

The SMD-40 Power Fuse is designed especially for outdoor distribution substations. These power fuses are available in the station-vertical style in voltage ratings of 4.8 kV, 14.4 kV, and 25 kV, and they provide a continuous current rating of 400 amperes. Interrupting ratings are 25,000 amperes RMS symmetrical at 4.8 kV and 14.4 kV, and 20,000 amperes RMS symmetrical at 25 kV. See Figure 1.

SMD-40 Power Fuses are ideally suited for distribution substation applications, including transformer, capacitor bank, and line and cable protection.

### Features

SMD-40 Power Fuses include 45°-opening dropout “blown-fuse” indication to provide visual evidence the fuse has operated, plus air-gap isolation of the faulted circuit. Blown-fuse indication is a desirable feature in any application, but especially for capacitor-bank applications where a blown-fuse condition may be otherwise undetected for an extended period of time. In addition to blown-fuse indication, these power fuses include a new outdoor S&C Silencer that virtually eliminates noise and exhaust from fuse operations.

SMD-40 Power Fuses are easy to handle, too. Fuse units for these power fuses are readily installed or removed from the mounting using a universal pole equipped with an S&C Large Clamp. Re-fusing is equally simple and only requires replacing the SMU-40® Fuse Unit after a fuse operation. Fuse unit end-fittings with an S&C Silencer and all mountings are reusable. The reduced weight of the fuse unit end-fittings for SMD-40 Power Fuses results in unsurpassed handling performance relative to other designs of 400-ampere power fuses.

SMD-40 Power Fuses are offered in a disconnect style that features spring-backed silver-to-silver contacts at both the latch and the hinge. A rugged cast red brass hinge plus bronze latch-end guide horns provide reliable control for the fuse unit during closing with an ordinary station prong. And, with the simple inclusion of an optional attachment hook to the mounting, the SMD-40 Power Fuse is ready for full-load live switching operations using Loadbuster®—The S&C Loadbreak Tool.

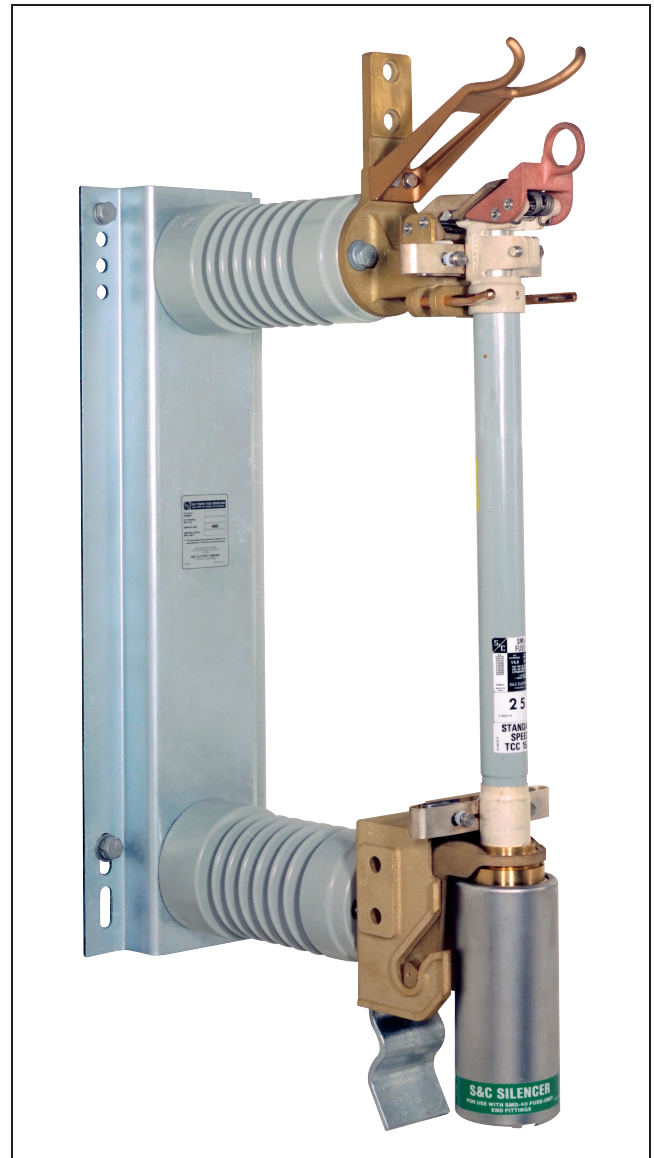


Figure 1. A 14.4-kV station-vertical style SMD-40 Power Fuse.



## Type SMD-40 Power Fuses

SMD-40 Power Fuses are offered with a choice of Cypoxy™ Insulators or porcelain station post insulators. Cypoxy Insulators are nontracking, self-scouring, and nonweathering, and they provide generous leakage distances. S&C Cypoxy station post insulators meet or exceed the electrical and mechanical-strength requirements established in ANSI Standard C29.9 (1983) for porcelain standard-strength station post insulators.

SMU-40® Fuse Units for use with SMD-40 Power Fuses are available in the widely used S&C Standard Speed and Slow Speed in ratings through 400 amperes. The SMU-40 Fuse Unit is similar in construction to the SMU-20® Fuse Unit, and it uses S&C's unique nondamagable fusible element construction that is unaffected by transient surges. See Figure 2 and Figure 3 on page 3. Consequently, the time-current characteristics of these fuses are precise and permanently accurate, providing predictable and reliable performance.

For additional information, consult the nearest S&C Sales Office.

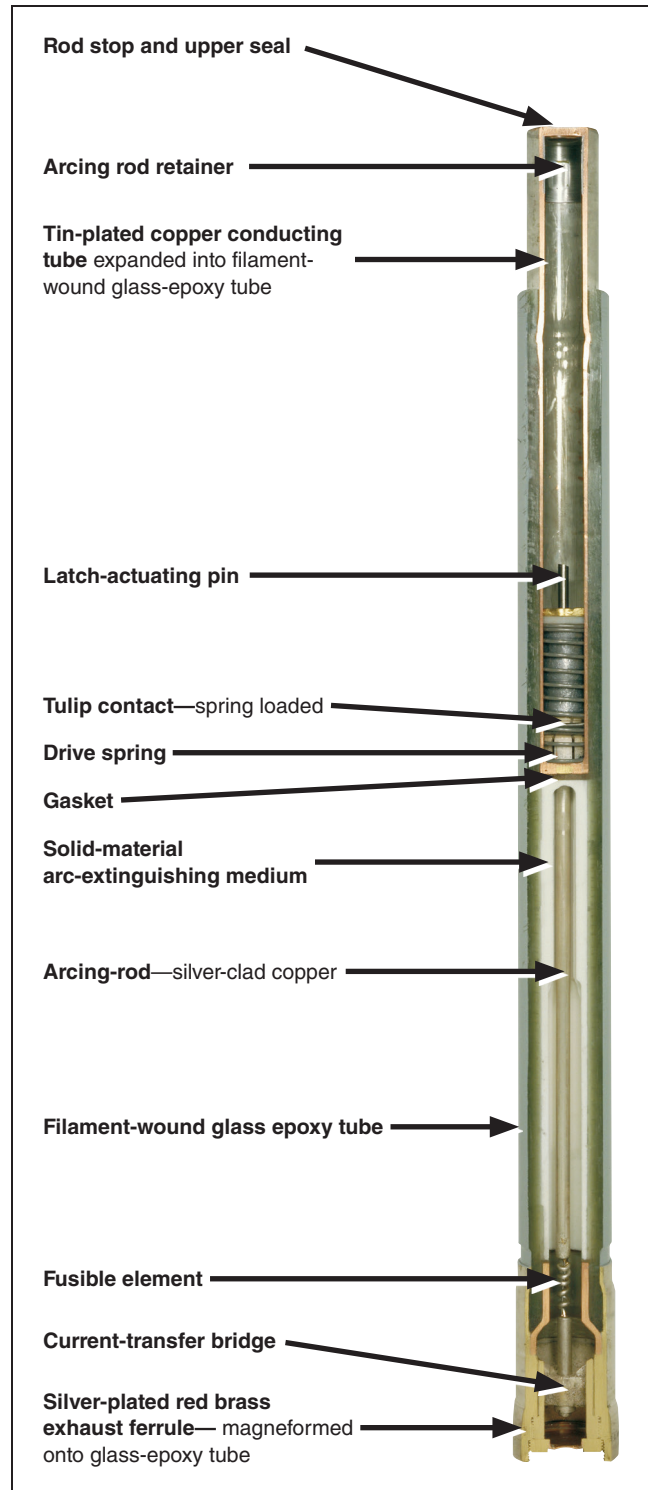


Figure 2. An SMU-40 Fuse Unit.

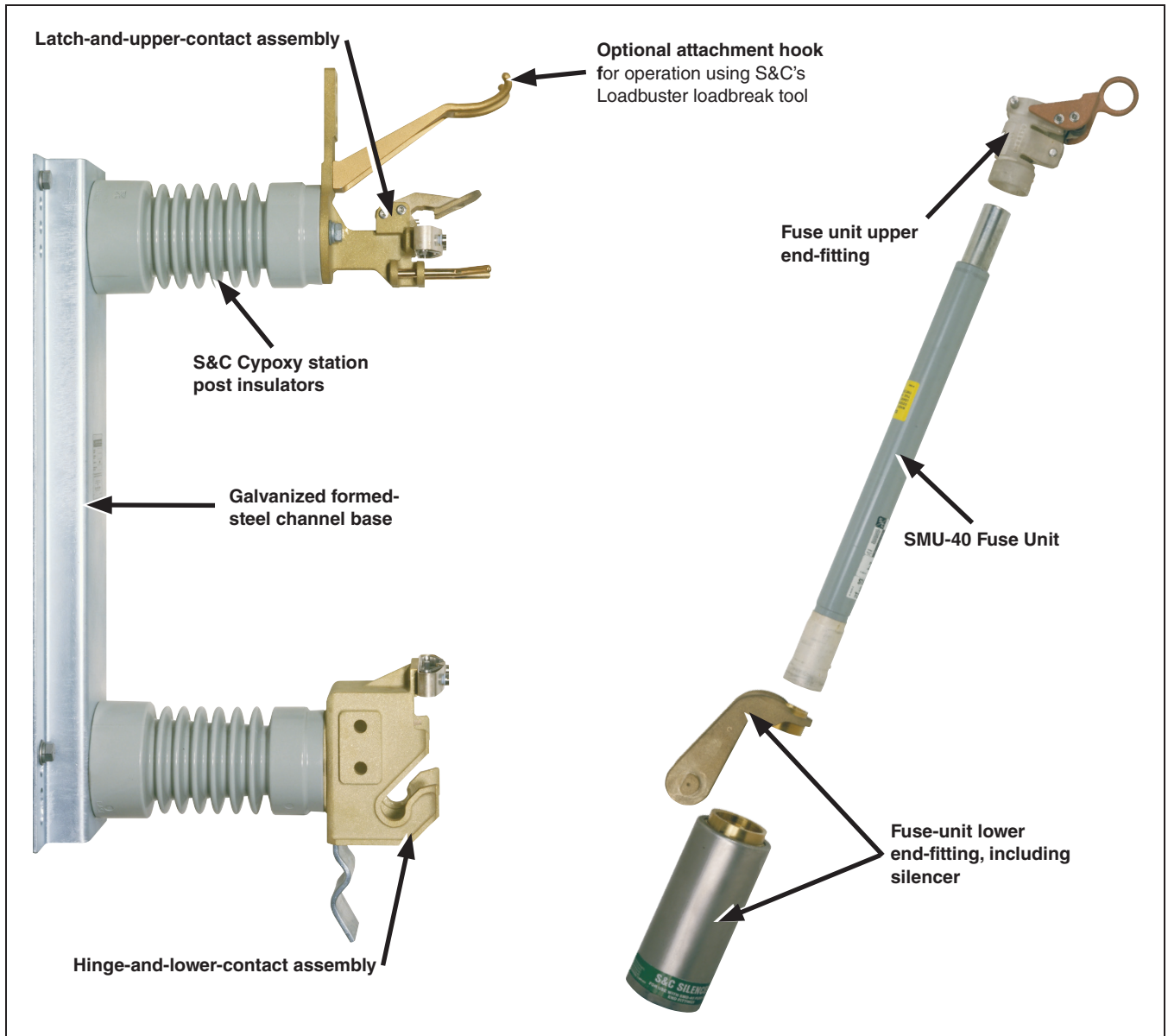


Figure 3. A 14.4-kV station—vertical style SMD-40 Power Fuse.

Table 1. Ratings for Station—Vertical-Style Type SMD-40 Power Fuses

Style	Rating					Leakage Distance to Ground, Minimum, Inches (mm)	Catalog Number	
	kV			Amperes, RMS Sym. ①			Cyproxy Station Post Insulators	Porcelain Station Post Insulators
	Nom.	Max	BIL	Max	Interrupting			
Station—Vertical	4.8	5.5	95	400E	25 000	15½ (394)	192320●	192320-SP■
	14.4	17.0	110	400E	25 000	15½ (394)	192322	192322-SP
	25	29	150	400E	20 000	24 (610)	192323	192323-SP

① Symmetrical ratings assigned are based on available short-circuit current at locations where the X/R ratio is 15. The interrupting ratings expressed in amperes RMS asymmetrical are 1.6 times the symmetrical ratings listed.

● Mounting includes 14.4-kV/110-kV BIL Cyproxy station post insulators.

■ Mounting includes 4.8-kV/95-kV BIL porcelain station post insulators. Leakage distance to ground is 10½ inches (267 mm).