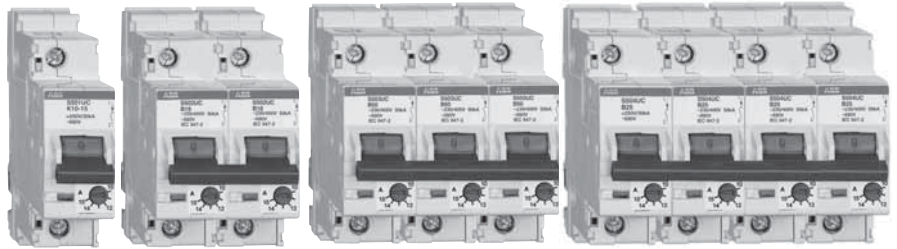


# S500 Miniature circuit breakers



## System pro M compact 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

UL File # E167556

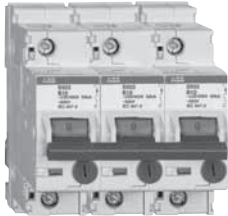
# S500 600Y/277 VAC



S501-C16

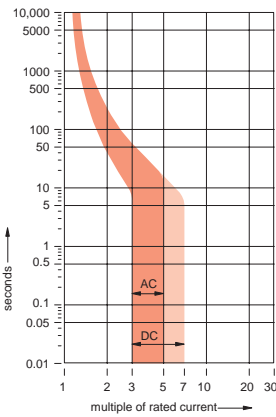


S502-C6

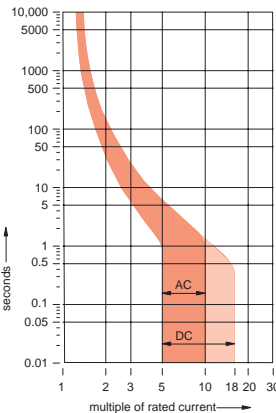


S503-C10

**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
<b>1 pole</b>				
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		
<b>2 pole</b>				
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		
<b>3 pole</b>				
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
<b>1 pole</b>				
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		
<b>2 pole</b>				
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		
<b>3 pole</b>				
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		

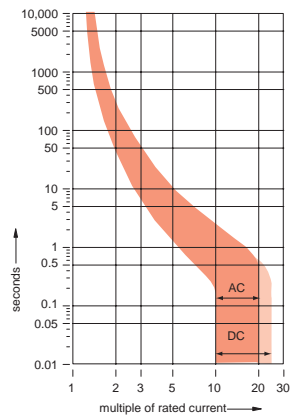
**D** UL 1077 CSA C22.2  
VDE 0641 IEC 947-1

Rated current	Catalog number	List price	Delivery class	Wgt. oz. (1 Pc.)		
<b>1 pole</b>						
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				
<b>2 pole</b>						
13	S502-D13	372			B	17.85
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				
<b>3 pole</b>						
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**



# S500 600Y/277 VAC

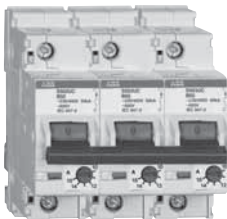
System pro M  
S500 Series



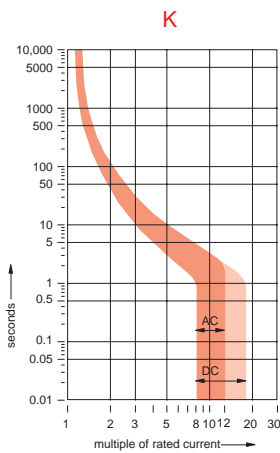
S501-D20



S502-D13



S503-K6



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

### 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

Rated current	Catalog number	List price	Delivery class	Wgt. oz. (1 Pc.)
<b>1 pole</b>				
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		
29 - 37	S501-K37	202		
34 - 41	S501-K41	226		
38 - 45	S501-K45	226		
<b>2 pole</b>				
0.1 - 0.15	S502-K0.15	356	B	17.85
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		
<b>3 pole</b>				
0.1 - 0.15	S503-K0.15	518	B	25.36
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		

# S500UC

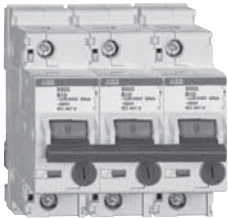
600Y/277 VAC  
600 VDC



S501UC-B40



S502UC-B16



S503UC-B50

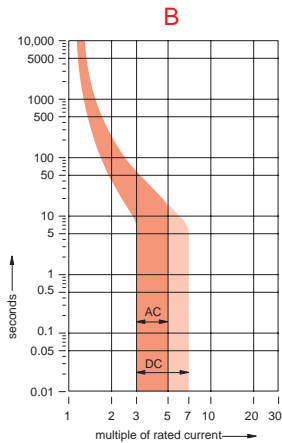
**B** UL 1077 CSA C22.2  
VDE 0660

Rated current	Catalog number	List price	Delivery class	Weight (oz.) 1 pc
<b>1 pole</b>				
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		
<b>2 pole</b>				
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
<b>3 pole</b>				
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		
<b>4 pole</b>				
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



# S500 UC 600Y/277 VAC 600 VDC

System pro M  
S500 Series

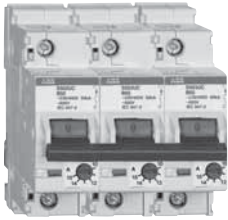
**K** UL 1077 CSA C22.2  
VDE 0660



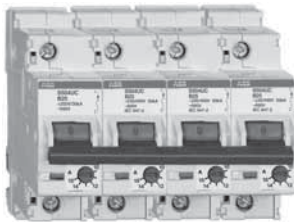
S501UC-K0.15



S502UC-K0.15

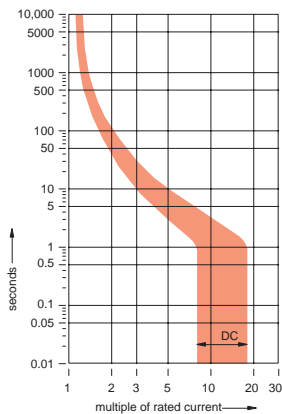


S503UC-K0.15



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
<b>1 pole</b>					<b>3 pole</b>				
0.1 - 0.15	S501UC-K0.15	\$ 250	C	8.90	0.1 - 0.15	S503UC-K0.15	\$ 712	C	25.36
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			2.8 - 4.2	S503UC-K4.2	712		
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				
<b>2 pole</b>					<b>4 pole</b>				
0.1 - 0.15	S502UC-K0.15	488	C	17.85	0.1 - 0.15	S504UC-K0.15	996	C	35.75
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			2 - 3	S504UC-K3	996		
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

## Accessories



S500-H11  
Auxiliary contacts



S500-RD3



S500-K2



S500-BB38

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	<b>\$ 84</b>	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	<b>92</b>	B	2.14
2 N.O.	S500-S20			
2 N.C.	S500-S02			

For field mounting left side

### Handle mechanism

S500-RD3	<b>100</b>	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	<b>60</b>	A	2.1
1 to 3 poles	S500-ME2	<b>70</b>		2.9
1 to 7 poles	S500-ME3	<b>80</b>		3.6

### Power feed terminal – Accepts into 2/0 AWG

S500-K2	<b>25</b>	A	2
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Suggested order quantity is 5.

### Busbars – 3 phase L1, L2, L3

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	3 x 8	650	—	S500-BB38	<b>\$ 182</b>	A	1	1
	4 x 4	435	—	S500-BB44	<b>142</b>			
	3 x 13	1055	—	S500-BB313	<b>274</b>			

### Busbar end caps

Electrical accessories	Catalog number	List price	Delivery class	Wgt. oz. (1pc.)
	S500-EK	<b>\$ 25</b>	A	10

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

12 V	UA12	<b>\$ 266</b>	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	<b>224</b>	B	5.71
24 V	AL24			
48 V	AL48			
110 V	AL110			
230 V	AL230			
500 V	AL500			

Factory mount only.

### 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

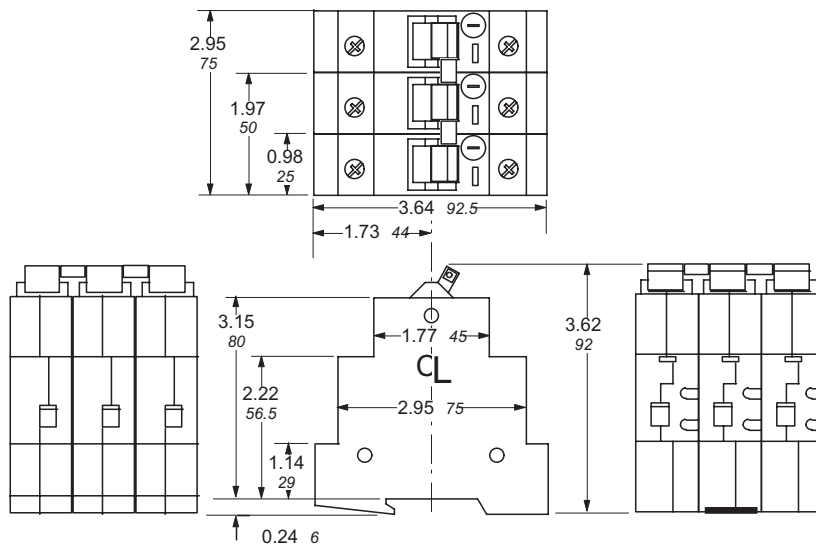
# Technical data

System pro M  
S500 Series

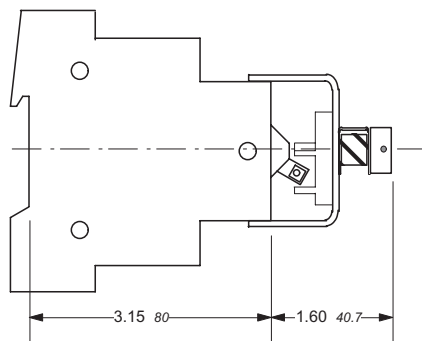
Item	S500-B, C, D	S500-K
Approvals:		
UL	1077	1077
CSA	C22.2 - No.235	C22.2 - No. 235
VDE	0641/6.78	0641/6.78
IEC	947-2	—
No. of poles:	1,2,3, +N, +NA	1,2,3, +N, +NA
Tripping characteristic:	B.C.D.	K
Rated currents:	6 to 63A	0.1 to 45A
Rated voltage:		
UL/CSA single pole	277VAC	277VAC
UL/CSA multi pole	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			

## S500



## S500-RD3 Handle mechanism



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## S500 Front mounting kit

