

## Specifications

### Conditions of Sale

**STANDARD:** The seller's standard conditions of sale set forth in Price Sheet 150 apply, except as modified under "WARRANTY QUALIFICATIONS" below.

### SPECIAL TO THIS PRODUCT:

**NOTE:** Fault Fiter Electronic Power Fuses are available only in S&C Metal-Enclosed Switchgear, S&C Metal-Enclosed Fuses, and S&C Pad-Mounted Gear. Replacement components for these fuses (i.e., interrupting modules and control modules) are listed in this document.

**WARRANTY QUALIFICATIONS:** The standard warranty contained in the seller's standard conditions of sale (as set forth in Price Sheet 150) does not apply when components of other than S&C manufacture are used in Fault Fiter Electronic Power Fuse mountings or when Fault Fiter interrupting modules and control modules are used in mountings of other than S&C manufacture.

### A Note on System Voltage Ratings

Fault Fiter Electronic Power Fuses should be selected having a maximum voltage rating equal to, or greater than, the system line-to-line voltage because the fuse can be exposed to full system line-to-line voltage in clearing faults. To ensure proper coordination of Fault Fiter fuse with system surge arresters, it is also important the system voltage not be too low relative to the Fault Fiter fuse's voltage rating. To satisfy both of these requirements, the specific system-voltage recommendations shown in Table 1 should be observed.

**Table 1: System-Voltage Recommendations**

Fault Fiter Fuse Voltage Rating, kV		Applicable System Voltage, kV
Nom.	Max	
4.16	5.5	4.16 and 4.8
13.8	17.0	12.0 through 16.5
25	29	22.9 through 27.6

### How to Order Replacement Fault Fiter Electronic Power Fuse Components

Complete the following steps to put a complete catalog number together for replacement Fault Fiter Electronic Power Fuse components:

**STEP 1.** Obtain the catalog number of replacement interrupting modules from Table 2 on page 2, taking care to match the voltage rating of the interrupting module to that of the mounting in which it is installed.

Catalog Number:

**STEP 2.** Obtain the catalog number of replacement control modules from Tables 3 through 5 on pages 2 and 3.

Catalog Number:

Catalog Number:

Catalog Number:

**Example 1:** The catalog number for a replacement Fault Fiter fuse interrupting module rated 25 kV is:

**8 0 3 6 0 0 R 2**

**Example 2:** The catalog number for a replacement Fault Fiter fuse control module, with an inverse curve TCC (TCC 410-7) and a minimum pickup current of 1000 A is:

**8 1 4 1 0 0**

### How to Order Handling Tools

Obtain the catalog number(s) of recommended handling tool(s) from Table 6 on page 4.

Catalog Number:

Catalog Number:

★ Fault Fiter Electronic Power Fuses are manufactured in accordance with a quality system certified to ISO 9001.



**Table 2. Fault Fiter Fuse Interrupting Modules**

Rating				Catalog Number
kV		Amperes, RMS		
Nom.	Max	Cont.①	Interrupting (Sym.)②	
4.16	5.5	600	40 000	800600R2
13.8	17.0	600	40 000	802600R2
25	29	600	40 000	803600R2

① Interrupting modules rated 600 amperes continuous are also applicable for use in mountings rated 200 amperes or 400 amperes continuous

② Rating of interrupting module is 40,000 amperes, RMS, symmetrical. Rating of the metal-enclosed gear with Fault Fiter fuses may be lower. Refer to the nameplate on the switchgear door.

**Table 3. Fault Fiter Fuse Control Modules—Underground Subloop ① Type (TCC No. 422-7)**

Continuous Current, Amperes, Max ②	TCC Curve Parameters				Catalog Number
	Minimum Pickup, Amperes, RMS	Short-Time Pickup, Amperes, RMS	Short-Time Delay Band	Instantaneous Pickup, Amperes, RMS	
600	400	1300	2	3000	7020-C40P130S2T3
	500	1300	1	3000	7020-C50P130S1T3

① This control module is applicable for protection of 15-kV and 25-kV class underground distribution subloops having the following parameters: maximum available fault current—14,000 amperes, RMS, symmetrical at 15 kV, 12,500 amperes, RMS, symmetrical at 25 kV; maximum rated transformer kVA connected for residential circuits—1200 kVA single-phase, 3600 kVA three-phase at 15 kV, 2400 kVA single-phase, 7200 kVA three-phase at 25 kV; with no capacitor banks or current-

limiting fuses on the load side of Fault Fiter fuses. If the maximum rated transformer kVA connected is greater than the values listed in Table 2, or if the application involves protection of circuits serving industrial, commercial, or institutional loads, refer to your nearest S&C Sales Office.

② Control modules rated 600 amperes continuous are also applicable for use in mountings rated 200 amperes or 400 amperes continuous.

**Table 4. Fault Fiter Fuse Control Modules—Inverse Curve Type (TCC No. 410-7)**

Continuous Current, Amperes, Max ①	Minimum Pickup, Amperes, RMS	Catalog Number
600	400	814040
	500	814050
	600	814060
	700	814070
	800	814080
	1000	814100
	1250	814125
	1500	814150

① Control modules rated 600 amperes continuous are also applicable for use in mountings rated 200 amperes or 400 amperes continuous.

**Table 5. Fault Fiter Fuse Control Modules—Time-Delayed Compound-Curve Type (TCC No. 421-7)**

Continuous Current, Amperes, Max <sup>①</sup>	TCC Curve Parameters				Catalog Number
	Minimum Pickup, Amperes, RMS	Short-Time Delay Band	High-Current Pickup, Amperes, RMS	High-Current Delay Band Time Delay, ms	
600	400	1	3000	8	7010-C40S1T3D8
			6000	8	7010-C40S1T6D8
		2	3000	8	7010-C40S2T3D8
			6000	8	7010-C40S2T6D8
		3	3000	8	7010-C40S3T3D8
			6000	8	7010-C40S3T6D8
		4	3000	8	7010-C40S4T3D8
			6000	8	7010-C40S4T6D8
	600	1	3000	8	7010-C60S1T3D8
			6000	8	7010-C60S1T6D8
		2	3000	8	7010-C60S2T3D8
			6000	8	7010-C60S2T6D8
		3	3000	8	7010-C60S3T3D8
			6000	8	7010-C60S3T6D8
		4	3000	8	7010-C60S4T3D8
			6000	8	7010-C60S4T6D8
	800	1	3000	8	7010-C80S1T3D8
			6000	8	7010-C80S1T6D8
		2	3000	8	7010-C80S2T3D8
			6000	8	7010-C80S2T6D8
		3	3000	8	7010-C80S3T3D8
			6000	8	7010-C80S3T6D8
		4	3000	8	7010-C80S4T3D8
			6000	8	7010-C80S4T6D8
	1100	1	3000	8	7010-C110S1T3D8
			6000	8	7010-C110S1T6D8
		2	3000	8	7010-C110S2T3D8
			6000	8	7010-C110S2T6D8
		3	3000	8	7010-C110S3T3D8
			6000	8	7010-C110S3T6D8
		4	3000	8	7010-C110S4T3D8
			6000	8	7010-C110S4T6D8

<sup>①</sup> Control modules rated 600 amperes continuous are also applicable for use in mountings rated 200 amperes or 400 amperes continuous.

Table 6. Recommended Handling Tools①

Fault Fiter Electronic Power Fuse Mounting Style	Handling Tool		Catalog Number
	For Opening and Closing Handling Tool	For Installing and Removing Handling Tool②	
Disconnect, with Uni-Rupter; and Disconnect	Grappler™ Handling Tool①	Grappler™ Handling Tool	4423
	—	Extra-Large Clamp	4424

① Universal poles for use with S&C Handling Tools are listed in Specification Bulletin 851-31.

② Holders for use with Fault Fiter Electronic Power Fuses rated 25 kV should be installed and removed using gloved hands after the mounting has been de-energized and properly grounded in accordance with local operating procedures.