The enclosure and insulating-barrier dimensions listed in Table 2 on page 3 (illustrated in Figures 1 and 2 on page 2) have been determined using the minimum clearances (listed in Table 1 on page 3) recommended to facilitate fuse handling and to maintain the inherent electrical ratings of Type SML Power Fuses when installed in metal enclosures. These clearances are sufficient provided normal consideration has been given to avoidance of pointgap configurations. When installing bus or cable connections and cable terminations, these clearances should be observed.

Note: Lesser clearances than those shown are acceptable only if substantiated by impulse testing of the complete assembly consisting of the enclosure, power fuses, barriers, bus, connectors, terminators, etc.

In addition, enclosure dimensions should be sufficient, or barriers should be provided, to ensure a minimum clearance between the metal parts of a hookstick and ground during opening and closing operations as follows: 2 inches (51 mm) at 13.8 kV and 3¼ inches (83 mm) at 25 kV.

Back-Connected Disconnect Style Type SML Power Fuse live parts require careful adjustment to ensure proper operation. For detailed instructions on the installation and adjustment of Back-Connected Disconnect Style Type SML-4Z or Type SML-20 Power Fuse live parts, refer to S&C Instruction Sheets 252-520 or 252-545 respectively.

There are no requirements for special reinforcement of enclosures provided the enclosures reflect adequate consideration of environmental factors, such as controlled access; tamper-resistance; and sealing against ingress of rodents, insects, and weeds.

★ Not applicable to submersible enclosures.

Supersedes Data Bulletin 242-301 dated 6-14-82

December 9, 2019

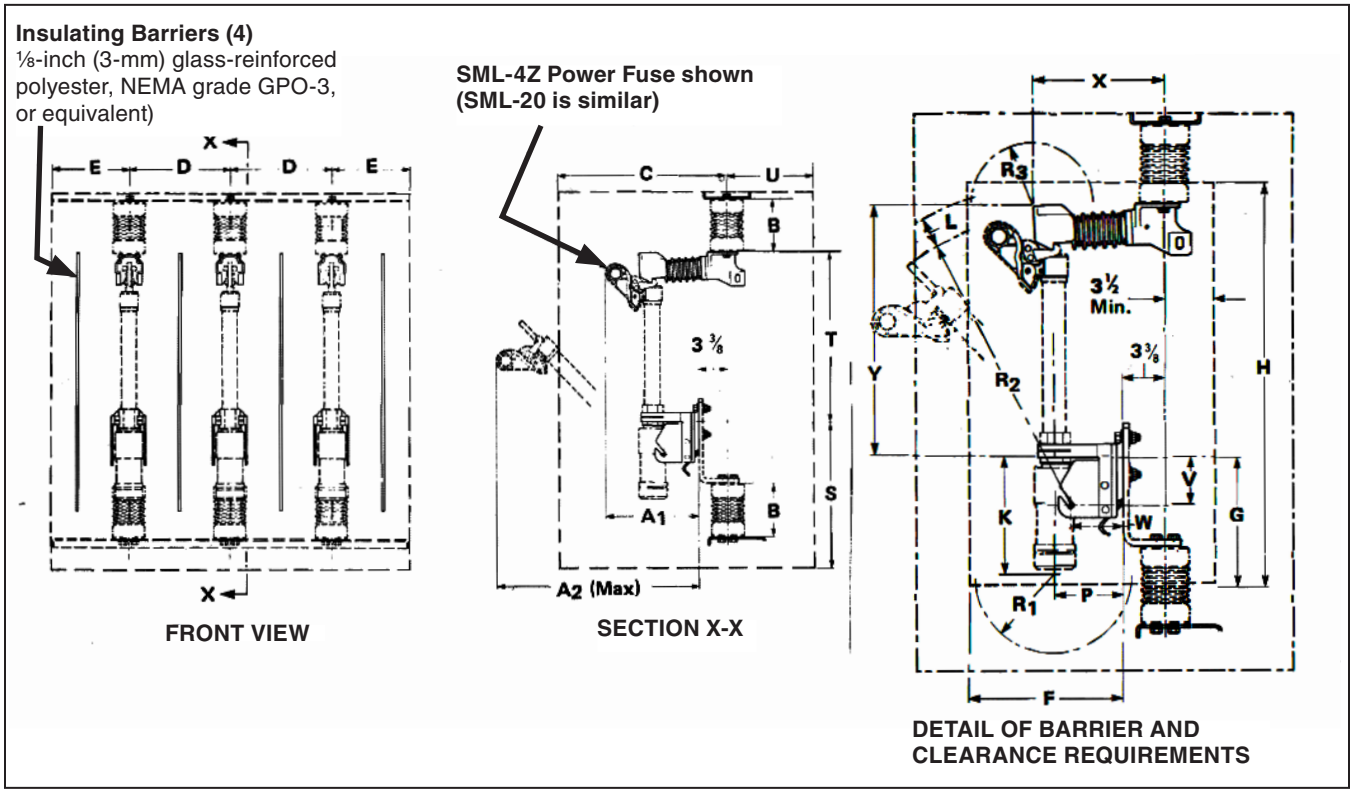

Figure 1. Enclosure and Insulating-barrier dimensions for a mounting configuration using a bottom-supported hinge-and-lower-contact assembly.

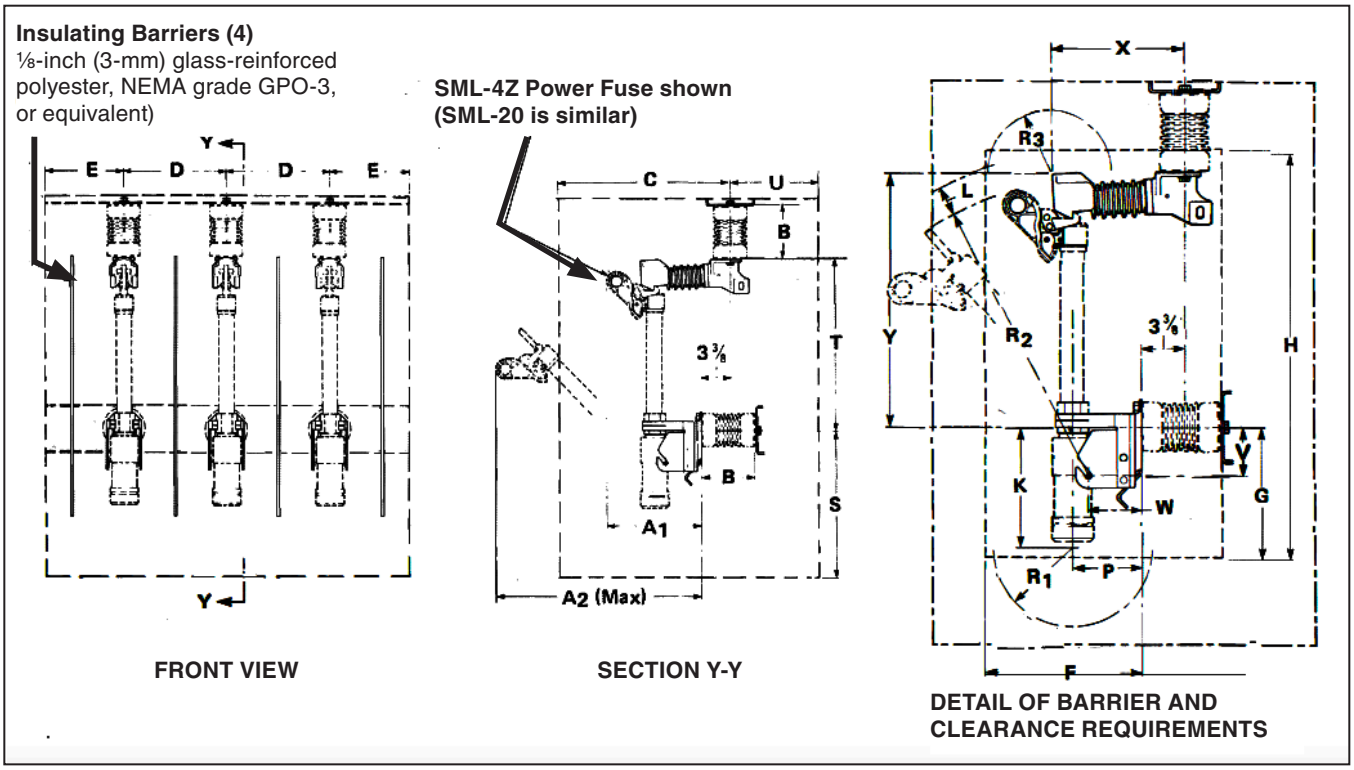

Figure 2. Enclosure and Insulating-barrier dimensions for a mounting configuration using a back-supported hinge-and-lower-contact assembly.

Notes

1. Dimensions "D" and "E" provide a minimum of 2 inches (51 mm) adjacent to the hinge in which to make cable or bus connections and still maintain the recommended clearance to barriers. See Table 2.
2. Clearance from fuse unit (or holder) in the **Closed** position to any grounded part should not be less than the minimum recommended metal-to-metal clearance listed in Table 1.
3. If the complete assembly consisting of the enclosure, power fuses, barriers, bus, connectors, terminators, etc., is not impulse-tested to verify it will fully meet its assigned BIL rating, the assembly should be checked to ensure the following minimum recommended clearances have been met or exceeded. See Table 1. Greater clearances may be required if corners, edges, or small-radius points exist.

Table 1. Minimum Recommended Fuse Clearances

Fuse Rating, kV,BIL	Minimum Recommended Clearance, Inches (mm)		
	Metal-to-Metal① (phase-to-phase and phase-to-ground)	Energized Part-to-Barrier	Barrier-to-Ground (in vicinity of energized-parts)
95	6 (152)	1 (25)	1 (25)
125	8½ (216)	2¼ (57)	2¼ (57)

① Where insulating barriers are provided, metal-to-metal clearances should be measured around the edge of the barrier.

Table 2. Type SML Power Fuses Minimum Dimensions To Enclosures and Insulating-Barriers

Fuse Type	Rating				Minimum Dimensions, Inches (mm)																				
	Amps, RMS Max.	kV			A1 ●	A2 ●	B	C ■	D ▲	E ▲	F	G ◆	H	K ◆	L ▼	P ●	R1 □	R2 ●	R3 △	S ◆	T ◆●	U	V ◆●	W ●	X ●	Y ●
		Nom.	Max.	BIL																					
SML-20	200K or 200E	13.8	17.0	95	12½ (318)	24½ (622)	6 (152)	21⅞ (556)	9¼ (235)	7¼ (184)	13 (330)	10 (254)	30 (762)	9½ (241)	2 (51)	4½ (114)	8 (203)	22½ (572)	4 (102)	17½ (445)	19 15⁄16 (506)	8⅛ (206)	2⅞ (73)	2⅞ (73)	10½ (267)	20 (508)
		25	27	125	12½ (318)	26½ (673)	8½ (216)	24¼ (616)	11¼ (286)	9¾ (248)	13 (330)	11 (279)	35 (889)	9½ (241)	3½ (89)	4½ (114)	10½ (267)	26 (660)	5½ (140)	20 (508)	23 7⁄16 (595)	11¾ (298)	2⅞ (73)	2⅞ (73)	10½ (267)	24¼ (616)
SML-4Z	200E	13.8	17.0	95	10⅞ (276)	26 (660)	6 (152)	20¼ (514)	9½ (241)	7⅜ (187)	11 (279)	10 (254)	30 (762)	9 (229)	2 (51)	5¼ (133)	8 (203)	23¼ (591)	4 (102)	17 (432)	19¾ (502)	8⅛ (206)	3¾ (95)	4⅛ (105)	10½ (508)	20 (508)
		25	27	125	10⅞ (276)	28½ (724)	8½ (216)	22⅝ (575)	11½ (292)	9⅞ (251)	11 (279)	11 (279)	35 (889)	9 (229)	3½ (89)	5¼ (133)	10½ (267)	27½ (699)	5½ (140)	19½ (495)	24 (610)	11¾ (298)	3¾ (95)	4⅛ (105)	10½ (267)	24¼ (616)

● These dimensions are inherent to the power fuse and are thus invariable.

■ This dimension provides full BIL clearance from the fuse unit or holder to the enclosure door or panel, with the fuse unit or holder in the **Closed** position only.

▲ Add 1 inch (25 mm) to the dimensions shown if the lower live part (hinge assembly) is equipped with the optional S&C grounding stud.

◆ The dimension shown is to be measured from the centerline of the mounting bolt circle on the hinge assembly. **Note**: The SML-20 hinge assembly features two sets of mounting holes. For the SML-20 hinge assembly, the dimension shown is to be measured from the centerline of the upper set of mounting holes.

▼ Minimum recommended clearance to any grounded object (such as a door stile) in the vicinity of holder or fuse-unit assembly during switching.

□ Minimum recommended clearance to nearest switchgear component other than a bus or cable of same phase.

△ Minimum distance to energized component of same phase.