

Type SMD-20 Power Fuses with SMU-20® Fuse Units
Outdoor Distribution (14.4 kV through 34.5 kV)

Maximum Fault Currents for Series Coordination of SMD-20 Power Fuses with SMD-20 Power Fuses and Positrol® Fuse Links

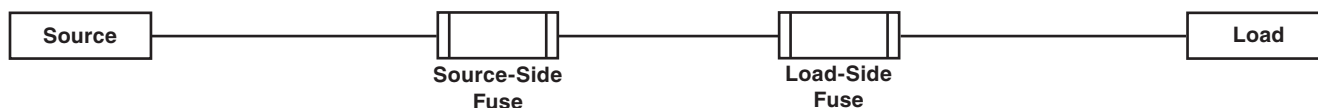


Figure 1. A single-line representation of source- and load-side fuses in series.

The selection tables presented in this information bulletin feature maximum fault-current values for series coordination of S&C Type SMD-20 Power Fuses with load-side SMD-20 Power Fuses and Positrol Fuse Links. Figure 1 shows a single-line representation of two fuses in series. The maximum fault-current values listed in the tables in this document represent the intersection of the total clearing time-current characteristic (TCC) curve (B-C) of the load-side SMU-20 Fuse Unit or Positrol Fuse Link, as applicable, with the minimum melting TCC curve (A-A) or the adjusted minimum melting TCC curve (A-D) of the source-side SMU-20 Fuse Unit, as illustrated in Figure 2.

To locate the appropriate selection table, based on the load-side fuse, refer to Table 1.

Note: A coordination scheme designed to take full advantage of the nondamageability and the superior coordination capabilities of S&C Type SMD-20 Power Fuses may not function satisfactorily if fuse units of the same speed but of other makes are substituted. Accordingly, the tables listed in this publication apply only to S&C Type SMD-20 Power Fuses (and S&C Positrol Fuse Links, as applicable).

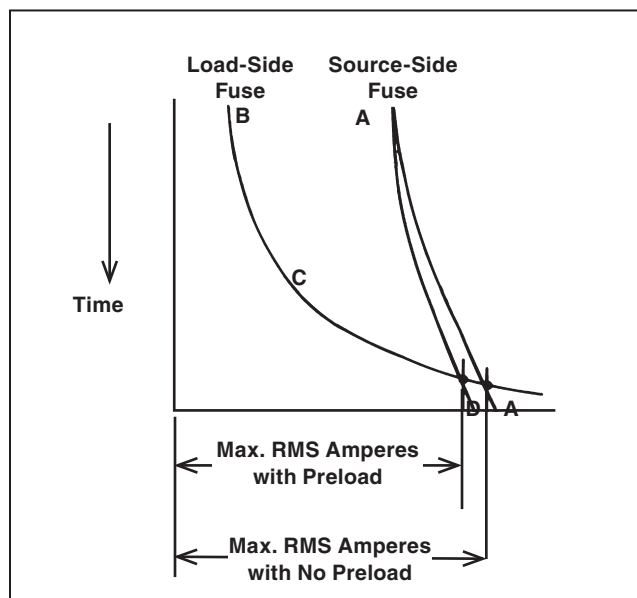


Figure 2. A TCC analysis for series-coordinated source- and load-side fuses.

Table 1. Index to Selection Tables

| Load-Side Fuse | | | | | Source-Side SMU-20 Fuse Unit | | | Table Number | Page Number |
|------------------|--------------|------------------------|--------------------|------------------------|------------------------------|-------------------------|---------|--------------|-------------------------|
| SMU-20 Fuse Unit | | | Positrol Fuse Link | | Speed | Minimum Melting TCC No. | Preload | | |
| kV, Nom. | Speed | Total Clearing TCC No. | Speed | Total Clearing TCC No. | | | | Speed | Minimum Melting TCC No. |
| 14.4 | S&C Standard | 153-1-2 | — | — | S&C Standard | 153-1 | No | 2 | 2 |
| | | | — | — | | | Yes | 3 | 3 |
| 25 and 34.5 | S&C Standard | 153-1-4 | — | — | S&C Standard | 153-1 | No | 4 | 4 |
| | | | — | — | | | Yes | 5 | 5 |
| 14.4 | S&C "K" | 165-1-2 | — | — | S&C "K" | 165-1 | No | 6 | 6 |
| | | | — | — | | | Yes | 7 | 7 |
| 25 and 34.5 | S&C "K" | 165-1-4 | — | — | S&C "K" | 165-1 | No | 8 | 8 |
| | | | — | — | | | Yes | 9 | 9 |
| — | — | — | S&C Standard | 123-6-2 | S&C Standard | 153-1 | No | 10 | 10 |
| — | — | — | | | | | Yes | 11 | 11 |
| — | — | — | S&C "K" | 165-6-2 | S&C "K" | 165-1 | No | 12 | 12 |
| — | — | — | | | | | Yes | 13 | 13 |
| — | — | — | S&C "T" | 170-6-2 | S&C Slow | 119-1 | No | 14 | 14 |
| — | — | — | | | | | Yes | 15 | 15 |



Supersedes Data Bulletin 240-170 dated 2-1-88.

October 28, 2019
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Type SMD-20 Power Fuses with SMU-20® Fuse Units

**Table 2. Series Coordination of S&C Standard Speed SMU-20 Fuse Units (TCC No. 153-1)
Rated 14.4 kV, Based on No Preloading of Source-Side Fuse Unit**

| Load-Side Fuse-Unit Ampere Rating ↓ | Maximum Fault Current in Amperes, RMS ^① | | | | | | | | | | | | | | | | |
|--|--|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|
| | → Source-Side Fuse-Unit Ampere Rating | 7E | 10E | 13E | 15E | 20E | 25E | 30E | 40E | 50E | 65E | 80E | 100E | 125E | 150E | 175E | 200E |
| 5E | 115 | 225 | 336 | 405 | 600 | 800 | 910 | 1200 | 1500 | 2100 | 2700 | 3450 | 4350 | 5600 | 6400 | 7100 | |
| 7E | | 130 | 280 | 365 | 570 | 780 | 880 | 1200 | 1500 | 2100 | 2700 | 3450 | 4350 | 5600 | 6400 | 7100 | |
| 10E | | | 175 | 265 | 520 | 750 | 860 | 1150 | 1450 | 2100 | 2700 | 3450 | 4350 | 5600 | 6400 | 7100 | |
| 13E | | | | 130 | 450 | 710 | 830 | 1150 | 1450 | 2100 | 2700 | 3450 | 4350 | 5600 | 6400 | 7100 | |
| 15E | | | | | 350 | 640 | 770 | 1100 | 1400 | 2050 | 2700 | 3450 | 4350 | 5600 | 6400 | 7100 | |
| 20E | | | | | | 400 | 570 | 1000 | 1350 | 2000 | 2600 | 3350 | 4350 | 5600 | 6400 | 7100 | |
| 25E | | | | | | | 200 | 800 | 1200 | 1900 | 2550 | 3250 | 4250 | 5500 | 6400 | 7100 | |
| 30E | | | | | | | | 610 | 1050 | 1750 | 2450 | 3200 | 4200 | 5400 | 6200 | 6900 | |
| 40E | | | | | | | | | 730 | 1600 | 2300 | 3050 | 4100 | 5300 | 6100 | 6800 | |
| 50E | | | | | | | | | | 1150 | 2050 | 2900 | 3950 | 5100 | 5900 | 6700 | |
| 65E | | | | | | | | | | | 1150 | 2250 | 3500 | 4850 | 5700 | 6400 | |
| 80E | | | | | | | | | | | | 1400 | 2900 | 4450 | 5400 | 6100 | |
| 100E | | | | | | | | | | | | | 2000 | 3800 | 4800 | 5600 | |
| 125E | | | | | | | | | | | | | | 2250 | 3750 | 4750 | |
| 150E | | | | | | | | | | | | | | | | 2100 | 3300 |

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 SMU-20 Fuse Unit is preloaded to its ampere rating.

Table 3. Series Coordination of S&C Standard Speed SMU-20 Fuse Units (TCC No. 153-1) Rated 14.4 kV, Based on Preloading of Source-Side Fuse Unit

| Load-Side Fuse-Unit Ampere Rating ↓ | Maximum Fault Current in Amperes, RMS ^① | | | | | | | | | | | | | | | | |
|--|--|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|
| | 7E | 10E | 13E | 15E | 20E | 25E | 30E | 40E | 50E | 65E | 80E | 100E | 125E | 150E | 175E | 200E | |
| 5E | 65 | 180 | 280 | 340 | 510 | 690 | 780 | 1050 | 1300 | 1800 | 2350 | 3000 | 3850 | 4850 | 5500 | 6100 | |
| 7E | | 65 | 205 | 285 | 485 | 670 | 750 | 1000 | 1300 | 1800 | 2350 | 3000 | 3850 | 4850 | 5500 | 6100 | |
| 10E | | | 80 | 185 | 415 | 630 | 730 | 1000 | 1250 | 1800 | 2350 | 3000 | 3850 | 4850 | 5500 | 6100 | |
| 13E | | | | | 325 | 580 | 690 | 980 | 1250 | 1800 | 2350 | 3000 | 3850 | 4850 | 5500 | 6100 | |
| 15E | | | | | 180 | 495 | 630 | 930 | 1200 | 1750 | 2350 | 3000 | 3850 | 4850 | 5500 | 6100 | |
| 20E | | | | | | 145 | 370 | 790 | 1100 | 1700 | 2250 | 2900 | 3850 | 4850 | 5500 | 6100 | |
| 25E | | | | | | | 90 | 490 | 970 | 1600 | 2200 | 2850 | 3700 | 4750 | 5500 | 6100 | |
| 30E | | | | | | | | 270 | 800 | 1450 | 2050 | 2750 | 3650 | 4650 | 5400 | 6000 | |
| 40E | | | | | | | | | 215 | 1250 | 1900 | 2600 | 3500 | 4600 | 5300 | 5900 | |
| 50E | | | | | | | | | | 680 | 1550 | 2400 | 3400 | 4450 | 5100 | 5700 | |
| 65E | | | | | | | | | | | | 1600 | 2850 | 4100 | 4850 | 5500 | |
| 80E | | | | | | | | | | | | | 770 | 2100 | 3500 | 5100 | |
| 100E | | | | | | | | | | | | | | 840 | 2650 | 4550 | |
| 125E | | | | | | | | | | | | | | | 910 | 3500 | |
| 150E | | | | | | | | | | | | | | | | 950 | 1800 |

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 SMU-20 Fuse Unit to its ampere rating.

Type SMD-20 Power Fuses with SMU-20® Fuse Units

**Table 4. Series Coordination of S&C Standard Speed SMU-20 Fuse Units (TCC No. 153-1)
Rated 25 kV and 34.5 kV, Based on No Preloading of Source-Side Fuse Unit**

| Load-Side Fuse-Unit Ampere Rating ↓ | Maximum Fault Current in Amperes, RMS ^① | | | | | | | | | | | | | | | |
|--|--|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|
| | 7E | 10E | 13E | 15E | 20E | 25E | 30E | 40E | 50E | 65E | 80E | 100E | 125E | 150E | 175E | 200E |
| 5E | 120 | 240 | 350 | 425 | 620 | 820 | 920 | 1200 | 1500 | 2100 | 2700 | 3450 | 4400 | 5600 | 6400 | 7100 |
| 7E | | 120 | 260 | 340 | 540 | 740 | 830 | 1100 | 1400 | 2000 | 2650 | 3350 | 4350 | 5500 | 6300 | 7000 |
| 10E | | | 155 | 245 | 475 | 690 | 790 | 1100 | 1350 | 1950 | 2600 | 3300 | 4250 | 5400 | 6300 | 7000 |
| 13E | | | | 70 | 385 | 610 | 720 | 1000 | 1300 | 1900 | 2550 | 3250 | 4250 | 5400 | 6300 | 7000 |
| 15E | | | | | 285 | 540 | 660 | 970 | 1250 | 1850 | 2500 | 3200 | 4200 | 5400 | 6200 | 6900 |
| 20E | | | | | | 315 | 470 | 850 | 1200 | 1800 | 2400 | 3100 | 4050 | 5300 | 6100 | 6900 |
| 25E | | | | | | | 160 | 650 | 1000 | 1600 | 2250 | 3000 | 4000 | 5300 | 6100 | 6800 |
| 30E | | | | | | | | 490 | 910 | 1500 | 2150 | 2900 | 3900 | 5100 | 5900 | 6700 |
| 40E | | | | | | | | | 530 | 1300 | 1900 | 2650 | 3600 | 4850 | 5700 | 6500 |
| 50E | | | | | | | | | | 980 | 1600 | 2300 | 3300 | 4500 | 5400 | 6100 |
| 65E | | | | | | | | | | | 1100 | 1850 | 2850 | 4050 | 4950 | 5700 |
| 80E | | | | | | | | | | | | 1200 | 2350 | 3500 | 4400 | 5200 |
| 100E | | | | | | | | | | | | | 1700 | 2950 | 3800 | 4550 |
| 125E | | | | | | | | | | | | | | 1750 | 2750 | 3550 |
| 150E | | | | | | | | | | | | | | | 1450 | 2500 |

^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 SMU-20 Fuse Unit is preloaded to its ampere rating.

**Table 5. Series Coordination of S&C Standard Speed SMU-20 Fuse Units (TCC No. 153-1)
Rated 25 kV and 34.5 kV, Based on Preloading of Source-Side Fuse Unit**

| Load-Side Fuse-Unit Ampere Rating ↓ | Maximum Fault Current in Amperes, RMS ^① | | | | | | | | | | | | | | | | |
|---|--|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|
| | → Source-Side Fuse-Unit Ampere Rating | 7E | 10E | 13E | 15E | 20E | 25E | 30E | 40E | 50E | 65E | 80E | 100E | 125E | 150E | 175E | 200E |
| 5E | 65 | 185 | 290 | 360 | 530 | 700 | 790 | 1050 | 1300 | 1800 | 2350 | 3000 | 3850 | 4850 | 5600 | 6100 | |
| 7E | | 50 | 185 | 260 | 445 | 620 | 710 | 950 | 1200 | 1750 | 2300 | 2900 | 3750 | 4800 | 5500 | 6000 | |
| 10E | | | 55 | 160 | 375 | 570 | 660 | 920 | 1200 | 1700 | 2250 | 2850 | 3700 | 4750 | 5500 | 6000 | |
| 13E | | | | | 270 | 490 | 590 | 860 | 1150 | 1650 | 2200 | 2850 | 3700 | 4750 | 5500 | 6000 | |
| 15E | | | | | 150 | 400 | 510 | 800 | 1050 | 1600 | 2150 | 2750 | 3650 | 4650 | 5400 | 6000 | |
| 20E | | | | | | 90 | 280 | 640 | 970 | 1500 | 2050 | 2700 | 3500 | 4550 | 5250 | 5900 | |
| 25E | | | | | | | | 400 | 790 | 1350 | 1900 | 2550 | 3450 | 4450 | 5200 | 5800 | |
| 30E | | | | | | | | 190 | 650 | 1250 | 1800 | 2400 | 3300 | 4350 | 5000 | 5700 | |
| 40E | | | | | | | | | 125 | 1000 | 1550 | 2150 | 3000 | 4100 | 4850 | 5500 | |
| 50E | | | | | | | | | | 500 | 1250 | 1900 | 2750 | 3750 | 4500 | 5100 | |
| 65E | | | | | | | | | | | | 1400 | 2250 | 3300 | 4000 | 4650 | |
| 80E | | | | | | | | | | | | 720 | 1700 | 2750 | 3450 | 4100 | |
| 100E | | | | | | | | | | | | | 550 | 2150 | 2900 | 3550 | |
| 125E | | | | | | | | | | | | | | | 1700 | 2450 | |
| 150E | | | | | | | | | | | | | | | | | 1250 |

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 SMU-20 Fuse Unit to its ampere rating.

Type SMD-20 Power Fuses with SMU-20® Fuse Units

**Table 6. Series Coordination of S&C “K” Speed SMU-20 Fuse Units (TCC No. 165-1)
Rated 14.4 kV, Based on No Preloading of Source-Side Fuse Unit**

| Load-Side Fuse-Unit Ampere Rating ↓ | Maximum Fault Current in Amperes, RMS ^① | | | | | | | | | | | | | | |
|---|--|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| | 6K | 8K | 10K | 12K | 15K | 20K | 25K | 30K | 40K | 50K | 65K | 80K | 100K | 140K | 200K |
| 3K | 75 | 140 | 210 | 300 | 400 | 580 | 720 | 900 | 1250 | 1550 | 2050 | 2700 | 3500 | 6100 | 9900 |
| 6K | | 110 | 190 | 280 | 380 | 550 | 710 | 900 | 1250 | 1550 | 2050 | 2700 | 3500 | 6100 | 9900 |
| 8K | | | 110 | 240 | 350 | 530 | 680 | 880 | 1200 | 1550 | 2050 | 2700 | 3500 | 6100 | 9900 |
| 10K | | | | 150 | 280 | 470 | 630 | 840 | 1150 | 1500 | 1950 | 2600 | 3400 | 6000 | 9800 |
| 12K | | | | | 180 | 440 | 600 | 800 | 1150 | 1450 | 1950 | 2600 | 3400 | 6000 | 9800 |
| 15K | | | | | | 320 | 500 | 710 | 1050 | 1400 | 1850 | 2500 | 3300 | 6000 | 9800 |
| 20K | | | | | | | 260 | 580 | 950 | 1250 | 1750 | 2400 | 3150 | 5800 | 9600 |
| 25K | | | | | | | | 390 | 850 | 1150 | 1650 | 2300 | 3050 | 5700 | 9600 |
| 30K | | | | | | | | | 710 | 1050 | 1550 | 2200 | 3000 | 5700 | 9600 |
| 40K | | | | | | | | | | 660 | 1300 | 2050 | 2850 | 5500 | 9400 |
| 50K | | | | | | | | | | | 880 | 1800 | 2600 | 5300 | 9200 |
| 65K | | | | | | | | | | | | 1100 | 2000 | 4800 | 8800 |
| 80K | | | | | | | | | | | | | 1500 | 4500 | 8700 |
| 100K | | | | | | | | | | | | | | 4000 | 8600 |
| 140K | | | | | | | | | | | | | | | 6700 |

^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 SMU-20 Fuse Unit is preloaded to its ampere rating.

**Table 7. Series Coordination of S&C “K” Speed SMU-20 Fuse Units (TCC No. 165-1)
Rated 14.4 kV, Based on Preloading of Source-Side Fuse Unit**

| Load-Side Fuse-Unit Ampere Rating ↓ | Maximum Fault Current in Amperes, RMS ^① | | | | | | | | | | | | | | |
|--|--|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| | → Source-Side Fuse-Unit Ampere Rating | 6K | 8K | 10K | 12K | 15K | 20K | 25K | 30K | 40K | 50K | 65K | 80K | 100K | 140K |
| 3K | 50 | 120 | 170 | 250 | 340 | 490 | 610 | 790 | 1100 | 1350 | 1750 | 2350 | 3000 | 5300 | 8800 |
| 6K | | 80 | 140 | 230 | 320 | 470 | 600 | 780 | 1100 | 1350 | 1750 | 2350 | 3000 | 5300 | 8800 |
| 8K | | | 50 | 170 | 280 | 440 | 570 | 750 | 1050 | 1350 | 1750 | 2350 | 3000 | 5300 | 8800 |
| 10K | | | | 80 | 190 | 380 | 520 | 700 | 1000 | 1300 | 1700 | 2250 | 2950 | 5200 | 8700 |
| 12K | | | | | 70 | 330 | 480 | 670 | 980 | 1250 | 1650 | 2250 | 2950 | 5200 | 8700 |
| 15K | | | | | | 190 | 370 | 580 | 900 | 1150 | 1600 | 2200 | 2850 | 5100 | 8700 |
| 20K | | | | | | | 110 | 400 | 770 | 1050 | 1500 | 2050 | 2750 | 5000 | 8400 |
| 25K | | | | | | | | 155 | 660 | 940 | 1350 | 1900 | 2600 | 4900 | 8400 |
| 30K | | | | | | | | | 435 | 820 | 1300 | 1850 | 2550 | 4800 | 8400 |
| 40K | | | | | | | | | | 245 | 980 | 1650 | 2350 | 4700 | 8200 |
| 50K | | | | | | | | | | | 490 | 1400 | 2150 | 4400 | 8000 |
| 65K | | | | | | | | | | | | 540 | 1550 | 3900 | 7600 |
| 80K | | | | | | | | | | | | | 790 | 3600 | 7500 |
| 100K | | | | | | | | | | | | | | 3250 | 7200 |
| 140K | | | | | | | | | | | | | | | 4900 |

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 SMU-20 Fuse Unit to its ampere rating.

Type SMD-20 Power Fuses with SMU-20® Fuse Units

**Table 8. Series Coordination of S&C “K” Speed SMU-20 Fuse Units (TCC No. 165-1)
Rated 25 kV and 34.5 kV, Based on No Preloading of Source-Side Fuse Unit**

| Load-Side Fuse-Unit Ampere Rating ↓ | Maximum Fault Current in Amperes, RMS ^① | | | | | | | | | | | | | | |
|--|--|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|--------|
| | 6K | 8K | 10K | 12K | 15K | 20K | 25K | 30K | 40K | 50K | 65K | 80K | 100K | 140K | 200K |
| 3K | 75 | 150 | 210 | 290 | 390 | 560 | 700 | 890 | 1250 | 1550 | 2000 | 2650 | 3450 | 6100 | 10 000 |
| 6K | | 110 | 180 | 270 | 370 | 540 | 660 | 860 | 1200 | 1500 | 1950 | 2650 | 3450 | 6100 | 10 000 |
| 8K | | | 110 | 230 | 340 | 500 | 640 | 830 | 1150 | 1450 | 1950 | 2650 | 3400 | 6100 | 10 000 |
| 10K | | | | 150 | 290 | 470 | 610 | 800 | 1150 | 1400 | 1900 | 2600 | 3400 | 6100 | 10 000 |
| 12K | | | | | 190 | 420 | 570 | 770 | 1100 | 1400 | 1900 | 2600 | 3350 | 6100 | 10 000 |
| 15K | | | | | | 330 | 500 | 720 | 1050 | 1400 | 1900 | 2600 | 3350 | 6100 | 10 000 |
| 20K | | | | | | | 270 | 570 | 950 | 1250 | 1750 | 2400 | 3200 | 5900 | 9 900 |
| 25K | | | | | | | | 370 | 810 | 1100 | 1600 | 2300 | 3100 | 5900 | 9 900 |
| 30K | | | | | | | | | 670 | 1000 | 1500 | 2100 | 2900 | 5600 | 9 800 |
| 40K | | | | | | | | | | 640 | 1250 | 1950 | 2700 | 5500 | 9 700 |
| 50K | | | | | | | | | | | 900 | 1700 | 2500 | 5200 | 9 500 |
| 65K | | | | | | | | | | | | 1100 | 2000 | 4800 | 9 100 |
| 80K | | | | | | | | | | | | | 1500 | 4200 | 9 000 |
| 100K | | | | | | | | | | | | | | 3700 | 8 500 |
| 140K | | | | | | | | | | | | | | | 5 400 |

^① 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 SMU-20 Fuse Unit is preloaded to its ampere rating.

**Table 9. Series Coordination of S&C “K” Speed SMU-20 Fuse Units (TCC No. 165-1)
Rated 25 kV and 34.5 kV, Based on Preloading of Source-Side Fuse Unit**

| Load-Side Fuse-Unit Ampere Rating ↓ | Maximum Fault Current in Amperes, RMS ^① | | | | | | | | | | | | | | |
|-------------------------------------|--|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| | 6K | 8K | 10K | 12K | 15K | 20K | 25K | 30K | 40K | 50K | 65K | 80K | 100K | 140K | 200K |
| 3K | 55 | 120 | 180 | 250 | 340 | 480 | 610 | 780 | 1100 | 1350 | 1750 | 2350 | 3000 | 5300 | 8800 |
| 6K | | 80 | 150 | 230 | 320 | 460 | 580 | 750 | 1050 | 1300 | 1750 | 2300 | 3000 | 5300 | 8800 |
| 8K | | | 50 | 190 | 280 | 430 | 540 | 710 | 1000 | 1300 | 1700 | 2300 | 2900 | 5300 | 8700 |
| 10K | | | | 80 | 220 | 390 | 520 | 690 | 990 | 1250 | 1700 | 2250 | 2900 | 5300 | 8700 |
| 12K | | | | | 65 | 330 | 470 | 650 | 960 | 1250 | 1700 | 2250 | 2900 | 5300 | 8700 |
| 15K | | | | | | 230 | 400 | 600 | 920 | 1200 | 1650 | 2250 | 2900 | 5300 | 8700 |
| 20K | | | | | | | 110 | 420 | 780 | 1050 | 1500 | 2050 | 2750 | 5100 | 8600 |
| 25K | | | | | | | | 160 | 650 | 940 | 1350 | 1950 | 2650 | 5100 | 8600 |
| 30K | | | | | | | | | 440 | 820 | 1300 | 1800 | 2450 | 4800 | 8500 |
| 40K | | | | | | | | | | 260 | 960 | 1600 | 2300 | 4600 | 8400 |
| 50K | | | | | | | | | | | 500 | 1300 | 2100 | 4400 | 8100 |
| 65K | | | | | | | | | | | | 580 | 1550 | 3900 | 7800 |
| 80K | | | | | | | | | | | | | 820 | 3400 | 7400 |
| 100K | | | | | | | | | | | | | | 2800 | 6900 |
| 140K | | | | | | | | | | | | | | | 3900 |

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 SMU-20 Fuse Unit to its ampere rating.

Type SMD-20 Power Fuses with SMU-20® Fuse Units

Table 10. Series Coordination of S&C Standard Speed SMU-20 Fuse Units (TCC No. 153-1) with S&C Standard Speed Positrol Fuse Links (TCC No. 123-6), Based on No Preloading of Source-Side Fuse Unit

| Load-Side Fuse-Link Ampere Rating ↓ | Maximum Fault Current in Amperes, RMS ^① | | | | | | | | | | | | | | | | | |
|-------------------------------------|--|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| | → Source-Side Fuse-Unit Ampere Rating | 5E | 7E | 10E | 13E | 15E | 20E | 25E | 30E | 40E | 50E | 65E | 80E | 100E | 125E | 150E | 175E | 200E |
| 1 Std. | 180 | 290 | 415 | 550 | 640 | 890 | 1150 | 1250 | 1600 | 2000 | 2700 | 3800 | 4250 | 5300 | 6700 | 7500 | 8300 | |
| 2 Std. | 160 | 280 | 405 | 540 | 630 | 890 | 1150 | 1250 | 1600 | 2000 | 2700 | 3800 | 4250 | 5300 | 6700 | 7500 | 8300 | |
| 3 Std. | 125 | 250 | 385 | 530 | 620 | 870 | 1150 | 1250 | 1600 | 2000 | 2700 | 3800 | 4250 | 5300 | 6700 | 7500 | 8300 | |
| 5 Std. | | 180 | 345 | 495 | 590 | 850 | 1100 | 1250 | 1600 | 2000 | 2700 | 3800 | 4250 | 5300 | 6700 | 7500 | 8300 | |
| 7 Std. | | | 260 | 445 | 550 | 820 | 1100 | 1200 | 1600 | 2000 | 2700 | 3800 | 4250 | 5300 | 6700 | 7500 | 8300 | |
| 10 Std. | | | | 260 | 410 | 740 | 1050 | 1150 | 1550 | 1950 | 2700 | 3800 | 4250 | 5300 | 6700 | 7500 | 8300 | |
| 15 Std. | | | | | | 460 | 850 | 1000 | 1450 | 1800 | 2600 | 3350 | 4250 | 5300 | 6700 | 7500 | 8300 | |
| 20 Std. | | | | | | | 610 | 810 | 1300 | 1700 | 2550 | 3300 | 4200 | 5300 | 6700 | 7500 | 8300 | |
| 25 Std. | | | | | | | | 520 | 1150 | 1650 | 2450 | 3250 | 4100 | 5200 | 6600 | 7500 | 8200 | |
| 30 Std. | | | | | | | | | 880 | 1400 | 2350 | 3150 | 4050 | 5100 | 6500 | 7400 | 8100 | |
| 40 Std. | | | | | | | | | | 720 | 2000 | 2900 | 3850 | 5000 | 6400 | 7300 | 8100 | |
| 50 Std. | | | | | | | | | | | 1350 | 2500 | 3600 | 4850 | 6300 | 7200 | 8000 | |
| 65 Std. | | | | | | | | | | | | 1950 | 3200 | 4600 | 6100 | 7000 | 7800 | |
| 80 Std. | | | | | | | | | | | | | 2500 | 4100 | 5700 | 6700 | 7500 | |
| 100 Std. | | | | | | | | | | | | | | 2700 | 4700 | 5900 | 6800 | |
| 125 Std. | | | | | | | | | | | | | | | | 4050 | 5300 | |

① The maximum fault-current values are based on published time-current characteristic curves. See Table 11 on page 11 for maximum fault-current values based on the assumption the source-side SMU-20 Fuse Unit is preloaded to its ampere rating.

Table 11. Series Coordination of S&C Standard Speed SMU-20 Fuse Units (TCC No. 153-1) with S&C Standard Speed Positrol Fuse Links (TCC No. 123-6), Based on Preloading of Source-Side Fuse Unit

| Load-Side Fuse-Link Ampere Rating ↓ | Maximum Fault Current in Amperes, RMS ^① | | | | | | | | | | | | | | | | | |
|-------------------------------------|--|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| | → Source-Side Fuse-Unit Ampere Rating | 5E | 7E | 10E | 13E | 15E | 20E | 25E | 30E | 40E | 50E | 65E | 80E | 100E | 125E | 150E | 175E | 200E |
| 1 Std. | 150 | 250 | 360 | 480 | 560 | 770 | 1000 | 1100 | 1450 | 1750 | 2400 | 3000 | 3750 | 4750 | 5900 | 6600 | 7300 | |
| 2 Std. | 125 | 235 | 350 | 470 | 550 | 770 | 1000 | 1100 | 1450 | 1750 | 2400 | 3000 | 3750 | 4750 | 5900 | 6600 | 7300 | |
| 3 Std. | 85 | 205 | 320 | 455 | 540 | 760 | 990 | 1100 | 1450 | 1750 | 2400 | 3000 | 3750 | 4750 | 5900 | 6600 | 7300 | |
| 5 Std. | | 105 | 270 | 410 | 500 | 730 | 960 | 1100 | 1400 | 1750 | 2400 | 3000 | 3750 | 4750 | 5900 | 6600 | 7300 | |
| 7 Std. | | | 155 | 350 | 450 | 700 | 940 | 1050 | 1400 | 1700 | 2350 | 3000 | 3750 | 4750 | 5900 | 6600 | 7300 | |
| 10 Std. | | | | | 270 | 600 | 870 | 990 | 1350 | 1650 | 2350 | 3000 | 3750 | 4750 | 5900 | 6600 | 7300 | |
| 15 Std. | | | | | | 170 | 650 | 800 | 1200 | 1550 | 2250 | 2900 | 3700 | 4700 | 5900 | 6600 | 7300 | |
| 20 Std. | | | | | | | 320 | 560 | 1050 | 1450 | 2200 | 2850 | 3650 | 4650 | 5900 | 6600 | 7300 | |
| 25 Std. | | | | | | | | | 850 | 1350 | 2100 | 2800 | 3600 | 4600 | 5800 | 6600 | 7200 | |
| 30 Std. | | | | | | | | | 425 | 1050 | 1950 | 2700 | 3500 | 4500 | 5700 | 6500 | 7200 | |
| 40 Std. | | | | | | | | | | | 1500 | 2400 | 3300 | 4350 | 5500 | 6300 | 7100 | |
| 50 Std. | | | | | | | | | | | 550 | 1900 | 2950 | 4150 | 5400 | 6200 | 6900 | |
| 65 Std. | | | | | | | | | | | | 1100 | 2450 | 3800 | 5200 | 600 | 6700 | |
| 80 Std. | | | | | | | | | | | | | 1450 | 3150 | 4750 | 5700 | 6400 | |
| 100 Std. | | | | | | | | | | | | | | 950 | 3500 | 4650 | 5600 | |
| 125 Std. | | | | | | | | | | | | | | | | 1050 | 3550 | |

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 SMU-20 Fuse Unit to its ampere rating.

Type SMD-20 Power Fuses with SMU-20® Fuse Units

Table 12. Series Coordination of S&C “K” Speed SMU-20 Fuse Units (TCC No. 165-1) with S&C “K” Speed Positrol Fuse Links (TCC No. 165-6), Based on No Preloading of Source-Side Fuse Unit

| Load-Side Fuse-Link Ampere Rating ↓ | Maximum Fault Current in Amperes, RMS① | | | | | | | | | | | | | |
|-------------------------------------|--|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|--------|
| | 8K | 10K | 12K | 15K | 20K | 25K | 30K | 40K | 50K | 65K | 80K | 100K | 140K | 200K |
| 6K | 115 | 240 | 390 | 540 | 770 | 960 | 1200 | 1600 | 2000 | 2550 | 3350 | 4200 | 7200 | 11 500 |
| 8K | | 140 | 325 | 510 | 740 | 930 | 1200 | 1600 | 2000 | 2550 | 3350 | 4200 | 7200 | 11 500 |
| 10K | | | 200 | 415 | 700 | 890 | 1150 | 1600 | 2000 | 2550 | 3350 | 4200 | 7200 | 11 500 |
| 12K | | | | 255 | 580 | 820 | 1100 | 1550 | 1950 | 2550 | 3350 | 4200 | 7200 | 11 500 |
| 15K | | | | | 400 | 680 | 1000 | 1500 | 1900 | 2500 | 3300 | 4200 | 7200 | 11 500 |
| 20K | | | | | | 400 | 820 | 1350 | 1800 | 2400 | 3250 | 4150 | 7200 | 11 500 |
| 25K | | | | | | | 450 | 1150 | 1650 | 2300 | 3150 | 4100 | 7100 | 11 500 |
| 30K | | | | | | | | 800 | 1400 | 2150 | 3000 | 3950 | 7100 | 11 000 |
| 40K | | | | | | | | | 840 | 1800 | 2800 | 3850 | 6900 | 11 000 |
| 50K | | | | | | | | | | 1150 | 2350 | 3550 | 6800 | 11 000 |
| 65K | | | | | | | | | | | 1800 | 3100 | 6600 | 11 000 |
| 80K | | | | | | | | | | | | 2000 | 6100 | 10 500 |
| 100K | | | | | | | | | | | | | 5300 | 10 000 |
| 140K | | | | | | | | | | | | | | 7 700 |

① The maximum fault-current values are based on published time-current characteristic curves. See Table 13 on page 13 for maximum fault-current values based on the assumption the source-side SMU-20 Fuse Unit is preloaded to its ampere rating.

Table 13. Series Coordination of S&C “K” Speed SMU-20 Fuse Units (TCC No. 165-1) with S&C “K” Speed Positrol Fuse Links (TCC No. 165-6), Based on Preloading of Source-Side Fuse Unit

| Load-Side Fuse-Link Ampere Rating ↓ | Maximum Fault Current in Amperes, RMS ^① | | | | | | | | | | | | | |
|-------------------------------------|--|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|--------|
| | 8K | 10K | 12K | 15K | 20K | 25K | 30K | 40K | 50K | 65K | 80K | 100K | 140K | 200K |
| 6K | | 190 | 325 | 460 | 670 | 830 | 1050 | 1400 | 1750 | 2300 | 2950 | 3750 | 6400 | 10 000 |
| 8K | | | 250 | 410 | 640 | 810 | 1050 | 1400 | 1750 | 2300 | 2950 | 3750 | 6400 | 10 000 |
| 10K | | | | 305 | 580 | 770 | 1000 | 1400 | 1750 | 2300 | 2950 | 3750 | 6400 | 10 000 |
| 12K | | | | 55 | 455 | 670 | 940 | 1350 | 1700 | 2250 | 2950 | 3750 | 6400 | 10 000 |
| 15K | | | | | 170 | 510 | 820 | 1300 | 1650 | 2200 | 2900 | 3700 | 6300 | 10 000 |
| 20K | | | | | | 100 | 600 | 1150 | 1550 | 2100 | 2800 | 3650 | 6300 | 10 000 |
| 25K | | | | | | | 120 | 880 | 1350 | 2000 | 2750 | 3550 | 6300 | 10 000 |
| 30K | | | | | | | | 430 | 1050 | 1750 | 2600 | 3450 | 6200 | 9 900 |
| 40K | | | | | | | | | 280 | 1350 | 2300 | 3300 | 6100 | 9 800 |
| 50K | | | | | | | | | | 470 | 1800 | 2900 | 6000 | 9 700 |
| 65K | | | | | | | | | | | 1050 | 2450 | 5700 | 9 500 |
| 80K | | | | | | | | | | | | 560 | 5000 | 9 300 |
| 100K | | | | | | | | | | | | | 4200 | 8 900 |
| 140K | | | | | | | | | | | | | | 5 700 |

^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 SMU-20 Fuse Unit to its ampere rating.

Type SMD-20 Power Fuses with SMU-20® Fuse Units

Table 14. Series Coordination of S&C Slow Speed SMU-20 Fuse Units (TCC No. 119-1) with S&C “T” Speed Positrol Fuse Links (TCC No. 170-6), Based on No Preloading of Source-Side Fuse Unit

| Load-Side Fuse-Link Ampere Rating ↓ | Maximum Fault Current in Amperes, RMS ^① | | | | | | | | | | | | |
|---|--|-----|------|------|------|------|------|------|------|------|------|--------|--------|
| | 15E | 20E | 25E | 30E | 40E | 50E | 65E | 80E | 100E | 125E | 150E | 175E | 200E |
| 6T | 720 | 950 | 1100 | 1500 | 2250 | 2850 | 3500 | 4600 | 5900 | 7700 | 9500 | 10 500 | 12 000 |
| 8T | 620 | 890 | 1050 | 1450 | 2200 | 2850 | 3450 | 4550 | 5900 | 7600 | 9500 | 10 500 | 12 000 |
| 10T | 400 | 760 | 970 | 1400 | 2200 | 2800 | 3400 | 4550 | 5800 | 7600 | 9500 | 10 500 | 12 000 |
| 12T | | 490 | 750 | 1250 | 2050 | 2700 | 3350 | 4450 | 5800 | 7500 | 9400 | 10 500 | 12 000 |
| 15T | | | 110 | 1000 | 1950 | 2600 | 3250 | 4400 | 5700 | 7400 | 9400 | 10 500 | 12 000 |
| 20T | | | | 365 | 1700 | 2450 | 3100 | 4300 | 5700 | 7300 | 9200 | 10 500 | 12 000 |
| 25T | | | | | 1200 | 2150 | 2850 | 4150 | 5500 | 7300 | 9100 | 10 000 | 12 000 |
| 30T | | | | | | 1550 | 2400 | 3850 | 5300 | 7100 | 9100 | 10 000 | 11 500 |
| 40T | | | | | | | 1350 | 3300 | 5000 | 6800 | 8900 | 9 800 | 11 500 |
| 50T | | | | | | | | 2400 | 4400 | 6400 | 8600 | 9 500 | 11 500 |
| 65T | | | | | | | | | 3200 | 5600 | 8000 | 8 900 | 11 000 |
| 80T | | | | | | | | | | 4350 | 7100 | 8 000 | 10 000 |
| 100T | | | | | | | | | | | 5100 | 6 500 | 9 400 |

^① The maximum fault-current values are based on published time-current characteristic curves. See Table 15 on page 15 for maximum fault-current values based on the assumption the source-side SMU-20 Fuse Unit is preloaded to its ampere rating.

Table 15 — Series Coordination of S&C Slow Speed SMU-20 Fuse Units (TCC No. 119-1) with S&C “T” Speed Positrol Fuse Links (TCC No. 170-6), Based on Preloading of Source-Side Fuse Unit

| Load-Side Fuse-Link Ampere Rating ↓ | Maximum Fault Current in Amperes, RMS ^① | | | | | | | | | | | | |
|-------------------------------------|--|-----|-----|------|------|------|------|------|------|------|------|------|--------|
| | Source-Side Fuse-Unit Ampere Rating → | 15E | 20E | 25E | 30E | 40E | 50E | 65E | 80E | 100E | 125E | 150E | 175E |
| 6T | 600 | 820 | 980 | 1350 | 1950 | 2550 | 3050 | 4050 | 5200 | 6700 | 8400 | 9100 | 10 500 |
| 8T | 495 | 750 | 910 | 1250 | 1950 | 2500 | 3050 | 4000 | 5200 | 6700 | 8400 | 9000 | 10 500 |
| 10T | 150 | 590 | 790 | 1200 | 1900 | 2450 | 3000 | 4000 | 5200 | 6700 | 8300 | 9000 | 10 500 |
| 12T | | 130 | 540 | 1050 | 1800 | 2350 | 2950 | 3950 | 5100 | 6600 | 8300 | 8900 | 10 500 |
| 15T | | | | 710 | 1650 | 2250 | 2800 | 3850 | 5100 | 6600 | 8300 | 8900 | 10 500 |
| 20T | | | | | 1300 | 2050 | 2650 | 3750 | 5000 | 6500 | 8200 | 8900 | 10 000 |
| 25T | | | | | 540 | 1700 | 2400 | 3550 | 4850 | 6400 | 8100 | 8800 | 10 000 |
| 30T | | | | | | 770 | 1850 | 3200 | 4550 | 6200 | 8000 | 8700 | 10 000 |
| 40T | | | | | | | 370 | 2500 | 4150 | 5900 | 7700 | 8400 | 10 000 |
| 50T | | | | | | | | 800 | 3450 | 5400 | 7400 | 8200 | 9 800 |
| 65T | | | | | | | | | 1650 | 4450 | 6600 | 7400 | 9 300 |
| 80T | | | | | | | | | | 2400 | 5600 | 6500 | 8 500 |
| 100T | | | | | | | | | | | 2400 | 4200 | 7 100 |

^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 SMU-20 Fuse Unit to its ampere rating.