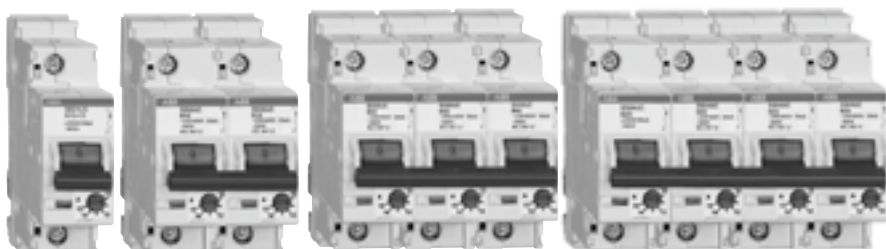


S500 Miniature circuit breakers



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

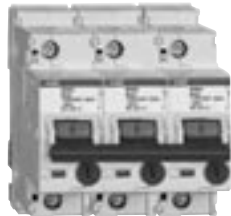
S500 600Y/277 VAC



S501-C16

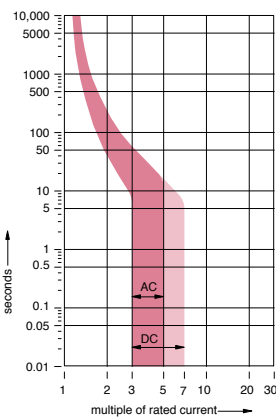


S502-C6

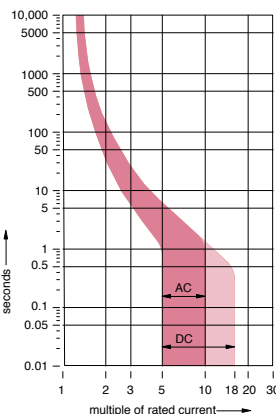


S503-C10

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
1 pole				
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		
2 pole				
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		
3 pole				
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
1 pole				
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		
2 pole				
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		
3 pole				
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		

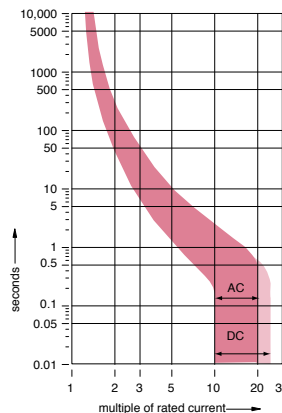
D UL 1077 CSA C22.2
VDE 0641 IEC 947-1

Rated current	Catalog number	List price	Delivery class	Wgt. oz. (1 Pc.)		
1 pole						
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				
2 pole						
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				
3 pole						
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

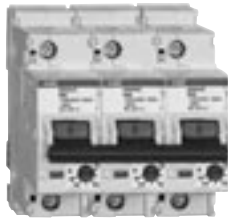
600Y/277 VAC



S501-D20

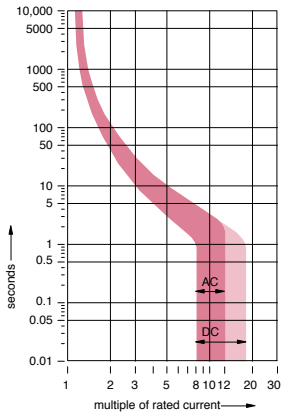


S502-D13



S503-K6

K



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.)
1 pole				
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		
2 pole				
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		
3 pole				
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

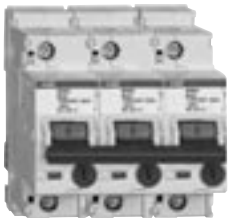
B UL 1077 CSA C22.2
VDE 0660



S501UC-B40



S502UC-B16



S503UC-B50

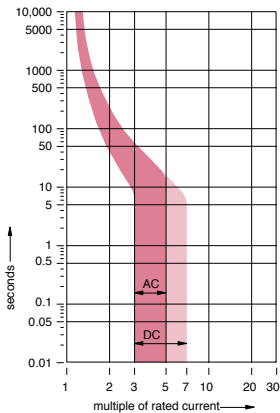
Rated current	Catalog number	List price	Delivery class	Weight (oz.) 1 pc
1 pole				
6	S501UC-B6	\$ 226	C	8.90
10	S501UC-B10	226		
13	S501UC-B13	226		
16	S501UC-B16	226		
20	S501UC-B20	226		
25	S501UC-B25	226		
32	S501UC-B32	226		
40	S501UC-B40	226		
50	S501UC-B50	258		
63	S501UC-B63	292		
2 pole				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

B



S500 UC

600Y/277 VAC

600 VDC



K UL 1077 CSA C22.2
VDE 0660



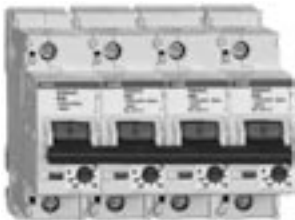
S501UC-K0.15



S502UC-K0.15

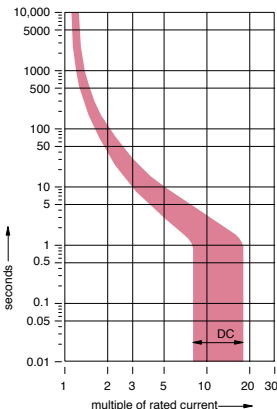


S503UC-K0.15



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
1 pole					3 pole				
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				
2 pole					4 pole				
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



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

For field mounting left side

Bell alarm with auxiliary contacts

1 N.O./1 N.C.	S500-S11			
2 N.O.	S500-S20	92	B	2.14
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		2.1
1 to 3 poles	S500-ME2	70	A	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

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

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

Factory mount only.

Shunt trip

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

Factory mount only.

Technical data

S500

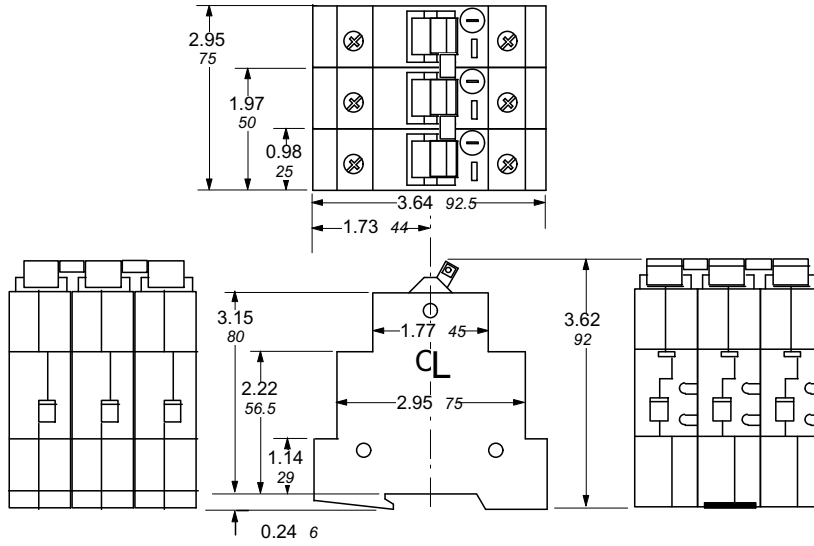
Item	S500-B, C, D	S500-K
Approvals:		
UL	1077	1077
CSA	C22.2 - No.235	C22.2 - No. 235
VDE	0641/6.78	0641/6.78
IEC	947-2	—
No. of poles:	1,2,3, +N, +NA	1,2,3, +N, +NA
Tripping characteristic:	B.C.D.	K
Rated currents:	6 to 63A	0.1 to 45A
Rated voltage:		
UL/CSA single pole	277VAC	277VAC
UL/CSA multi pole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

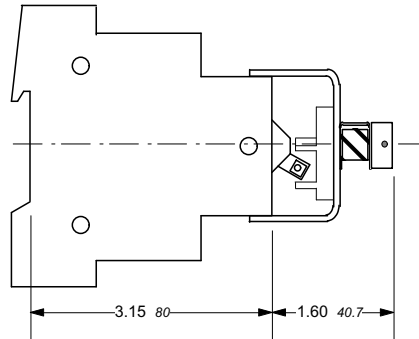
Approximate dimensions S500 Accessories

00.00 Inches
00.00 (Millimeters)

S500



S500-RD3 Handle mechanism



14

S500 Front mounting kit

