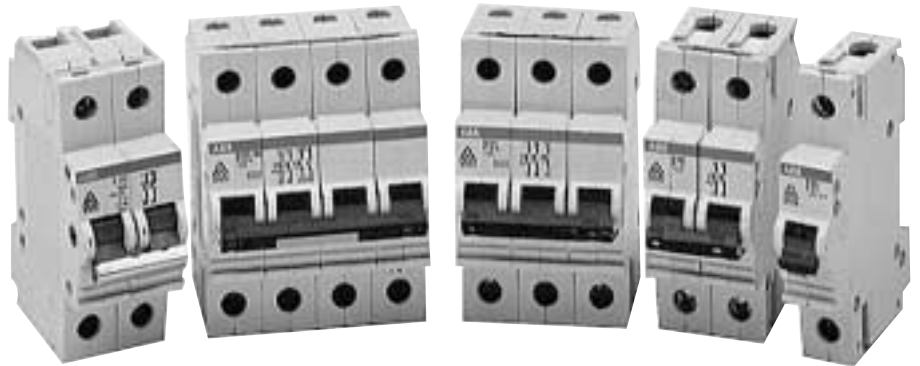




Pro M Miniature Circuit Breakers S260, S270, S280, S290



Description

The S2 Series of miniature circuit breakers offer a compact solution to protection requirements. The breakers are recognized under standard UL 1077 as supplemental protective devices. The S2 devices are current limiting, DIN rail mounted and can offer a good equivalent to fused systems.

The S2 is available with application-specific trip characteristics to provide maximum circuit protection. The breakers offer thermal-magnetic trip protection according to B, C, D, K and Z characteristics.

For the worldwide market, the breakers carry UL, CSA, IEC, CE and many other agency approvals and certifications.

Features

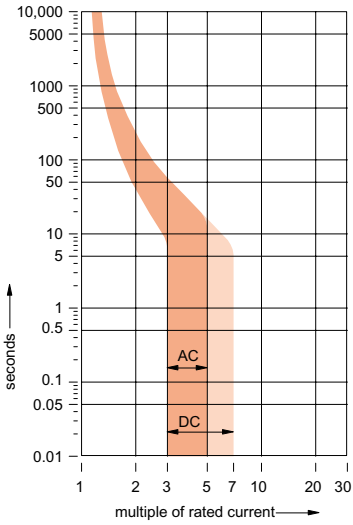
- Current limiting
- Fast breaking time (2.5 – 3.5 msec)
- Unique bus connection system
- Wide range of accessories
- Available with variable depth handle mechanism
- Optional Z curve for SCR protection
- CE certified and marked
- DIN rail or front panel mounting
- Finger safe terminals
- Multi-function terminals
- Suitable for reverse feed
- UL 1077 and CSA 22.2
- 277/480VAC and 500VDC versions

S260 – S290 MCBS

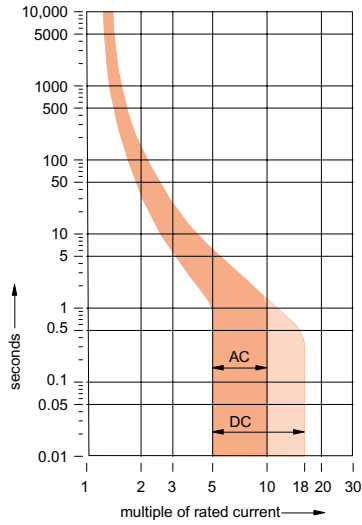
General information

Tripping curves

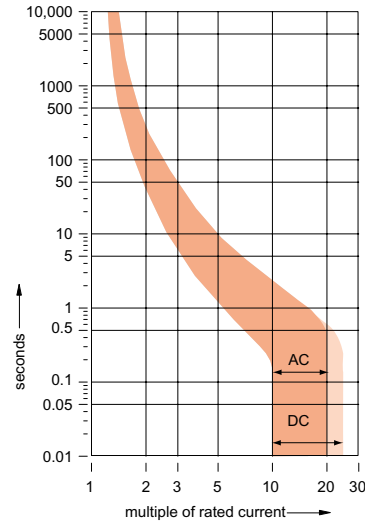
B



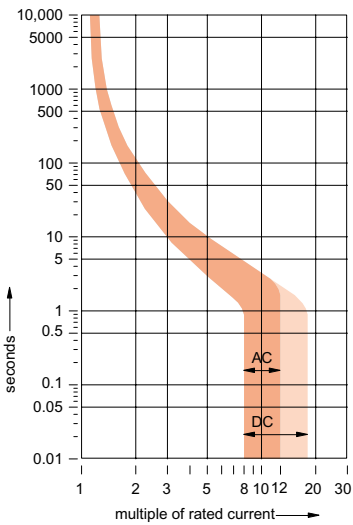
C



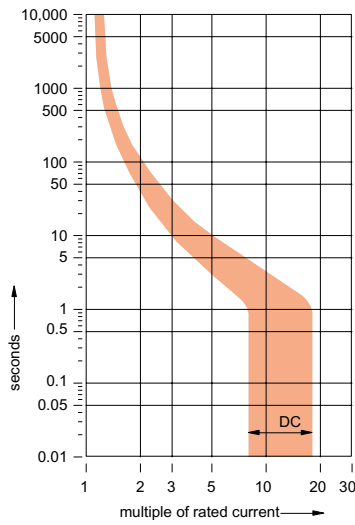
D



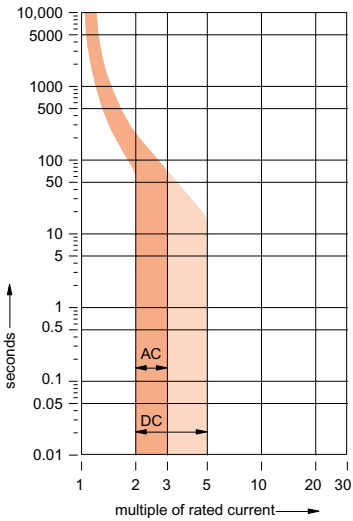
K



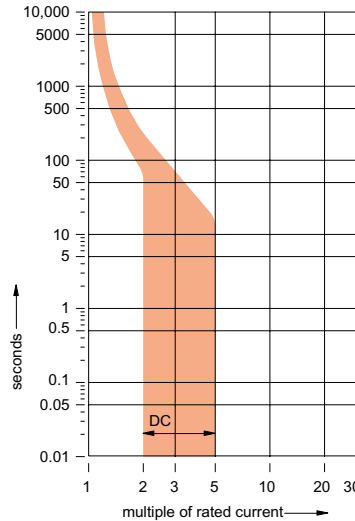
UC-K



Z



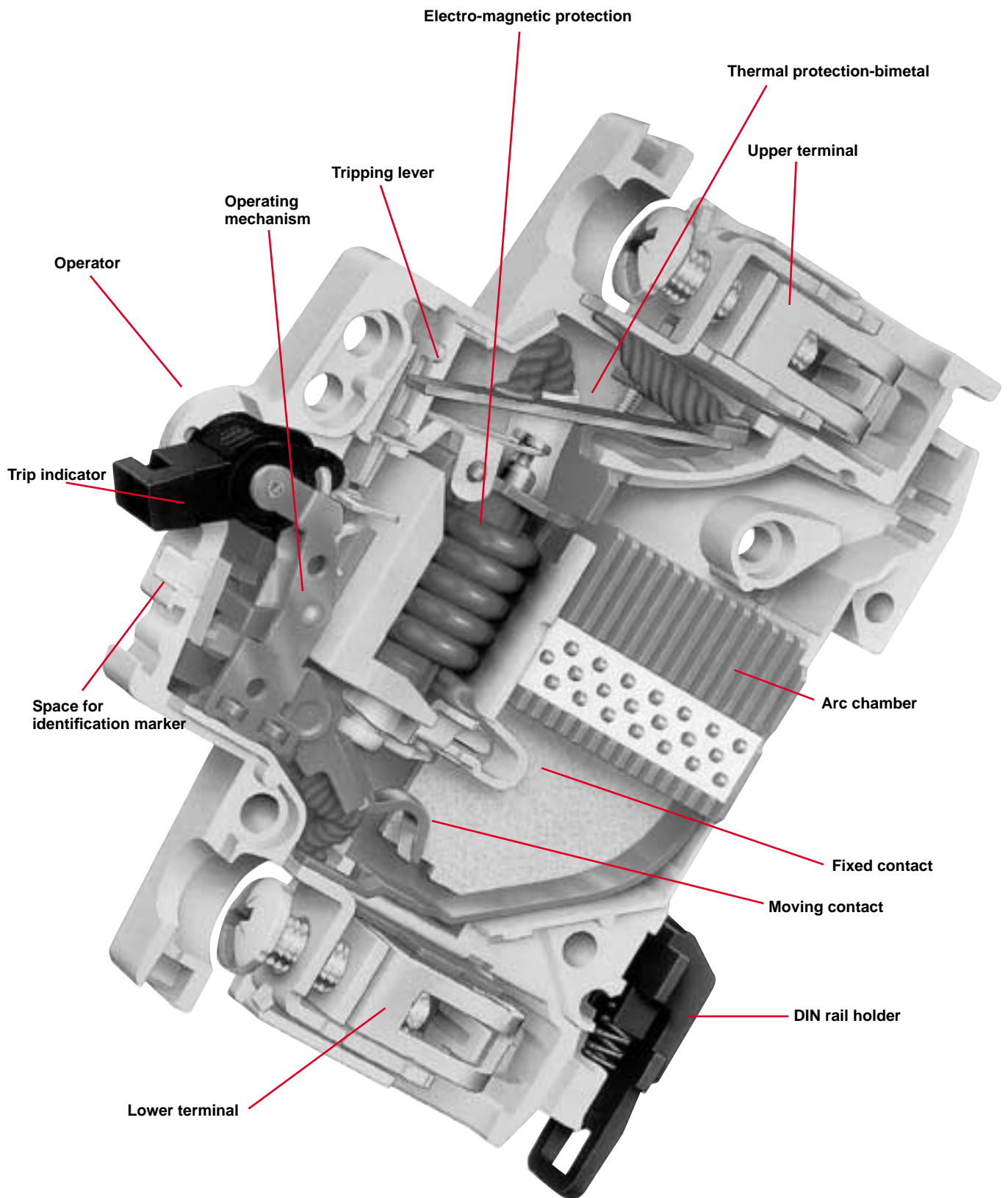
UC-Z



General information

Construction details (S280 shown)

System
Pro M



B UL 1077 CSA C22.2 No. 235
VDE 0641 IEC-898
Cable protection



S261-B6, 1 pole



S262-B6, 2 pole
S261-B6NA, 1 P+N

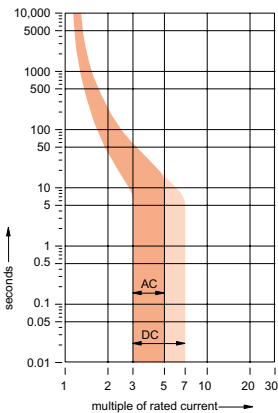


S263-B6, 3 pole



S264-B6, 4 pole
S263-B6NA, 3P+N

B



Rated current	Catalog number	List price	Delivery class	Sugg. order qty	Wgt. oz. (1 pc.)
6	S261-B6	\$ 36			
10	S261-B10	36			
13	S261-B13	36			
16	S261-B16	36			
20	S261-B20	38			
25	S261-B25	38			
32	S261-B32	40			
40	S261-B40	42			
50	S261-B50	48			
63	S261-B63	56			
			A	10	4.5
6	S261-B6NA	62			
10	S261-B10NA	62			
13	S261-B13NA	62			
16	S261-B16NA	62			
20	S261-B20NA	68			
25	S261-B25NA	72			
32	S261-B32NA	74			
40	S261-B40NA	76			
50	S261-B50NA	90			
63	S261-B63NA	102			
			B	5	9.0
6	S262-B6	78			
10	S262-B10	78			
13	S262-B13	78			
16	S262-B16	78			
20	S262-B20	86			
25	S262-B25	88			
32	S262-B32	94			
40	S262-B40	98			
50	S262-B50	112			
63	S262-B63	128			
			A	5	9.0

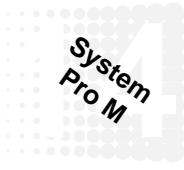
Rated current	Catalog number	List price	Delivery class	Sugg. order qty	Wgt. oz. (1 pc.)
6	S263-B6	\$ 118			
10	S263-B10	118			
13	S263-B13	118			
16	S263-B16	118			
20	S263-B20	130			
25	S263-B25	132			
32	S263-B32	142			
40	S263-B40	148			
50	S263-B50	170			
63	S263-B63	194			
			A	3	13.5
6	S263-B6NA	142			
10	S263-B10NA	142			
13	S263-B13NA	142			
16	S263-B16NA	142			
20	S263-B20NA	162			
25	S263-B25NA	168			
32	S263-B32NA	176			
40	S263-B40NA	184			
50	S263-B50NA	212			
63	S263-B63NA	240			
			B	2	18.0
6	S264-B6	156			
10	S264-B10	156			
13	S264-B13	156			
16	S264-B16	156			
20	S264-B20	172			
25	S264-B25	176			
32	S264-B32	188			
40	S264-B40	196			
50	S264-B50	224			
63	S264-B63	256			
			B	2	18.0

Delivery Class

- A** - Standard item, stock to 2 weeks lead time
- B** - Stock to 4 weeks lead time
- C** - 6 to 8 week lead time
- D** - 10 to 12 week lead time
- E** - Call for delivery

S260

277/480 VAC



C UL 1077 CSA C22.2 - NO. 235
 VDE 0641 IEC-898
 Cable & equipment protection

S261-C1, 1 pole

S262-C1, 2 pole
S261-C1NA, 1P+N

S263-C1, 3 pole

S264-C1, 4 pole
S263-C1NA, 3P+N

C

Rated current	Catalog number	List price	Delivery class	Sugg. order qty	Wgt. oz. (1 pc.)	Rated current	Catalog number	List price	Delivery class	Sugg. order qty	Wgt. oz. (1 pc.)
0.5	S261-C0.5	\$ 42	A	10	4.5	0.5	S263-C0.5	\$ 138	A	3	13.5
1	S261-C1	42				1	S263-C1	138			
1.6	S261-C1.6	42				1.6	S263-C1.6	138			
2	S261-C2	42				2	S263-C2	138			
3	S261-C3	42				3	S263-C3	138			
4	S261-C4	42				4	S263-C4	138			
6	S261-C6	42				6	S263-C6	138			
8	S261-C8	42				8	S263-C8	138			
10	S261-C10	42				10	S263-C10	138			
13	S261-C13	42				13	S263-C13	138			
16	S261-C16	42				16	S263-C16	138			
20	S261-C20	42				20	S263-C20	138			
25	S261-C25	46				25	S263-C25	156			
32	S261-C32	48				32	S263-C32	158			
40	S261-C40	52	40	S263-C40	174						
50	S261-C50	60	50	S263-C50	200						
63	S261-C63	68	60	S263-CS60	228						
						63	S263-C63	228			
0.5	S261-C0.5NA	84	B	5	9.0	0.5	S263-C0.5NA	200	B	2	18.0
1	S261-C1NA	84				1	S263-C1NA	200			
1.6	S261-C1.6NA	84				1.6	S263-C1.6NA	200			
2	S261-C2NA	84				2	S263-C2NA	200			
3	S261-C3NA	84				3	S263-C3NA	200			
4	S261-C4NA	84				4	S263-C4NA	200			
6	S261-C6NA	84				6	S263-C6NA	200			
8	S261-C8NA	84				8	S263-C8NA	200			
10	S261-C10NA	84				10	S263-C10NA	200			
13	S261-C13NA	84				13	S263-C13NA	200			
16	S261-C16NA	84				16	S263-C16NA	200			
20	S261-C20NA	84				20	S263-C20NA	200			
25	S261-C25NA	88				25	S263-C25NA	206			
32	S261-C32NA	90				32	S263-C32NA	212			
40	S261-C40NA	96	40	S263-C40NA	224						
50	S261-C50NA	112	50	S263-C50NA	264						
63	S261-C63NA	130	63	S263-C63NA	304						
0.5	S262-C0.5	96	A	5	9.0	0.5	S264-C0.5	218	B	2	18.0
1	S262-C1	96				1	S264-C1	218			
1.6	S262-C1.6	96				1.6	S264-C1.6	218			
2	S262-C2	96				2	S264-C2	218			
3	S262-C3	96				3	S264-C3	218			
4	S262-C4	96				4	S264-C4	218			
6	S262-C6	96				6	S264-C6	218			
8	S262-C8	96				8	S264-C8	218			
10	S262-C10	96				10	S264-C10	218			
13	S262-C13	96				13	S264-C13	218			
16	S262-C16	96				16	S264-C16	218			
20	S262-C20	96				20	S264-C20	218			
25	S262-C25	106				25	S264-C25	234			
32	S262-C32	106				32	S264-C32	238			
40	S262-C40	116	40	S264-C40	260						
50	S262-C50	136	50	S264-C50	300						
63	S262-C63	152	63	S264-C63	338						

Delivery Class

A - Standard item, stock to 2 weeks lead time
B - Stock to 4 weeks lead time
C - 6 to 8 week lead time
D - 10 to 12 week lead time
E - Call for delivery

D UL 1077 CSA C22.2
VDE 0641 IEC-898
Cable & equipment protection



S261-D0.5, 1 pole



S262-D1, 2 pole



S263-D63, 3 pole

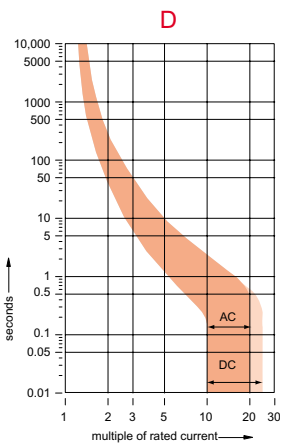
Rated current	Catalog number	List price	Delivery class	Sugg. order qty	Wgt. oz. (1 pc.)
0.5	S261-D0.5	\$ 42			
1	S261-D1	42			
1.6	S261-D1.6	42			
2	S261-D2	42			
3	S261-D3	42			
4	S261-D4	42			
6	S261-D6	42			
8	S261-D8	42			
10	S261-D10	42	A	10	4.5
13	S261-D13	42			
16	S261-D16	42			
20	S261-D20	42			
25	S261-D25	46			
32	S261-D32	48			
40	S261-D40	52			
50	S261-D50	60			
63	S261-D63	68			
0.5	S262-D0.5	96			
1	S262-D1	96			
1.6	S262-D1.6	96			
2	S262-D2	96			
3	S262-D3	96			
4	S262-D4	96			
6	S262-D6	96			
8	S262-D8	96			
10	S262-D10	96	A	5	9.0
13	S262-D13	96			
16	S262-D16	96			
20	S262-D20	96			
25	S262-D25	106			
32	S262-D32	106			
40	S262-D40	116			
50	S262-D50	136			
63	S262-D63	152			

Rated current	Catalog number	List price	Delivery class	Sugg. order qty	Wgt. oz. (1 pc.)
0.5	S263-D0.5	\$ 138			
1	S263-D1	138			
1.6	S263-D1.6	138			
2	S263-D2	138			
3	S263-D3	138			
4	S263-D4	138			
6	S263-D6	138			
8	S263-D8	138	A	3	13.5
10	S263-D10	138			
13	S263-D13	138			
16	S263-D16	138			
20	S263-D20	138			
25	S263-D25	156			
32	S263-D32	158			
40	S263-D40	174			
50	S263-D50	200			
63	S263-D63	228			

Delivery Class

- A - Standard item, stock to 2 weeks lead time
- B - Stock to 4 weeks lead time
- C - 6 to 8 week lead time
- D - 10 to 12 week lead time
- E - Call for delivery

14



S270

277/480 VAC

System
Pro M

K UL 1077 CSA C22.2 - NO. 235
VDE 0641 IEC-898
Cable & equipment protection



S271-K10, 1 pole



S272-K10, 2 pole
S271-K10NA, 1P+N

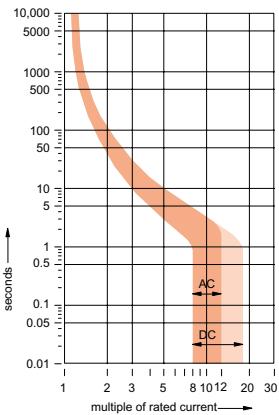


S273-K10, 3 pole



S274-K10, 4 pole
S273-K10NA, 3P+N

K



Rated current	Catalog number	List price	Delivery class	Sugg. order qty	Wgt. oz. (1 pc.)	Rated current	Catalog number	List price	Delivery class	Sugg. order qty	Wgt. oz. (1 pc.)
0.5	S271-K0.5	\$ 42				0.5	S273-K0.5	\$ 138			
1	S271-K1	42				1	S273-K1	138			
1.6	S271-K1.6	42				1.6	S273-K1.6	138			
2	S271-K2	42				2	S273-K2	138			
3	S271-K3	42				3	S273-K3	138			
4	S271-K4	42				4	S273-K4	138			
5	S271-KS5 ①	42				5	S273-KS5 ①	138			
6	S271-K6	42				6	S273-K6	138			
8	S271-K8	42				8	S273-K8	138			
10	S271-K10	42				10	S273-K10	138			
13	S271-K13	42	A	10	4.5	13	S273-K13	138	A	3	13.5
15	S271-KS15 ①	42				15	S273-KS15 ①	138			
16	S271-K16	42				16	S273-K16	138			
20	S271-K20	42				20	S273-K20	138			
25	S271-K25	46				25	S273-K25	156			
30	S271-KS30 ①	48				30	S273-KS30 ①	158			
32	S271-K32	48				32	S273-K32	158			
40	S271-K40	52				40	S273-K40	174			
50	S271-K50	60				50	S273-K50	200			
60	S271-KS60 ①	68				60	S273-KS60 ①	228			
63	S271-K63	68				63	S273-K63	228			
0.5	S271-K0.5NA	84				0.5	S273-K0.5NA	200			
1	S271-K1NA	84				1	S273-K1NA	200			
1.6	S271-K1.6NA	84				1.6	S273-K1.6NA	200			
2	S271-K2NA	84				2	S273-K2NA	200			
3	S271-K3NA	84				3	S273-K3NA	200			
4	S271-K4NA	84				4	S273-K4NA	200			
6	S271-K6NA	84				6	S273-K6NA	200			
8	S271-K8NA	84				8	S273-K8NA	200			
10	S271-K10NA	84	B	5	9.0	10	S273-K10NA	200	B	2	18.0
13	S271-K13NA	84				13	S273-K13NA	200			
16	S271-K16NA	84				16	S273-K16NA	200			
20	S271-K20NA	84				20	S273-K20NA	200			
25	S271-K25NA	88				25	S273-K25NA	206			
32	S271-K32NA	90				32	S273-K32NA	212			
40	S271-K40NA	96				40	S273-K40NA	224			
50	S271-K50NA	112				50	S273-K50NA	264			
63	S271-K63NA	130				63	S273-K63NA	304			
0.5	S272-K0.5	96				0.5	S274-K0.5	218			
1	S272-K1	96				1	S274-K1	218			
1.6	S272-K1.6	96				1.6	S274-K1.6	218			
2	S272-K2	96				2	S274-K2	218			
3	S272-K3	96				3	S274-K3	218			
4	S272-K4	96				4	S274-K4	218			
5	S272-KS5 ①	96				5	S274-K5	218			
6	S272-K6	96				6	S274-K6	218			
8	S272-K8	96				8	S274-K8	218	B	2	18.0
10	S272-K10	96				10	S274-K10	218			
13	S272-K13	96	A	5	9.0	13	S274-K13	218			
15	S272-KS15 ①	96				15	S274-K15	218			
16	S272-K16	96				16	S274-K16	218			
20	S272-K20	96				20	S274-K20	218			
25	S272-K25	106				25	S274-K25	234			
30	S272-KS30 ①	106				30	S274-K30	238			
32	S272-K32	106				32	S274-K32	238			
40	S272-K40	116				40	S274-K40	260			
50	S272-K50	136				50	S274-K50	300			
60	S272-KS60 ①	152				60	S274-K60	338			
63	S272-K63	152				63	S274-K63	338			

① KS is for standard U.S. size.

Delivery Class

- A - Standard item, stock to 2 weeks lead time
- B - Stock to 4 weeks lead time
- C - 6 to 8 week lead time
- D - 10 to 12 week lead time
- E - Call for delivery

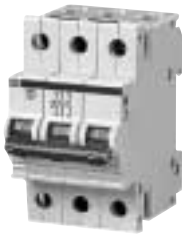
K UL 1077 CSA C22.2 - NO. 235
VDE 0660
Cable & equipment protection



S281-K16, 1 pole



S282-K1, 2 pole



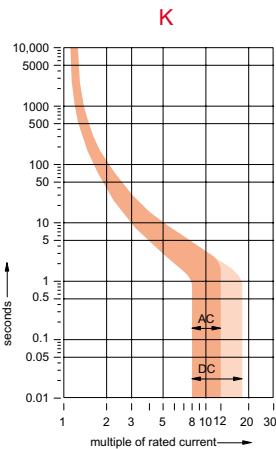
S283-K63, 3 pole

Rated current	Catalog number	List price	Delivery class	Sugg. order qty	Wgt. oz. (1 pc.)	Rated current	Catalog number	List price	Delivery class	Sugg. order qty	Wgt. oz. (1 pc.)
0.2	S281-K0.2	\$ 54				0.2	S283-K0.2	\$ 194			
0.3	S281-K0.3	54				0.3	S283-K0.3	194			
0.5	S281-K0.5	54				0.5	S283-K0.5	194			
0.75	S281-K0.75	54				0.75	S283-K0.75	194			
1	S281-K1	54				1	S283-K1	194			
1.6	S281-K1.6	54				1.6	S283-K1.6	194			
2	S281-K2	54				2	S283-K2	194			
3	S281-K3	54				3	S283-K3	194			
4	S281-K4	54				4	S283-K4	194			
6	S281-K6	54				6	S283-K6	194	A	3	13.9
8	S281-K8	54	A	10	4.6	8	S283-K8	194			
10	S281-K10	54				10	S283-K10	194			
13	S281-K13	54				13	S283-K13	194			
16	S281-K16	54				16	S283-K16	194			
20	S281-K20	54				20	S283-K20	194			
25	S281-K25	56				25	S283-K25	196			
32	S281-K32	58				32	S283-K32	200			
40	S281-K40	64				40	S283-K40	214			
50	S281-K50	70				50	S283-K50	246			
63	S281-K63	80				63	S283-K63	280			
0.2	S282-K0.2	128									
0.3	S282-K0.3	128									
0.5	S282-K0.5	128									
0.75	S282-K0.75	128									
1	S282-K1	128									
1.6	S282-K1.6	128									
2	S282-K2	128									
3	S282-K3	128									
4	S282-K4	128									
6	S282-K6	128	A	5	9.2						
8	S282-K8	128									
10	S282-K10	128									
13	S282-K13	128									
16	S282-K16	128									
20	S282-K20	128									
25	S282-K25	130									
32	S282-K32	134									
40	S282-K40	134									
50	S282-K50	162									
63	S282-K63	182									

Delivery Class

- A - Standard item, stock to 2 weeks lead time
- B - Stock to 4 weeks lead time
- C - 6 to 8 week lead time
- D - 10 to 12 week lead time
- E - Call for delivery

14



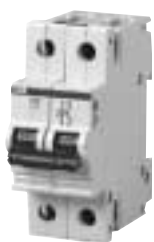
S280 (W)

for use with ring tongue terminal connectors
277/480 VAC

K UL 1077 CSA C22.2 - NO. 235
VDE 0660
Cable & equipment protection



S281-K16W, 1 pole



S282-K1W, 2 pole



S283-K63W, 3 pole

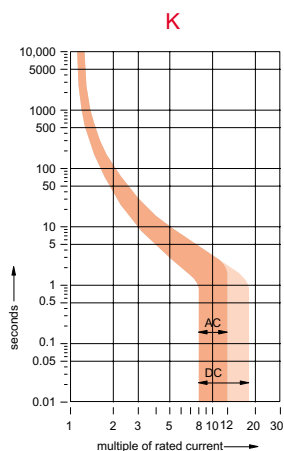
Rated current	Catalog number	List price	Delivery class	Sugg. order qty	Wgt. oz. (1 pc.)	Rated current	Catalog number	List price	Delivery class	Sugg. order qty	Wgt. oz. (1 pc.)
0.2	S281-K0.2W	\$ 54				0.2	S283-K0.2W	\$ 194			
0.3	S281-K0.3W	54				0.3	S283-K0.3W	194			
0.5	S281-K0.5W	54				0.5	S283-K0.5W	194			
0.75	S281-K0.75W	54				0.75	S283-K0.75W	194			
1	S281-K1W	54				1	S283-K1W	194			
1.6	S281-K1.6W	54				1.6	S283-K1.6W	194			
2	S281-K2W	54				2	S283-K2W	194			
3	S281-K3W	54				3	S283-K3W	194			
4	S281-K4W	54				4	S283-K4W	194			
6	S281-K6W	54				6	S283-K6W	194	B	3	13.9
8	S281-K8W	54	B	10	4.6	8	S283-K8W	194			
10	S281-K10W	54				10	S283-K10W	194			
13	S281-K13W	54				13	S283-K13W	194			
16	S281-K16W	54				16	S283-K16W	194			
20	S281-K20W	54				20	S283-K20W	194			
25	S281-K25W	56				25	S283-K25W	196			
32	S281-K32W	58				32	S283-K32W	200			
40	S281-K40W	64				40	S283-K40W	214			
50	S281-K50W	70				50	S283-K50W	246			
63	S281-K63W	80				63	S283-K63W	280			
0.2	S282-K0.2W	128									
0.3	S282-K0.3W	128									
0.5	S282-K0.5W	128									
0.75	S282-K0.75W	128									
1	S282-K1W	128									
1.6	S282-K1.6W	128									
2	S282-K2W	128									
3	S282-K3W	128									
4	S282-K4W	128									
6	S282-K6W	128	B	5	9.2						
8	S282-K8W	128									
10	S282-K10W	128									
13	S282-K13W	128									
16	S282-K16W	128									
20	S282-K20W	128									
25	S282-K25W	130									
32	S282-K32W	134									
40	S282-K40W	134									
50	S282-K50W	162									
63	S282-K63W	182									

Delivery Class

- A - Standard item, stock to 2 weeks lead time
- B - Stock to 4 weeks lead time
- C - 6 to 8 week lead time
- D - 10 to 12 week lead time
- E - Call for delivery

Screws (must be ordered separately!)

Item	Catalog number	List price ②
PKG of 20 screws	S2-SCR	No charge



① For use with ring tongue or cable terminals only. Cannot be used with busbar system.
② No charge when ordered with the S280(W).

S280UC 500 VDC

K UL 1077 VDE 0660
CSA 22.2 No. 235
Cable and Equipment Protection



S281UC-K25, 1 pole



S282UC-K8, 2 pole



S283UC-K16, 3 pole

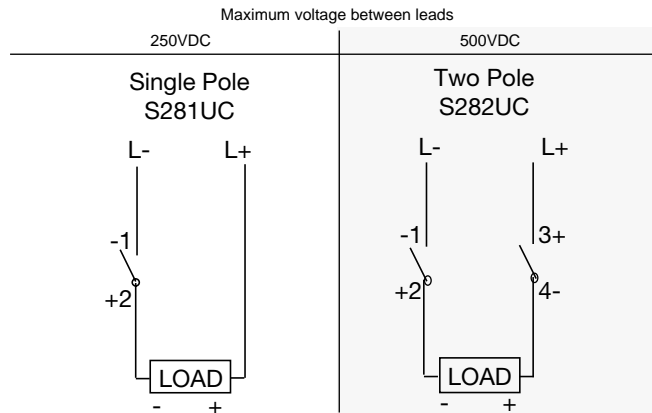
Rated current	Catalog number	List price	Delivery class	Sugg. order qty	Wgt. oz. (1 pc.)	Rated current	Catalog number	List price	Delivery class	Sugg. order qty	Wgt. oz. (1 pc.)
0.2	S281UC-K0.2	\$ 104				0.2	S283UC-K0.2	\$ 370			
0.3	S281UC-K0.3	104				0.3	S283UC-K0.3	370			
0.5	S281UC-K0.5	104				0.5	S283UC-K0.5	370			
0.75	S281UC-K0.75	104				0.75	S283UC-K0.75	370			
1	S281UC-K1	104				1	S283UC-K1	370			
1.6	S281UC-K1.6	104				1.6	S283UC-K1.6	370			
2	S281UC-K2	104				2	S283UC-K2	370			
3	S281UC-K3	104				3	S283UC-K3	370	B	3	13.9
4	S281UC-K4	104				4	S283UC-K4	370			
6	S281UC-K6	104	B	10	4.6	6	S283UC-K6	370			
8	S281UC-K8	104				8	S283UC-K8	370			
10	S281UC-K10	104				10	S283UC-K10	370			
16	S281UC-K16	104				16	S283UC-K16	370			
20	S281UC-K20	104				20	S283UC-K20	370			
25	S281UC-K25	108				25	S283UC-K25	382			
32	S281UC-K32	110				32	S283UC-K32	408			
40	S281UC-K40	116				40	S283UC-K40	448			
50	S281UC-K50	136				50	S283UC-K50	472			
63	S281UC-K63	152				63	S283UC-K63	534			
0.2	S282UC-K0.2	242				0.2	S282UC-K0.2	242			
0.3	S282UC-K0.3	242				0.3	S282UC-K0.3	242			
0.5	S282UC-K0.5	242				0.5	S282UC-K0.5	242			
0.75	S282UC-K0.75	242				0.75	S282UC-K0.75	242			
1	S282UC-K1	242				1	S282UC-K1	242			
1.6	S282UC-K1.6	242				1.6	S282UC-K1.6	242			
2	S282UC-K2	242				2	S282UC-K2	242			
3	S282UC-K3	242				3	S282UC-K3	242			
4	S282UC-K4	242	B	5	9.2	4	S282UC-K4	242			
6	S282UC-K6	242				6	S282UC-K6	242			
8	S282UC-K8	242				8	S282UC-K8	242			
10	S282UC-K10	242				10	S282UC-K10	242			
16	S282UC-K16	242				16	S282UC-K16	242			
20	S282UC-K20	242				20	S282UC-K20	242			
25	S282UC-K25	248				25	S282UC-K25	248			
32	S282UC-K32	256				32	S282UC-K32	256			
40	S282UC-K40	266				40	S282UC-K40	266			
50	S282UC-K50	312				50	S282UC-K50	312			
63	S282UC-K63	348				63	S282UC-K63	348			

Delivery Class

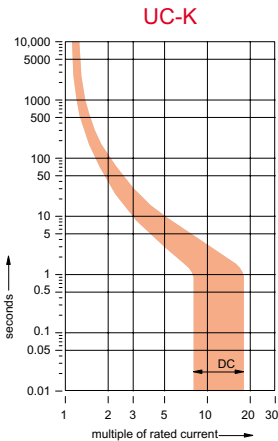
- A - Standard item, stock to 2 weeks lead time
- B - Stock to 4 weeks lead time
- C - 6 to 8 week lead time
- D - 10 to 12 week lead time
- E - Call for delivery

Direct current applications

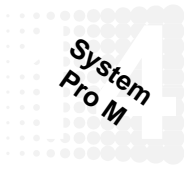
The S280UC differs from standard miniature circuit breakers in that the UC versions include a permanent magnet which aids in the extinguishing of the arc during medium and high level faults. It is necessary to observe the correct polarity and current direction when connecting the UC breakers. Two examples of correct connection are shown below.



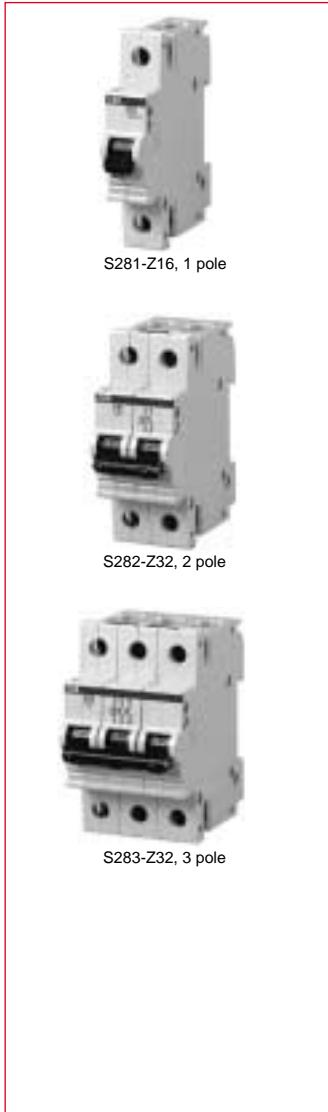
Termination points are marked on all UC type MCBs, points one (1) and four (4) are negative and points two (2) and three (3) are positive. Four pole breakers are also available for voltage reversal applications.



S280 & S280UC 277/480VAC & 500VDC



Z UL 1077 VDE 0660
CSA 22.2 No. 235
Fast trip characteristic

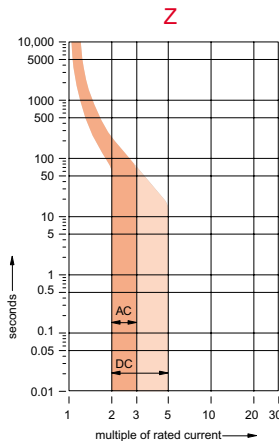
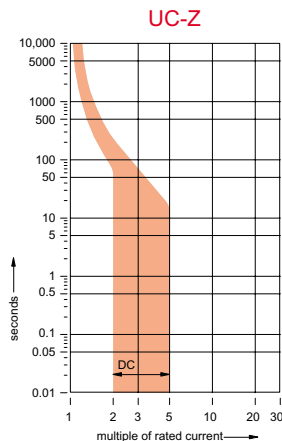


277/480 VAC

Rated current	Catalog number	List price	Delivery class	Sugg. order qty	Wgt. oz. (1 pc.)
0.5	S281-Z0.5	\$ 70			
1	S281-Z1	70			
1.6	S281-Z1.6	70			
2	S281-Z2	70			
3	S281-Z3	70			
4	S281-Z4	70			
6	S281-Z6	70			
8	S281-Z8	70	B	10	4.5
10	S281-Z10	70			
16	S281-Z16	70			
20	S281-Z20	70			
25	S281-Z25	70			
32	S281-Z32	74			
40	S281-Z40	78			
50	S281-Z50	88			
63	S281-Z63	100			
0.5	S282-Z0.5	162			
1	S282-Z1	162			
1.6	S282-Z1.6	162			
2	S282-Z2	162			
3	S282-Z3	162			
4	S282-Z4	162			
6	S282-Z6	162			
8	S282-Z8	162	B	5	9.2
10	S282-Z10	162			
16	S282-Z16	162			
20	S282-Z20	162			
25	S282-Z25	184			
32	S282-Z32	170			
40	S282-Z40	176			
50	S282-Z50	206			
63	S282-Z63	232			
0.5	S283-Z0.5	244			
1	S283-Z1	244			
1.6	S283-Z1.6	244			
2	S283-Z2	244			
3	S283-Z3	244			
4	S283-Z4	244			
6	S283-Z6	244			
8	S283-Z8	244	B	3	13.9
10	S283-Z10	244			
16	S283-Z16	244			
20	S283-Z20	244			
25	S283-Z25	248			
32	S283-Z32	254			
40	S283-Z40	266			
50	S283-Z50	306			
63	S283-Z63	344			

500 VDC

Rated current	Catalog number	List price	Delivery class	Sugg. order qty	Wgt. oz. (1 pc.)
0.5	S281UC-Z0.5	\$ 168			
1	S281UC-Z1	168			
1.6	S281UC-Z1.6	168			
2	S281UC-Z2	168			
3	S281UC-Z3	168			
4	S281UC-Z4	168			
6	S281UC-Z6	168			
8	S281UC-Z8	168	B	10	4.6
10	S281UC-Z10	168			
16	S281UC-Z16	168			
20	S281UC-Z20	168			
25	S281UC-Z25	170			
32	S281UC-Z32	176			
40	S281UC-Z40	188			
50	S281UC-Z50	216			
63	S281UC-Z63	242			
0.5	S282UC-Z0.5	390			
1	S282UC-Z1	390			
1.6	S282UC-Z1.6	390			
2	S282UC-Z2	390			
3	S282UC-Z3	390			
4	S282UC-Z4	390			
6	S282UC-Z6	390			
8	S282UC-Z8	390	B	5	9.2
10	S282UC-Z10	390			
16	S282UC-Z16	390			
20	S282UC-Z20	390			
25	S282UC-Z25	398			
32	S282UC-Z32	410			
40	S282UC-Z40	426			
50	S282UC-Z50	498			
63	S282UC-Z63	558			
0.5	S283UC-Z0.5	594			
1	S283UC-Z1	594			
1.6	S283UC-Z1.6	594			
2	S283UC-Z2	594			
3	S283UC-Z3	594			
4	S283UC-Z4	594			
6	S283UC-Z6	594			
8	S283UC-Z8	594	B	3	13.9
10	S283UC-Z10	594			
16	S283UC-Z16	594			
20	S283UC-Z20	594			
25	S283UC-Z25	603			
32	S283UC-Z32	612			
40	S283UC-Z40	657			
50	S283UC-Z50	756			
63	S283UC-Z63	855			



Delivery Class

- A - Standard item, stock to 2 weeks lead time
- B - Stock to 4 weeks lead time
- C - 6 to 8 week lead time
- D - 10 to 12 week lead time
- E - Call for delivery

S290

277/480 VAC

C VDE 0660
Cable and equipment protection



S291-C80



S290-H11

480 VAC

Rated current	Catalog number	List price	Delivery class	Sugg. order qty	Wgt. oz. (1 pc.)
80	S291-C80	\$ 138			
100	S291-C100	144	B	6	9.2
125	S291-C125	192			
80	S292-C80	340			
100	S292-C100	364	B	3	18.4
125	S292-C125	568			
80	S293-C80	536			
100	S293-C100	548	B	2	27.6
125	S293-C125	732			
80	S294-C80	740			
100	S294-C100	756	B	1	36.8
125	S294-C125	948			

Auxiliary contact

S290-H11	72	B	1	1.75
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Bell alarm

S290-S	112	B	1	1.75
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Shunt trip

S290-A1	144	B	1	6.2
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For field mounting, left side, 110V – 415VAC

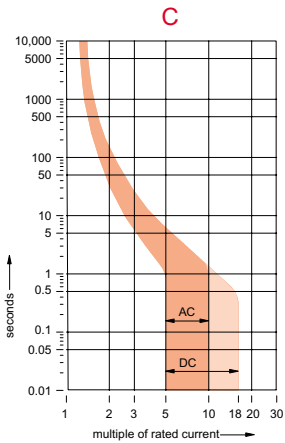
S290-A2	144	B	1	6.2
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For field mounting, left side, 24 – 48VDC

Delivery Class

- A - Standard item, stock to 2 weeks lead time
- B - Stock to 4 weeks lead time
- C - 6 to 8 week lead time
- D - 10 to 12 week lead time
- E - Call for delivery

14

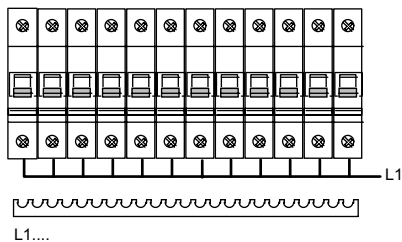


Accessories

Busbars

S260, S270, S280

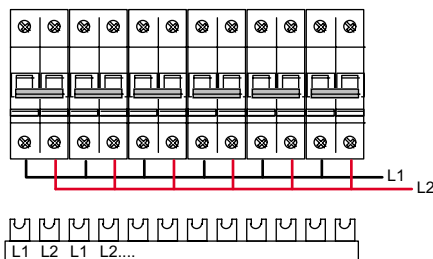
1 Phase



Amp rating	Number of poles	Busbar length (mm)	End cap catalog number	Catalog number	List price	Delivery class	Suggested order qty. quantity	Weight (ozs)
55	12	207	—	SZ-KS1/12	\$ 12	A	10	0.6
55	56	988	—	SZ-KS1/56	36		5	2.6
85	56	988	—	SZ-KS2/56	46		5	5.2
110	56	988	—	SZ-VB45.32	68		5	10.0

Uninsulated copper bar mounts flush with bottom edge of circuit breakers.
For use on load side (bottom) of S260, S270, S280 and line side (top) of S280 MCBs.

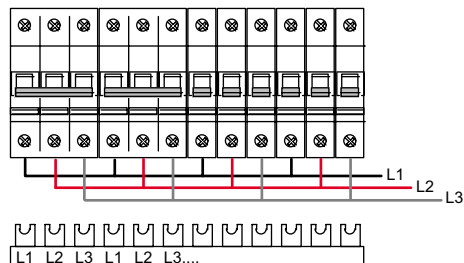
2 Phase



Amp rating	Number of poles	Busbar length (mm)	End cap catalog number	Catalog number	List price	Delivery class	Suggested order qty. quantity	Weight (ozs)
50	58	1035	PSB-END3	SZ-PSB54N	\$ 122	A	1	14.4
65	58	1035	PSB-END3	SZ-PSB56N	122			19.1
50	12	213	—	PSB-53UL	40			4.0

Insulated busbar assembly contains 2 separate circuits for use with 1, 1+N or 2 pole MCBs.
For use on load side (bottom) of S260, S270, S280 and line side (top) of S280 MCBs.

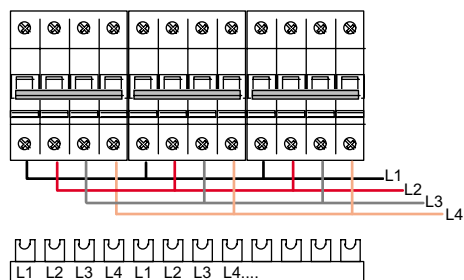
3 Phase



Amp rating	Number of poles	Busbar length (mm)	End cap catalog number	Catalog number	List price	Delivery class	Suggested order qty. quantity	Weight (ozs)
50	12	213	—	PSB-3UL	\$ 60	A	3	4.3
50	60	1065	PSB-END6	SZ-PSB4N	130		1	21.4
65	60	1065	PSB-END6	SZ-PSB12N	176		1	34.2

Insulated busbar assembly contains 3 separate circuits for use with 1 or 3 pole MCBs.
For use on load side (bottom) of S260, S270, S280 and line side (top) of S280 MCBs.

4 Phase



Amp rating	Number of poles	Busbar length (mm)	End cap catalog number	Catalog number	List price	Delivery class	Suggested order qty. quantity	Weight (ozs)
50	60	1056	PSB-END4	SZ-PSB62N	\$ 204	A	1	23.2
65	60	1056	PSB-END4	SZ-PSB64N	236			31.6

Insulated busbar assembly contains 4 separate circuits for use with 3+N1 or 4 pole MCBs.
For use on load side (bottom) of S260, S270, S280 and line side (top) of S280 MCBs.

Delivery Class

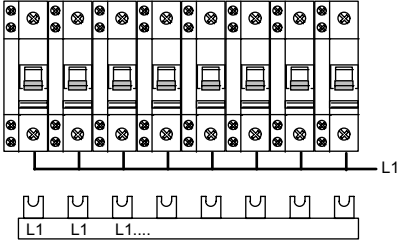
- A** - Standard item, stock to 2 weeks lead time
- B** - Stock to 4 weeks lead time
- C** - 6 to 8 week lead time
- D** - 10 to 12 week lead time
- E** - Call for delivery

Accessories

Busbars

S260, S270, S280

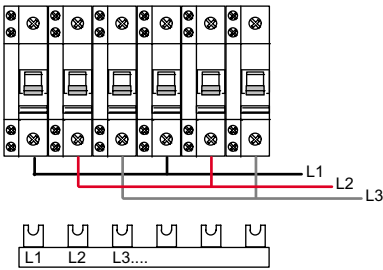
1 Phase with 1 auxiliary



Amp rating	Number of poles	Busbar length (mm)	End cap catalog number	Catalog number	List price	Delivery class	Suggested order qty. quantity	Weight (ozs)
50	39	1044	PSB-END3	SZ-KS3/39N	\$ 50	A	1	7.4
65	39	1044	PSB-END3	SZ-KS4/39N	56	A	1	10.1

Insulated busbar assembly for use on load side (bottom) of S260, S270, S280 and line side (top) of S280 MCBs.

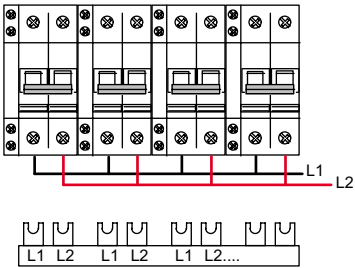
3 Phase for 1 pole MCB's with 1 auxiliary



Amp rating	Number of poles	Busbar length (mm)	End cap catalog number	Catalog number	List price	Delivery class	Suggested order qty. quantity	Weight (ozs)
50	58	1044	PSB-END3	SZ-PSB46N	\$ 124	B	1	16.1
65	58	1044	PSB-END3	SZ-PSB48N	158	B	1	22.1

Insulated busbar assembly contains 3 separate circuits for use with 1 pole MCBs. For use on load side (bottom) of S260, S270, S280 and line side (top) of S280 MCBs.

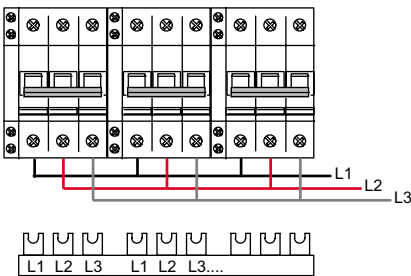
2 Phase with 1 auxiliary



Amp rating	Number of poles	Busbar length (mm)	End cap catalog number	Catalog number	List price	Delivery class	Suggested order qty. quantity	Weight (ozs)
65	48	1065	—	SZ-PSB92N	174	B	1	23.2

Insulated busbar assembly contains 2 separate circuits for use with 1 or 2 pole MCBs. For use on load side (bottom) of S260, S270, S280 and line side (top) of S280 MCBs.

3 Phase with 1 auxiliary



Amp rating	Number of poles	Busbar length (mm)	End cap catalog number	Catalog number	List price	Delivery class	Suggested order qty. quantity	Weight (ozs)
50	48	980	PSB-END3	SZ-PSB50N	\$ 124	B	1	15.8
65	48	980	PSB-END3	SZ-PSB52N	158	A	1	22.6

Insulated busbar assembly contains 3 separate circuits for use with 1 or 3 pole MCBs. For use on load side (bottom) of S260, S270, S280 and line side (top) of S280 MCBs.

Delivery Class

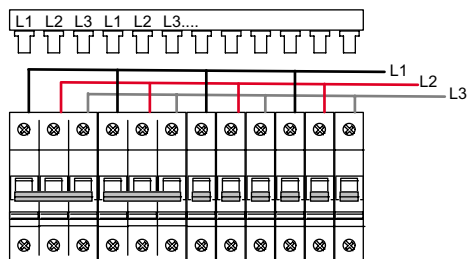
- A - Standard item, stock to 2 weeks lead time
- B - Stock to 4 weeks lead time
- C - 6 to 8 week lead time
- D - 10 to 12 week lead time
- E - Call for delivery

Accessories

Busbars

S260, S270, S280

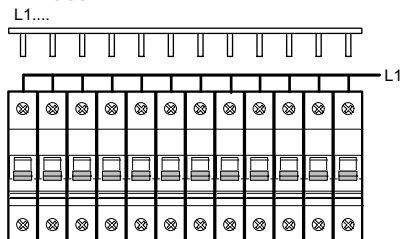
3 Phase



Amp rating	Number of poles	Busbar length (mm)	End cap catalog number	Catalog number	List price	Delivery class	Suggested order qty. quantity	Weight (ozs)
65	12	213	PSB-END3	SZ-PSB23N	50	A	1	6.0
65	60	1065	PSB-END3	SZ-PSB24N	176	A	1	34.2

Insulated busbar assembly contains 3 separate circuits for use with 1, 2+N or 3 pole MCBs. For use on line side (top) of S260 and S270 MCBs.

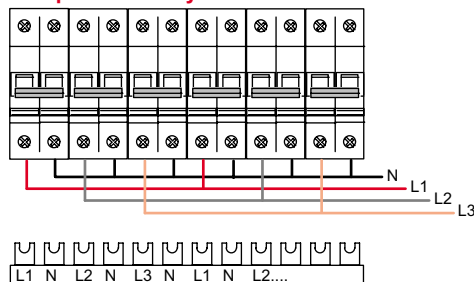
1 Phase



Amp rating	Number of poles	Busbar length (mm)	End cap catalog number	Catalog number	List price	Delivery class	Suggested order qty. quantity	Weight (ozs)
50	12	202	—	SZ-KS16/12N	\$ 13	A	1	1.5
50	56	1007	—	SZ-KS16/56N	55	A	1	9.0

Insulated busbar assembly contains 1 circuit for use with 1 pole MCBs. For use on line side (top) of S260 and S270 MCBs.

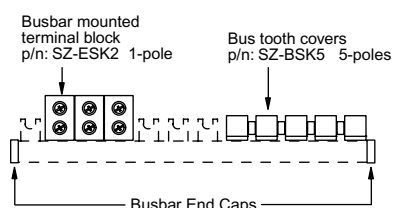
3 Phase + N, for use with 2 pole MCB's on 3 phase / 4W system



Amp rating	Number of poles	Busbar length (mm)	End cap catalog number	Catalog number	List price	Delivery class	Suggested order qty. quantity	Weight (ozs)
50	58	1048	PSB-END4	SZ-PSB58N	\$ 198	B	1	22.3
65	58	1048	PSB-END4	SZ-PSB60N	238	A	1	30.8

Insulated busbar assembly contains 4 separate circuits for use with 1+N or 2 pole MCBs. For use on load side (bottom) of S260, S270, S280 and line side (top) of S280 MCBs.

MCB Busbar accessories



Description	Catalog number	List price	Delivery class	Suggested order qty.	Weight ounce qty. (2 pc.)
Busbar end caps	PSB-END3 PSB-END4 PSB-END5 PSB-END6	\$ 2	A	10	—
Busbar tooth covers (shrouds unused portion of busbar)	SZ-BSK5	4	A	10	—
Busbar mounted terminal block, 1 pole, for use on all busbars. Wire size: 14 AWG to 2 AWG	SZ-ESK2	10	A	1	1.0
Busbar mounted terminal block, 1 pole, for use on all busbars. Wire size: 14 AWG to 4 AWG.	SZ-ESK1	10	A	1	1.0

NOTE

ALL BUSBARS MAY BE CENTER FED IN ORDER TO DOUBLE THE AMPACITY RATING

Delivery Class

A - Standard item, stock to 2 weeks lead time
B - Stock to 4 weeks lead time
C - 6 to 8 week lead time
D - 10 to 12 week lead time
E - Call for delivery

Accessories S260, S270 & S280



S2-H11



S2-A1



S2-BM1



S2-S



S2-S/H



S2-NT

Electrical accessories	Catalog number	List price	Delivery class	Suggested order quantities	Wgt. oz. (1 pc.)
Auxiliary contacts					
For field mounting: left side					
1 N.O./ 1 N.C.	S2-H11	\$ 36	A	1	1.4
2 N.O.	S2-H20	36			
2 N.C.	S2-H02	36			
1 N.O./ 2 N.C.	S2-H12	54			
2 N.O./ 1 N.C.	S2-H21	54			
2 N.O./ 1 N.C. (low voltage)	S2-H21KL	60			

The S2-H11 auxiliary switch can be field mounted to any S260, S270 or S280 series breaker. The auxiliary contacts will signal whether the breaker is in the ON or OFF position. The contacts are rated 6A/240 VAC and 1.5A/110 VDC. Minimum operating voltage is 12 VAC/VDC. Wire size: 18 AWG to 16 AWG.

Bell alarm					
For field mounting, left side	S2-S	48	A	1	1.4

The S2-S bell alarm includes a set of contacts that will only signal when the breaker has tripped. Typically the contacts would be connected to an alarm or bell to signal the operator that an overcurrent trip has occurred. The bell alarm also includes a test button for testing the alarm contacts without opening the breaker. The contact is rated 6A/240 VAC and 1.5A/110 VDC. Minimum operating voltage is 12 VAC/VDC.

Bell alarm with auxiliary contact					
For field mounting, left side	S2-S/H	58	A	1	1.4

The S2-S/H bell alarm with auxiliary contact device combines one set of bell alarm contacts with one set of auxiliary contacts (N.O.).

Shunt trip					
For field mounting, left side	S2-A1 S2-A2	138	A	1	5.2
12-60 VAC (12-60VDC) 110-415 VAC (110-250 VDC)					

For remote tripping of breaker, a shunt trip device can be added to the MCB. The solenoid device opens the breaker after control voltage is applied. Shunt trips are available depending on control system voltage (12-415 VAC/VDC).

Undervoltage release					
For field mounting, left or right side	S2-BM1 S2-BM2 S2-BM3 S2-BM4 S2-BM5 S2-BM6	216	A	1	5.2
12 VDC					
24 VAC/VDC					
48 VAC/VDC					
110 VAC/VDC					
220 VAC/VDC 380 VAC					

When control voltage drops below approximately 50% of rated voltage, the S2-BM opens the breaker. The breaker can not be operated unless proper control voltage is first applied to the UVR coil. Similar in size and mounting to the shunt trip accessory; can be left or right side mounted.

Hand operated neutral disconnect					
For field mounting, right side, 40A max.	S2-NT	27	A	1	1.4

Wire range: 14-8 AWG. Must be turned off manually. Not UL Listed. S2-NT is only 1/2 pole width.

Factory mounting
All accessories can be easily mounted in the field. For factory mounting of any accessory devices, add \$30 list to total price per breaker. To create complete catalog number, take suffix of accessory device following "S2-" and add suffix to end of breaker part number. Multiple suffixes must be added in alphabetical order.

Example: S272-K20A1 \$ 264 (2 pole, 20A breaker with type A1 shunt trip) S272-K20 @ \$96 + A1 @ \$138 + factory mounting @ \$30 = \$264
S272-K20A2H11 \$ 300 (2 pole, 20A breaker with type A2 shunt trip and H11 aux. contacts) S272-K20 @ \$96 + A2 @ \$138 + H11 @ \$36 + factory mounting @ \$30 = \$300

Auxiliary contacts and shunt trips may be mounted in combination.

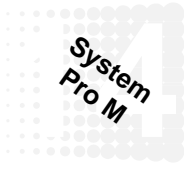
Delivery Class

- A** - Standard item, stock to 2 weeks lead time
- B** - Stock to 4 weeks lead time
- C** - 6 to 8 week lead time
- D** - 10 to 12 week lead time
- E** - Call for delivery

NOTE: Above accessories are for use with types S260, S270 and S280 breakers only.

Accessories

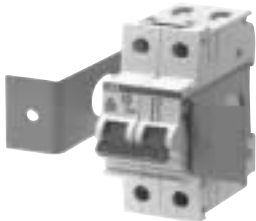
S260, S270, S280



S500-ME2



MB-CL



MB-3PD



SA1



SA2

Electrical accessories	Catalog number	List price	Delivery class	Suggested order quantities	Wgt. oz. (1 pc.)
Front mounting kit					
For 2 poles	S500-ME1	\$ 60	A	1	2.1
For 2 – 5 poles	S500-ME2	70			2.9
For 2 – 10 poles	S500-ME3	80			3.6
Optional rear terminals	S500-K1	16			1.5

Includes flange, mounting rail and hardware.

Front mounting clip

For 1 – 4 poles	MB-CL	35	A	1	2
-----------------	-------	----	---	---	---

Simple mounting clip for up to four module mounting.

Front mounting bracket

For 1 – 3 poles	MB-3PD	35	A	1	2.5
-----------------	--------	----	---	---	-----

For flush mounting of three pole MCBs: includes hardware.

Locking device

Adaptor only	SA1	9	A	10	0.7
Padlock only w/ 2 keys	SA2	19			0.1

Allows breaker to be locked in ON or OFF position.

Labeling accessory

1 sheet = 100 blank labels	STL-ST	74	A	1	—
1 sheet = 100 numbered labels					

Snaps into rail indent on front of MCB Label holder & labels includes 100 label carriers.

Enclosure, IP55

For 4 modules	12644	84	A	1	8.1
For 6 modules	12646	98			10.8
For 10 modules	12650	126			20.4
For 20 modules	12652	210			41.0

Molded plastic complete with mounting rail and knock-outs for cable entries.

Blanking plates

Single pole (set of 10)	BP-1P	6	A	1	—
Twelve pole (snap-off, set of 1)	BP-12P	7	—	—	—

Terminal cover enclosure, IP40

For 2 modules	12402	32	B	1	2.0
For 4 modules	12404	45			2.8
For 6 modules	12406	56			3.4
For 8 modules	12408	66			4.1

For additional protection against accidental contact. Includes integrated mounting rail.

Handle mechanism

	RHS2-M	76	A	1	9.2
--	--------	----	---	---	-----

For use with 2, 3 and 4 pole S2 MCBs and disconnect switch handles with 5mm shaft.

Mounting rail

Universal mounting	SMR-39	21	A	1	8
--------------------	--------	----	---	---	---

35mm DIN rails are available in 39-inch strips (1 meter).

Delivery Class

- A - Standard item, stock to 2 weeks lead time
- B - Stock to 4 weeks lead time
- C - 6 to 8 week lead time
- D - 10 to 12 week lead time
- E - Call for delivery

Accessories

S260, S270, S280

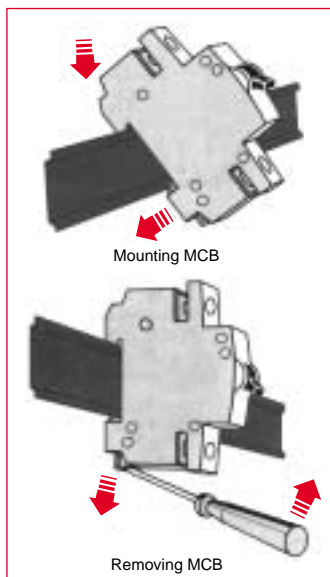
Electrical accessories	Catalog number	List price	Delivery class	Suggested order quantities	Wgt. oz. (1 pc.)
Posidrive tools					
Screwdriver, #1	SD-PZ1	\$ 40	A	1	4
Screwdriver, #2	SD-PZ2	40	A	1	4
Bit, #1	BIT-PZ1	4	A	1	4
Bit, #2	BIT-PZ2	4	A	1	4

Connection terminals

Cross section mm ²	Type number	Catalog number	List price	Delivery class	Suggested order quantities	Wgt. oz. (1 pc.)
2AWG (35mm ²)	Fork	SZ-AS71	10	A	10	0.4
1/0 (50mm ²)	Fork	SZ-AS78	10	A	10	0.4
1/0 (50mm ²)	Pin	SZ-AST121	15	A	10	0.5
1/0 (50mm ²)	Pin	SZ-AST501	15	A	10	0.5

Technical data

Mounting and operating instructions



Mounting

Universal mounting position using snap-on mounting to standard 35x7.5mm DIN rail.

Miniature circuit breakers (MCBs) can also be mounted to front of door using a panel cut-out with breaker handle protruding through panel opening for external operation. Special front mounting kit type ME is available (see page 2.12).

Connection

Terminals are suitable for solid or flexible conductors from 18 to 4 AWG (0.75 to 25mm²) with no busbar connected. When maximum busbar size of 36 mm² is used, maximum cable is 6 AWG (16 mm²).

Maximum tightening torque of 17.5 in-lb (2 Nm) for line/load terminals and 4.5 in-lb (0.5Nm) for accessory device terminals.

Operation

MCBs are switched on by moving the handle to the upper position. Stamped onto the handle switch, a "I" is visible confirming that the breaker is closed.

The MCBs are "trip-free," if the handle is being forced to the "ON" position, the breaker will still trip under fault conditions.

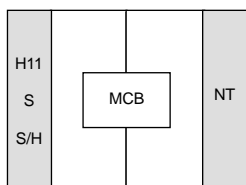
The "O" marking indicates that the breaker is in the "OFF" position. The MCB is now open and the load is disconnected from line power.

When a breaker has tripped, the MCB handle should first be set to the full "OFF" position to make certain the trip mechanism has been reset. Once the fault has been determined and cleared the MCB can again be switched "ON".

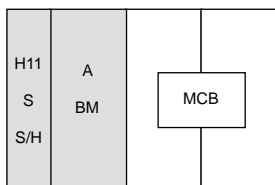
Maintenance

ABB miniature circuit breakers require no special maintenance; only normal electrical system maintenance procedures are required.

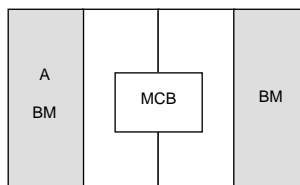
Possible mounting arrangements of MCB accessories



Auxiliary switch/bell alarm neutral disconnect

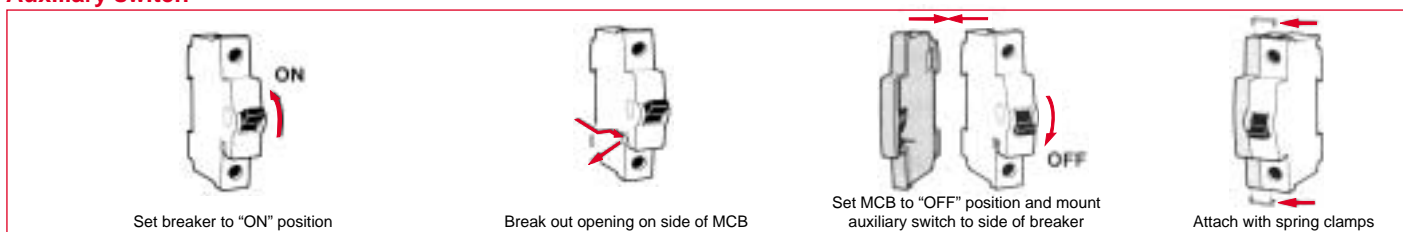


Shunt trip or undervoltage release mounted with auxiliary switch

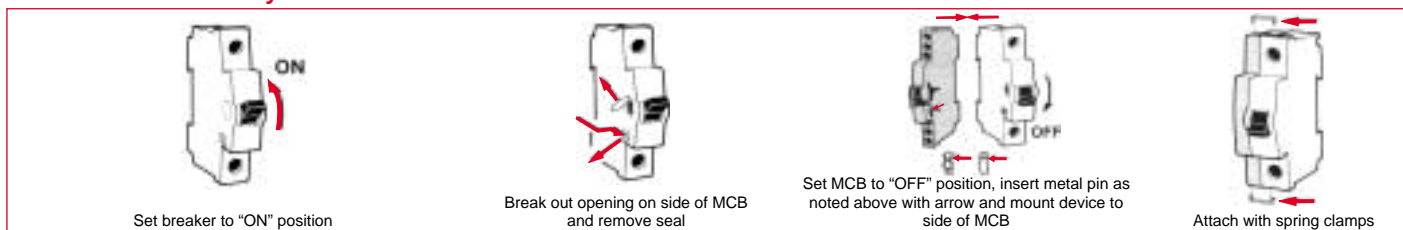


Shunt trip and/or undervoltage release

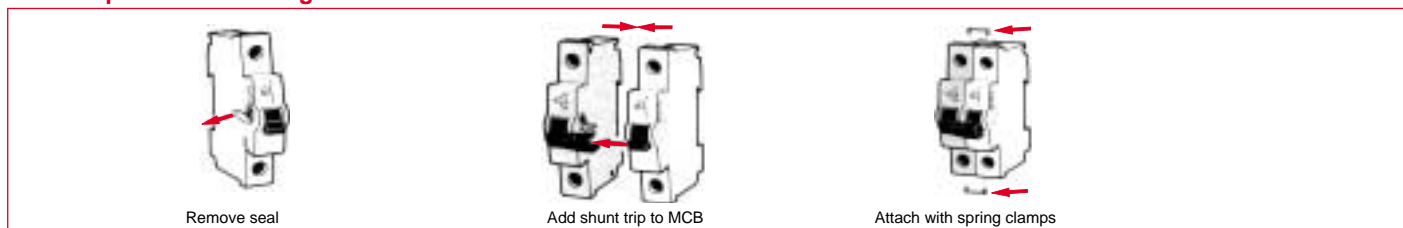
Auxiliary switch



Bell alarm with auxiliary contact



Shunt trip and undervoltage release



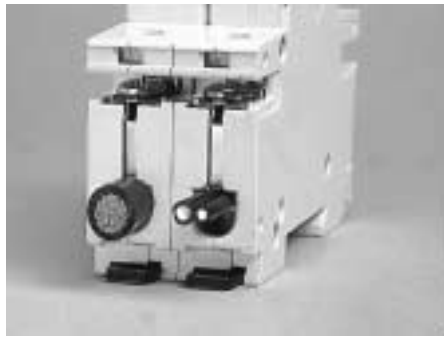
Technical data

Busbars & connectors

Connection methods



Dual function terminals provided in open position for connection to busbars. Pressing on screw head opens box terminal for cable insertion. Only the lower terminal is dual function.



Terminals allow for connection of cable 18-4 AWG. Conductors of different sizes may also be used in same terminal.



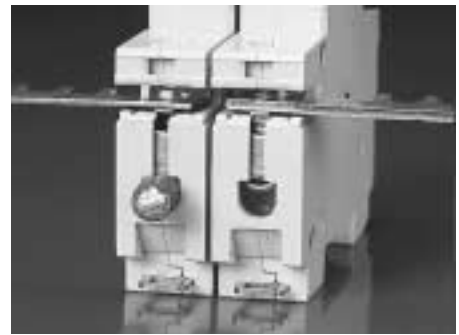
Up to five conductors, 16 AWG each, can be safely connected per terminal.



Lower terminals can be bussed together with single phase or multi-phase busbars as shown. Upper terminals can also be busbar connected.



Lower terminal can also be bussed with solid round conductor.



Cables can be connected to box terminals in addition to busbar connections on lower, dual function terminals.

Technical data

S260, S270, & S280

System
Pro M

Item	S260-B		S260-C, -D		S270-K		S280-K	
Approvals:	1077		1077		1077		1077	
UL	C22.2 — No. 235		C22.2 — No. 235		C22.2 — No. 235		—	
CSA	0641, 0660		0660		0660		0660	
VDE	898, 947		898, 947		898, 947		898, 947	
IEC	—		—		—		—	
No. of poles:	1,2,3,4 1+N,3+N		1,2,3		1,2,3,4, 1+N,3+N		1,2,3,4,1+N,3+N	
Tripping characteristic:	B		C,D		K		K	
Rated currents:	6 to 63A		0.5 to 63A		0.5 to 63A		0.2 to 63A	
Minimum operating voltage:	12V		12V		12V		12V	
UL/CSA rated voltage & interrupting capacity	Single pole	Multi pole	Single pole	Multi pole	Single pole	Multi pole	Single pole	Multi pole
120VAC	10kA	—	10kA	—	10kA	—	10kA for 0.2-40A 6kA for 50-63A	—
240VAC	6kA	10kA	6kA	10kA	6kA	10kA	10kA for 0.2-40A 6kA for 50-63A	10kA for 0.2-32A 6kA for 40-63A
277VAC	6kA	—	6kA	—	6kA	—	10kA for 0.2-40A	—
277/480 VAC	—	6kA	—	6kA	—	6kA	—	10kA
60VDC	10kA	10kA	10kA	10kA	10kA	10kA	—	—
125VDC	—	10kA	—	10kA	—	10kA	—	—
Frequency:	50/60Hz (See below)		50/60Hz (see below)		50/60Hz (see below)		50/60Hz (see below)	
Rated voltage	240/415VAC		240/415VAC		240/415VAC		240/415VAC	
IEC single pole	60VDC		60VDC		60VDC		60VDC	
IEC multi-pole	415VAC		415VAC		415VAC		415VAC	
	110VDC		110VDC		110VDC		110VDC	
Protection category:	IP20		IP20		IP20		IP20	
Depth of unit per DIN 43880:	68mm		68mm		68mm		68mm	
Mounting position:	optional		optional		optional		optional	
Standard mounting:	35mm DIN rail		35mm DIN rail		35mm DIN rail		35mm DIN rail	
Main and shunt trip terminals:	6-40A 18-4 AWG		0.5-40A 18-4 AWG		0.5-40A 18-4 AWG		0.2-40A 18-4 AWG	
Wire size	50A & above 18-2 AWG		50A & above 18-2 AWG		50A & above 18-2 AWG		50A & above 18-2 AWG	
Torque	17.5 in.-lbs.		17.5 in.-lbs.		17.5 in.-lbs.		17.5 in.-lbs.	
Tool	#2 Posidrive		#2 Posidrive		#2 Posidrive		#2 Posidrive	
Accessory terminals	18-16 AWG		18-16 AWG		18-16 AWG		18-16 AWG	
Wire size	4.5 in.-lbs.		4.5 in.-lbs.		4.5 in.-lbs.		4.5 in.-lbs.	
Torque	#1 Posidrive		#1 Posidrive		#1 Posidrive		#1 Posidrive	
Tool	—		—		—		—	
Service life at rated load:	$I_n < 32 A$, 20,000 operations $I_n > 32 A$, 10,000 operations		$I_n < 32 A$, 20,000 operations $I_n > 32 A$, 10,000 operations		$I_n < 32 A$, 20,000 operations $I_n > 32 A$, 10,000 operations		$I_n < 32 A$, 20,000 operations $I_n > 32 A$, 10,000 operations	
Ambient temperatures:	-25°C to +55°C		-25°C to +55°C		-25°C to +55°C		-25°C to +55°C	
Storage temperatures	-40°C to +70°C		-40°C to +70°C		-40°C to +70°C		-40°C to +70°C	
Shock resistance:	30g minimum of 2 impacts, shock duration of 13ms		30g minimum of 2 impacts, shock duration of 13ms		30g minimum of 2 impacts, shock duration of 13ms		30g minimum of 2 impacts, shock duration of 13ms	
Vibration resistance:	5g, 20 cycles, 5 Hz, 150 Hz @ 0.8 - I_n		5g, 20 cycles, 5 Hz, 150 Hz @ 0.8 - I_n		5g, 20 cycles, 5 Hz, 150 Hz @ 0.8 - I_n		5g, 20 cycles, 5 Hz, 150 Hz @ 0.8 - I_n	
Disconnecting neutral rating:	6kA switching		6kA switching		6kA switching		—	

Influence of frequency on electro-magnetic trips

Magnetic trip values shown on trip curves are valid for 50/60Hz applications. For frequencies other than 50/60Hz, the magnetic (instantaneous) trip values are increased by the factor given below:

	16 2/3 - 60Hz	100Hz	200Hz	400Hz	DC
Approx. factor	1	1.1	1.2	1.5	1.5

Thermal tripping is independent of frequency.

① Available for purchase. See page 14.19.

Technical data S280, S280UC, S290

Item	S280UC-K		S280-Z		S280UC-Z		S290-C	
Approvals:								
UL	1077		1077		1077		—	
CSA	—		—		—		—	
VDE	0660		0660		0660		0660	
IEC	898,947		898, 947		898, 947		898	
No. of poles:	1,2,3		1,2,3,4		1,2,3		1,2,3,4	
Tripping characteristic:	K		Z		Z		C	
Rated currents:	0.2 to 63A		0.5 to 63A		0.5 to 63A		80 to 125A	
Minimum operating voltage:	12V		12V		12V		12V	
UL/CSA rated voltage & interrupting capacity	Single pole	Multi pole	Single pole	Multi pole	Single pole	Multi pole		
120VAC	6kA for 0.2-40A 5kA for 50-63A	—	10kA for 0.2-40A 6kA for 50-63A	—	6kA for 0.2-40A 5kA for 50-63A	—	—	
240VAC	6kA for 0.2-40A 5kA for 50-63A	6kA for 0.2-40A 5kA for 50-63A	10kA for 0.2-40A 6kA for 50-63A	10kA for 0.2-32A 6kA for 40-63A	6kA for 0.2-40A 5kA for 50-63A	6kA for 0.2-40A 5kA for 50-63A	—	
277VAC	4.5kA for 0.2-40A 5kA for 50-63A	—	10kA for 0.2-40A 6kA for 50-63A	—	4.5kA for 0.2-40A 5kA for 50-63A	—	—	
277/480 VAC	—	4.5kA for 0.2-40A 5kA for 50-63A	—	10kA	—	4.5kA for 0.2-40A 5kA for 50-63A	—	
60VDC	10kA	10kA	—	—	10kA	10kA	—	
125VDC	10kA	10kA	—	—	10kA	10kA	—	
250VDC	4.5kA	4.5kA	—	—	4.5kA	4.5kA	—	
500VDC	—	4.5kA	—	—	—	4.5kA	—	
Frequency:	50/60Hz (see below)		50/60 Hz (see below)		50/60Hz (see below)		50/60Hz (see below)	
Rated voltage								
IEC single pole	240/415VAC 220VDC		240/415VAC 60VDC		240/415VAC 220VDC		230/440VAC 60VDC	
IEC multi-pole	415VAC 440VDC		415VAC 110VDC		415VAC 440VDC		440VAC 110VDC	
Protection category:	IP20		IP20		IP20		IP20	
Depth of unit per DIN 43880:	68mm		68mm		68mm		70mm	
Mounting position:	optional		optional		optional		optional	
Standard mounting:	35mm DIN rail		35mm DIN rail		35mm DIN-rail		35mm DIN-rail	
Main and shunt trip terminals:								
Wire size	0.2-40A 18-4 AWG 50A & above 18-2 AWG		0.5-40A 18-4 AWG 50A & above 18-2 AWG		0.5-40A 18-4 AWG 50A & above 18-2 AWG		80-125A 14-1/0 AWG	
Torque	17.5 in.-lbs.		17.5 in.-lbs.		17.5 in.-lbs.		17.5 in.-lbs.	
Tool	#2 Posidrive		#2 Posidrive		#2 Posidrive		#2 Posidrive	
Accessory terminals								
Wire size	18-16 AWG		18-16 AWG		18-16 AWG		18-16 AWG	
Torque	4.5 in.-lbs.		4.5 in.-lbs.		4.5 in.-lbs.		4.5 in.-lbs.	
Tool	#1 Posidrive		#1 Posidrive		#1 Posidrive		#1 Posidrive	
Service life at rated load:	$I_n < 32$ A, 20,000 operations $I_n > 32$ A, 10,000 operations		$I_n < 32$ A, 20,000 operations $I_n > 32$ A, 10,000 operations		$I_n < 32$ A, 20,000 operations $I_n > 32$ A, 10,000 operations		10,000 operations —	
Ambient temperatures:	-25°C to +55°C		-25°C to +55°C		-25°C to +55°C		-5°C to +45°C	
Storage temperatures	-40°C to +70°C		-40°C to +70°C		-40°C to +70°C		-40°C to +70°C	
Shock resistance:	30g minimum of 2 impacts, shock duration of 13ms		30g minimum of 2 impacts, shock duration of 13ms		30g minimum of 2 impacts, shock duration of 13ms		30g minimum of 2 impacts, shock duration of 13ms	
Vibration resistance:	5g, 20 cycles, 5 Hz, 150 Hz @ 0.8 ~ I_n		5g, 20 cycles, 5 Hz, 150 Hz @ 0.8 ~ I_n		5g, 20 cycles, 5 Hz, 150 Hz @ 0.8 ~ I_n		60m/s ² , at 10 – 150 Hz	

Influence of frequency on electro-magnetic trips

Magnetic trip values shown on trip curves are valid for 50/60Hz applications. For frequencies other than 50/60Hz, the magnetic (instantaneous) trip values are increased by the factor given below:

	16 2/3 - 60Hz	100Hz	200Hz	400Hz	DC
Approx. factor	1	1.1	1.2	1.5	1.5

Thermal tripping is independent of frequency.

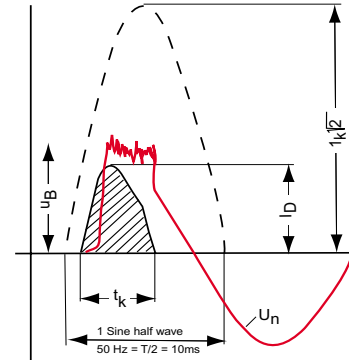
Technical data

Let-through values

Description

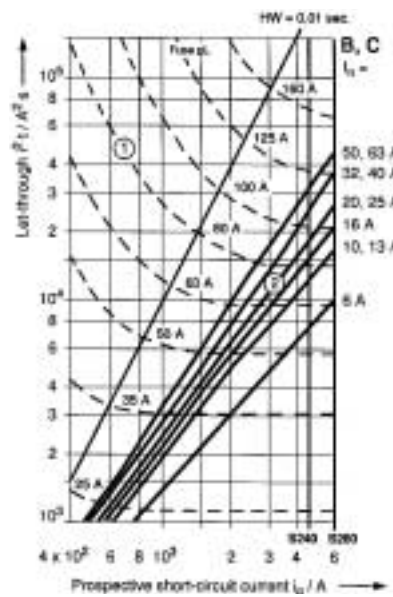
All ABB miniature circuit breakers substantially reduce the maximum let-through current from the peak available short circuit current.

- I_K - RMS current of fault
- I_D - Max let-through of MCB
- V_D - System voltage
- V_n - Arc voltage of MCB
- t_B - Breaking time of MCB

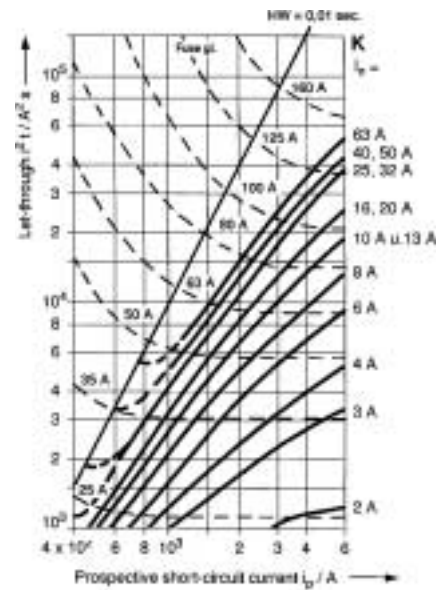


Let-through values I^2t

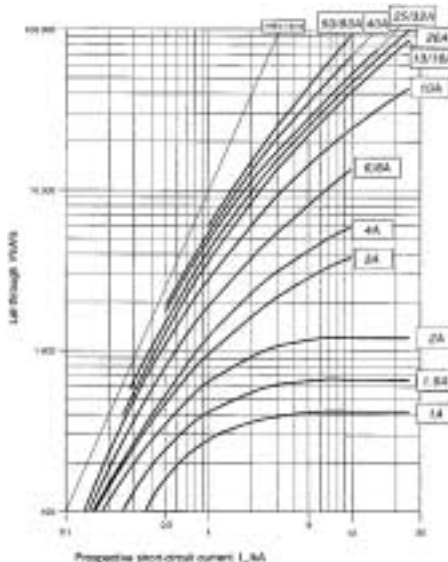
S260-B



S270-K



S280-K



For other curves, please contact ABB Control.

Version	I^2t	I_{Peak}
S260B	TD9980	—
S260C	TD9981	—
S260D	TD9982	—
S270K	TD9972	TD9950
S280K	TD9978	—
S280Z	TD9979	—
S290C	TD9985	—

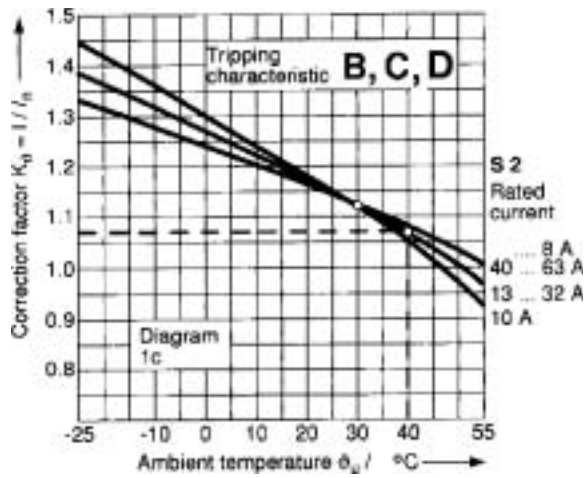
Version	Amps	Time-current trip
S260B	6 - 63	TD9725
S270K	0.5 - 8	TD9705
	10 - 40	TD9706
	50 - 63	TD9707
S280K	0.2 - 8	TD9708
	10 - 40	TD9709
	50 - 63	TD9710
S280Z	0.5 - 63	TD9711

Technical data

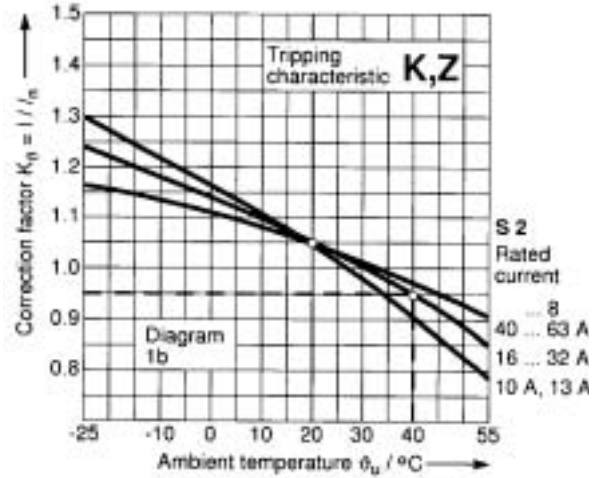
Temperature derating factors

Terminal markings

Type B, C, D



Type K, Z



Current carrying capacity of type "B", "C", "D", "K" and "Z" thermal trip characteristics as a function of ambient temperature.

Terminal markings

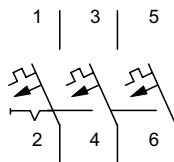
Input optional from top or bottom.



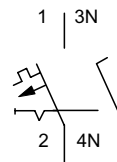
1 Pole



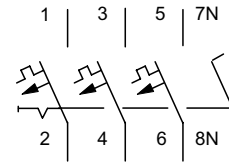
2 Pole



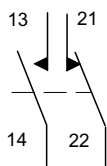
3 Pole



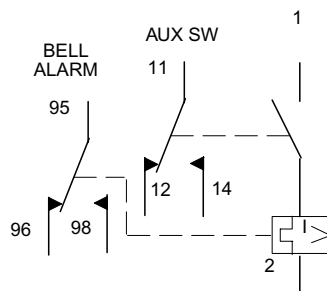
1 Pole & NA



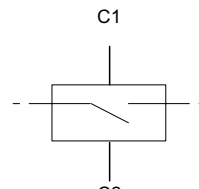
3 Pole & NA



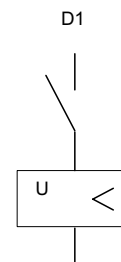
H11



S/H



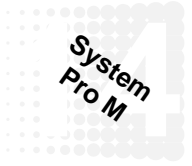
A1 / A2



BM

Technical data

Breaker resistance values & wire size comparison



Miniature circuit breaker resistance values

Ampere rating	Milliohms			
	S260-B	S270-K	S280-K	S280-Z
0.2	—	—	33300	—
0.3	—	—	19700	—
0.5	—	6340	5020	10100
0.75	—	—	2400	—
1.0	—	1550	1390	2270
1.6	—	695	612	1100
2	—	460	450	619
3	—	165	147	202
4	—	120	112	149
6	55	52	54.1	104
8	15	38	33.8	53.9
10	13.3	12.6	15.1	17.5
12	13.3	12.6	—	—
16	7.0	7.7	8.1	10.9
20	6.25	6.7	5.27	6.0
25	5.0	4.6	3.97	4.1
32	3.6	3.5	2.65	2.81
40	3.0	2.8	2.44	2.55
50	1.2	1.15	1.15	1.77
63	1.4	0.70	0.70	1.31

Comparison of IEC and AWG wire sizes

mm	AWG (mm)	Amps / UL	Amps / IEC
1.0	—	—	8
—	16 (1.3)	10	—
1.5	—	—	12
—	14 (2.1)	15	—
2.5	—	—	20
—	12 (3.3)	20	—
4	—	—	25
—	10 (5.3)	30	—
6	—	—	32
—	8 (8.4)	50	—
10	—	—	50
—	6 (13.3)	65	—
16	—	—	65
—	4 (21.2)	85	—
25	—	—	85
—	3 (26.7)	100	—
—	2 (33.6)	115	—
35	—	—	115

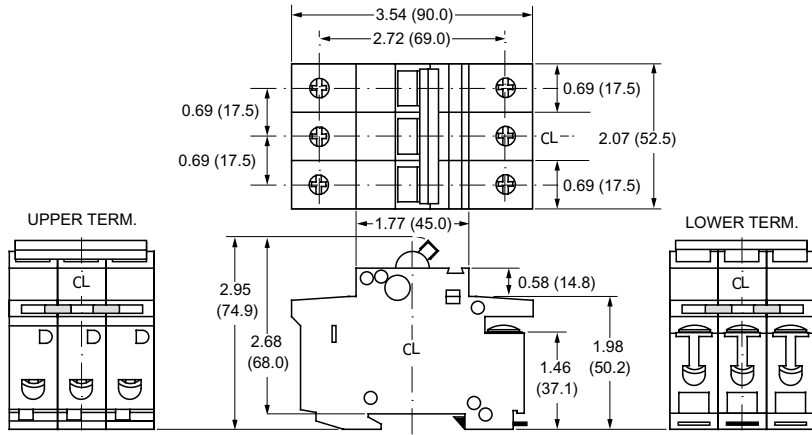
Ampacities for AWG wire are based on copper cable rated 75° C, except for 16AWG which is based on 60° C wire. Taken from UL508 Table 52.2.

Consult applicable standards for further detail and information.

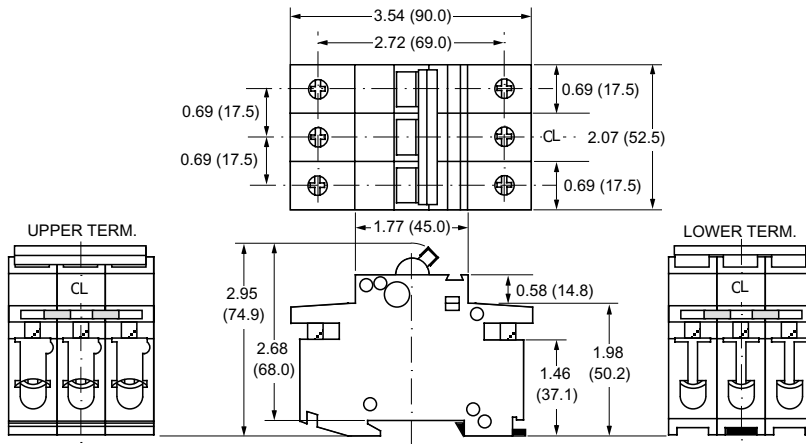
Approximate dimensions S260, S270, S280, S290

← 00.00 → Inches
00.00 [Millimeters]

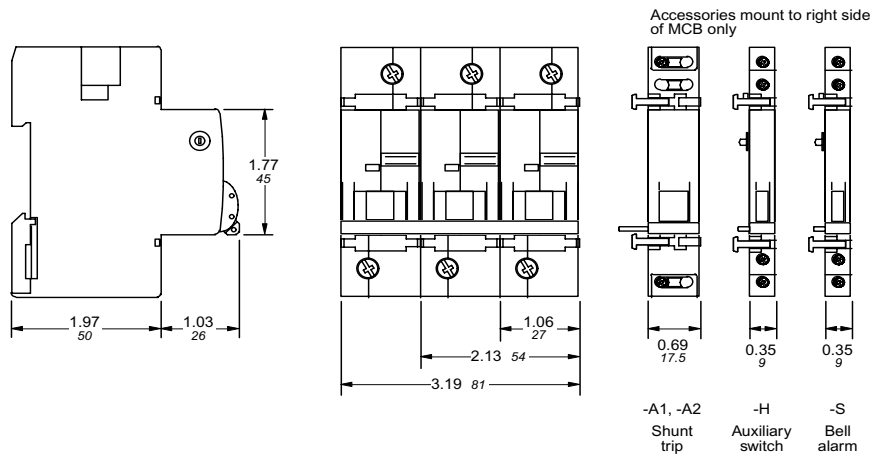
S260 & S270



S280



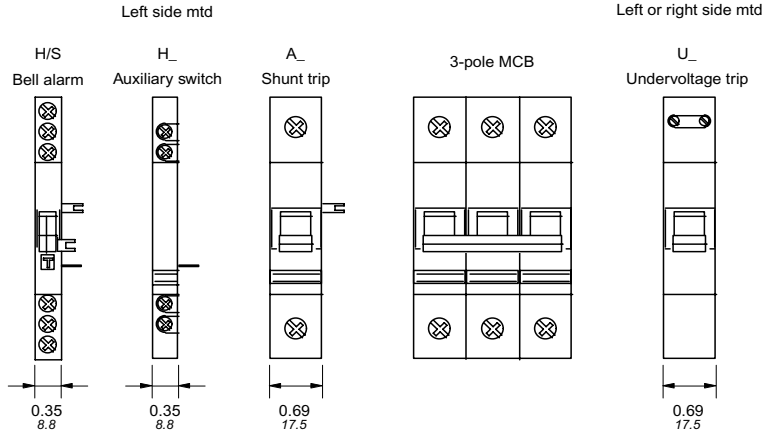
S290



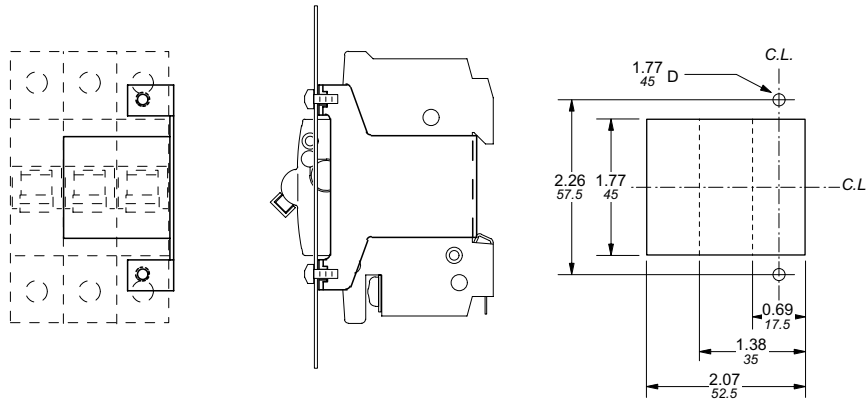
Approximate dimensions Accessories

00.00 — Inches
00.00 — [Millimeters]

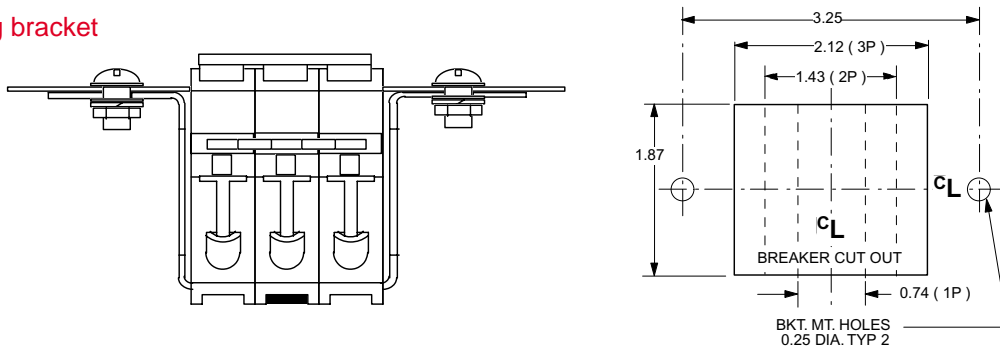
Accessories



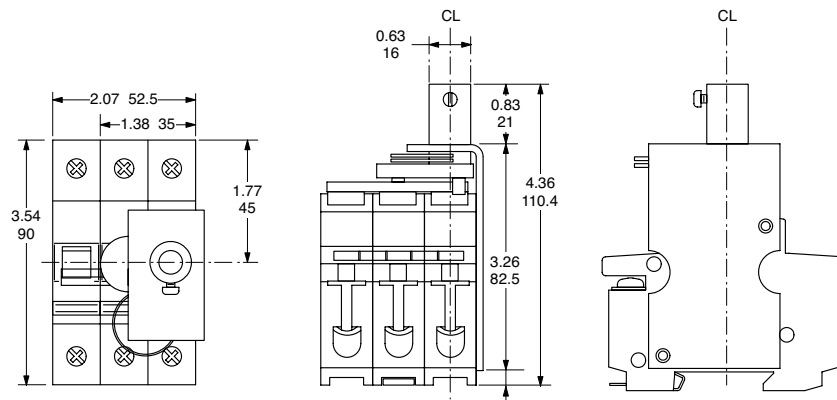
MB-CL Front mounting clip



MB-3PD Front mounting bracket



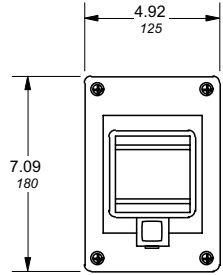
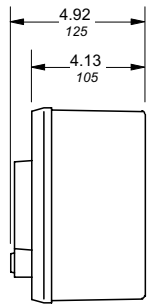
RHS2-M Handle mechanism



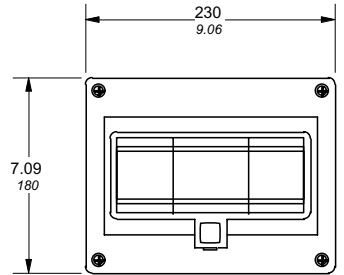
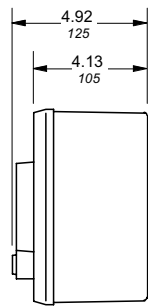
Approximate dimensions Accessories

← 00.00 → Inches
00.00 [Millimeters]

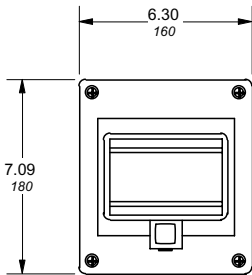
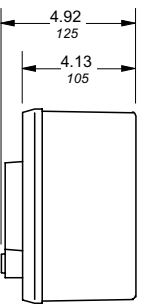
12644



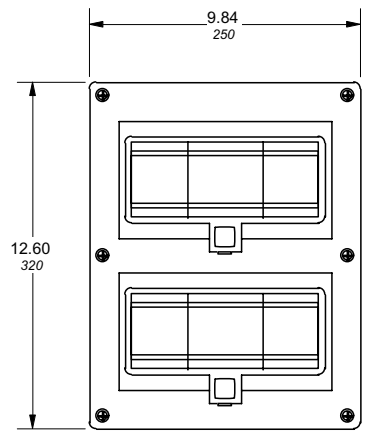
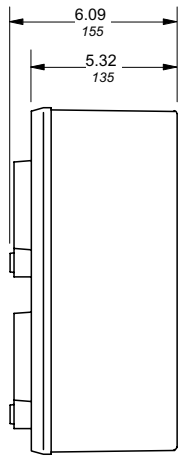
12650



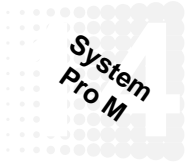
12646



12652



Cross-reference



Older version	Suggested replacement series	Physical comparison	Electrical comparison
S160L	S260B	Same pole spacing	Same trip characteristic as "L"
S160K	S270K	Same pole spacing	Same trip characteristic as "K" S270 is 6kA IC
S210L	S260B	Same pole spacing	Same trip characteristic as "L" S260B is 6kA IC
S210K	S280K	Same pole spacing	Same trip characteristic as "K" S280K is 6kA IC
S210Z	S280Z	Same pole spacing	Same trip characteristic as "Z"
S250L	S260B	Same pole spacing	Same trip characteristic as "L"
S210-UCK	S280UC-K	Same pole spacing	Same trip characteristic as "K"
S210-UCZ	S280UC-Z	Same pole spacing	Same trip characteristic as "Z"
S220-K	S500-K	Different pole spacing	Same trip characteristic as "K"
S230-B	S260-B	Same pole spacing	Same trip characteristic as "B"

Many older styles of ABB miniature circuit breakers have been replaced by new and improved versions. Many of these newer styles can be directly interchanged, both electrically and physically, with the older version. There are also many international styles of ABB circuit breakers which are not normal stock items and may be interchanged with stocked ABB versions.

Note: MCB types S260/270 and S280 can be raised to the same height as older style S210 series MCBs through the use of a height adjuster (SZ-ES68/83; \$ 30 list per 20). The height adjuster snaps onto the DIN rail and raises the height of components 68mm to match that of the S210 series (83mm).



Notes



Pro M Miniature Circuit Breakers S280U Compact branch circuit protective MCCB

UL 489 Listed
as branch circuit
protective MCCB



Description

UL 489 Listed for branch circuit protection! ABB is pleased to announce our new S280U series of miniature circuit breakers -- all the functionality of molded case circuit breakers plus all the great features of miniature circuit breakers:

- Branch circuit protective device
- Compact
- DIN rail mount
- Current limiting
- 1, 2, & 3 pole
- Ring-tongue terminal option

The ABB S280U series Pro M miniature circuit breakers are true UL489 listed compact molded case circuit breakers. They are suitable, per UL and the NEC, as branch circuit protective devices for circuits feeding either resistive or inductive loads including cables, duplex plugs, lighting, motors, transformers, and other loads where significant levels of inrush current are possible.

They can be applied in applications up to 240 VAC and are available in a wide range of current ratings, from 0.2 up to 63 amps. Both European and North American standard current sizes are available.

S280U MCCBS

S280U

Compact branch circuit protective MCCB



S281U-K1



S281UX-K1



S282UX-K10

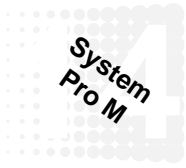


S283UX-K20

S281U-K_ 1-pole			S281UX-K_ 1-pole			S282UX-K_ 2-pole			S283UX-K_ 3-pole		
Catalog number	List price	Box Qty.	Catalog number	List price	Box Qty.	Catalog number	List price	Box Qty.	Catalog number	List price	Box Qty.
S281U-K0.2	\$ 70	10	S281UX-K0.2	\$ 70	6	S282UX-K0.2	\$ 162	3	S283UX-K0.2	\$ 244	2
S281U-K0.3	70	10	S281UX-K0.3	70	6	S282UX-K0.3	162	3	S283UX-K0.3	244	2
S281U-K0.5	70	10	S281UX-K0.5	70	6	S282UX-K0.5	162	3	S283UX-K0.5	244	2
S281U-K0.75	70	10	S281UX-K0.75	70	6	S282UX-K0.75	162	3	S283UX-K0.75	244	2
S281U-K1	70	10	S281UX-K1	70	6	S282UX-K1	162	3	S283UX-K1	244	2
S281U-K1.6	70	10	S281UX-K1.6	70	6	S282UX-K1.6	162	3	S283UX-K1.6	244	2
S281U-K2	70	10	S281UX-K2	70	6	S282UX-K2	162	3	S283UX-K2	244	2
S281U-K3	70	10	S281UX-K3	70	6	S282UX-K3	162	3	S283UX-K3	244	2
S281U-K4	70	10	S281UX-K4	70	6	S282UX-K4	162	3	S283UX-K4	244	2
S281U-K5	70	10	S281UX-K5	70	6	S282UX-K5	162	3	S283UX-K5	244	2
S281U-K6	70	10	S281UX-K6	70	6	S282UX-K6	162	3	S283UX-K6	244	2
S281U-K8	70	10	S281UX-K8	70	6	S282UX-K8	162	3	S283UX-K8	244	2
S281U-K10	70	10	S281UX-K10	70	6	S282UX-K10	162	3	S283UX-K10	244	2
S281U-K13	70	10	S281UX-K13	70	6	S282UX-K13	162	3	S283UX-K13	244	2
S281U-K15	70	10	S281UX-K15	70	6	S282UX-K15	162	3	S283UX-K15	244	2
S281U-K16	70	10	S281UX-K16	70	6	S282UX-K16	162	3	S283UX-K16	244	2
S281U-K20	70	10	S281UX-K20	70	6	S282UX-K20	162	3	S283UX-K20	244	2
S281U-K25	70	10	S281UX-K25	70	6	S282UX-K25	162	3	S283UX-K25	244	2
S281U-K30	74	10	S281UX-K30	74	6	S282UX-K30	170	3	S283UX-K30	254	2
S281U-K32	74	10	S281UX-K32	74	6	S282UX-K32	170	3	S283UX-K32	254	2
S281U-K40	78	10	S281UX-K40	78	6	S282UX-K40	176	3	S283UX-K40	266	2
S281U-K50	88	10	S281UX-K50	88	6	S282UX-K50	206	3	S283UX-K50	306	2
S281U-K60	100	10	S281UX-K60	100	6	S282UX-K60	232	3	S283UX-K60	344	2
S281U-K63	100	10	S281UX-K63	100	6	S282UX-K63	232	3	S283UX-K63	344	2

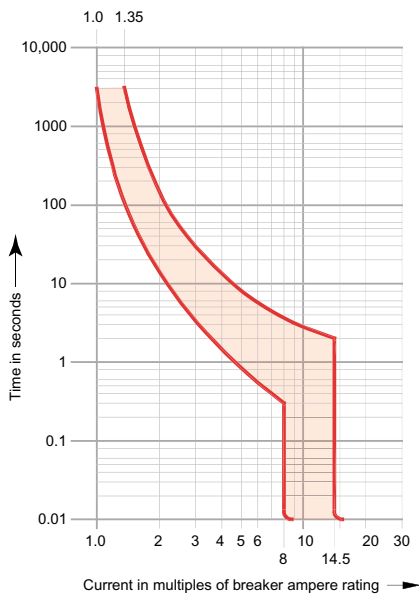
Ring tongue terminal compatible.

Technical data



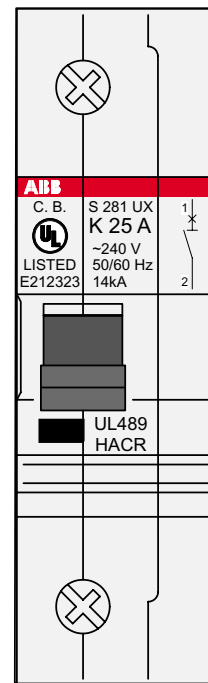
Approval	UL489 UL File No. E212323 CE Marked
Voltage	240 VAC 1, 2, and 3 pole
Current ratings (A)	0.2, 0.3, 0.5, 0.75, 1, 1.6, 2, 3, 4, 5, 6, 8, 10, 13, 15, 16, 20, 25, 30, 32, 40, 50, 60, 63
Interrupting capacity (A)	0.2 - 25A: 14kA @ 240VAC, 1, 2, and 3 pole 30 - 63A: 10kA @ 240VAC, 1, 2, and 3 pole
Frequency	50/60 Hz
Terminals	Dual function, up to (2) stripped wires plus fork style crimp terminals. Ring tongue terminal compatible
Terminal range (copper wire only)	(1) 18 - 4 AWG or (2) 18 - 8 AWG or (1) 18 - 4 AWG + (1) 18 - 14 AWG Solid or stranded wire, or mixed

Terminal torque	18 lb.in., combination flat blade / No. 2 posi-drive screw
Service life	20,000 operations at rated load
HACR rating	Heating, Air-Conditioning, and Refrigeration rating (marked on front of breaker)
Ambient temperature	25° C
Thermal release (A)	1.0 - 1.35 x MCB amperage rating
Magnetic release	8 - 14.5 x MCB amperage rating
Operational temperature range	-25° to +55° C



Time – Current trip curve

Thermal release threshold: 1.0 - 1.35X
Magnetic release threshold: 8 - 14.5X
Ambient calibration temperature: 25° C

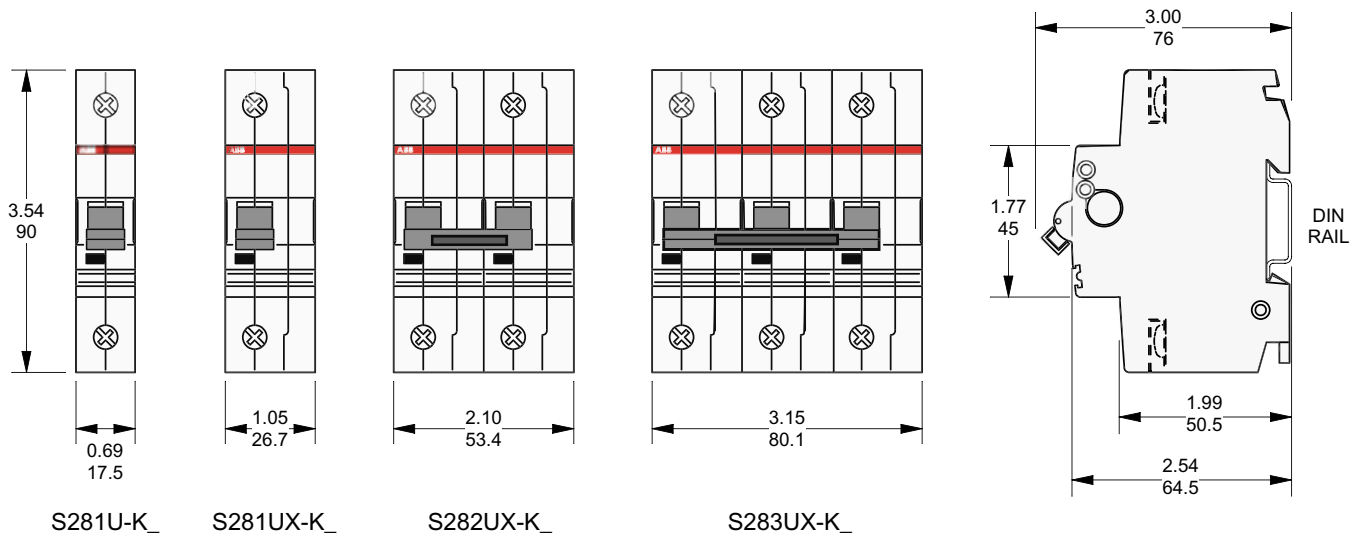


S281UX-K25

Scale 1:1

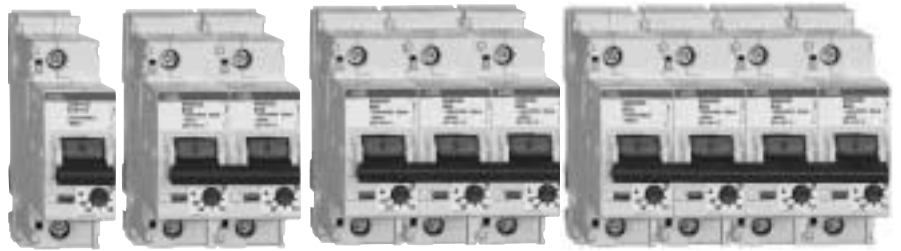


Approximate dimensions





Pro M Miniature Circuit Breakers S500 Series



Description

Increasing energy requirements result in larger short-circuit currents which place heavy demands on protective switchgear regarding safety, reliability and switching capacities.

The S500 heavy-duty circuit breaker fulfills these requirements by virtue of its technical features. It is equipped with a thermal and/or electromagnetic release to protect circuits, motors, switchgear and systems from the effects of overload and short-circuit currents.

For the worldwide market, the S500 breakers carry UL, CSA, IEC, CE and many other agency approvals.

Features

- High breaking capacity
- Energy-limiting
- Current-limiting
- Extremely fast breaking time
- Optimal selectivity
- Various versions for special applications
- Compact dimensions, DIN cap size
- Easy and quick to install
- Easy to connect; finger safe terminals
- Wide range of accessories
- UL 1077 recognized 600VAC and 500VDC versions

S500 MCBS

S500

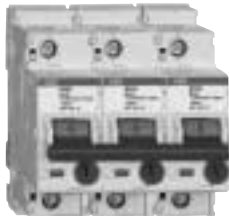
277/600 VAC



S501-C16

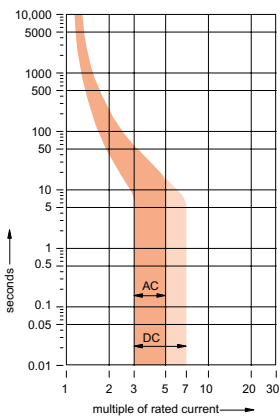


S502-C6

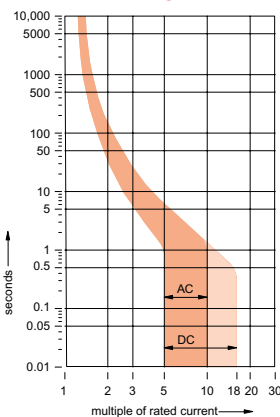


S503-C10

B



C



B UL 1077 CSA C22.2
VDE 0641 IEC 947-2

Rated current	Catalog number	List price	Delivery class	Weight (oz.) 1 pc
6	S501-B6	\$ 168	B	8.90
10	S501-B10	168		
13	S501-B13	168		
16	S501-B16	168		
20	S501-B20	168		
25	S501-B25	168		
32	S501-B32	168		
40	S501-B40	168		
50	S501-B50	186		
63	S501-B63	202		
6	S502-B6	328	B	17.85
10	S502-B10	328		
13	S502-B13	328		
16	S502-B16	328		
20	S502-B20	328		
25	S502-B25	328		
32	S502-B32	328		
40	S502-B40	328		
50	S502-B50	362		
63	S502-B63	392		
6	S503-B6	478	B	25.36
10	S503-B10	478		
13	S503-B13	478		
16	S503-B16	478		
20	S503-B20	478		
25	S503-B25	478		
32	S503-B32	478		
40	S503-B40	478		
50	S503-B50	526		
63	S503-B63	574		

C UL 1077 CSA C22.2
VDE 0641 IEC 947-2

Rated current	Catalog number	List price	Delivery class	Weight (oz.) 1 pc
6	S501-C6	\$ 168	B	8.90
10	S501-C10	168		
13	S501-C13	168		
16	S501-C16	168		
20	S501-C20	168		
25	S501-C25	168		
32	S501-C32	168		
40	S501-C40	168		
50	S501-C50	184		
63	S501-C63	202		
6	S502-C6	328	B	17.85
10	S502-C10	328		
13	S502-C13	328		
16	S502-C16	328		
20	S502-C20	328		
25	S502-C25	328		
32	S502-C32	328		
40	S502-C40	328		
50	S502-C50	362		
63	S502-C63	392		
6	S503-C6	478	B	25.36
10	S503-C10	478		
13	S503-C13	478		
16	S503-C16	478		
20	S503-C20	478		
25	S503-C25	478		
32	S503-C32	478		
40	S503-C40	478		
50	S503-C50	526		
63	S503-C63	574		

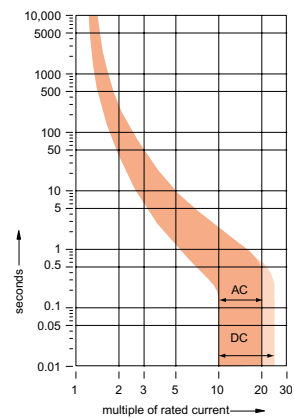
D UL 1077 CSA C22.2
VDE 0641 IEC 947-1

Rated current	Catalog number	List price	Delivery class	Wgt. oz. (1 Pc.)
13	S501-D13	\$ 190	B	8.90
16	S501-D16	190		
20	S501-D20	190		
25	S501-D25	190		
32	S501-D32	190		
40	S501-D40	190		
50	S501-D50	210		
63	S501-D63	226		
13	S502-D13	372		
16	S502-D16	372		
20	S502-D20	372		
25	S502-D25	372		
32	S502-D32	372		
40	S502-D40	372		
50	S502-D50	408		
63	S502-D63	442		
13	S503-D13	544	B	25.36
16	S503-D16	544		
20	S503-D20	544		
25	S503-D25	544		
32	S503-D32	544		
40	S503-D40	544		
50	S503-D50	600		
63	S503-D63	646		

Delivery Class

- A - Standard item, stock to 2 weeks lead time
- B - Stock to 4 weeks lead time
- C - 6 to 8 week lead time
- D - 10 to 12 week lead time
- E - Call for delivery

D

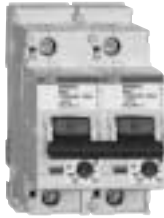


S500 277/600 VAC

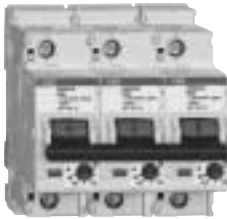
System
Pro M



S501-D20

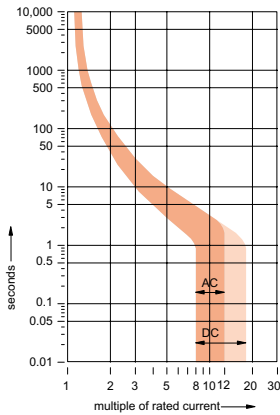


S502-D13



S503-K6

K



K UL 1077 CSA C22.2
VDE 0641 IEC-898

Rated current	Catalog number	List price	Delivery class	Wgt. oz. (1 Pc.)
0.1 - 0.15	S501-K0.15	\$ 182	B	8.90
0.14 - 0.21	S501-K0.21	182		
0.2 - 0.3	S501-K0.3	182		
0.28 - 0.42	S501-K0.42	182		
0.38 - 0.58	S501-K0.58	182		
0.53 - 0.8	S501-K0.8	182		
0.73 - 1.1	S501-K1.1	182		
1 - 1.5	S501-K1.5	182		
1.4 - 2.1	S501-K2.1	182		
2 - 3	S501-K3	182		
2.8 - 4.2	S501-K4.2	182		
3.8 - 5.8	S501-K5.8	182		
5.3 - 8	S501-K8	182		
7.3 - 11	S501-K11	182		
10 - 15	S501-K15	182		
14 - 20	S501-K20	182		
18 - 26	S501-K26	182		
23 - 32	S501-K32	202	B	17.85
29 - 37	S501-K37	202		
34 - 41	S501-K41	226		
38 - 45	S501-K45	226		
0.1 - 0.15	S502-K0.15	356		
0.14 - 0.21	S502-K0.21	356		
0.2 - 0.3	S502-K0.3	356		
0.28 - 0.42	S502-K0.42	356		
0.38 - 0.58	S502-K0.58	356		
0.53 - 0.8	S502-K0.8	356		
0.73 - 1.1	S502-K1.1	356		
1 - 1.5	S502-K1.5	356		
1.4 - 2.1	S502-K2.1	356		
2 - 3	S502-K3	356		
2.8 - 4.2	S502-K4.2	356		
3.8 - 5.8	S502-K5.8	356		
5.3 - 8	S502-K8	356		
7.3 - 11	S502-K11	356		
10 - 15	S502-K15	356		
14 - 20	S502-K20	356		
18 - 26	S502-K26	356		
23 - 32	S502-K32	392		
29 - 37	S502-K37	392		
34 - 41	S502-K41	442		
38 - 45	S502-K45	442		
0.1 - 0.15	S503-K0.15	518		
0.14 - 0.21	S503-K0.21	518		
0.2 - 0.3	S503-K0.3	518		
0.28 - 0.42	S503-K0.42	518		
0.38 - 0.58	S503-K0.58	518		
0.53 - 0.8	S503-K0.8	518		
0.73 - 1.1	S503-K1.1	518		
1 - 1.5	S503-K1.5	518		
1.4 - 2.1	S503-K2.1	518		
2 - 3	S503-K3	518		
2.8 - 4.2	S503-K4.2	518		
3.8 - 5.8	S503-K5.8	518		
5.3 - 8	S503-K8	518		
7.3 - 11	S503-K11	518		
10 - 15	S503-K15	518		
14 - 20	S503-K20	518		
18 - 26	S503-K26	518		
23 - 32	S503-K32	574		
29 - 37	S503-K37	574		
34 - 41	S503-K41	644		
38 - 45	S503-K45	828		

Delivery Class

- A - Standard item, stock to 2 weeks lead time
- B - Stock to 4 weeks lead time
- C - 6 to 8 week lead time
- D - 10 to 12 week lead time
- E - Call for delivery

S500UC 600 VAC/VDC

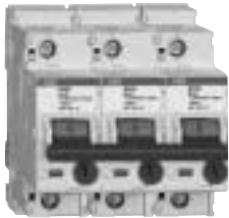
B UL 1077 CSA C22.2
VDE 0660



S501UC-B40



S502UC-B16



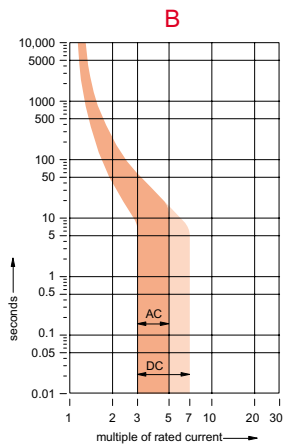
S503UC-B50

Rated current	Catalog number	List price	Delivery class	Weight (oz.) 1 pc
6	S501UC-B6	\$ 226	C	8.90
10	S501UC-B10	226		
13	S501UC-B13	226		
16	S501UC-B16	226		
20	S501UC-B20	226		
25	S501UC-B25	226		
32	S501UC-B32	226		
40	S501UC-B40	226		
50	S501UC-B50	258		
63	S501UC-B63	292		
6	S502UC-B6	442	C	17.85
10	S502UC-B10	442		
13	S502UC-B13	442		
16	S502UC-B16	442		
20	S502UC-B20	442		
25	S502UC-B25	442		
32	S502UC-B32	442		
40	S502UC-B40	442		
50	S502UC-B50	502		
63	S502UC-B63	568		

Rated current	Catalog number	List price	Delivery class	Weight (oz.) 1 pc
6	S503UC-B6	\$ 646	C	25.36
10	S503UC-B10	646		
13	S503UC-B13	646		
16	S503UC-B16	646		
20	S503UC-B20	646		
25	S503UC-B25	646		
32	S503UC-B32	646		
40	S503UC-B40	646		
50	S503UC-B50	734		
63	S503UC-B63	832		
6	S504UC-B6	908	C	35.75
10	S504UC-B10	908		
13	S504UC-B13	908		
16	S504UC-B16	908		
20	S504UC-B20	908		
25	S504UC-B25	908		
32	S504UC-B32	908		
40	S504UC-B40	908		
50	S504UC-B50	1030		
63	S504UC-B63	1164		

Delivery Class

- A - Standard item, stock to 2 weeks lead time
- B - Stock to 4 weeks lead time
- C - 6 to 8 week lead time
- D - 10 to 12 week lead time
- E - Call for delivery



S500 UC 600 VAC/VDC

System
Pro M

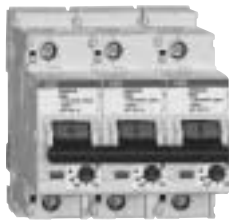
K UL 1077 CSA C22.2
VDE 0660



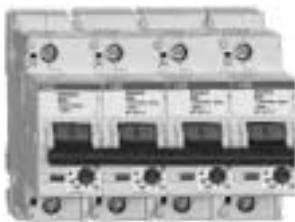
S501UC-K0.15



S502UC-K0.15

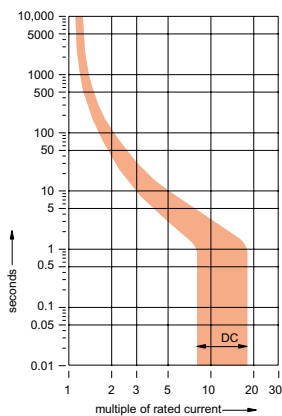


S503UC-K0.15



S504UC-K0.15

UC-K



Rated current	Catalog number	List price	Delivery class	Weight (oz.) 1 pc	Rated current	Catalog number	List price	Delivery class	Weight (oz.) 1 pc
0.1 - 0.15	S501UC-K0.15	\$ 250			0.1 - 0.15	S503UC-K0.15	\$ 712		
0.14 - 0.21	S501UC-K0.21	250			0.14 - 0.21	S503UC-K0.21	712		
0.2 - 0.3	S501UC-K0.3	250			0.2 - 0.3	S503UC-K0.3	712		
0.28 - 0.42	S501UC-K0.42	250			0.28 - 0.42	S503UC-K0.42	712		
0.38 - 0.58	S501UC-K0.58	250			0.38 - 0.58	S503UC-K0.58	712		
0.53 - 0.8	S501UC-K0.8	250			0.53 - 0.8	S503UC-K0.8	712		
0.73 - 1.1	S501UC-K1.1	250			0.73 - 1.1	S503UC-K1.1	712		
1 - 1.5	S501UC-K1.5	250			1 - 1.5	S503UC-K1.5	712		
1.4 - 2.1	S501UC-K2.1	250			1.4 - 2.1	S503UC-K2.1	712		
2 - 3	S501UC-K3	250			2 - 3	S503UC-K3	712		
2.8 - 4.2	S501UC-K4.2	250	C	8.90	2.8 - 4.2	S503UC-K4.2	712	C	25.36
3.8 - 5.8	S501UC-K5.8	250			3.8 - 5.8	S503UC-K5.8	712		
5.3 - 8	S501UC-K8	250			5.3 - 8	S503UC-K8	712		
7.3 - 11	S501UC-K11	250			7.3 - 11	S503UC-K11	712		
10 - 15	S501UC-K15	250			10 - 15	S503UC-K15	712		
14 - 20	S501UC-K20	250			14 - 20	S503UC-K20	712		
18 - 26	S501UC-K26	250			18 - 26	S503UC-K26	712		
23 - 32	S501UC-K32	286			23 - 32	S503UC-K32	814		
29 - 37	S501UC-K37	286			29 - 37	S503UC-K37	814		
34 - 41	S501UC-K41	320			34 - 41	S503UC-K41	910		
38 - 45	S501UC-K45	320			38 - 45	S503UC-K45	910		
0.1 - 0.15	S502UC-K0.15	488			0.1 - 0.15	S504UC-K0.15	996		
0.14 - 0.21	S502UC-K0.21	488			0.14 - 0.21	S504UC-K0.21	996		
0.2 - 0.3	S502UC-K0.3	488			0.2 - 0.3	S504UC-K0.3	996		
0.28 - 0.42	S502UC-K0.42	488			0.28 - 0.42	S504UC-K0.42	996		
0.38 - 0.58	S502UC-K0.58	488			0.38 - 0.58	S504UC-K0.58	996		
0.53 - 0.8	S502UC-K0.8	488			0.53 - 0.8	S504UC-K0.8	996		
0.73 - 1.1	S502UC-K1.1	488			0.73 - 1.1	S504UC-K1.1	996		
1 - 1.5	S502UC-K1.5	488			1 - 1.5	S504UC-K1.5	996		
1.4 - 2.1	S502UC-K2.1	488			1.4 - 2.1	S504UC-K2.1	996		
2 - 3	S502UC-K3	488	C	17.85	2 - 3	S504UC-K3	996	C	35.75
2.8 - 4.2	S502UC-K4.2	488			2.8 - 4.2	S504UC-K4.2	996		
3.8 - 5.8	S502UC-K5.8	488			3.8 - 5.8	S504UC-K5.8	996		
5.3 - 8	S502UC-K8	488			5.3 - 8	S504UC-K8	996		
7.3 - 11	S502UC-K11	488			7.3 - 11	S504UC-K11	996		
10 - 15	S502UC-K15	488			10 - 15	S504UC-K15	996		
14 - 20	S502UC-K20	488			14 - 20	S504UC-K20	996		
18 - 26	S502UC-K26	488			18 - 26	S504UC-K26	996		
23 - 32	S502UC-K32	558			23 - 32	S504UC-K32	1142		
29 - 37	S502UC-K37	558			29 - 37	S504UC-K37	1142		
34 - 41	S502UC-K41	622			34 - 41	S504UC-K41	1276		
38 - 45	S502UC-K45	622			38 - 45	S504UC-K45	1276		

Delivery Class

- A - Standard item, stock to 2 weeks lead time
- B - Stock to 4 weeks lead time
- C - 6 to 8 week lead time
- D - 10 to 12 week lead time
- E - Call for delivery

Accessories S500



S500-H11
Auxiliary contacts

Electrical accessories	Catalog number	List price	Delivery class	Wgt. oz. (1pc.)
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Auxiliary contacts

1 N.O./1 N.C.	S500-H11	\$ 84	B	2.14
2 N.O.	S500-H20			
2 N.C.	S500-H02			

For field mounting left side

Bell alarm with auxiliary contacts

1 N.O./1 N.C.	S500-S11	92	B	2.14
2 N.O.	S500-S20			
2 N.C.	S500-S02			

For field mounting left side

Handle mechanism

S500-RD3	100	B	6.5
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For use with 1-4 pole S500 MCBs and disconnect switch selector handles with 5mm shafts

Front mounting kit

For 1 pole	S500-ME1	60	A	2.1
1 to 3 poles	S500-ME2	70		2.9
1 to 7 poles	S500-ME3	80		3.6

Power feed terminal

S500-K2	\$ 25	A	2
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Suggested order quantity is 5.

Busbars

Amp rating	Number of poles	Busbar length (mm)	End cap catalog number	Catalog number	List price	Delivery class	Suggested order qty. quantity	Weight (ozs)
150	2	145	—	S500-BB23	\$ 56	A	1	1
	3	218	—	S500-BB33	95			
	4	290	—	S500-BB43	132			
	5	363	—	S500-BB53	171			
	6	435	—	S500-BB63	208			

Delivery Class

- A** - Standard item, stock to 2 weeks lead time
- B** - Stock to 4 weeks lead time
- C** - 6 to 8 week lead time
- D** - 10 to 12 week lead time
- E** - Call for delivery

Electrical accessories	Catalog number suffix	List price	Delivery class	Wgt. oz. (1pc.)
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Undervoltage release

12 V	UA12	\$ 266	B	5.71
24 V	UA24			
48 V	UA48			
110 V	UA110			
230 V	UA230			
500 V	UA500			

Factory mount only.

Shunt trip

12 V	AL12	224	B	5.71
24 V	AL24			
48 V	AL48			
110 V	AL110			
230 V	AL230			
500 V	AL500			

Factory mount only.

Technical data

S500

System
Pro M

Item	S500-B, C, D	S500-K
Approvals:		
UL	1077	1077
CSA	C22.2 - No.235	C22.2 - No. 235
VDE	0641/6.78	0641/6.78
IEC	947-2	—
No. of poles:	1,2,3, +N, +NA	1,2,3, +N, +NA
Tripping characteristic:	B.C.D.	K
Rated currents:	6 to 63A	0.1 to 45A
Rated voltage:		
UL/CSA single pole	277VAC	277VAC
UL/CSA multi pole	600VAC	600VAC
IEC single pole	690VAC	690VAC
Rated interrupting capacity:		
Single pole	6-25A – 30KA/240VAC 14KA/277VAC	0.15-25A – 30KA/240VAC 14KA/277VAC
	32-63A – 18KA/240VAC 14KA/277VAC	26-45A – 18KA/240VAC 14KA/277VAC
Multi-pole	6-63A – 14KA/480VAC 6KA/600VAC	0.15-45A – 14KA/480VAC 6KA/600VAC
Frequency:	50/60 Hz	50/60Hz
Mounting position:	optional	optional
Standard mounting:	35mm DIN rail	35mm DIN rail
Terminals:	Conductors from 16-4AWG (1-25sq mm)	Conductors from 16-4AWG (1-25sq mm)
Service life at rated load:	20,000 operations	20,000 operations
Calibration temperature:	40°C	40°C

Item	S500UC-B, K			
Approvals:				
UL			1077	
CSA			C22.2	
VDE			0660	
No. of poles:			1,2,3, 4	
Tripping characteristic:			B, K	
Rated currents:			B: 6 to 63A K: 0.15 to 45A	
Rated voltage:				
UL single pole			277VAC/250VDC	
UL multi pole			600VAC/600VDC	
IEC multi pole			690VAC/750VDC	
Rated interrupting capacity:				
	B single pole:			
	6 – 25A	18KA/240VAC	14KA/277VAC	30KA/250VDC
	32 – 63A	30KA/240VAC	14KA/277VAC	30KA/250VDC
	B two-pole:			
	6 – 63A	14KA/480VAC	6KA/600VAC	30KA/500VDC
	B three-pole:			
	6 – 63A	14KA/480VAC	6KA/600VAC	30KA/600VDC
	K single pole:			
	0.15 – 25A	30KA/240VAC	14KA/277VAC	30KA/250VDC
	32 – 45A	18KA/240VAC	14KA/277VAC	30KA/250VDC
	K two-pole:			
	0.15 – 45A	14KA/480VAC	6KA/600VAC	30KA/500VDC
	K three-pole:			
	0.5 – 45A	14KA/480VAC	6KA/600VAC	30KA/600VDC
Frequency:			50/60Hz	
Mounting position:			optional	
Standard mounting:			35mm DIN-rail	
Terminals:			Conductors from 16 to 4AWG (1-25sq mm)	
Service life at rated load:			20,000 operations	
Calibration temperature:			40°C	



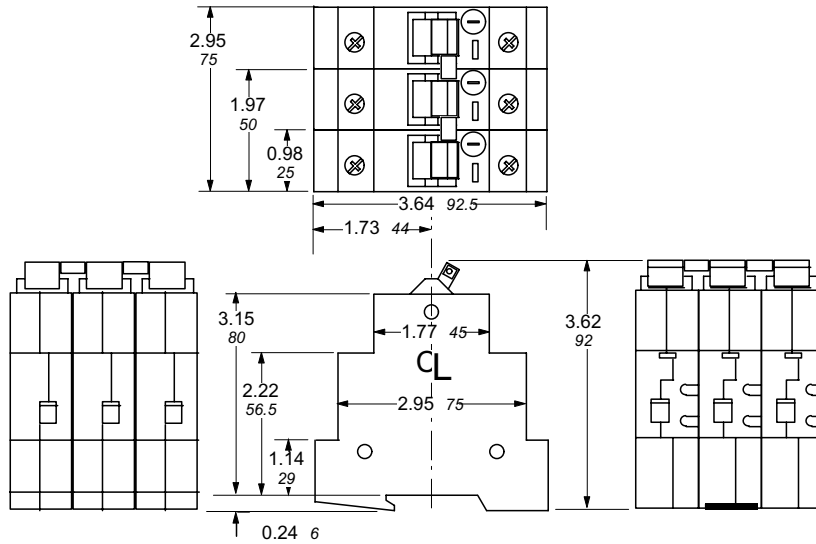
Approximate dimensions

S500

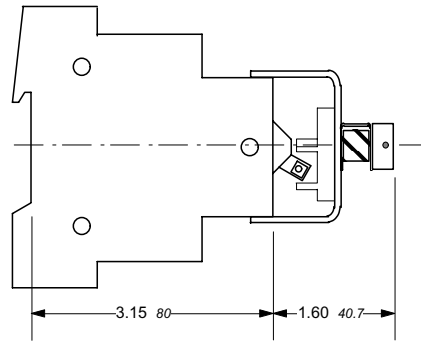
Accessories

00.00 — Inches
00.00 — [Millimeters]

S500

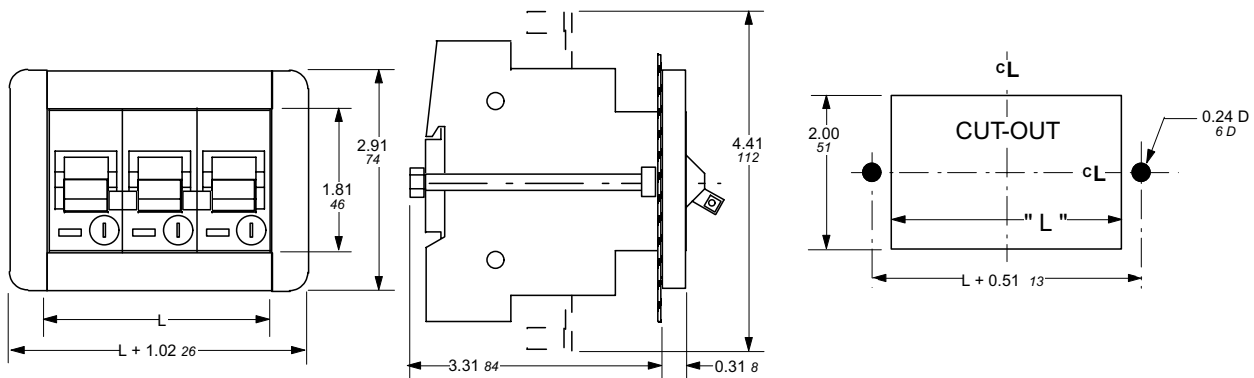


S500-RD3 Handle mechanism



S500 Front mounting kit

14





Pro M Residual current devices F370, F670 series



2 Pole

4 Pole

Description

RCDs provide ground fault equipment protection by monitoring the leakage of current to ground. The F370 and F670 series will trip when ground faults are detected in excess of the GF trip rating of the device. These devices provide GF protection only and are used in series with standard MCBs which provide overload and short circuit protection. The F370 and F670 series can be used as a main device providing GF protection for several MCB branch devices.

The F370 and F670 series are UL1053 recognized for use in 277/480VAC applications.

The F372 is for use in single phase/two wire or two wire systems. The F374 is for use in three phase/four wire systems.

The F370 and F670 series RCDs replace the F360 and F660 series with no change in form, fit or function.

The F370 and F670 have a profile similar to the S2 MCBs and can be used with the MCB busbars.

F370 – F670 RCDs

Selection guide

Residual current devices F372, F672, F374 & F674



F372, F672



F374, F674

Residual current devices

Breaker	GF trip level	Rated current	Catalog number	List price	Delivery class	Suggested order qty	Wgt. oz (1 Pc.)
F372, F672 Two pole 480VAC	10mA	16	F372-16/0.01	\$ 590	B	1	13.8
		25	F372-25/0.03	408			
		40	F372-40/0.03	464			
		63	F372-63/0.03	660			
		80	F672-80/0.03	1600			
		100	F672-100/0.03	2200			
	100mA	25	F372-25/0.1	408			
		40	F372-40/0.1	464			
		63	F372-63/0.1	660			
		80	F672-80/0.1	1600			
		100	F672-100/0.1	2200			
		300mA	25	F372-25/0.3			
	40		F372-40/0.3	320			
	63		F372-63/0.3	474			
	80		F672-80/0.3	1300			
100	F672-100/0.3		1800				
F374, F674 Four pole 480VAC	30mA		25	F374-25/0.03	426	B	1
		40	F374-40/0.03	486			
		63	F374-63/0.03	726			
		80	F674-80/0.03	1300			
		100	F674-100/0.03	1800			
		125	F674-125/0.03	1800			
	100mA	25	F374-25/0.1	426			
		40	F374-40/0.1	486			
		63	F374-63/0.1	726			
		80	F674-80/0.1	1300			
		100	F674-100/0.1	1800			
		125	F674-125/0.1	1800			
	300mA	25	F374-25/0.3	302			
		40	F374-40/0.3	342			
		63	F374-63/0.3	494			
		80	F674-80/0.3	1200			
		100	F674-100/0.3	1600			
		125	F674-125/0.3	1600			
	500mA	25	F374-25/0.5	302			
		40	F374-40/0.5	342			
		63	F374-63/0.5	494			

Above devices are UL 1053 recognized and IEC 1008 approved.

Delivery Class

- A** - Standard item, stock to 2 weeks lead time
- B** - Stock to 4 weeks lead time
- C** - 6 to 8 week lead time
- D** - 10 to 12 week lead time
- E** - Call for delivery

① For use on 3p/3w systems, add jumper between 4 and 8N for operation of test button.

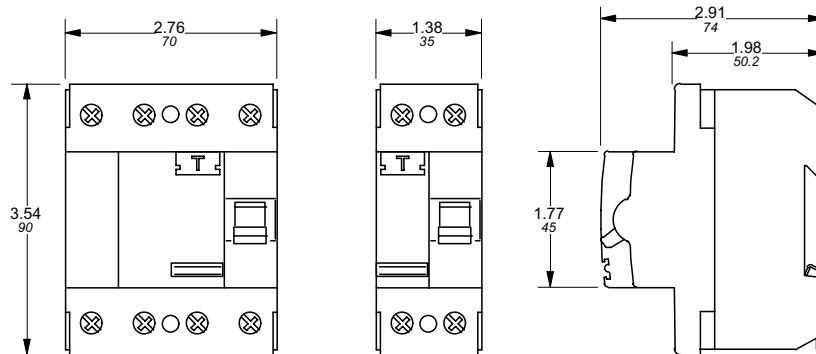
Selection guide

Residual current devices, F372, F672, F374, F674

System
Pro M

00.00 Inches
00.00 [Millimeters]

Approximate dimensions



Wiring diagram

