 202 UP-Z 6**	2CDS 272 317 R0378	**61687 4**			0.28	5
	8	**S 202 UP-Z 8**	2CDS 272 317 R0408	**61688 1**			0.28	5
	10	**S 202 UP-Z 10**	2CDS 272 317 R0428	**61689 8**			0.28	5
	15	**S 202 UP-Z 15**	2CDS 272 317 R0458	**61691 1**			0.28	5
	16	**S 202 UP-Z 16**	2CDS 272 317 R0468	**61692 8**			0.28	5
	20	**S 202 UP-Z 20**	2CDS 272 317 R0488	**61693 5**			0.28	5
	25	**S 202 UP-Z 25**	2CDS 272 317 R0518	**61694 2**			0.28	5
3	0.5	**S 203 UP-Z 0.5**	2CDS 273 317 R0158	**61701 7**			0.42	3
	1	**S 203 UP-Z 1**	2CDS 273 317 R0218	**61702 4**			0.42	3
	1.6	**S 203 UP-Z 1.6**	2CDS 273 317 R0258	**61703 1**			0.42	3
	2	**S 203 UP-Z 2**	2CDS 273 317 R0278	**61704 8**			0.42	3
	3	**S 203 UP-Z 3**	2CDS 273 317 R0318	**61705 5**			0.42	3
	4	**S 203 UP-Z 4**	2CDS 273 317 R0338	**61706 2**			0.42	3
	5	**S 203 UP-Z 5**	2CDS 273 317 R0358	**61707 9**			0.42	3
	6	**S 203 UP-Z 6**	2CDS 273 317 R0378	**61708 6**			0.42	3
	8	**S 203 UP-Z 8**	2CDS 273 317 R0408	**61709 3**			0.42	3
	10	**S 203 UP-Z 10**	2CDS 273 317 R0428	**61710 9**			0.42	3
	15	**S 203 UP-Z 15**	2CDS 273 317 R0458	**61712 3**			0.42	3
	16	**S 203 UP-Z 16**	2CDS 273 317 R0468	**61713 0**			0.42	3
	20	**S 203 UP-Z 20**	2CDS 273 317 R0488	**61714 7**			0.42	3
	25	**S 203 UP-Z 25**	2CDS 273 317 R0518	**61715 4**			0.42	3
4	0.5	**S 204 UP-Z 0.5**	2CDS 274 317 R0158	**61722 2**			0.56	2
	1	**S 204 UP-Z 1**	2CDS 274 317 R0218	**61723 9**			0.56	2
	1.6	**S 204 UP-Z 1.6**	2CDS 274 317 R0258	**61724 6**			0.56	2
	2	**S 204 UP-Z 2**	2CDS 274 317 R0278	**61725 3**			0.56	2
	3	**S 204 UP-Z 3**	2CDS 274 317 R0318	**61726 0**			0.56	2
	4	**S 204 UP-Z 4**	2CDS 274 317 R0338	**61727 7**			0.56	2
	5	**S 204 UP-Z 5**	2CDS 274 317 R0358	**61728 4**			0.56	2
	6	**S 204 UP-Z 6**	2CDS 274 317 R0378	**61729 1**			0.56	2
	8	**S 204 UP-Z 8**	2CDS 274 317 R0408	**61730 7**			0.56	2
	10	**S 204 UP-Z 10**	2CDS 274 317 R0428	**61731 4**			0.56	2
	15	**S 204 UP-Z 15**	2CDS 274 317 R0458	**61733 8**			0.56	2
	16	**S 204 UP-Z 16**	2CDS 274 317 R0468	**61734 5**			0.56	2
	20	**S 204 UP-Z 20**	2CDS 274 317 R0488	**61735 2**			0.56	2
	25	**S 204 UP-Z 25**	2CDS 274 317 R0518	**61736 9**			0.56	2

Miniature Moulded Case Circuit Breakers S 200 U and S 200 UP series acc. to UL 489, CSA C 22.2 No. 5


2CDC 021 322 F0004

S2C-H6 RU


2CDC 021 324 F0004

S2C-S6 RU


2CDC 021 146 F0005

S2C-A1 U

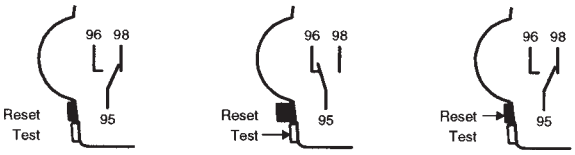
Accessories for S 200 U / S 200 UP

Description	Order details Type code	Order code	bbn 40 16779 EAN	Price 1 piece €	Price group	Weight 1 piece kg	Pack. unit pcs.
Auxiliary contact							
Auxiliary contact only for U/UP series	**S2C-H6RU**	2CDS 200 914 R0001	**61561 7**			0.035	1
Signal contact							
Signal contact only for U/UP series	**S2C-S6RU**	2CDS 200 924 R0001	**64677 2**			0.035	1
Shunt trip							
12…60 V AC/DC	**S2C-A1U**	2CDS 200 908 R0001	**64472 3**				
110…415 V AC	**S2C-A2U**	2CDS 200 908 R0002	**64473 0**				
110…250 V DC							

Connection drawings

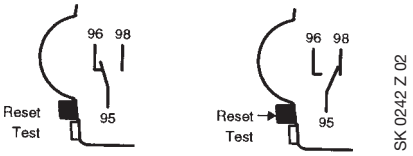
Signal contact S2C-S6 RU

in ON and OFF position after hand operation



SK 0240 Z 02

in OFF position after tripping



SK 0242 Z 02

Auxiliary contact

Auxiliary contact in ON position



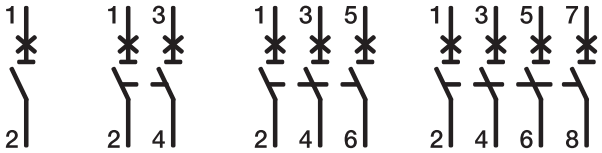
2CDC 092 047 F0005

Auxiliary contact in OFF position



2CDC 092 048 F0005

Miniature circuit breaker



2CDC 022 049 F0005

Feeder optional, top or bottom..
Terminal designation acc. to EN 50 005.

Shunt trip



2CDC 092 046 F0005

S2C-A1 U
S2C-A2 U

Miniature circuit breakers S 201 DC series acc. to UL 489

Series type S 201 DC-K and S 201 DC-Z with or without integrated auxiliary switch

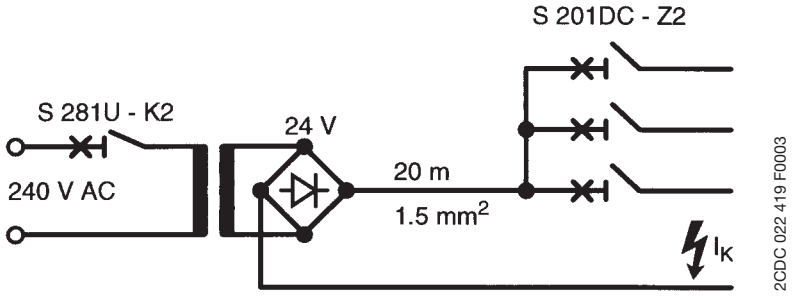
This series – 1-pole with K- and Z-type characteristics for 60 V AC/DC – has been designed for control circuits in machinery and plant that have to meet the requirements provided for in **UL 489,** i.e. **branch circuit protection**.

Planning notes

Overcurrent protection according to EN 60 204-1, protection of damageable components:
A high degree of protection is only possible if the undelayed release trips.
The parameters to be taken into account are:

- loop resistance ($R_i + R_L$)
  (R_i = internal resistance MCB at 20 °C/ 63 °F and R_L = output resistance at 20 °C / 63 °F)
- copper temperature: 80 °C / 176 °F in the case of a short circuit / voltage drop, contact resistance
- **Result: a total derating factor of 2/3**

example 1: standard power supply unit



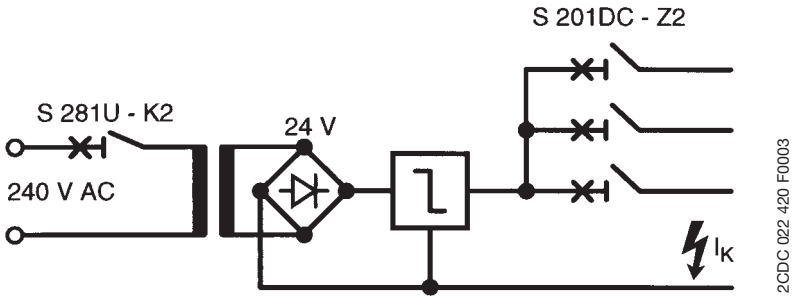
R_i = 0.62 Ω

$R_L = \frac{40\ m}{1.5 \times 56} = 0.48\ \Omega$

$R = (0.62 + 0.48)\ \Omega = 1.1\ \Omega$ response value unchanged of S 201 DC-Z2 = 4.5 In = 9 A

$I_K = \frac{24\ V \times 2/3}{1.1\ \Omega} = 14.5\ A$ result: trips within milliseconds

example 2: switched mode power supply unit

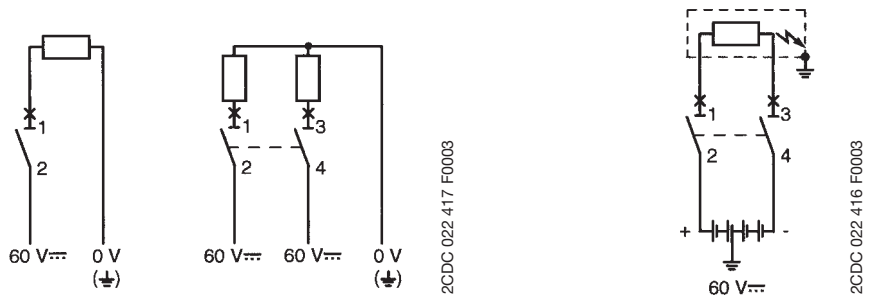


MCB S 201 needs < 100 ms for undelayed tripping. If the switched mode power supply unit adjusts downwards undelayed when a short circuit occurs, the PSU adjusts quicker than the S 201-... is able to respond.

consequence: no selective fault recognition.

result: The output of the switched mode PSU must adjust in a delayed mode (> 100 ms) and the protection device must be adapted to this delayed reduced value in order to ensure selective fault recognition.

example for admissible voltages between conductors



Miniature circuit breakers S 201 DC series acc. to UL 489

Technical Data

specifications:	DIN VDE 0641 -11, IEC 60898, EN 60898, VDE 0660 -101 IEC 60947-2, EN 60 947 -2, UL 489
No. of poles:	1
trip characteristics:	K, Z
rated current I_n:	K and Z 1 ... 25 A
rated voltage U_n:	1-pole 60 V DC / 60 V AC
min. operating voltage U_{Omin} :	12 V-
rated switching capacity:	10 kA
insulation coordination:	according to DIN VDE 0110 Part 1 und 2
– overvoltage category:	III
– pollution degree:	2
– surge voltage U_{imp} (1.2/50 µs):	4 kV (test voltage 6.2 kV at N.N., 5 kV at 2000 m)
– surge alternating voltage:	2.5 kV (50/60 Hz)
housing:	insul. mat. group I (CTI ≥ 600) acc. to DIN IEC 112/VDE 0303 Part 1, RAL 7035
operating lever:	insulating material group II (400 ≤ CTI < 600) black, sealable
protection according to DIN VDE 0100:	IP 20, in the consumer unit IP 40
degree of protection:	IP XXB
design:	according to DIN 43880, size code 1
depth:	68 mm
overall dimensions w x h x d:	17.5 x 85 x 69 mm (with auxiliary contact 17.5 x 102.5 x 69)
mounting position:	optional
fixing:	snap-on on top-hat rail EN 60 715, 35 mm screw fixing onto mounting rail
connection:	bi-directional cylinder lift terminal (two-terminal chamber) at top and bottom. Suitable for the connection of single, multi- or finely stranded conductors up to 25 mm² (with simultaneous busbar connection)
tightening torque:	2.5 Nm
mechanical service life :	20.000 switchovers
service life at rated load	20.000 switchovers
climatic resistance	constant climate 23/73/83, 40/104/93, 55/131/20 [°C/°F/RH]
according to DIN IEC 68 Part 2-30:	alternating climate 25/77/95 - 40/104/93 [°C/°F/RH]
storage temperature:	T_{max} + 70 °C/ 158 °F, T_{min} – 40 °C/– 40 °F
ambient temperature:	T_{max} + 55 °C/ 131 °F, T_{min} – 25 °C/– 13 °F
shock protection:	30 g, at least 2 impacts impact duration 13 ms
vibration resistance	
according to DIN IEC 68-2-6:	5 g, 20 frequency cycles 5 ... 150 ... 5 Hz at 0.8 I_n

Technical data of the integrated auxiliary contact

contact complement:	1NO (1 normally open) 1NC (1 normally closed)
contact rating:	DC 12 identical DC 13 DC 13 30 V 2 A, 50 V 1 A
min. contact load:	24 V, 4 mA
min. rated voltage:	12 V AC/DC at 0.1 VA
short circuit protection:	with S 201 DC-K2 or -Z2
electrical service life:	> 4000 switchovers

safe disconnection of auxiliary circuit and main circuit according to VDE 0106 Part 101

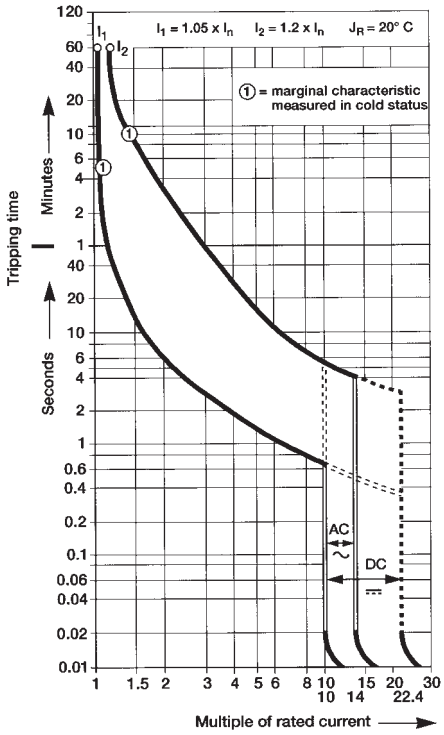
connection capacity:	0.75 up to 2.5 mm² (use connector sleeves for finely-stranded conductors)
tightening torque:	0.5 Nm

Note: busbar system according to UL 489 under preparation

Miniature circuit breakers
S 201 DC series
acc. to UL 489

K-type trip characteristic

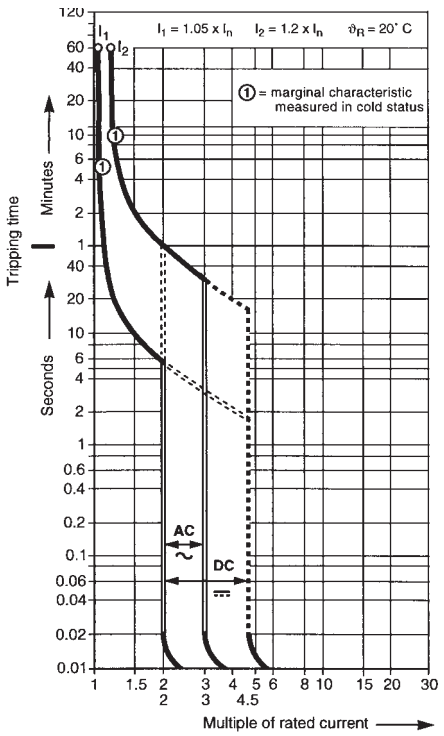
Reference temperature 20 °C/68 °F
Deviating ambient temperatures influence the tripping behaviour by 6% per 10 °C / 50 °F



2CDC 022 194 F0205

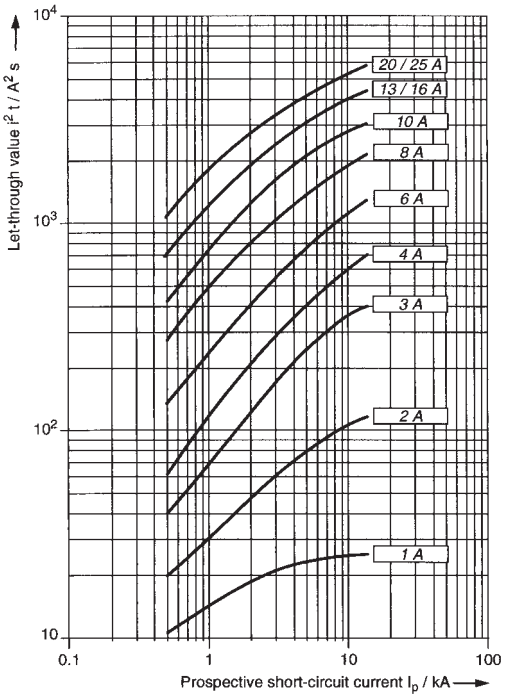
Z-type trip characteristic

Reference temperature 20 °C/68 °F
Deviating ambient temperatures influence the tripping behaviour by 6% per 10 °C / 50 °F



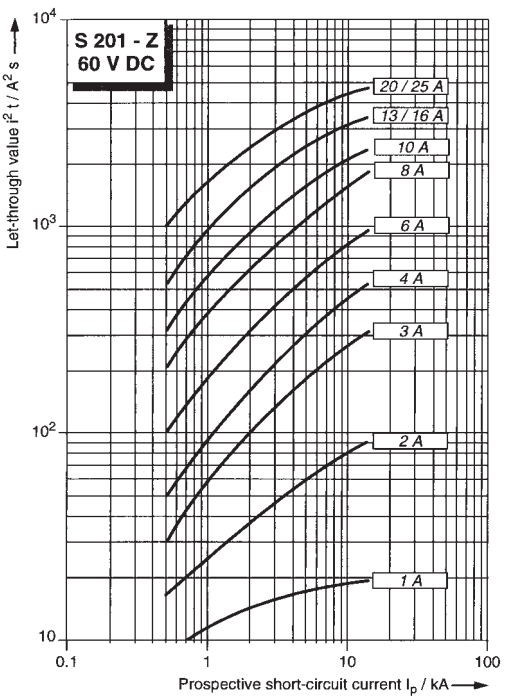
2CDC 022 428 F0203

Diagram of let-through values I²t of S 200-K



2CDC 022 422 F0203

Diagram of let-through values I²t of S 200-Z



2CDC 022 486 F0203

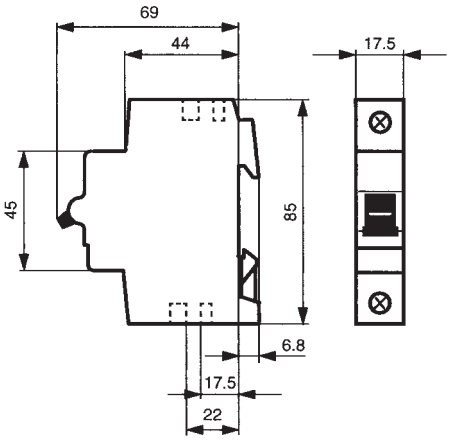
Miniature circuit breakers
S 201 DC series
acc. to UL 489

Internal resistance and power loss of MCBs

Internal resistance per pole in mΩ, power loss per pole in W

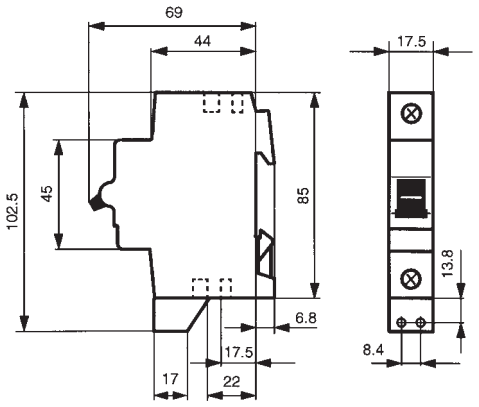
type	rated current I_n A	cb series K mΩ	W	Z mΩ	W
S 200 DC	1	1550	1.6	2270	2.3
	1.6	695	1.8	1100	2.8
	2	460	1.9	619	2.5
	3	165	1.5	202	1.8
	4	120	2.0	149	2.4
	6	52	1.9	104	3.7
	8	38	2.5	53.9	3.45
	10	12.6	1.26	17.5	1.7
	13	12.6	1.26	–	–
	16	7.7	2.0	10.9	2.8
	20	6.7	2.7	6.0	2.4
	25	4.6	2.9	4.1	2.6

Dimensions of S 201 DC



2CDC 022 415 F0003

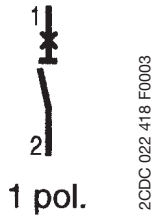
Dimensions of S 201 DC.. H10



SK 0045 Z 01

Connection

Feeder optional from top or bottom, terminals designated according to EN 50 005



1 pol.

2CDC 022 418 F0003



1 pol. - H10

2CDC 022 429 F0003

Miniature Moulded Case Circuit Breakers S 200 U and S 200 UP series acc. to UL 489, CSA C 22.2 No. 5

Technical data	**S 200 U**	**S 200 UP**
Specifications:	UL 489, CSA C 22.2 No. 5, IEC 60 947-2	
UL File-Number:	E 2123233	
No. of poles:	1, 2, 3 und 4	
tripping characteristics:	K and Z	
rated current I_n:	0.2 (K) 0.5 (Z) ... 63 A	0.2 (K) 0.5 (Z) ... 25 A
rated voltage U_n:	1-pole: 240 V AC multipole: 240 V AC	1-pole: 277 V AC multipole: 480 Y/277 V AC
short circuit rupturing capacity:	10 kA	
frequency:	50/60 Hz	
degree of protection:	IP 20	
mounting position:	optional	
fixing:	35 mm DIN rail	
clamps only for Co:	18 … 4 AWG (0.75 … 25 mm²)	
service life,		
mech. and at rated load:	20.000 operations	
tightening torque:	25 in. lbs (2.8 Nm)	
reference temperature:	25 °C	
ambient temperature:	– 25 … + 55 °C	
shock resistance:	10 g at least 2 impacts shock duration 13 ms	
resistance to vibration acc. to IEC 60 068-2-6	5 g, 20 frequency cycles, 5 … 150 … 5 Hz bei 0.8 I_n	

These two equipment rows are calling oneself different rated current range, the rated voltage and the equipment measurement through hers.

Auxiliary contact S2C-H6RU and Signal contact S2C-S6RU for Miniature Moulded Case Circuit Breakers S 200 U and S 200 UP

rated current I_n:	10
rated voltage AC / DC:	24
short-circuit withstand capacity / 230 V AC:	1000 A bei S 201 K4
insulation coordination:	acc. to DIN VDE 0110 part 1 and 2
– overvoltage category:	III
– surge voltage:	4 kV (1.2/50 µs)
– pollution degtree:	2
contact:	1 change over
connection capacity mm²	0.75...2.5
tightening torque:	1.2 Nm
shock resistance acc. to DIN IEC 68-2-6:	5 g, 20 frequency cycles 5...150...5 Hz at 24 V AC/DC, 5 mA auto-reclosing < 10 ms
mechanical service life :	10.000 operations
dimensions:	68 x 74 x 99 mm

AC 14	U_e	400V	230 V
	I_e	1 A	2 A

DC 12	U_e	220 V	110 V
	I_e	1 A	1.5 A

DC	U_e	60 V	24 V
	I_e	2 A	4 A

Shunt trip		**Type**	**S 2C-A1 U**	**S 2C-A2 U**
Rated voltage	AC DC	V V	12 ... 60 12 ... 60	110 ... 415 110 ... 250
Max. release duration		ms	<10	<10
Min. release voltage	AC DC	V V	7 10	55 80
Consumption on release	AC DC	VA VA	40 ... 200 40 ... 200	55 ... 210 55 ... 110
Coil resistance		Ω	3.7	225
Terminals		mm²	16	16
Tightening torque		Nm	2	2
Dimensions (H x D x W)		mm	100 x 69 x 17.5	100 x 69 x 17.5

Undervoltage release		**Type**	**S 2C-UA 12 DC**	**S 2C-UA 24 AC**	**S 2C-UA 24 DC**	**S 2C-UA 48 AC**	**S 2C-UA 48 DC**	**S 2C-UA 110 AC**	**S 2C-UA 110 DC**	**S 2C-UA 230 AC**	**S 2C-UA 230 DC**	**S 2C-UA 400 AC**
Standards			IEC/EN 60947-1									
Rated voltage	AC DC	V V	12	24	24	48	48	110	110	230	230	400
Frequency		Hz	50 ... 60									
Release trip		V	0.35 UnOVO 0.7 Un									
Terminals		mm²	2 x 1.5									
Consumption		VA	0.2	3.6	2	3.6	2.1	3.5	2.2	3.7	2.3	2.4
R esistance to corrosion		°C/RH	constant atmosphere: 23/83 – 40/93 – 55/20; variable atmosphere: 25/95 – 40/93									
Protection degree			IPXXB / IP2X									
Tightening torque		Nm	0.4									
Dimensions (H x D x W)		mm	85 x 69 x 17.5									

Miniature Moulded Case Circuit Breakers S 200 U and S 200 UP series acc. to UL 489, CSA C 22.2 No. 5

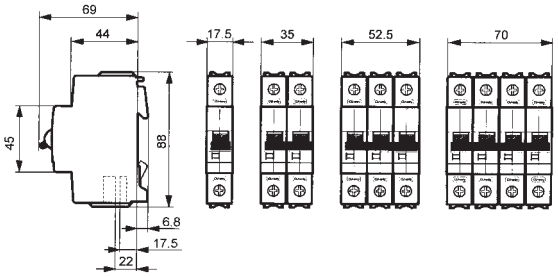
Short circuit rupturing capacity

series		alternating current				Back-up ①
trip characteristic		1phase		2/3phase		max.
rated current		120 V AC	240 V AC	240 V AC 120/240 V AC	400 V 277/480 V AC	Fuse
	A	kA/cos φ	kA/cos φ	kA/cos φ	kA/cos φ	gG/gL
S 200 U-K, Z	0.2/0.5 ... 2	unlimited				not required
	3	10/0.25	10/0.25	10/0.25		25 A
	4, 5					35 A
	6					63 A
	8					80 A
	10 ... 20					100 A
	25, 30					125 A
	32 ... 63					160 A
S 200 UP-K, Z	0.2/0.5 ... 2	unlimited				not required
	3	10/0.25	10/0.25	10/0.25	10/0.25	25 A
	4, 5					35 A
	6					63 A
	8					80 A
	10 ... 20					100 A
	25					125 A

① Back-up protection is necessary only if the solid short-circuit current to be expected at the place of installation may exceed the switching capacity indicated.

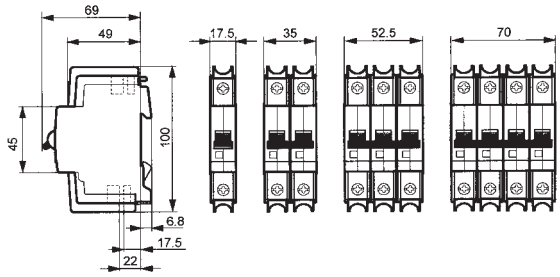
Dimension drawings in mm

S 200 U



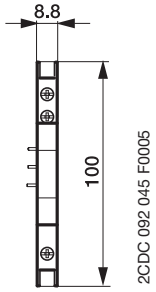
2CDC 022 291 F0004

S 200 UP



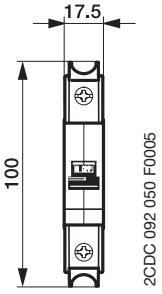
2CDC 022 218 F0004

S2C-H6RU, S2C-S6RU



2CDC 092 045 F0005

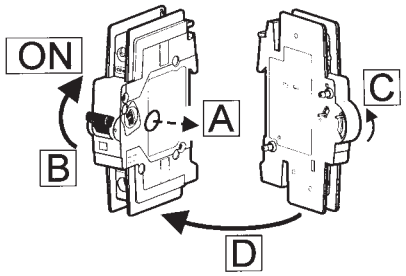
S2C-A..U



2CDC 092 050 F0005

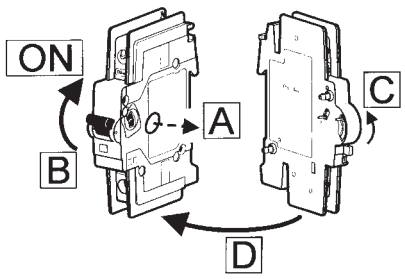
Mounting

built-on of a S2C-H6RU



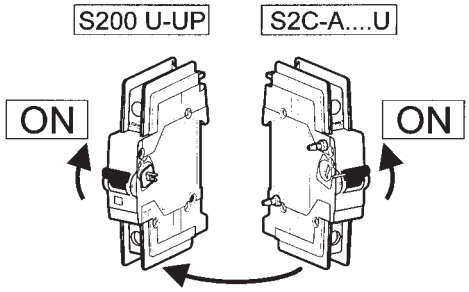
2CDC 022 290 F0004

built-on of a S2C-S6RU



2CDC 022 289 F0004

built-on of a S2C-A..U



2CDC 022 578 F0004

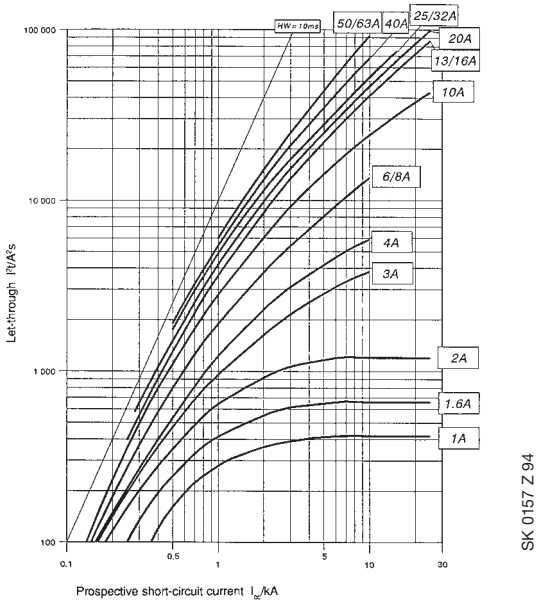
Internal resistance and power loss of the Miniature Moulded Case Circuit Breakers

Internal resistance per pole in mΩ, power loss per pole in W

Type	rated current I_n A	device series K mΩ	K W	Z mΩ	Z W
S 200 U **S 200 UP**	0.2	42500	1.7	–	–
	0.3	20000	1.8	–	–
	0.5	6340	1.6	10100	2.5
	0.75	2500	1.4	–	–
	1	1400	1.4	2270	2.3
	1.6	625	1.6	1100	2.8
	2	460	1.8	619	2.5
	3	211	1.9	211	1.9
	4	163	2.6	163	2.6
	6	67	2.4	104	3.7
	8	45	2.9	55	3.5
	10	19	1.9	21	2.1
	13	–	–	–	–
	16	8.2	2.1	10.9	2.8
	20	7.3	2.9	7.3	2.9
	25	5.6	3.5	5.6	3.5
	32	4.1	4.2	4.1	4.2
	40	4.0	6.4	4.0	6.4
	50	1.2	3.0	1.8	4.4
	63	1.3	5.2	1.3	5.2

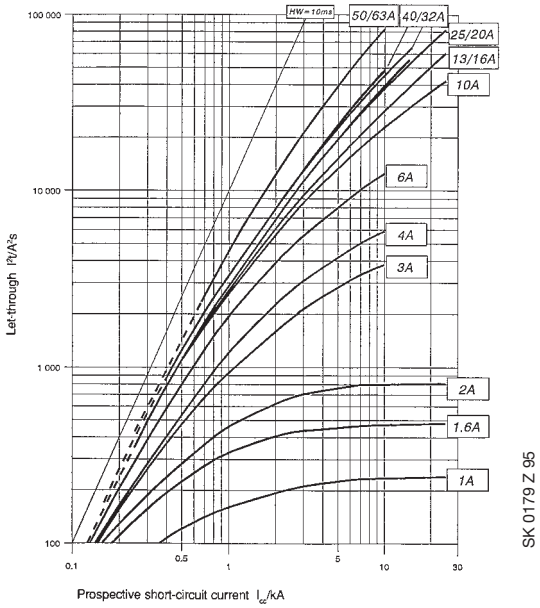
Diagrams of let through values $I^2 t$ at 230/400 V AC

K



SK 0157 Z 94

Z

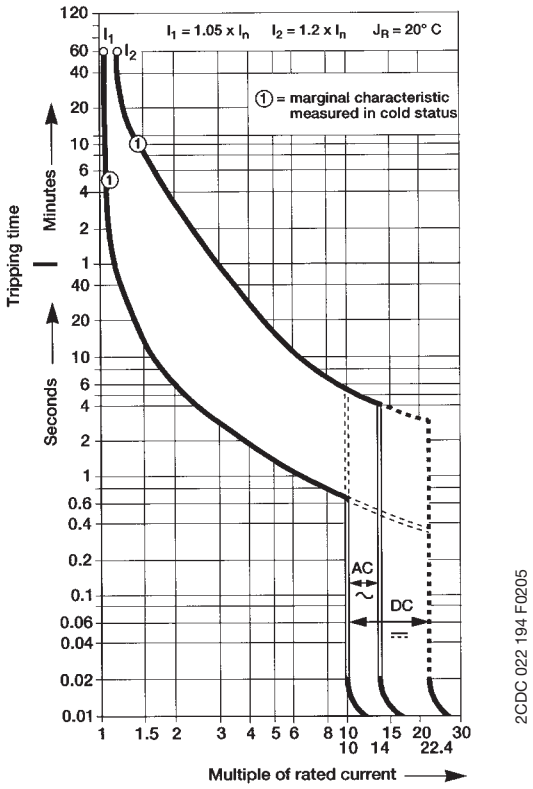


SK 0179 Z 95

Miniature Moulded Case Circuit Breakers S 200 U and S 200 UP series acc. to UL 489, CSA C 22.2 No. 5

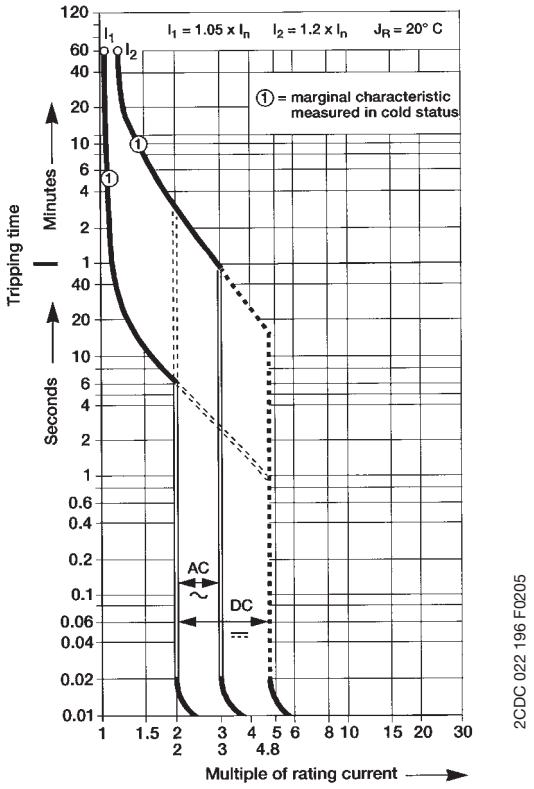
Tripping characteristic K

reference temperature 20 °C
The tripping device changes at a divergent ambient temperature by 6 % je 10 °C



Tripping characteristic Z

reference temperature 20 °C
The tripping device changes at a divergent ambient temperature by 6 % je 10 °C

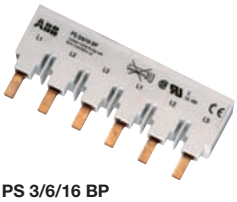


Max. operating current values depending on the ambient temperature for a cicruit-breaker in load circuit of characteristics type K and Z

K and Z	Ambient temperature T (°C/°F)											
I_n (A)	– 40	– 30	– 20	– 10	0	10	20	30	40	50	60	70
0.5	0.66	0.64	0.61	0.59	0.56	0.53	0.50	0.47	0.43	0.40	0.35	0.31
1.0	1.32	1.27	1.22	1.17	1.12	1.06	1.00	0.94	0.87	0.79	0.71	0.61
1.6	2.12	2.04	1.96	1.88	1.79	1.70	1.60	1.50	1.39	1.26	1.13	0.98
2.0	2.65	2.55	2.45	2.35	2.24	2.12	2.00	1.87	1.73	1.58	1.41	1.22
3.0	4.0	3.8	3.7	3.5	3.4	3.2	3.0	2.8	2.6	2.4	2.1	1.8
4.0	5.3	5.1	4.9	4.7	4.5	4.2	4.0	3.7	3.5	3.2	2.8	2.4
6.0	7.9	7.6	7.3	7.0	6.7	6.4	6.0	5.6	5.2	4.7	4.2	3.7
8.0	10.8	10.2	9.8	9.4	8.9	8.5	8.0	7.5	6.9	6.3	5.7	4.9
10.0	13.2	12.7	12.2	11.7	11.2	10.6	10.0	9.4	8.7	7.9	7.1	6.1
13.0	17.2	16.6	15.9	15.2	14.5	13.8	13.0	12.2	11.3	10.3	9.2	8.0
16.0	21.2	20.4	19.6	18.8	17.9	17.0	16.0	15.0	13.9	12.6	11.3	9.8
20.0	26.5	25.5	24.5	23.5	22.4	21.2	20.0	18.7	17.3	15.8	14.1	12.2
25.0	33.1	31.9	30.6	29.3	28.0	26.5	25.0	23.4	21.7	19.8	17.7	15.3
32.0	42.3	40.8	39.2	37.5	35.8	33.9	32.0	29.9	27.7	25.3	22.6	19.6
40.0	52.9	51.0	49.0	46.9	44.7	42.4	40.0	37.4	34.6	31.6	28.3	24.5
50.0	66.1	63.7	61.2	58.6	55.9	53.0	50.0	46.8	43.3	39.5	35.4	30.6
63.0	83.3	80.3	77.2	73.9	70.4	66.8	63.0	58.9	54.6	49.8	44.5	38.6

Mutual thermal interference when an even load is applied at the same time.
A correction factor must be taken into account in the case of butt-mounted MCBs and an evenly applied, high load: 2 and 3 MCBs multiply with factor 0.9 / 4 and 5 MCBs with factor 0.8 / 6 and more MCBs with factor 0.75

Busbars and accessories acc. to UL 489, CSA C 22.2 No. 5



2CDC 061 423 F0004

PS 3/6/16 BP



SZ-BSK SK 0100 B99

conn. capac. mm²	No. of pins	phases	order details type code	order code	bbn 40 16779 EAN	Cu-No.	price 1 pc. €	price group	weight 1 pc. kg	pack units pc.
UL approved busbars										
Preassembled busbars not cutable										
1-phase busbars, pin distance 17.6 mm, UL 489										
16	6	1	**PS 1/6/16 BP**	2CDL 210 489 R1606	**64496 9**	0.035				1
16	12	1	**PS 1/12/16 BP**	2CDL 210 489 R1612	**64497 6**	0.070				1
16	18	1	**PS 1/18/16 BP**	2CDL 210 489 R1618	**64498 3**	0.105				1
2-phase busbars, pin distance 17.6 mm, UL 489										
16	6	2	**PS 2/6/16 BP**	2CDL 220 489 R1606	**64499 0**	0.070				1
16	12	2	**PS 2/12/16 BP**	2CDL 220 489 R1612	**64500 3**	0.140				1
16	18	2	**PS 2/18/16 BP**	2CDL 220 489 R1618	**64501 0**	0.210				1
3-phase busbars, pin distance 17.6 mm, UL 489										
16	6	3	**PS 3/6/16 BP**	2CDL 230 489 R1606	**64502 7**	0.110				1
16	12	3	**PS 3/12/16 BP**	2CDL 230 489 R1612	**64503 4**	0.221				1
16	18	3	**PS 3/18/16 BP**	2CDL 230 489 R1618	**64504 1**	0.332				1
Feeder terminals										
for S 200 U										
6 – 50	angled feeding		**SZ-Ast 50 U**	2CDL 200 489 R5001						
6 – 50	straight feeding		**SZ-Ast 55 U**	2CDL 200 489 R5002						
for S 200 UP										
6 – 35	angled feeding		**SZ-Ast 50 UP**	2CDL 200 489 R3511						
6 – 35	straight feeding		**SZ-Ast 55 UP**	2CDL 200 489 R3512						

conn. capac. mm²	module	phases	order details type code	order code	bbn 40 16779 EAN	price 1 pc. €	price group	weight 1 pc. kg	pack. units pc.
Shock-protection caps for PS... busbar blocks									
		5-parts	**SZ-BSK**	2CDL 200 001 R0011	**42000 6**			0.003	10

Ring-tongue terminal SZ-Ast 55UP RT

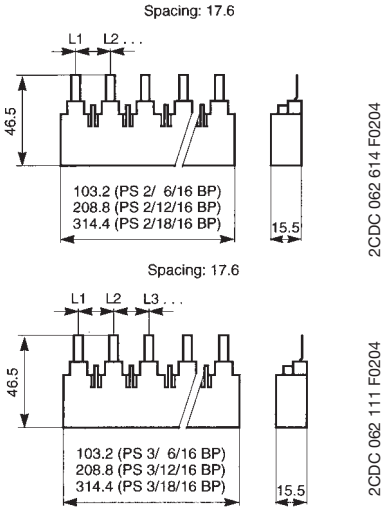
The terminal SZ-Ast 55UP RT is for connection of copper ring-tongue to our MCBs S 200 UP.

Technical data	**SZ-Ast 55UP RT**
Max. electrical load	100 A
Max. operating voltage	600 V AC
Max. torque	3 Nm
Insulation	Cycoloy C 2100 UL–V0

Use single UL listed or CSA certified insulated ring terminal only with max. width 0.46 inch (12 mm).

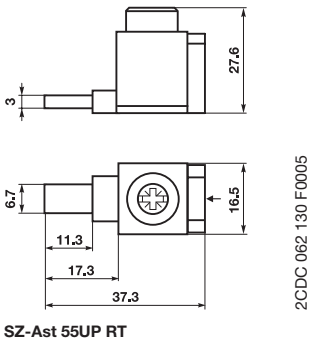
			SZ-Ast 55UP RT	2CDL 201 489 R0012	**65011 3**			0.011	50

Dimension drawings in mm



2CDC 062 614 F0204

2CDC 062 111 F0204



2CDC 062 130 F0005

SZ-Ast 55UP RT

Miniature circuit-breakers for line and device protection as well as their respective areas of applications

Areas of application	S 200 S 200M	S 201 DC	S 280 UC S 200 P	S 220	S 500	S 610	S 700 WT 63 ①
industrial networks **690 V~** **1000 V~**				S 220	S 500 S 500 HV		WT 63
motor protection transformer	S 200-K		S 200P-K	S 220-K	S 500-K	S 610-K	S 700-K
USV photovoltaics 250 V⎓ to 1200 V⎓			S 280 UC		S 500 UC		
semicon-ductor control circuits 24 V DC	S 200-Z		S 200P-Z				
high discrimination							S 700
disconnector and main circuit breaker capabilities			S 200 P	S 220	S 500	S 610	S 700
USA, Canada 1077 **480 V AC** **500 V DC**	S 200		S 200 P S 280 UC	S 220	S 500		
USA, Canada 489 **60 V DC/AC** **240 V AC** **480Y/277 V AC**		S 201 DC	S 200 U S 200 UP				
nautical classificationen **GL LRS** **BV DNV**	S 200		S 200 P S 280 UC	S 220	S 500	S 611 K (bis 63 A)	S 700 (GL)
rated current switching capacity (230/400 V) I_{cn}/A I_n /A	6 000 10 000 ≤ 63	14 000 ≤ 25	25 000 ≤ 25	10 000 ≤ 32	50 000 ≤ 63	50 000 ≤ 100	25 000 ≤ 100
innovative cost reduction **System pro *M* compact®**	S 200 S 200M	S 201 DC	S 200 P				

① as selective group or full automat

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