

As the continuous and emergency 8-hour peak-load capability values listed in Tables 1 through 8 indicate, certain S&C Positrol Fuse Links can be subjected to currents in excess of their ampere ratings without permanently damaging the fuse-link elements or sheaths or the distribution cutout fuse tubes. Such overloading is not generally recommended, either for Positrol Fuse Links of high-melting-temperature silver-element construction or for fuse links of low-melting temperature element construction. ● Overloading with either type of element construction can result in loss of coordination with other protective devices because all published melting time-current characteristic curves are based on no preloading.

The excessive preloading produced by overloading in accordance with the values listed in Tables 1 through 8 causes a reduction in melting time by as much as 70% of the published values. In the case of fuse links of low-melting-temperature element construction, overloading is additionally objectionable in that such links are thereby subjected to accelerated aging and the increased likelihood of surge damage to the fusible element.

Nonetheless, the peak-load capability values listed are provided for use in heat storms and emergencies where loss of coordination can be tolerated for the duration of the overload condition. Fuse links should not, however, be loaded to their emergency 8-hour peak-load capability values more than 10 times over the life of the fuse link.

The continuous and emergency 8-hour peak-load capability values are based on a 24-hour average ambient temperature of 25°C (77°F). For each degree centigrade the average ambient temperature is below 25°C (77°F), increase the listed values by 0.4%. For S&C “DR” Speed fuse links, increase the listed values by 1% per degree centigrade for fuse links rated 3DR through 5DR and by 0.5% per degree centigrade for fuse links rated 7DR through 20DR. For S&C “KSR” Speed fuse links, increase the listed values by 1% per degree centigrade for fuse links rated 3KSR through 30KSR and by 0.5% per degree centigrade for fuse links rated 40KSR through 200KSR.

For each degree centigrade that the average ambient temperature is above 25°C (77°F), decrease the listed values by 0.4%. For S&C “DR” Speed fuse links, decrease the listed values by 1% per degree centigrade for fuse links rated 3DR through 5DR and by 0.5% per degree centigrade for fuse links rated 7DR through 20DR. For S&C “KSR” Speed fuse links, decrease the listed values by 1% per degree centigrade for fuse links rated 3KSR through 30KSR and by 0.5% per degree centigrade for fuse links rated 40KSR through 200KSR.

These peak-load capability values apply only when S&C Positrol Fuse Links are used in 100- or 200-ampere open distribution cutouts that meet ANSI/IEEE standards for temperature rise.

● Positrol Fuse Links in ratings over 100 amperes (except S&C “QR” Speed) are of low-melting-temperature element construction.

Table 1. S&C Standard Speed (TCC No. 123-6)

Rating, Amperes	Peak-Load Capability ^①	
	Continuous	Emergency, 8-Hour
1	1.3	1.3
2	2.6	2.6
3	3.9	3.9
5	6.5	6.5
7	10	11
10	14	16
15	20	22
20	27	30
25	33	37
30	39	43
40	47	53
50	57	65
65	80	95
80	99	110
100	115	130
125	190	200
150	225	240
200	280	320

① Applicable to the following Positrol Fuse Links: Universal Style—not usable in Positrect™ Cutouts, and obsolete Extra-Performance Style—not usable in Positrect Cutouts.

Table 2. S&C “K” Speed (TCC No. 165-6)

Rating, Amperes	Peak-Load Capability	
	Continuous	Emergency, 8-Hour
6K	9.6	11
8K	13	14
10K	15	17
12K	20	22
15K	23	26
20K	31	35
25K	37	42
30K	42	48
40K	51	58
50K	66	75
65K	84	100
80K	105	120
100K	115	130
140K	210	225
200K	300	320



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Table 3. S&C “T” Speed (TCC No. 170-6)

Rating, Amperes	Peak-Load Capability	
	Continuous	Emergency, 8-Hour
6T	7.8	8.8
8T	10	12
10T	13	15
12T	16	18
15T	22	25
20T	27	31
25T	36	41
30T	42	49
40T	52	59
50T	63	72
65T	88	100
80T	105	115
100T	120	135
140T	210	225
200T	295	320

Table 4. S&C “KSR” Speed (TCC No. 171-6) (Obsolete)

Rating, Amperes	Peak-Load Capability	
	Continuous	Emergency, 8-Hour
3KSR	4.5	4.5
5KSR	7.5	7.5
7KSR	10.5	10.5
10KSR	15	15
15KSR	23	23
20KSR	30	30
25KSR	38	38
30KSR	45	45
40KSR	60	60
50KSR	75	75
65KSR	88	88
80KSR	116	116
100KSR	145	145
125KSR	175	175
150KSR	200	200
200KSR	250	250

Table 5. S&C “QR” Speed (TCC No. 166-6)

Rating, Amperes	Peak-Load Capability	
	Continuous	Emergency, 8-Hour
1QR	1.3	1.3
2QR	2.6	2.6
3QR	3.9	3.9
5QR	5	5
7QR	7	7
10QR	10	11
15QR	15	17
20QR	20	23
25QR	28	31
30QR	32	36
40QR	41	46
50QR	52	59
60QR	66	76
75QR	80	90
100QR	105	120
125QR	125	125
150QR	165	165
175QR	180	180
200QR	200	200

Table 6. S&C “DR” Speed (TCC No. 175-6) (Obsolete)

Rating, Amperes	Peak-Load Capability	
	Continuous	Emergency, 8-Hour
3	3.9	3.9
4	5.2	5.2
5	6.5	6.5
7	9	9
10	13	13
15	20	20
20	26	26

Table 7. S&C “N” Speed (TCC No. 167-6)

Rating, Amperes	Peak-Load Capability	
	Continuous	Emergency, 8-Hour
5N	5	5
8N	8	8
10N	13	13
15N	17	17
20N	27	27
25N	31	31
30N	38	38
40N	40	40
45N	46	46
50N	54	54
65N	66	66
75N	80	80
85N	94	94
95N	105	105
100N	130	130
125N	190	190
150N	225	225
200N	290	290

Table 8. S&C Coordinating Speed (TCC No. 172-6)

Rating, Amperes	Peak-Load Capability	
	Continuous	Emergency, 8-Hour
101	150	150
102	150	150
103	150	150