

Figure 1. Single-line representation of fuse links in series.

The selection tables presented in this information bulletin feature maximum fault-current values for series coordination of S&C Positrol Fuse Links. The maximum fault-current values listed in Tables 2 through 9 represent the intersection of the total clearing time-current characteristic curve (B-C) of the load-side fuse link with the minimum melting time-current characteristic curve (A-A), or adjusted minimum melting time-current characteristic curve (A-D), of the source-side fuse link, as illustrated in Figure 2. To locate the appropriate selection table, refer to Table 1.

Note: A coordination scheme designed to take full advantage of the nondamageability and the superior coordination capabilities of S&C Positrol Fuse Links may not function satisfactorily if fuse links of the same speed but of other makes are substituted. Accordingly, the tables listed in this publication apply only to S&C Positrol Fuse Links.

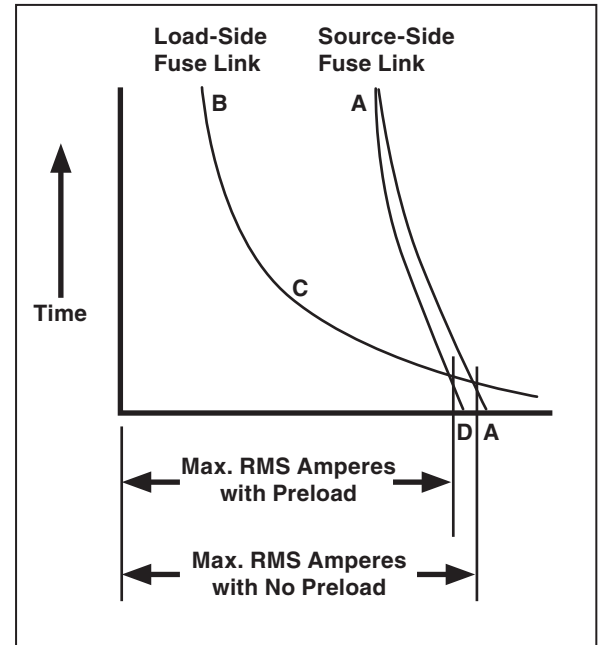


Figure 2. Time-current characteristic curves analysis for series coordination of fuse links.

Table 1. Index to Selection Tables

Load-Side Fuse Link		Source-Side Fuse Link			Table Number	Page Number
Speed	Total Clearing TCC No.	Speed	Minimum Melting TCC No.	Preload		
S&C Standard	123-6-2	S&C Standard	123-6	No	2	2
				Yes	3	3
S&C "K"	165-6-2	S&C "K"	165-6	No	4	4
				Yes	5	5
S&C "T"	170-6-2	S&C "T"	170-6	No	6	6
				Yes	7	7
S&C "OR"	166-6-2	S&C "QR"	166-6	No	8	8
				Yes	9	9



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Table 2. S&C Standard Speed Fuse Links (TCC No. 123-6), Based on No Preloading of Source-Side Fuse Link

Load-Side Fuse Link Ampere Rating ↓	Maximum Fault Current in Amperes, RMS ^①																					
	Source-Side Fuse Link Ampere Rating →		5	7	10	15	20	25	30	40	50	65	80	100	101●	102●	103●	125	150	200		
1			145	260	420	670	850	1 000	1 200	1 650	2 100	2 550	3 150	4 200	5 700	9 800	16 000	4 700	6 100	7 700		
2			120	245	415	660	850	1 000	1 200	1 650	2 100	2 550	3 150	4 200	5 700	9 800	16 000	4 700	6 100	7 700		
3			80	215	395	650	840	990	1 200	1 650	2 100	2 550	3 150	4 200	5 700	9 800	16 000	4 700	6 100	7 700		
5				120	350	620	810	970	1 200	1 650	2 050	2 550	3 150	4 200	5 700	9 800	16 000	4 700	6 100	7 700		
7					270	580	790	950	1 200	1 600	2 050	2 500	3 150	4 200	5 700	9 800	16 000	4 700	6 100	7 700		
10						440	690	880	1 100	1 600	2 000	2 500	3 100	4 150	5 700	9 800	16 000	4 700	6 100	7 700		
15							410	670	970	1 500	1 900	2 400	3 050	4 100	5 600	9 800	16 000	4 650	6 100	7 700		
20								370	780	1 350	1 850	2 350	3 000	4 100	5 600	9 800	16 000	4 600	6 000	7 700		
25									450	1 200	1 750	2 300	2 950	4 000	5 600	9 800	16 000	4 550	6 000	7 700		
30										940	1 550	2 150	2 850	3 950	5 500	9 700	16 000	4 500	5 900	7 600		
40											980	1 750	2 550	3 750	5 300	9 600	15 500	4 300	5 800	7 500		
50												1 050	2 100	3 500	5 200	9 500	15 500	4 150	5 600	7 400		
65													1 500	3 100	4 900	9 300	15 500	3 750	5 400	7 200		
80														2 350	4 400	9 100	15 000	3 150	5 000	6 900		
100															3 100	8 600	15 000	1 000	3 850	6 100		
101●																6 200	16 000			2 750		
102●																	9 500					
125																		7 200	14 500			4 350
150																			13 000			

① The maximum fault-current values are based on published time-current characteristic curves. See Table 3 on page 3 for maximum fault-current values based on the assumption the source-side fuse link is preloaded to its rating.

- S&C Coordinating Speed Fuse Links, TCC No. 172-6.

Table 3. S&C Standard Speed Fuse Links (TCC No 123-6), Based on Preloading of Source-Side Fuse Link

Load-Side Fuse Link Ampere Rating ↓	Maximum Fault Current in Amperes, RMS ^①																			
	Source-Side Fuse Link Ampere Rating →	5	7	10	15	20	25	30	40	50	65	80	100	101●	102●	103●	125	150	200	
1		120	220	370	590	750	890	1 100	1 500	1 850	2 250	2 800	3 700	5 200	8 900	15 000	4 300	5 500	7 100	
2		95	205	360	580	750	890	1 100	1 500	1 850	2 250	2 800	3 700	5 200	8 900	15 000	4 300	5 500	7 100	
3			175	335	570	740	880	1 100	1 500	1 850	2 250	2 800	3 700	5 200	8 900	15 000	4 300	5 500	7 100	
5			60	280	530	700	850	1 050	1 450	1 800	2 250	2 800	3 700	5 200	8 900	15 000	4 300	5 500	7 100	
7				170	490	680	830	1 050	1 450	1 800	2 250	2 750	3 700	5 200	8 900	15 000	4 300	5 500	7 100	
10					330	560	740	970	1 400	1 750	2 200	2 750	3 700	5 200	8 900	15 000	4 250	5 500	7 100	
15						120	480	780	1 250	1 650	2 100	2 700	3 650	5 100	8 900	15 000	4 250	5 500	7 100	
20								520	1 100	1 600	2 050	2 600	3 600	5 100	8 900	15 000	4 200	5 500	7 000	
25									920	1 450	1 950	2 550	3 500	5 100	8 900	15 000	4 150	5 400	7 000	
30									560	1 200	1 750	2 450	3 450	5 000	8 800	15 000	4 050	5 400	7 000	
40										285	1 300	2 100	3 200	4 800	8 800	14 500	3 850	5 200	6 800	
50											290	1 550	2 850	4 650	8 600	14 500	3 650	5 100	6 700	
65												365	2 400	4 300	8 500	14 500	3 250	4 800	6 500	
80													1 350	3 750	8 200	14 000	2 550	4 350	6 200	
100															2 300	7 600	14 000		3 100	5 200
101●																	13 000			1 650
102●																	6 200			
125																	13 000			3 150
150																	11 500			

● S&C Coordinating Speed Fuse Links, TCC No. 172-6.

① The maximum fault-current values are based on published total clearing time-current characteristic curves and on minimum melting time-current characteristic curves adjusted for preloading of the source-side fuse link to its ampere rating.

Table 4. S&C "K" Speed Fuse Links (TCC No. 165-6), Based on No Preloading of Source-Side Fuse Link

Load-Side Fuse Link Ampere Rating ↓	Maximum Fault Current in Amperes, RMS ^①																		
	Source-Side Fuse Link Ampere Rating →	6K	8K	10K	12K	15K	20K	25K	30K	40K	50K	65K	80K	100K	101●	102●	103●	140K	200K
1■	150	240	335	450	600	790	1 000	1 250	1 650	2 100	2 600	3 400	4 250	5 700	9 800	16 000	6 100	9 500	
2■	125	220	325	445	590	780	1 000	1 250	1 650	2 100	2 600	3 400	4 250	5 700	9 800	16 000	6 100	9 500	
3■	80	195	300	425	580	770	1 000	1 250	1 650	2 100	2 600	3 400	4 250	5 700	9 800	16 000	6 100	9 500	
5■		90	240	380	540	740	970	1 200	1 600	2 050	2 600	3 400	4 250	5 700	9 800	16 000	6 100	9 500	
6K		90	240	380	540	740	970	1 200	1 600	2 050	2 550	3 350	4 250	5 700	9 800	16 000	6 100	9 500	
8K			150	320	520	720	950	1 200	1 600	2 050	2 550	3 350	4 250	5 700	9 800	16 000	6 100	9 500	
10K				185	440	680	920	1 200	1 600	2 050	2 550	3 350	4 250	5 700	9 800	16 000	6 100	9 500	
12K					290	570	850	1 150	1 550	2 000	2 500	3 300	4 200	5 700	9 800	16 000	6 100	9 500	
15K						380	720	1 050	1 500	1 950	2 500	3 300	4 200	5 700	9 800	16 000	6 100	9 500	
20K							480	870	1 400	1 850	2 400	3 250	4 150	5 600	9 800	16 000	6 100	9 500	
25K								530	1 150	1 700	2 300	3 200	4 050	5 600	9 700	16 000	6 000	9 400	
30K									800	1 500	2 100	3 050	3 950	5 500	9 600	16 000	6 000	9 300	
40K										980	1 750	2 850	3 850	5 400	9 500	16 000	5 900	9 200	
50K											1 100	2 350	3 550	5 200	9 400	15 500	5 700	9 200	
65K												1 800	3 100	4 900	9 300	15 500	5 500	9 000	
80K													1 900	4 000	9 000	15 500	4 700	8 700	
100K														3 100	8 600	15 000	3 900	8 300	
101●															6 200	16 000		6 000	
102●																9 500		1 500	
140K																	13 500		5 000

① The maximum fault-current values are based on published time-current characteristic curves. See Table 5 on page 5 for maximum fault-current values based on the assumption the source-side fuse link is preloaded to its rating.

● S&C Coordinating Speed Fuse Links, TCC No. 172-6.

■ S&C Standard Speed Positrol Fuse Links, TCC No. 123-6.

□ Preferred ampere ratings

■ Intermediate ampere ratings

Table 5. S&C "K" Speed Fuse Links (TCC No. 165-6), Based on Preloading of Source-Side Fuse Link

Load-Side Fuse Link Ampere Rating ↓	Maximum Fault Current in Amperes, RMS ^①																		
	Source-Side Fuse Link Ampere Rating →																		
	6K	8K	10K	12K	15K	20K	25K	30K	40K	50K	65K	80K	100K	101●	102●	103●	140K	200K	
1■	125	200	290	395	530	690	890	1 100	1 450	1 850	2 300	3 000	3 750	5 200	8 900	15 000	5 600	8 700	
2■	95	185	280	385	520	690	890	1 100	1 450	1 850	2 300	3 000	3 750	5 200	8 900	15 000	5 600	8 700	
3■	45	155	250	365	500	680	870	1 100	1 450	1 850	2 300	3 000	3 750	5 200	8 900	15 000	5 600	8 700	
5■			180	310	465	650	850	1 100	1 450	1 800	2 300	3 000	3 750	5 200	8 900	15 000	5 600	8 700	
6K			180	310	465	650	850	1 100	1 450	1 800	2 300	3 000	3 750	5 200	8 900	15 000	5 600	8 700	
8K				245	430	630	830	1 050	1 400	1 800	2 300	3 000	3 750	5 200	8 900	15 000	5 600	8 700	
10K				50	330	570	790	1 050	1 400	1 800	2 250	3 000	3 750	5 200	8 900	15 000	5 600	8 700	
12K					110	440	710	970	1 350	1 750	2 200	2 950	3 750	5 200	8 900	15 000	5 600	8 700	
15K						135	560	860	1 300	1 700	2 150	2 900	3 700	5 200	8 900	15 000	5 600	8 700	
20K							155	650	1 150	1 600	2 100	2 850	3 650	5 200	8 900	15 000	5 600	8 700	
25K								145	890	1 400	1 950	2 750	3 550	5 100	8 900	15 000	5 500	8 700	
30K									365	1 150	1 750	2 600	3 450	5 000	8 900	15 000	5 400	8 600	
40K										420	1 300	2 350	3 300	4 850	8 700	14 500	5 300	8 500	
50K											285	1 850	2 900	4 700	8 700	14 500	5 200	8 400	
65K												1 100	2 400	4 350	8 500	14 500	4 850	8 200	
80K													460	3 400	8 200	14 000	4 050	7 900	
100K														2 400	7 600	14 000	3 100	7 400	
101●																	13 000		4 650
102●																	6 200		
140K																		12 000	3 250

① The maximum fault-current values are based on published total clearing time-current characteristic curves and on minimum melting time-current characteristic curves adjusted for preloading of the source-side fuse link to its ampere rating.

- S&C Coordinating Speed Fuse Links, TCC No. 172-6.
- S&C Standard Speed Positrol Fuse Links, TCC No. 123-6.

- Preferred ampere ratings
- Intermediate ampere ratings

Table 6. S&C 'T' Speed Fuse Links (TCC No 170-6), Based on No Preloading of Source-Side Fuse Link

Load-Side Fuse Link Ampere Rating ↓	Maximum Fault Current in Amperes, RMS ^①																			
	Source-Side Fuse Link Ampere Rating →	6T	8T	10T	12T	15T	20T	25T	30T	40T	50T	65T	80T	100T	101●	102●	103●	140T	200T	
1■		280	405	580	760	1 000	1 300	1 700	2 200	2 800	3 500	4 400	5 500	7 100	5 700	9 800	16 000	9 800	16 000	
2■		265	400	570	760	1 000	1 300	1 700	2 200	2 800	3 500	4 400	5 500	7 100	5 700	9 800	16 000	9 800	16 000	
3■		255	390	560	750	1 000	1 300	1 700	2 200	2 800	3 500	4 400	5 500	7 100	5 700	9 800	16 000	9 800	16 000	
5■		210	380	560	750	1 000	1 300	1 700	2 200	2 800	3 500	4 400	5 500	7 100	5 700	9 800	16 000	9 800	16 000	
6T			235	490	690	950	1 250	1 650	2 150	2 750	3 500	4 400	5 500	7 100	5 700	9 800	16 000	9 800	16 000	
8T				320	610	900	1 200	1 600	2 150	2 750	3 500	4 400	5 500	7 100	5 700	9 800	16 000	9 800	16 000	
10T					410	760	1 150	1 550	2 100	2 750	3 500	4 400	5 500	7 100	5 700	9 800	16 000	9 800	16 000	
12T						540	990	1 450	2 000	2 650	3 450	4 350	5 400	7 000	5 600	9 800	16 000	9 800	16 000	
15T							630	1 250	1 850	2 550	3 300	4 300	5 400	7 000	5 500	9 700	16 000	9 800	16 000	
20T								840	1 600	2 350	3 200	4 200	5 400	7 000	5 500	9 600	16 000	9 700	16 000	
25T									1 100	2 100	3 000	4 000	5 200	6 800	5 300	9 500	16 000	9 600	16 000	
30T										1 400	2 500	3 650	4 900	6 600	5 000	9 400	15 500	9 500	16 000	
40T											1 550	3 100	4 500	6 400	4 600	9 200	15 500	9 300	16 000	
50T												2 200	4 100	6 000	4 000	8 900	15 500	9 000	15 500	
65T													2 700	5 200	2 650	8 200	15 000	8 400	15 000	
80T														3 600		7 300	14 500	7 500	14 500	
100T																5 400	14 000	5 800	14 500	
101●																	6 200	16 000	4 850	13 000
102●																		9 500		6 100
140T																			7 600	8 300

① The maximum fault-current values are based on published time-current characteristic curves. See Table 7 on page 7 for maximum fault-current values based on the assumption the source-side fuse link is preloaded to its rating.

● S&C Coordinating Speed Fuse Links, TCC No. 172-6.

■ S&C Standard Speed Positrol Fuse Links, TCC No. 123-6.

□ Preferred ampere ratings

■ Intermediate ampere ratings

Table 7. S&C 'T' Speed Fuse Links (TCC No 170-6), Based on Preloading of Source-Side Fuse Link

Load-Side Fuse Link Ampere Rating ↓	Maximum Fault Current in Amperes, RMS ^①																			
	Source-Side Fuse Link Ampere Rating →	6T	8T	10T	12T	15T	20T	25T	30T	40T	50T	65T	80T	100T	101●	102●	103●	140T	200T	
1■		250	365	530	700	930	1 200	1 550	2 000	2 550	3 250	4 050	5 100	6 500	5 200	8 900	15 000	8 900	15 000	
2■		240	355	520	690	920	1 200	1 550	2 000	2 550	3 250	4 050	5 100	6 500	5 200	8 900	15 000	8 900	15 000	
3■		225	350	520	690	910	1 200	1 550	2 000	2 550	3 250	4 050	5 100	6 500	5 200	8 900	15 000	8 900	15 000	
5■		150	330	510	680	900	1 200	1 550	2 000	2 550	3 250	4 050	5 100	6 500	5 200	8 900	15 000	8 900	15 000	
6T			145	410	620	860	1 150	1 500	1 950	2 500	3 200	4 000	5 100	6 500	5 100	8 900	14 500	8 900	14 500	
8T				175	520	790	1 100	1 450	1 900	2 500	3 200	4 000	5 100	6 500	5 100	8 900	14 500	8 900	14 500	
10T					210	640	1 000	1 400	1 900	2 500	3 200	4 000	5 100	6 500	5 100	8 900	14 500	8 900	14 500	
12T						295	800	1 250	1 750	2 400	3 100	3 900	5 000	6 400	5 000	8 800	14 500	8 900	14 500	
15T							315	1 000	1 600	2 250	2 950	3 800	4 900	6 300	5 000	8 800	14 500	8 800	14 500	
20T								360	1 300	2 050	2 800	3 700	4 800	6 300	4 850	8 600	14 500	8 700	14 500	
25T									570	1 700	2 600	3 600	4 700	6 100	4 700	8 500	14 500	8 600	14 500	
30T										820	2 100	3 200	4 400	6 000	4 450	8 400	14 500	8 500	14 500	
40T											640	2 500	4 000	5 600	3 950	8 200	14 000	8 300	14 500	
50T													3 300	5 200	3 250	7 900	14 000	8 000	14 000	
65T														1 400	4 200	1 550	7 100	13 500	7 300	14 000
80T															1 900		6 100	13 000	6 300	13 000
100T																3 250	12 500	3 800	13 000	
101●																		13 000	6 600	15 000
102●																			6 200	10 000
140T																			4 400	4 650

① The maximum fault-current values are based on published total clearing time-current characteristic curves and on minimum melting time-current characteristic curves adjusted for pre-loading of the source-side fuse link to its ampere rating.

- S&C Coordinating Speed Fuse Links, TCC No. 172-6.
- S&C Standard Speed Positrol Fuse Links, TCC No. 123-6.

- Preferred ampere rating
- Intermediate ampere ratings

Table 8. S&C "QR"① Speed Fuse Links (TCC No. 166-6), Based on No Preloading of Source-Side Fuse Link

Load-Side Fuse Link Ampere Rating ↓	Maximum Fault Current in Amperes, RMS②																			
	3 QR	5 QR	7 QR	10 QR	15 QR	20 QR	25 QR	30 QR	40 QR	50 QR	60 QR	75 QR	100 QR	101●	102●	103●	125 QR	L50 QR	175 QR	200 QR
1QR	65	80	145	300	400	590	740	910	1 150	1 450	1 800	2 600	3 300	5 700	9 900	16 000	4 500	5 700	7 000	8 200
2QR			120	290	390	590	740	910	1 150	1 450	1 800	2 600	3 300	5 700	9 900	16 000	4 500	5 700	7 000	8 200
3QR			80	260	370	580	730	910	1 150	1 450	1 800	2 600	3 300	5 700	9 900	16 000	4 500	5 700	7 000	8 200
5QR			50	240	355	560	720	890	1 150	1 450	1 800	2 600	3 300	5 700	9 900	16 000	4 500	5 700	7 000	8 200
7QR				195	325	545	690	880	1 100	1 450	1 800	2 600	3 300	5 700	9 900	16 000	4 500	5 700	7 000	8 200
10QR					180	480	650	850	1 100	1 400	1 800	2 600	3 300	5 700	9 900	16 000	4 500	5 700	7 000	8 200
15QR						370	580	800	1 100	1 400	1 800	2 550	3 250	5 700	9 900	16 000	4 500	5 700	7 000	8 200
20QR							290	620	970	1 300	1 700	2 500	3 200	5 700	9 900	16 000	4 400	5 700	7 000	8 200
25QR								390	800	1 200	1 650	2 450	3 200	5 700	9 900	16 000	4 400	5 700	7 000	8 200
30QR									540	1 000	1 500	2 350	3 150	5 700	9 900	16 000	4 400	5 600	7 000	8 200
40QR										640	1 300	2 250	3 100	5 600	9 800	16 000	4 400	5 600	7 000	8 200
50QR											900	2 000	2 900	5 500	9 800	16 000	4 200	5 400	6 800	8 000
65QR												1 600	2 650	5 400	9 700	16 000	4 100	5 300	6 700	8 000
80QR													1 700	4 900	9 600	16 000	3 600	4 900	6 300	7 600
100QR														4 350	9 400	16 000	2 800	4 300	6 000	7 400
101●															6 200	16 000				
102●																9 500				
125QR														2 550	6 400	15 000		2 600	4 900	6 500
150QR															7 400	14 500			3 300	5 300
175QR																5 600	14 000			2 800
200QR																	13 000			

① S&C "QR" Speed Positrol Fuse Links are interchangeable mechanically, with respect to time-current characteristics, with Kearney Type "QA" fuse links.

② The maximum fault-current values are based on published time-current characteristic curves. See Table 9 on page 9 for maximum fault-current values based on the assumption the source-side fuse link is preloaded to its rating.

● S&C Coordinating Speed Fuse Links, TCC No. 172-6.

Table 9. S&C "QR"① Speed Fuse Links (TCC No. 166-6), Based on Preloading of Source-Side Fuse Link

Load-Side Fuse Link Ampere Rating ↓	Maximum Fault Current in Amperes, RMS②																			
	3 QR	5 QR	7 QR	10 QR	15 QR	20 QR	25 QR	30 QR	40 QR	50 QR	60 QR	75 QR	100 QR	101●	102●	103●	125 QR	L50 QR	175 QR	200 QR
1QR	50	50	120	240	325	485	610	750	950	1 200	1 500	2 100	2 800	5 200	9 000	15 000	3 850	4 800	5 900	6 900
2QR			90	220	315	480	600	750	950	1 200	1 500	2 100	2 800	5 200	9 000	15 000	3 850	4 800	5 900	6 900
3QR				195	285	465	590	740	940	1 200	1 500	2 100	2 800	5 200	9 000	15 000	3 850	4 800	5 900	6 900
5QR				170	265	450	580	730	930	1 150	1 500	2 100	2 800	5 200	9 000	15 000	3 850	4 800	5 900	6 900
7QR				95	225	425	560	710	910	1 150	1 450	2 100	2 800	5 200	9 000	15 000	3 850	4 800	5 900	6 900
10QR						330	490	660	880	1 100	1 400	2 050	2 750	5 200	9 000	15 000	3 800	4 800	5 900	6 900
15QR						130	390	580	820	1 100	1 400	2 050	2 750	5 200	9 000	15 000	3 800	4 800	5 900	6 900
20QR							300	660	980	1 300	2 000	2 700	5 200	9 000	15 000	3 800	4 800	5 900	6 900	
25QR								450	820	1 200	1 900	2 650	5 200	9 000	15 000	3 700	4 800	5 900	6 900	
30QR									560	1 050	1 800	2 600	5 100	8 900	15 000	3 850	4 700	5 800	6 900	
40QR										700	1 700	2 500	5 000	8 900	15 000	3 800	4 650	5 800	6 900	
50QR											1 400	2 300	4 900	8 800	15 000	3 500	4 550	5 700	6 700	
65QR											700	2 000	4 800	8 800	15 000	3 300	4 400	5 600	6 700	
80QR												520	4 350	8 500	14 500	2 800	3 900	5 200	6 300	
100QR														3 650	6 300	14 000	1 100	3 200	4 800	6 000
101●																	13 000			
102●																	6 200			
125QR														1 450	7 300	14 000			3 200	4 900
150QR															6 200	13 000				3 400
175QR															4 000	12 000				
200QR																	11 000			

① S&C "QR" Speed Positrol Fuse Links are interchangeable mechanically and, with respect to time-current characteristics, with Kearney Type "QA" fuse links.

② The maximum fault-current values are based on published total clearing time-current characteristic curves and on minimum melting time-current characteristic curves adjusted for preloading of the source-side fuse link to its ampere rating.

● S&C Coordinating Speed Fuse Links, TCC No. 172-6.