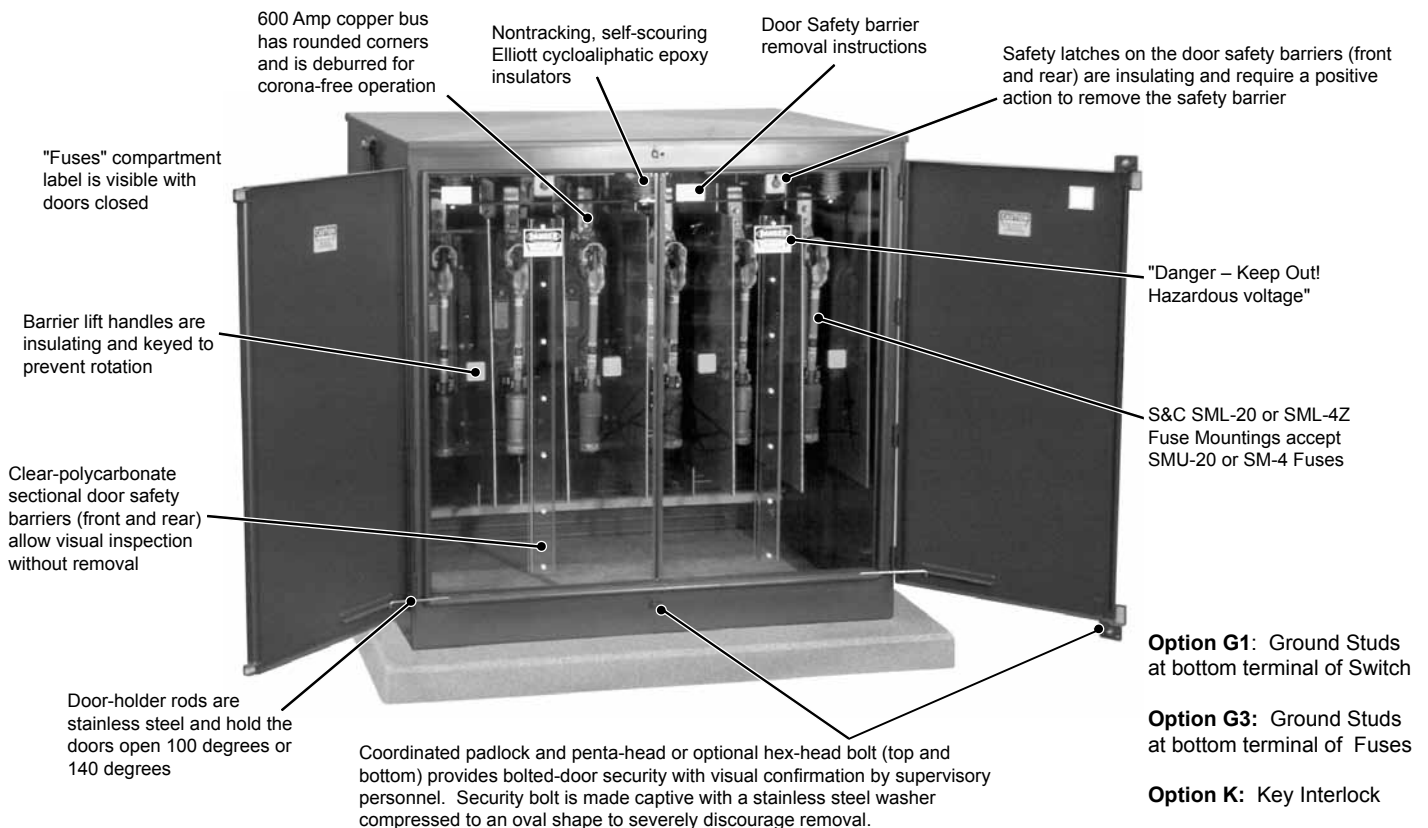
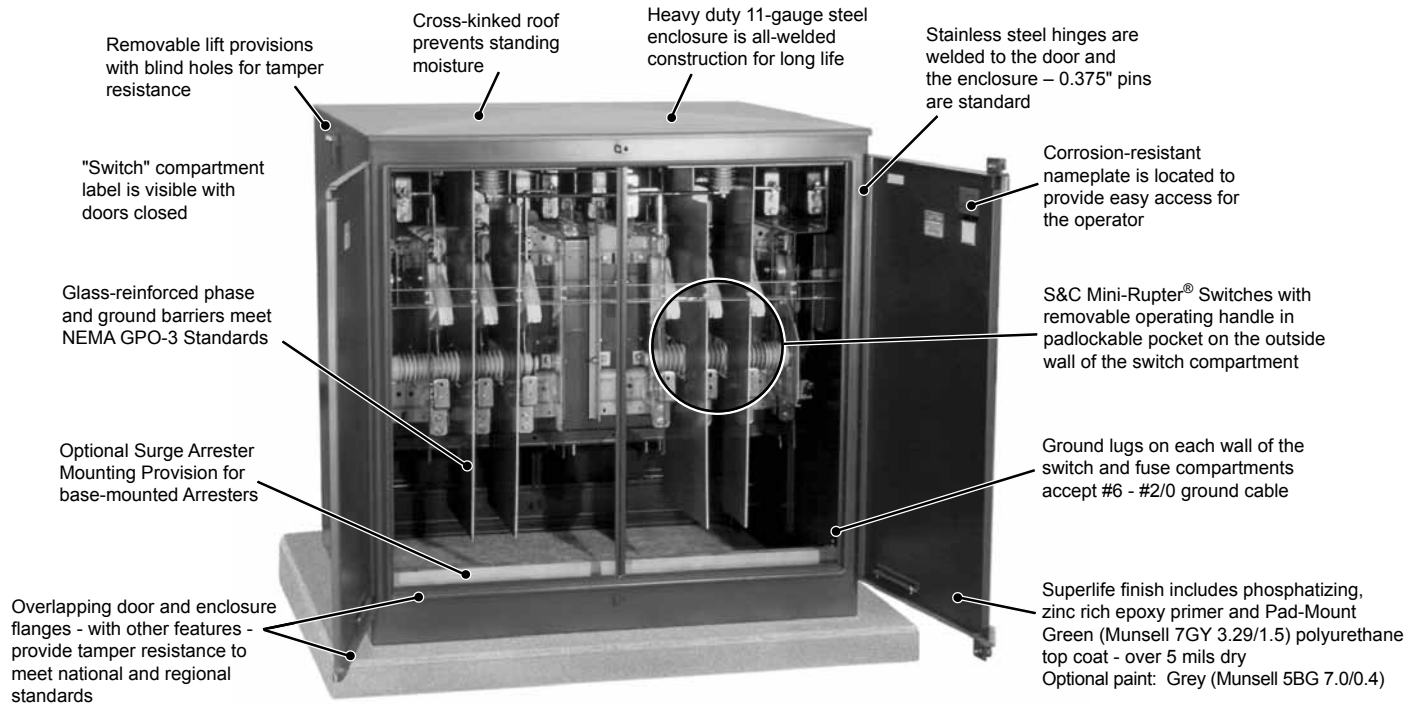


**15-kV Live-Terminal 600 Amp Group-Operated
Source Isolated Pad-Mounted Switchgear
200 Amp (Max) S&C SMU-20 and SM-4 Fuses**



ENCLOSURE OPTIONS:

- 1) 0.125" #5052H32 Aluminum
- 2) 12-gauge #304L Stainless Steel

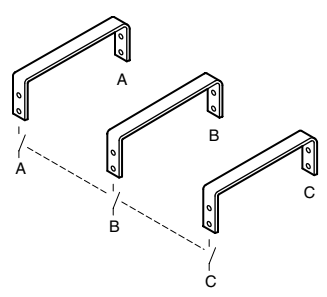


15-kV Live-Terminal 600 Amp Group-Operated Source Isolated Pad-Mounted Switchgear

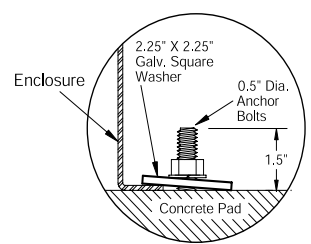
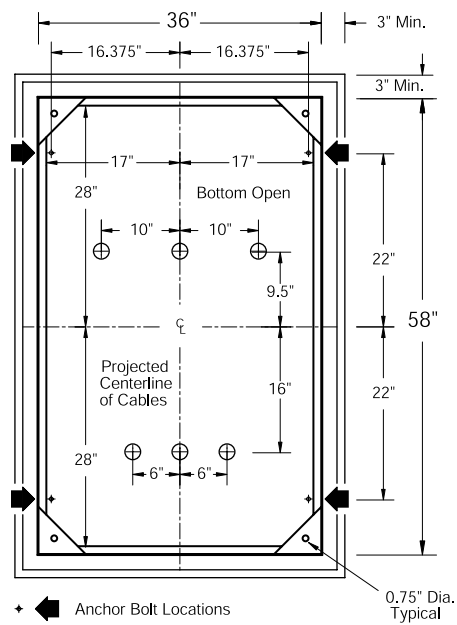
200 Amp (Max) S&C SMU-20 and SM-4 Fuses

Bulletin
730-122
Page 2 2009

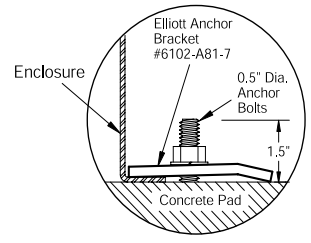
Copper Bus Bar
Elliott Cycloaliphatic Epoxy Insulators
Stainless Steel Hardware



Bus Arrangement



Alternate #1



Alternate #2

Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-311S-LT-MR	N/A	N/A	N/A

A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

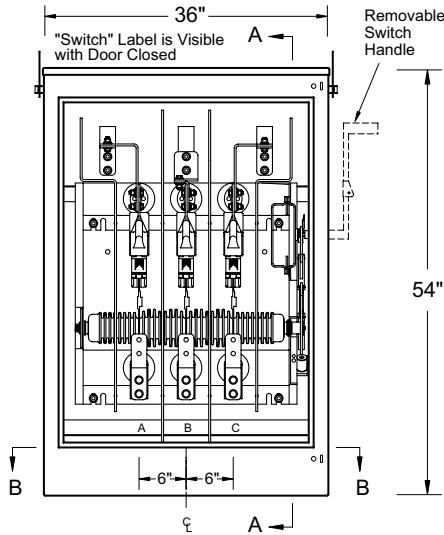
Mini-Rupter[®] and Uni-Rupter[®] are registered trademarks of S&C Electric Co.

One Line Diagram

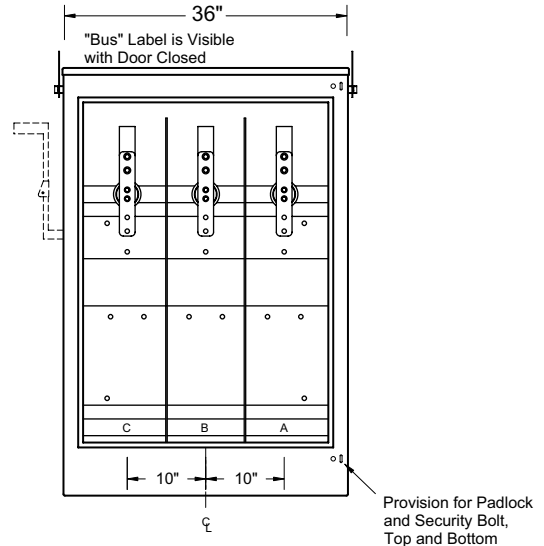


Three Phase – Two Ways per Phase

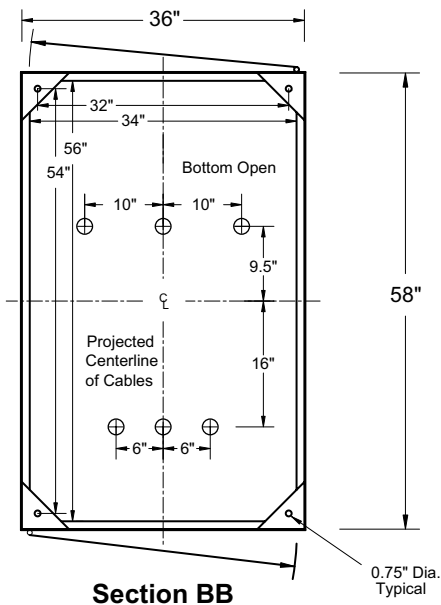
600 Amp Three-Pole S&C Mini-Rupter® Switch
8.3/14.4-kV Grounded Wye Max Design
95 kV BIL



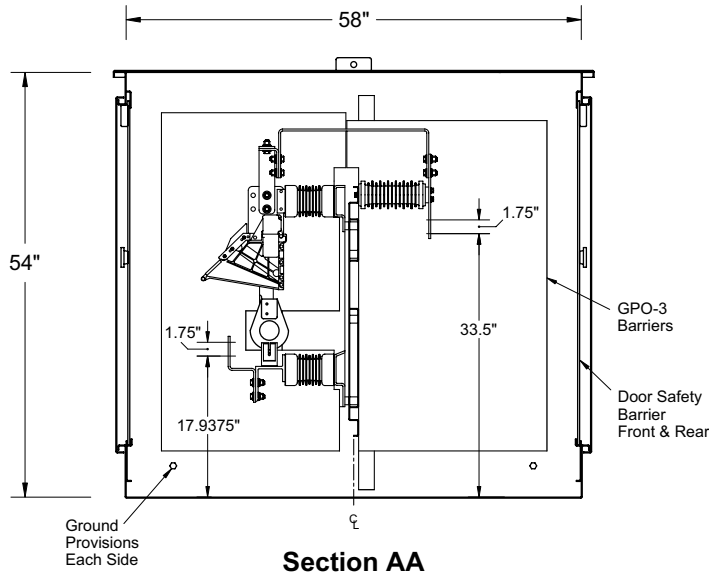
Front View
Door & Door Safety
Barrier Removed



Rear View
Door & Door Safety
Barrier Removed



Section BB



Section AA

Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-311S-LT-MR	N/A	N/A	N/A

A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

Mini-Rupter® and Uni-Rupter® are registered trademarks of S&C Electric Co.

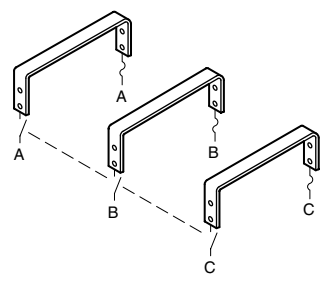


15-kV Live-Terminal 600 Amp Group-Operated Source Isolated Pad-Mounted Switchgear

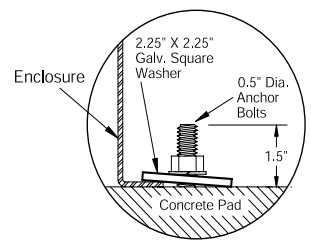
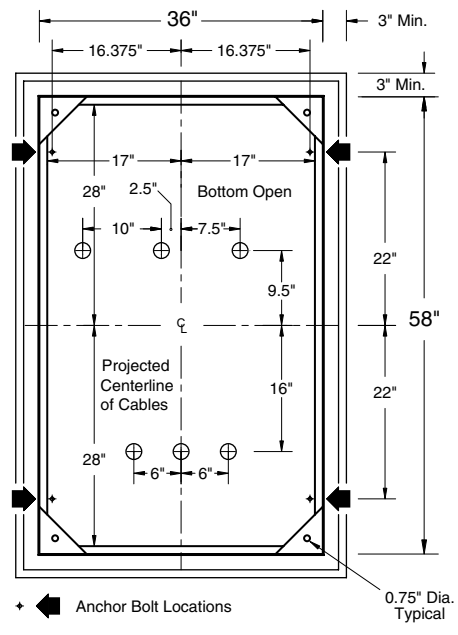
200 Amp (Max) S&C SMU-20 and SM-4 Fuses

Bulletin
730-122
Page 4 2009

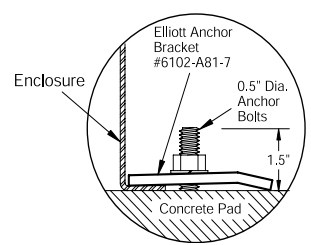
Copper Bus Bar
Elliott Cycloaliphatic Epoxy Insulators
Stainless Steel Hardware



Bus Arrangement



Alternate #1



Alternate #2

Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-311S-LT-MR-SML20	SML-20 with Uni-Rupter®	SML-20 Cat. #3097	SMU-20 200K or 200E Max
EPMHG-15-311S-LT-MR-SML4	SML-4Z with Uni-Rupter®	SML-4Z Cat. #92352	SM-4 200E Max

A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number"-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

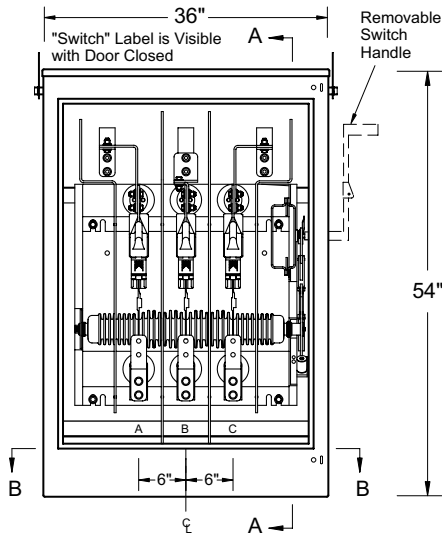
Mini-Rupter® and Uni-Rupter® are registered trademarks of S&C Electric Co.

One Line Diagram

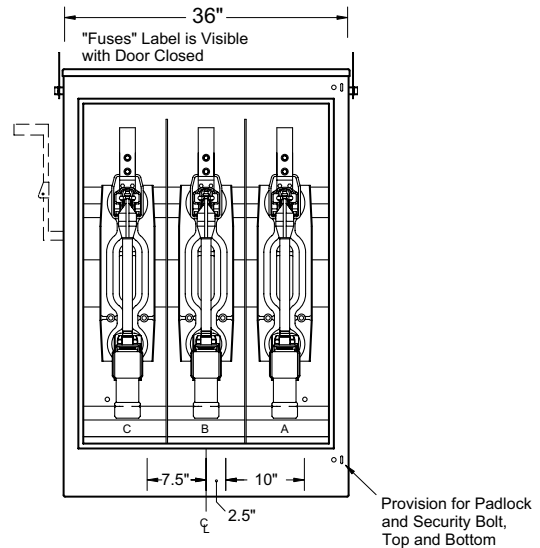


Three Phase – Two Ways per Phase

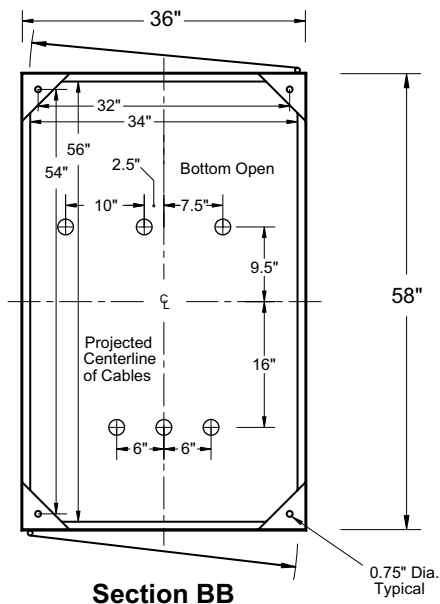
600 Amp Three-Pole S&C Mini-Rupter® Switch
200 Amp (Max) S&C Fuse Provisions with Uni-Rupter®
8.3/14.4-kV Grounded Wye Max Design
95 kV BIL



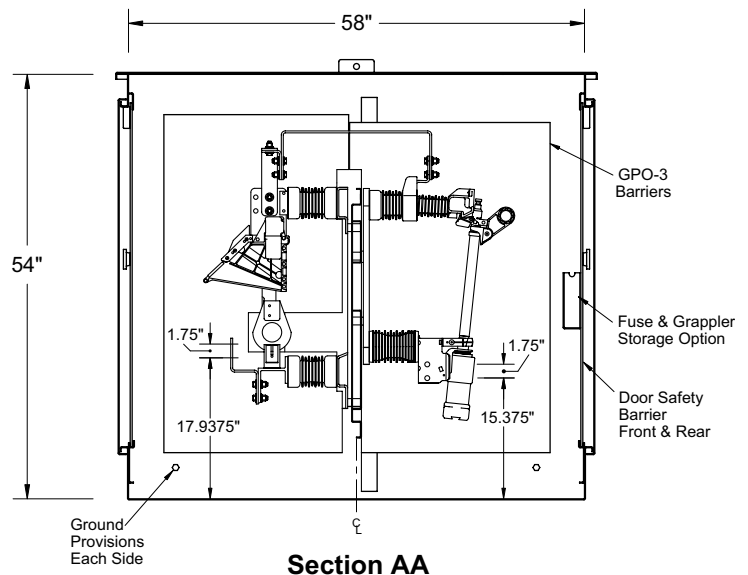
Front View
Door & Door Safety
Barrier Removed



Rear View
Door & Door Safety
Barrier Removed



Section BB

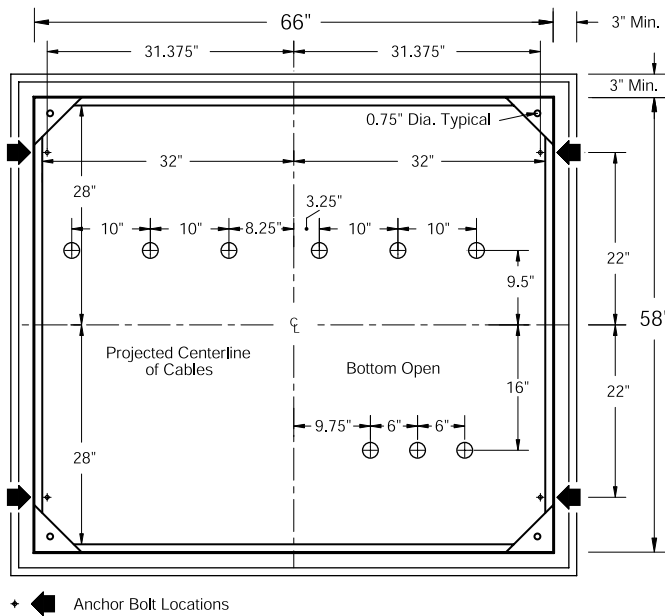
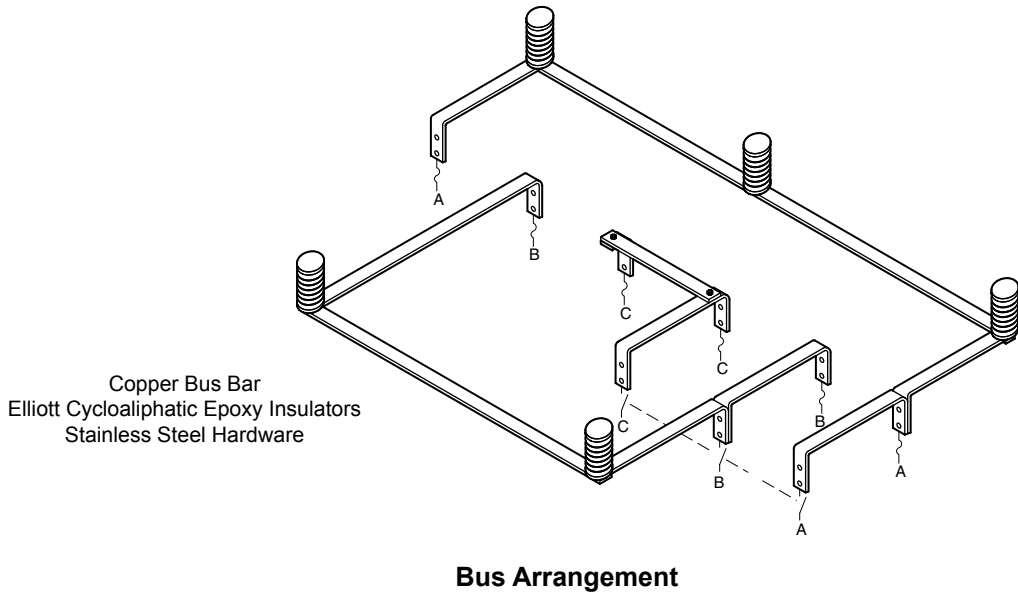


Section AA

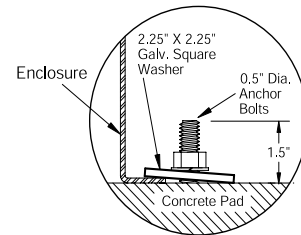
Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-311S-LT-MR-SML20	SML-20 with Uni-Rupter®	SML-20 Cat. #3097	SMU-20 200K or 200E Max
EPMHG-15-311S-LT-MR-SML4	SML-4Z with Uni-Rupter®	SML-4Z Cat. #92352	SM-4 200E Max

A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

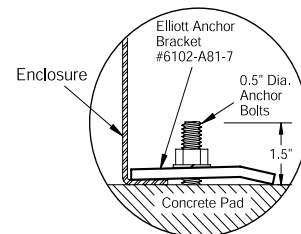
Mini-Rupter® and Uni-Rupter® are registered trademarks of S&C Electric Co.



Typical Pad Dimensions



Alternate #1



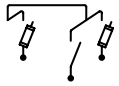
Alternate #2

Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-312S-LT-MR-SML20	SML-20 with Uni-Rupter®	SML-20 Cat. #3097	SMU-20 200K or 200E Max
EPMHG-15-312S-LT-MR-SML4	SML-4Z with Uni-Rupter®	SML-4Z Cat. #92352	SM-4 200E Max

A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

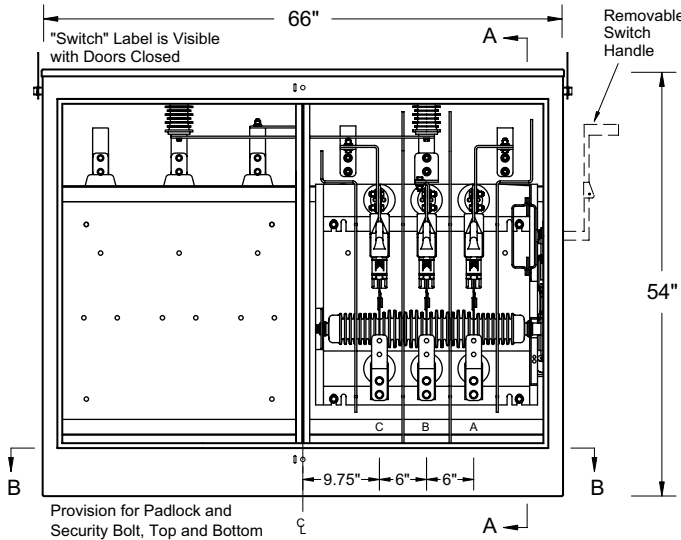
Mini-Rupter® and Uni-Rupter® are registered trademarks of S&C Electric Co.

One Line Diagram

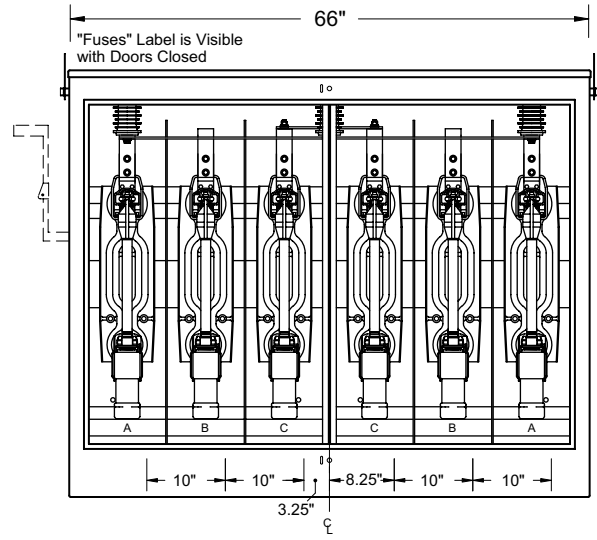


Three Phase – Three Ways per Phase

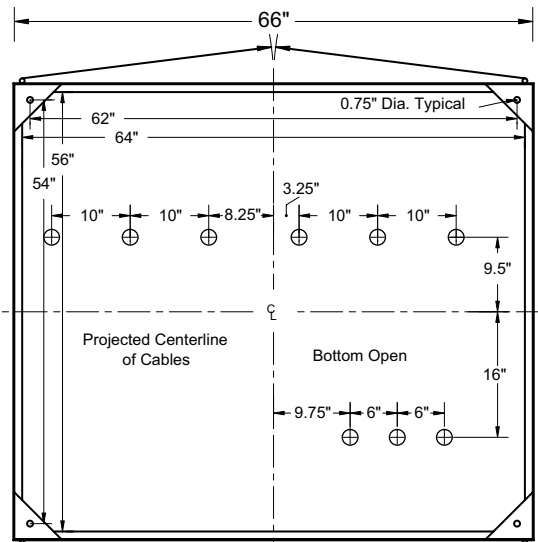
600 Amp Three-Pole S&C Mini-Rupter® Switch
200 Amp (Max) S&C Fuse Provisions with Uni-Rupter®
8.3/14.4-kV Grounded Wye Max Design
95 kV BIL



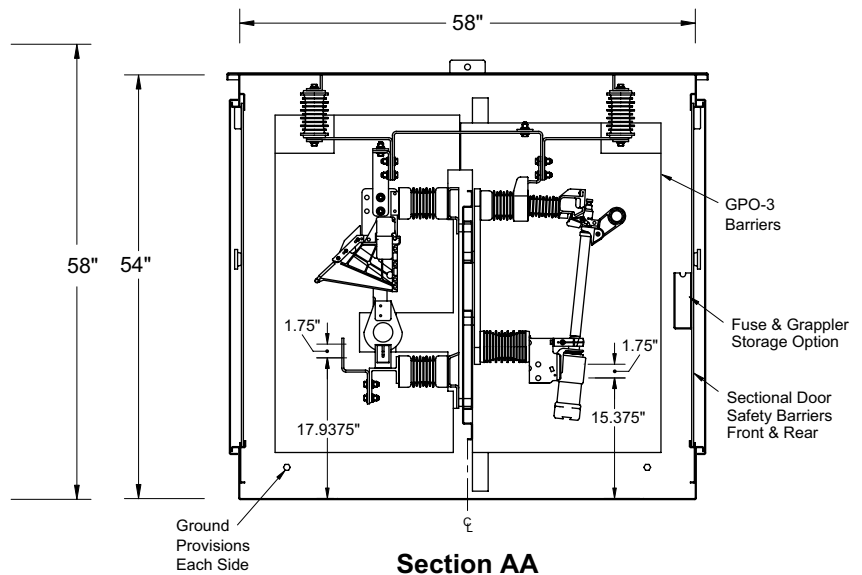
Front View
Doors & Door Safety
Barriers Removed



Rear View
Doors & Door Safety
Barriers Removed



Section BB

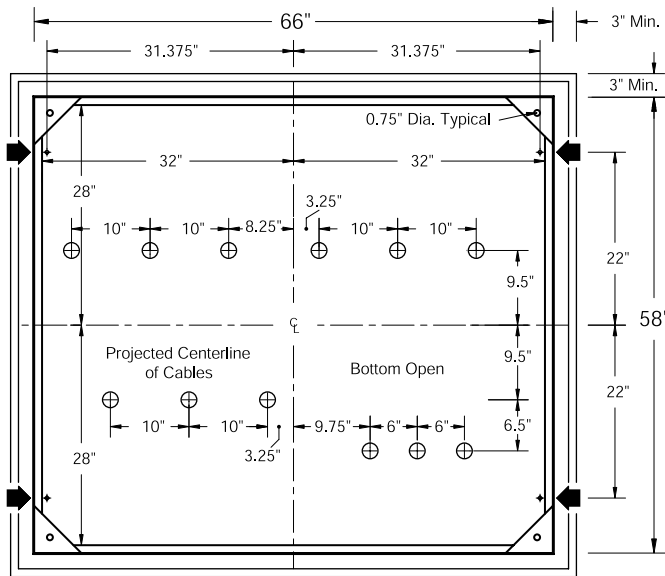
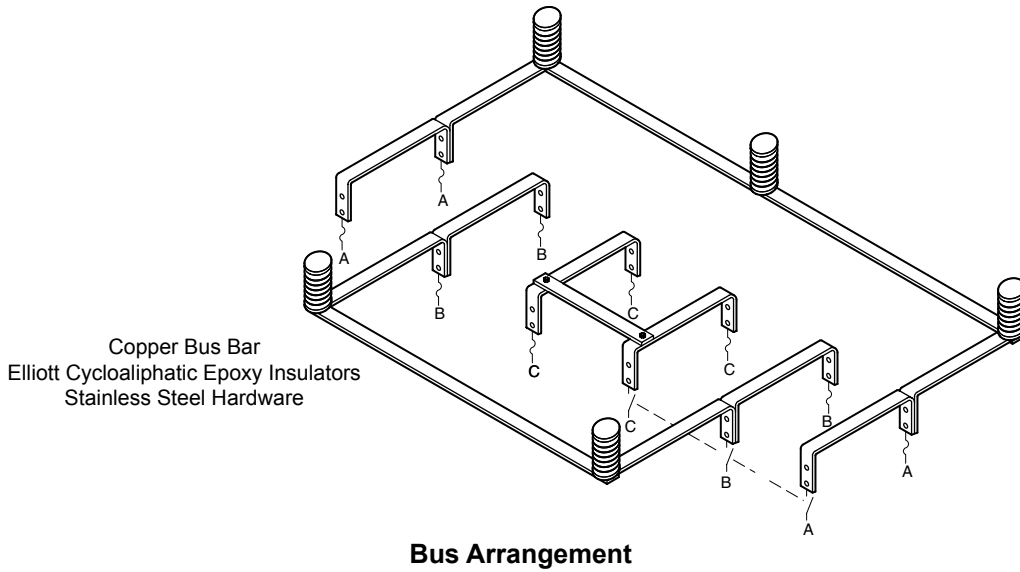


Section AA

Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-312S-LT-MR-SML20	SML-20 with Uni-Rupter®	SML-20 Cat. #3097	SMU-20 200K or 200E Max
EPMHG-15-312S-LT-MR-SML4	SML-4Z with Uni-Rupter®	SML-4Z Cat. #92352	SM-4 200E Max

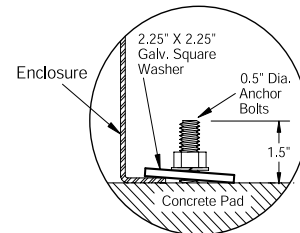
A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

Mini-Rupter® and Uni-Rupter® are registered trademarks of S&C Electric Co.

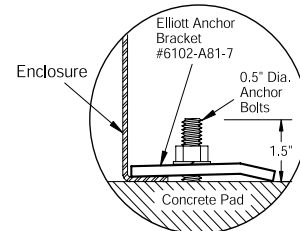


+ ◀ Anchor Bolt Locations

Typical Pad Dimensions



Alternate #1

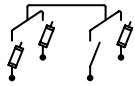


Alternate #2

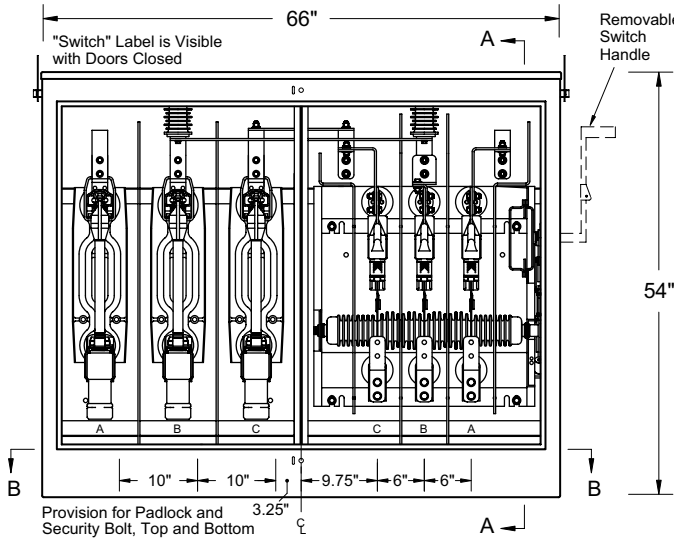
Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-313S-LT-MR-SML20	SML-20 with Uni-Rupter®	SML-20 Cat. #3097	SMU-20 200K or 200E Max
EPMHG-15-313S-LT-MR-SML4	SML-4Z with Uni-Rupter®	SML-4Z Cat. #92352	SM-4 200E Max

A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

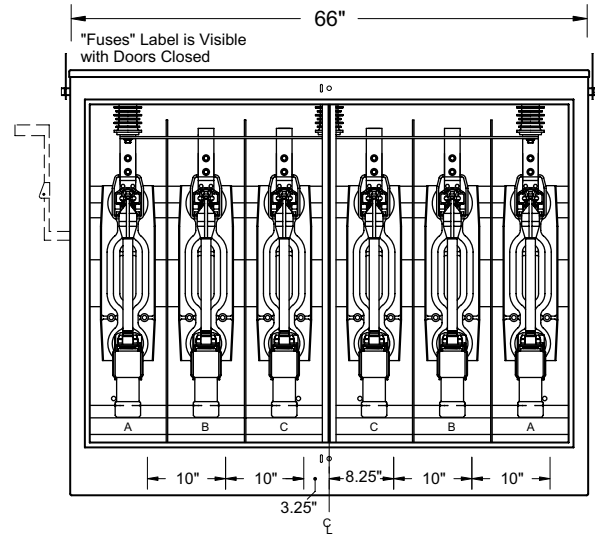
Mini-Rupter® and Uni-Rupter® are registered trademarks of S&C Electric Co.



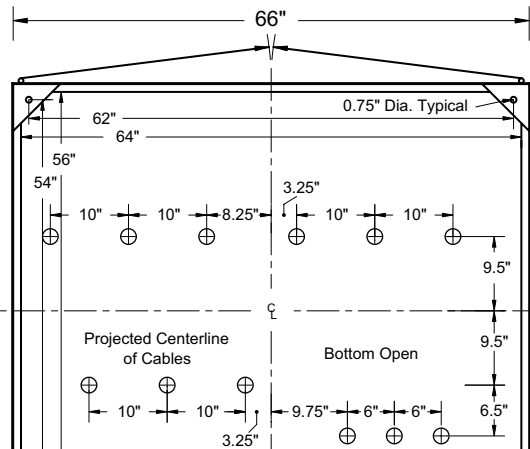
Three Phase – Four Ways per Phase
600 Amp Three-Pole S&C Mini-Rupter® Switch
200 Amp (Max) S&C Fuse Provisions with Uni-Rupter®
8.3/14.4-kV Grounded Wye Max Design
95 kV BIL



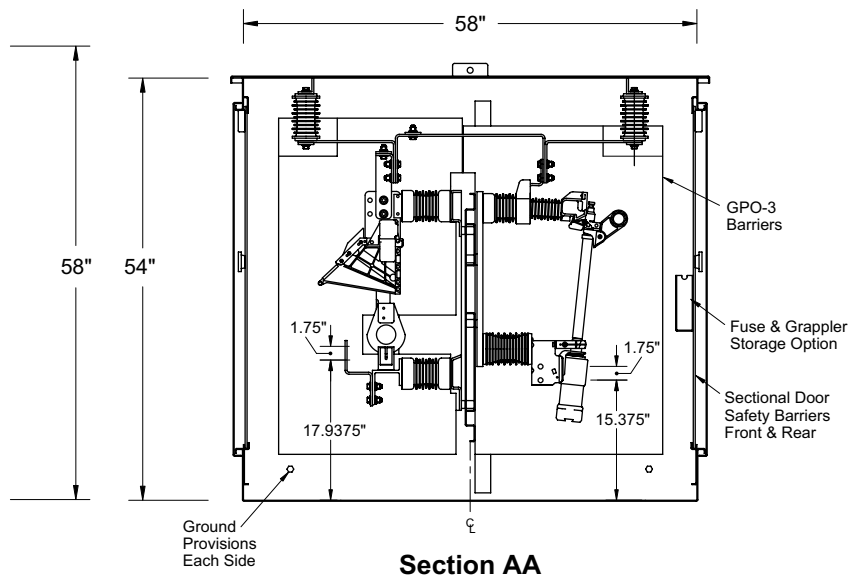
Front View
Doors & Door Safety
Barriers Removed



Rear View
Doors & Door Safety
Barriers Removed



Section BB

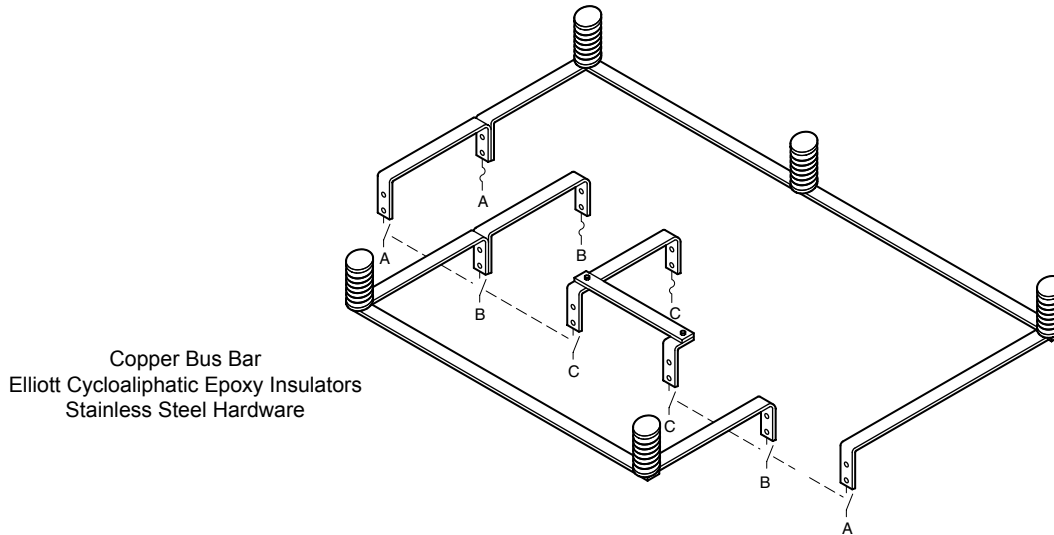


Section AA

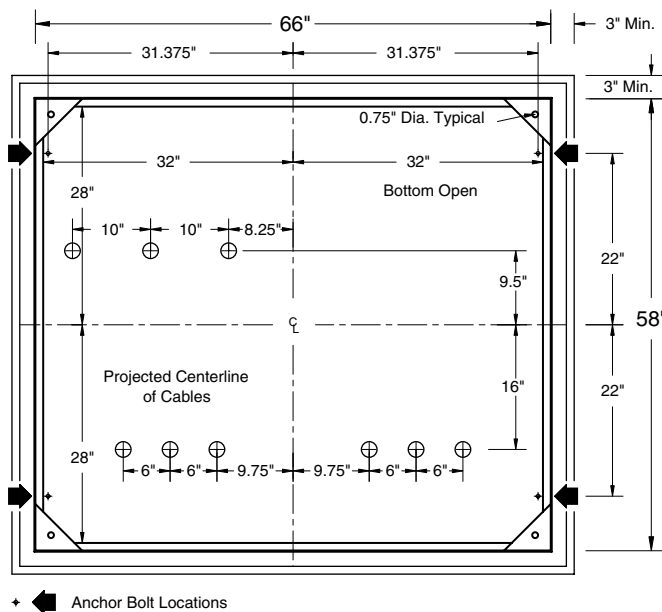
Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-313S-LT-MR-SML20	SML-20 with Uni-Rupter®	SML-20 Cat. #3097	SMU-20 200K or 200E Max
EPMHG-15-313S-LT-MR-SML4	SML-4Z with Uni-Rupter®	SML-4Z Cat. #92352	SM-4 200E Max

A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

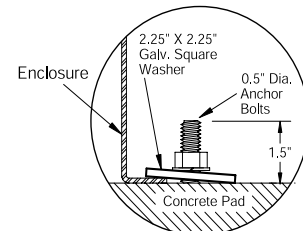
Mini-Rupter® and Uni-Rupter® are registered trademarks of S&C Electric Co.



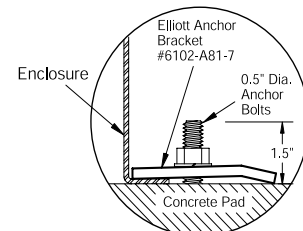
Bus Arrangement



Typical Pad Dimensions



Alternate #1



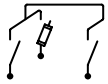
Alternate #2

Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-321S-LT-MR-SML20	SML-20 with Uni-Rupter®	SML-20 Cat. #3097	SMU-20 200K or 200E Max
EPMHG-15-321S-LT-MR-SML4	SML-4Z with Uni-Rupter®	SML-4Z Cat. #92352	SM-4 200E Max

A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

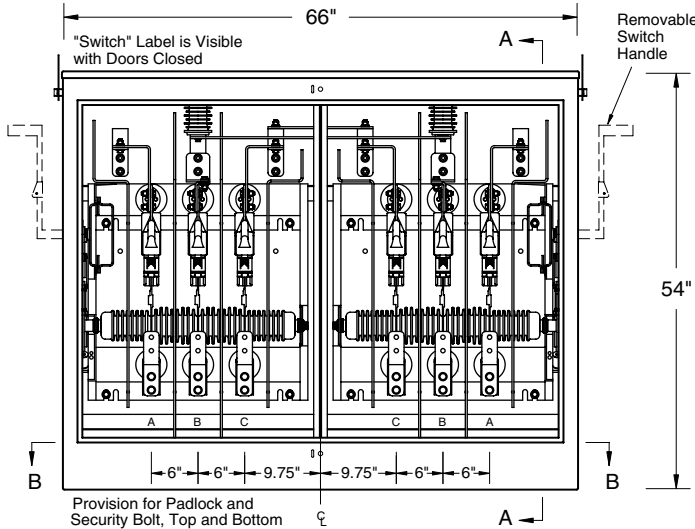
Mini-Rupter® and Uni-Rupter® are registered trademarks of S&C Electric Co.

One Line Diagram

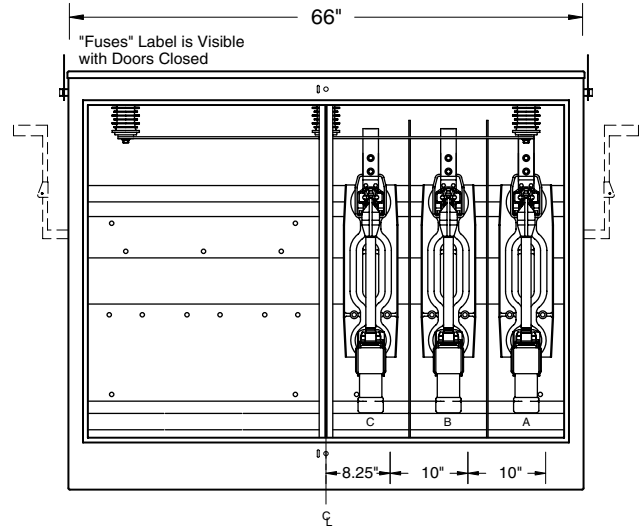


Three Phase – Three Ways per Phase

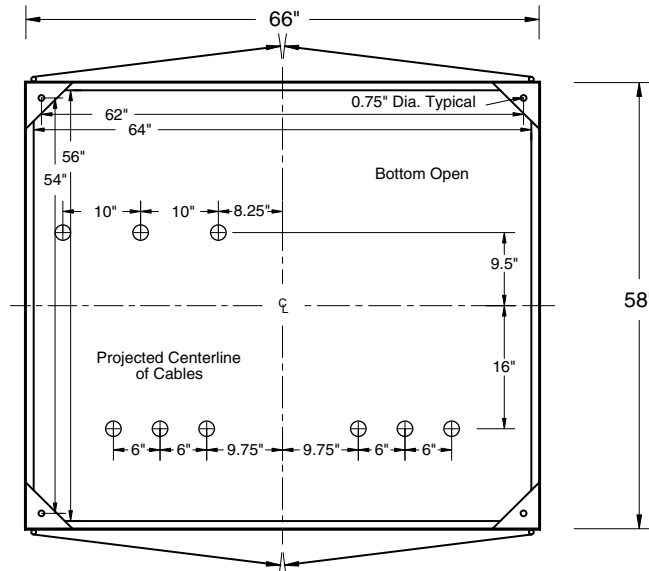
600 Amp Three-Pole S&C Mini-Rupter® Switch
 200 Amp (Max) S&C Fuse Provisions with Uni-Rupter®
 8.3/14.4-kV Grounded Wye Max Design
 95 kV BIL



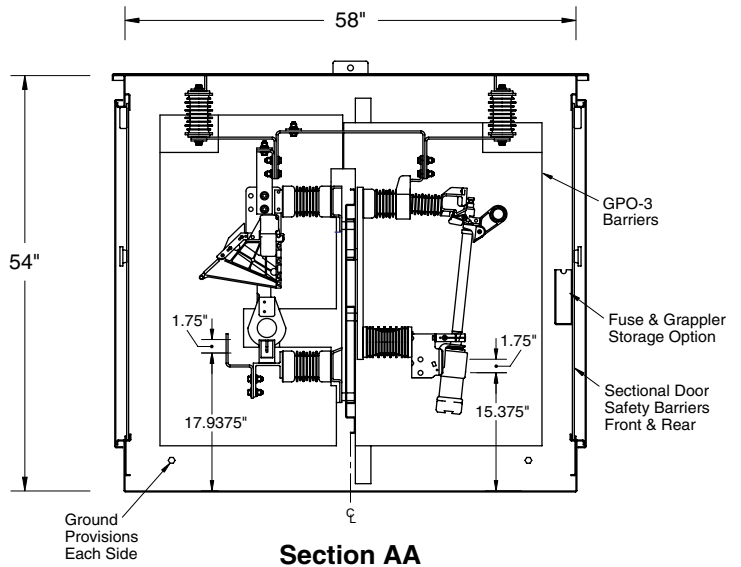
Front View
 Doors & Door Safety Barriers Removed



Rear View
 Doors & Door Safety Barriers Removed



Section BB

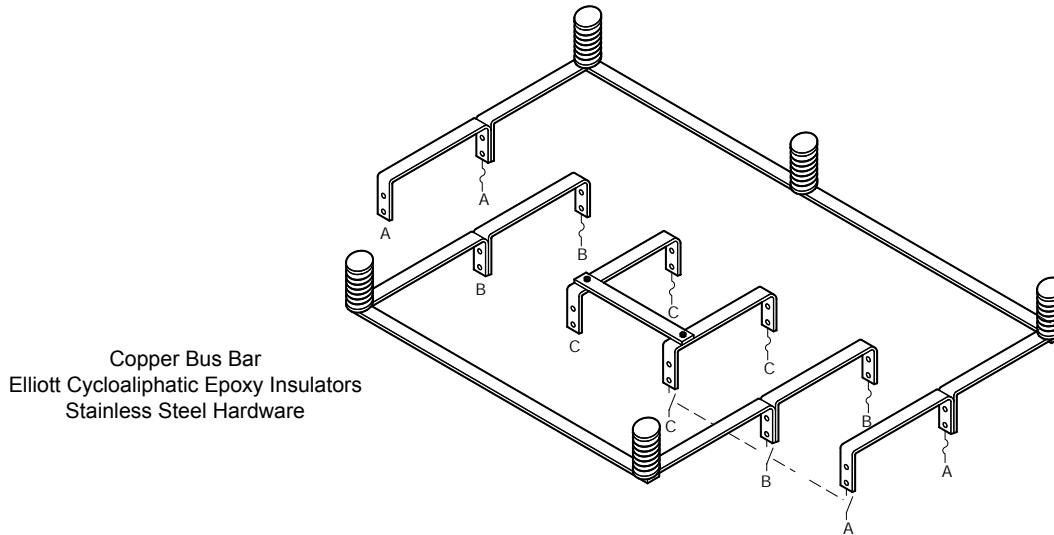


Section AA

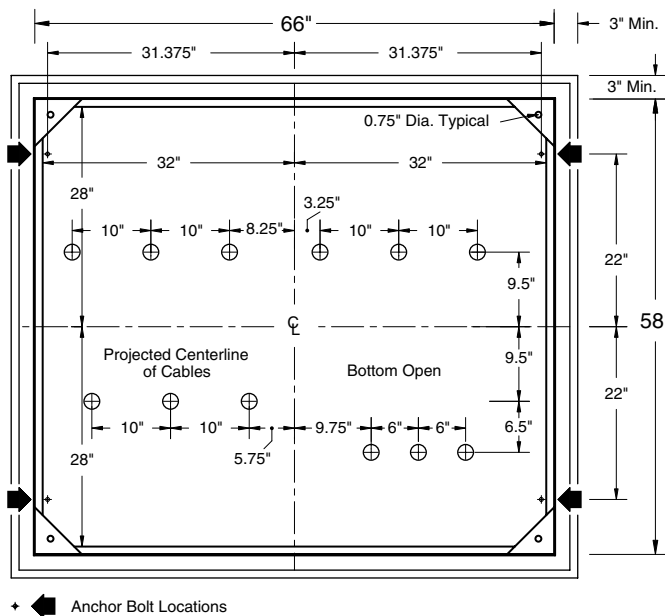
Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-321S-LT-MR-SML20	SML-20 with Uni-Rupter®	SML-20 Cat. #3097	SMU-20 200K or 200E Max
EPMHG-15-321S-LT-MR-SML4	SML-4Z with Uni-Rupter®	SML-4Z Cat. #92352	SM-4 200E Max

A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

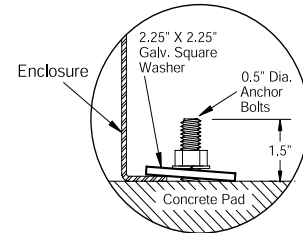
Mini-Rupter® and Uni-Rupter® are registered trademarks of S&C Electric Co.



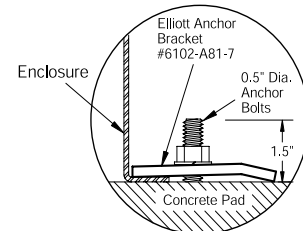
Bus Arrangement



Typical Pad Dimensions



Alternate #1



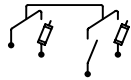
Alternate #2

Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-322S-LT-MR/BT-SML20	SML-20 with Uni-Rupter®	SML-20 Cat. #3097	SMU-20 200K or 200E Max
EPMHG-15-322S-LT-MR/BT-SML4	SML-4Z with Uni-Rupter®	SML-4Z Cat. #92352	SM-4 200E Max

A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

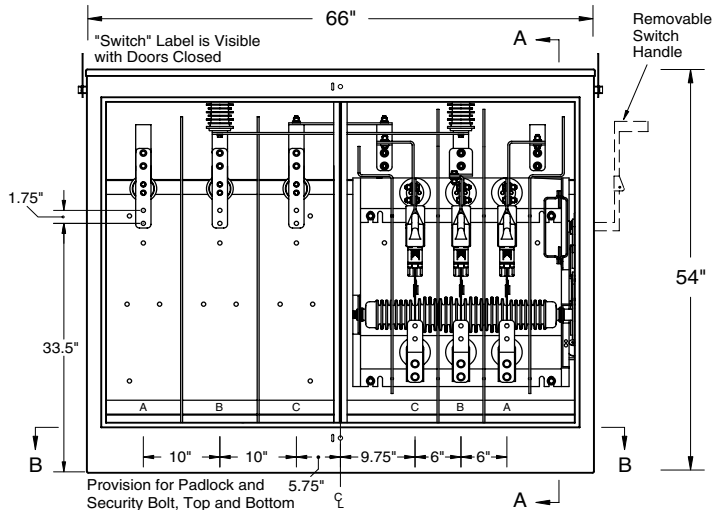
Mini-Rupter® and Uni-Rupter® are registered trademarks of S&C Electric Co.

One Line Diagram

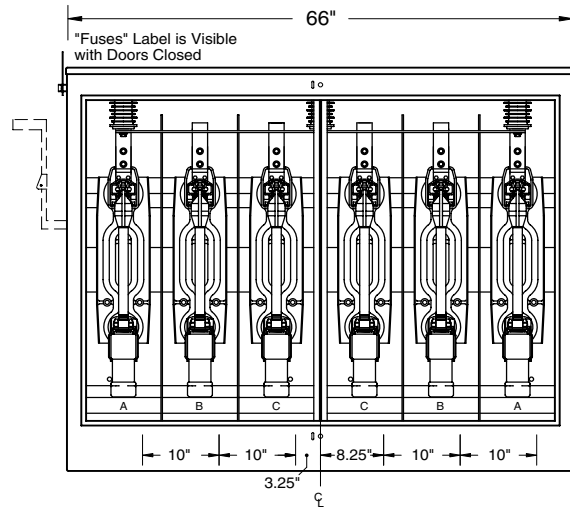


Three Phase – Four Ways per Phase

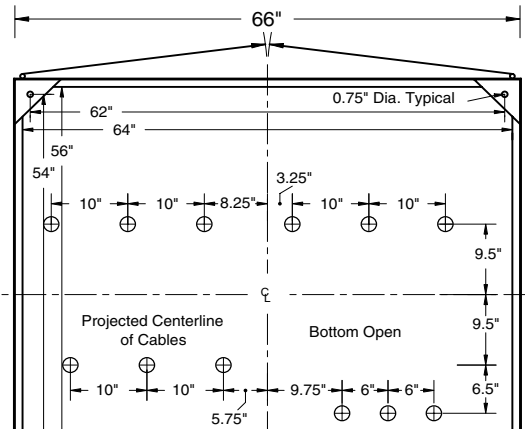
600 Amp Three-Pole S&C Mini-Rupter® Switch
200 Amp (Max) S&C Fuse Provisions with Uni-Rupter®
8.3/14.4-kV Grounded Wye Max Design
95 kV BIL



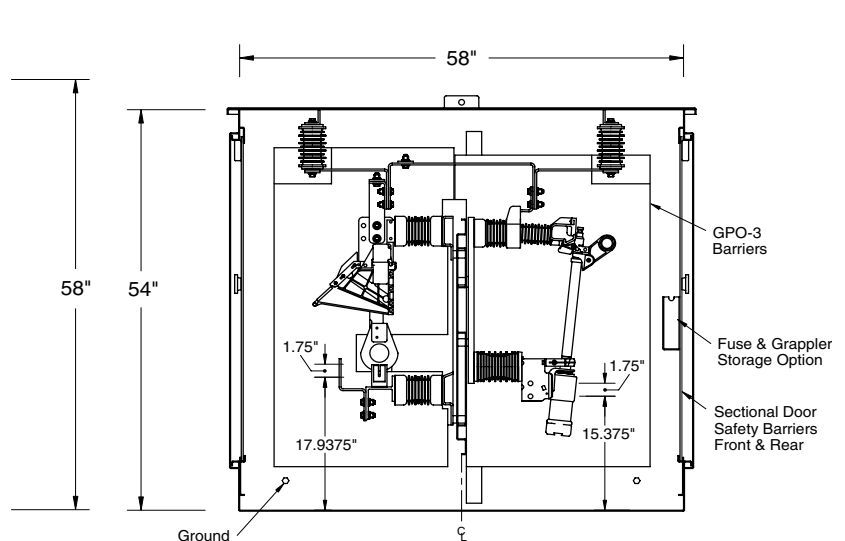
Front View
Doors & Door Safety
Barriers Removed



Rear View
Doors & Door Safety
Barriers Removed



Section BB

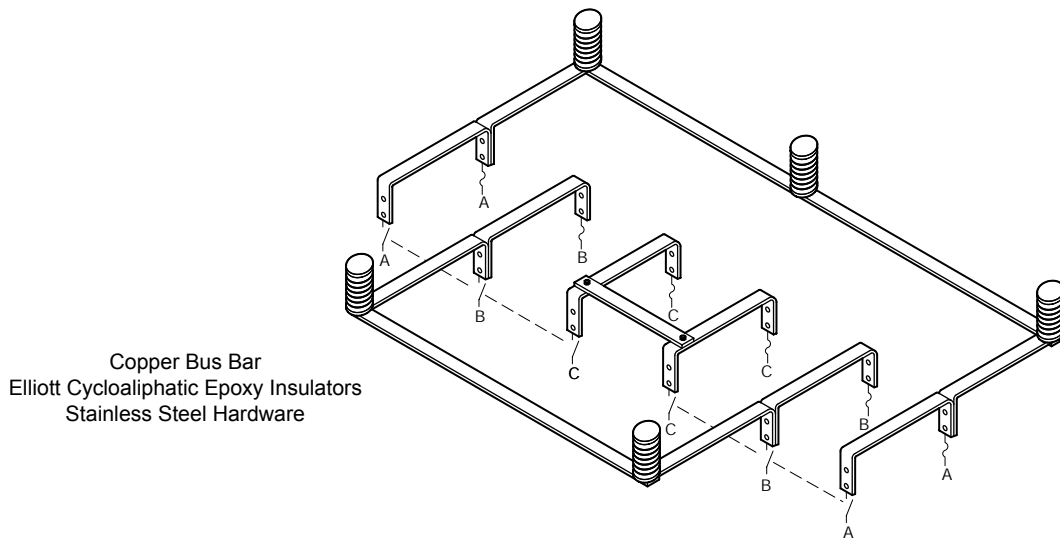


Section AA

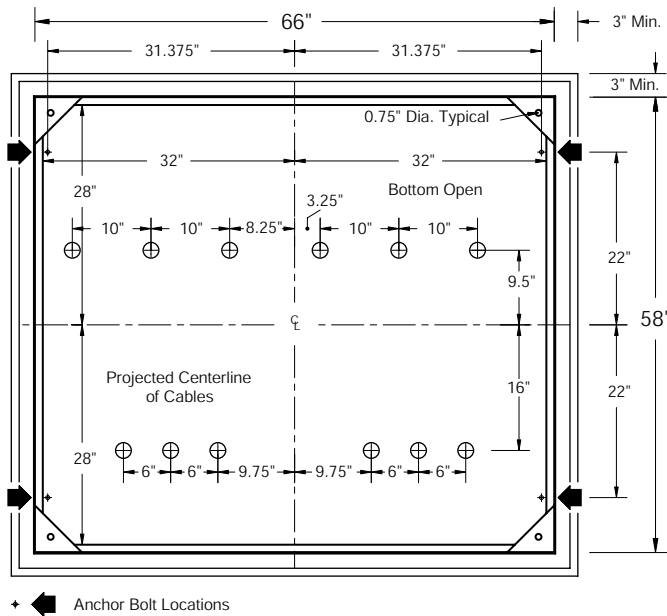
Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-322S-LT-MR/BT-SML20	SML-20 with Uni-Rupter®	SML-20 Cat. #3097	SMU-20 200K or 200E Max
EPMHG-15-322S-LT-MR/BT-SML4	SML-4Z with Uni-Rupter®	SML-4Z Cat. #92352	SM-4 200E Max

A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

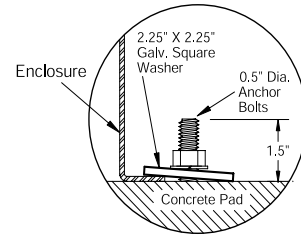
Mini-Rupter® and Uni-Rupter® are registered trademarks of S&C Electric Co.



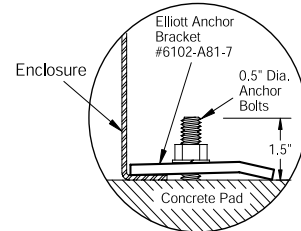
Bus Arrangement



Typical Pad Dimensions



Alternate #1

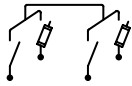


Alternate #2

Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-322S-LT-MR-SML20	SML-20 with Uni-Rupter®	SML-20 Cat. #3097	SMU-20 200K or 200E Max
EPMHG-15-322S-LT-MR-SML4	SML-4Z with Uni-Rupter®	SML-4Z Cat. #92352	SM-4 200E Max

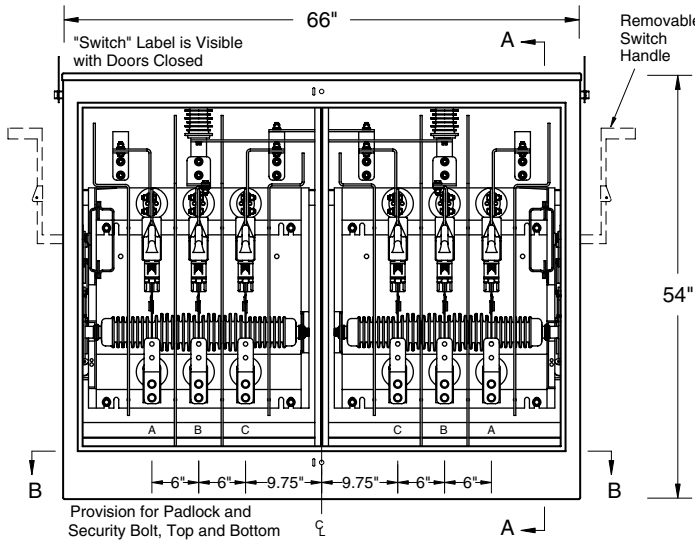
A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

One Line Diagram

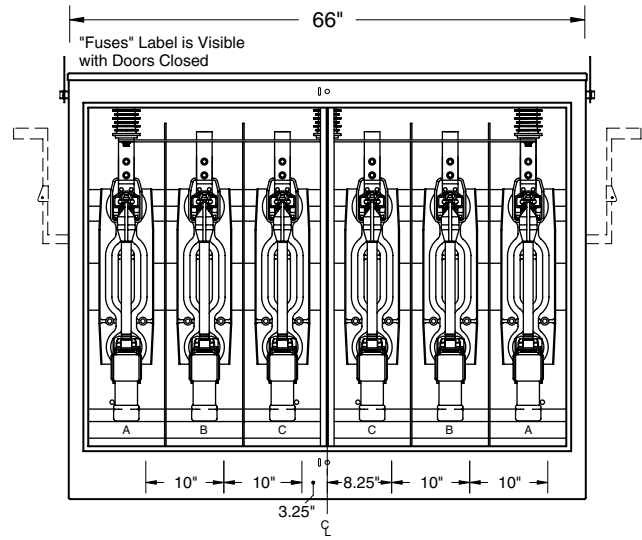


Three Phase – Four Ways per Phase

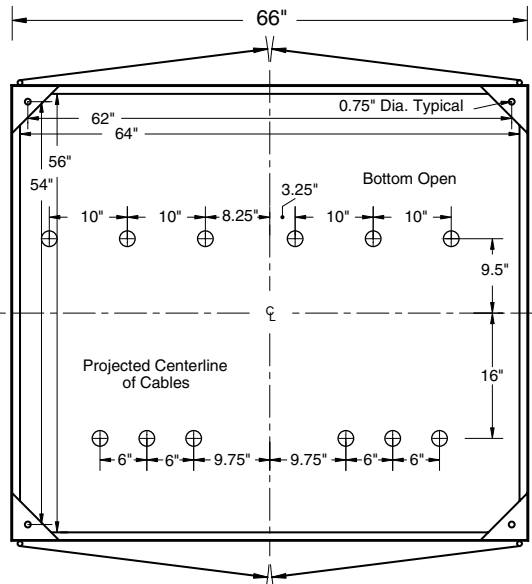
600 Amp Three-Pole S&C Mini-Rupter® Switch
 200 Amp (Max) S&C Fuse Provisions with Uni-Rupter®
 8.3/14.4-kV Grounded Wye Max Design
 95 kV BIL



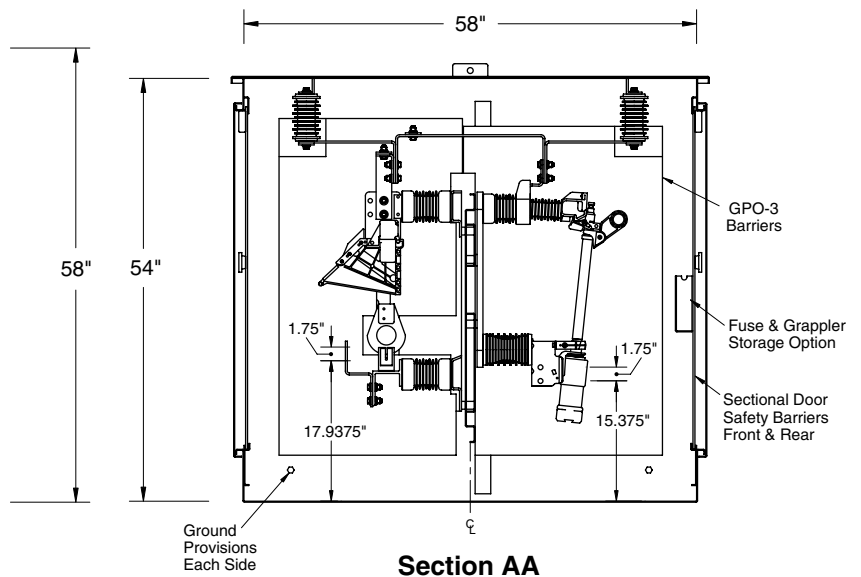
Front View
 Doors & Door Safety Barriers Removed



Rear View
 Doors & Door Safety Barriers Removed



Section BB

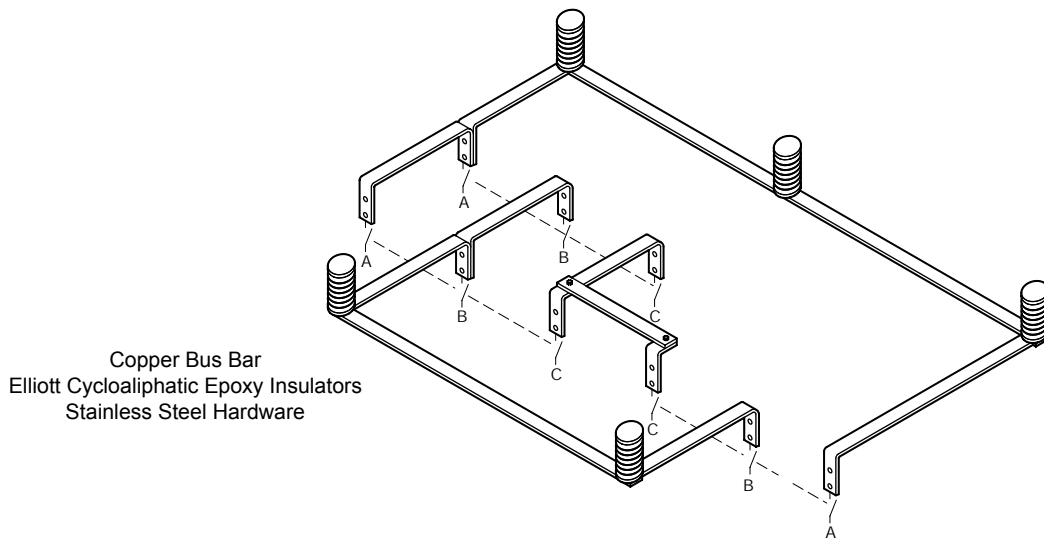


Section AA

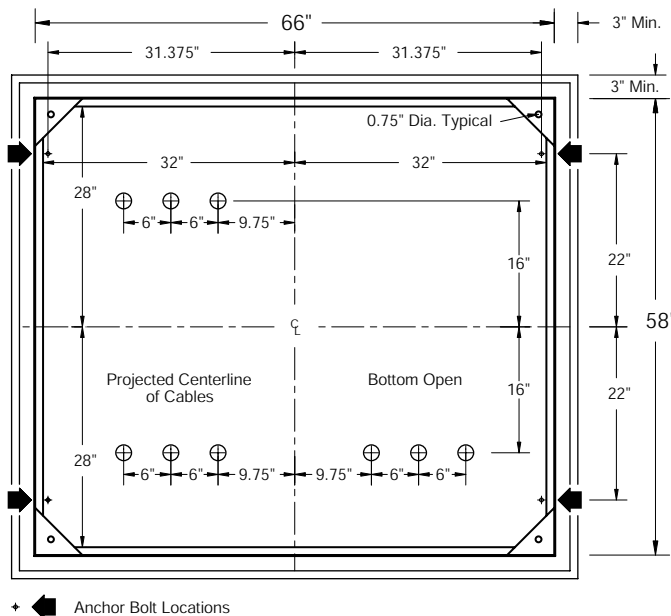
Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-322S-LT-MR-SML20	SML-20 with Uni-Rupter®	SML-20 Cat. #3097	SMU-20 200K or 200E Max
EPMHG-15-322S-LT-MR-SML4	SML-4Z with Uni-Rupter®	SML-4Z Cat. #92352	SM-4 200E Max

A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

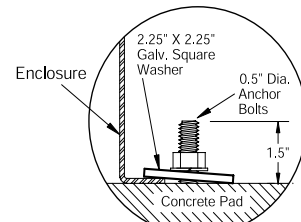
Mini-Rupter® and Uni-Rupter® are registered trademarks of S&C Electric Co.



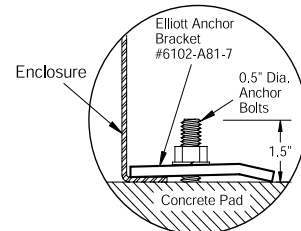
Bus Arrangement



Typical Pad Dimensions



Alternate #1



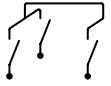
Alternate #2

Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-330S-LT-MR	N/A	N/A	N/A

A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

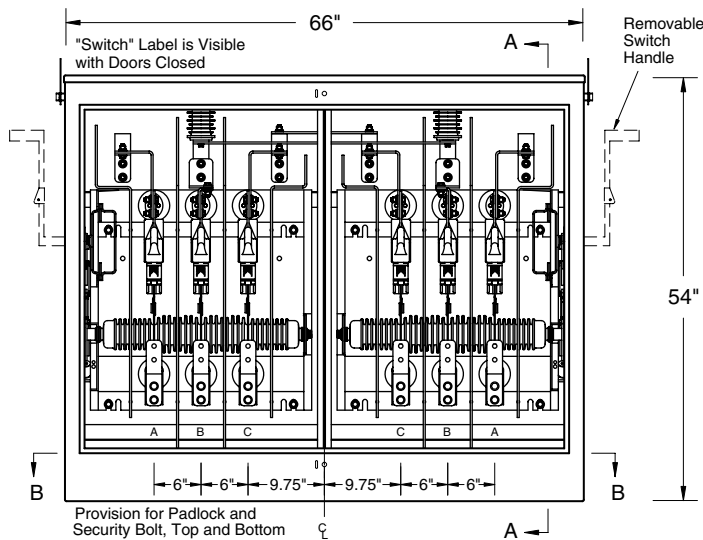
Mini-Rupter® and Uni-Rupter® are registered trademarks of S&C Electric Co.

One Line Diagram

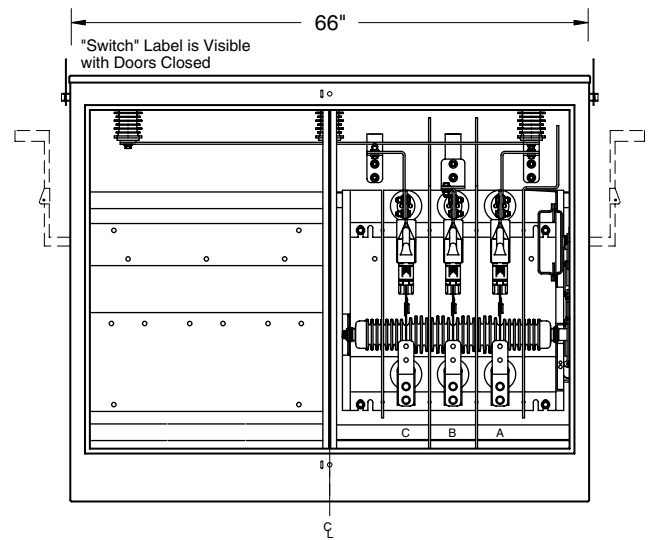


Three Phase – Three Ways per Phase

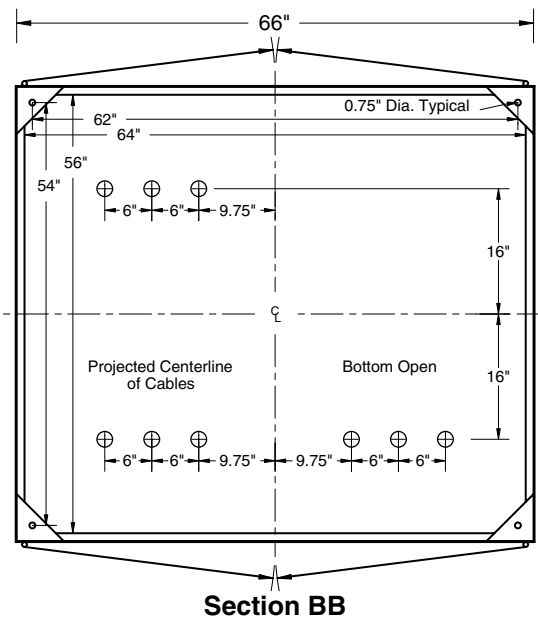
600 Amp Three-Pole S&C Mini-Rupter® Switch
8.3/14.4-kV Grounded Wye Max Design
95 kV BIL



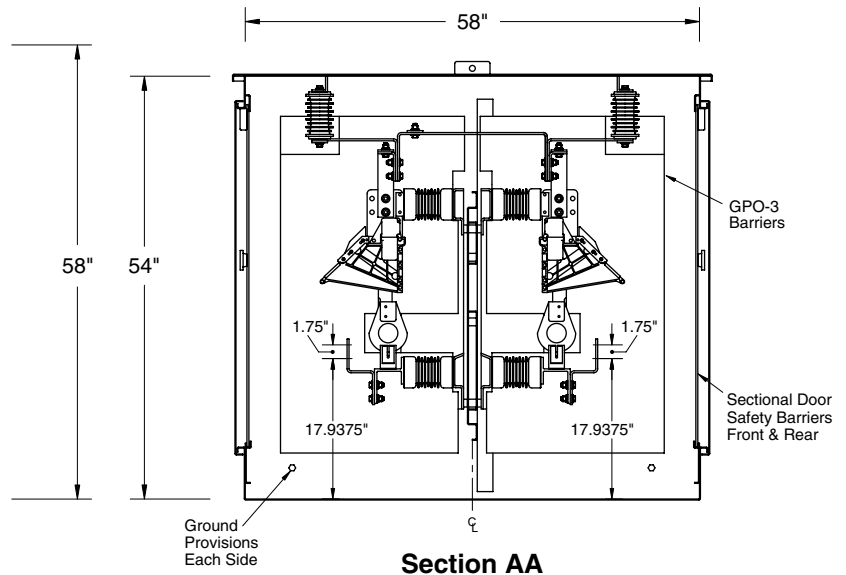
Front View
Doors & Door Safety
Barriers Removed



Rear View
Doors & Door Safety
Barriers Removed



Section BB

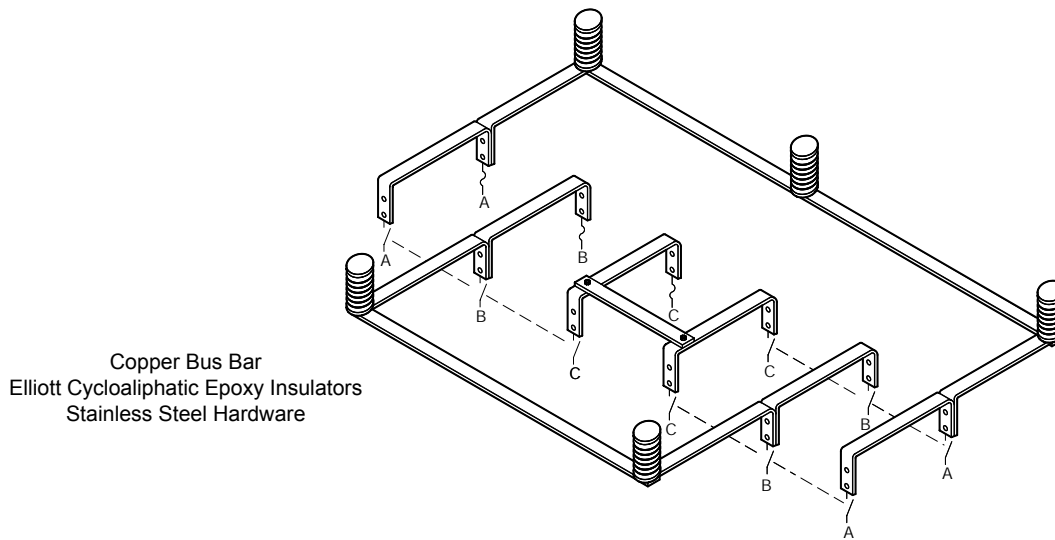


Section AA

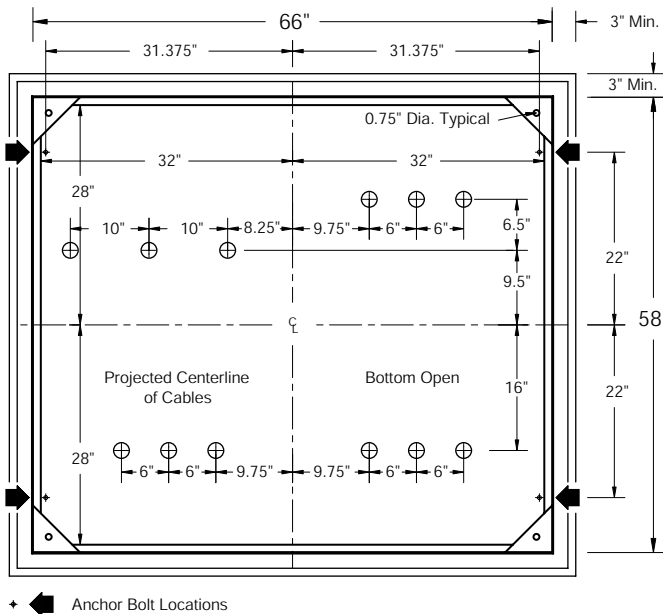
Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-330S-LT-MR	N/A	N/A	N/A

A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

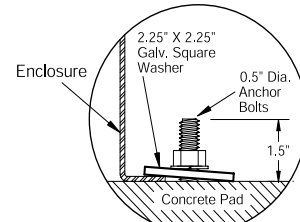
Mini-Rupter® and Uni-Rupter® are registered trademarks of S&C Electric Co.



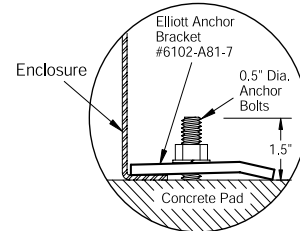
Bus Arrangement



Typical Pad Dimensions



Alternate #1



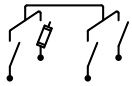
Alternate #2

Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-331S-LT-MR-SML20	SML-20 with Uni-Rupter®	SML-20 Cat. #3097	SMU-20 200K or 200E Max
EPMHG-15-331S-LT-MR-SML4	SML-4Z with Uni-Rupter®	SML-4Z Cat. #92352	SM-4 200E Max

A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

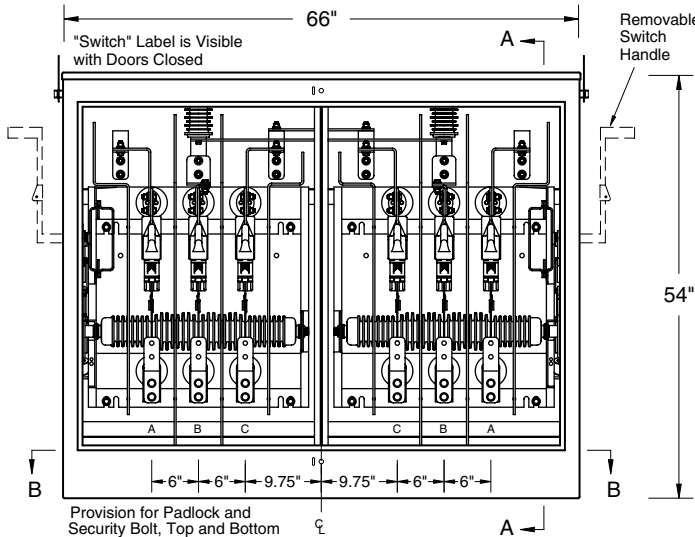
Mini-Rupter® and Uni-Rupter® are registered trademarks of S&C Electric Co.

One Line Diagram

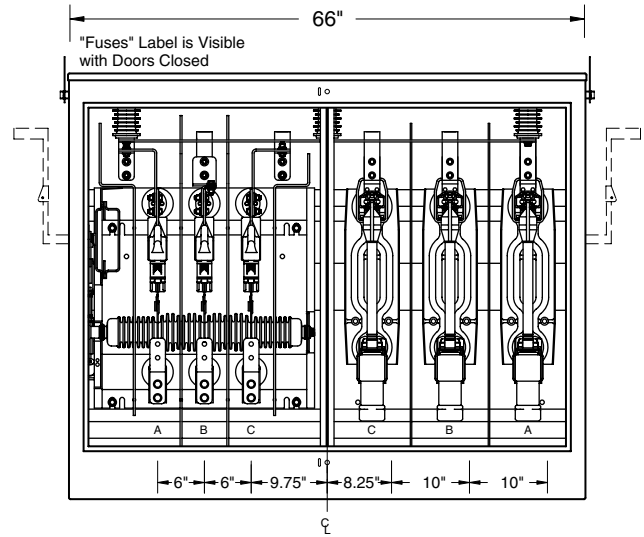


Three Phase – Four Ways per Phase

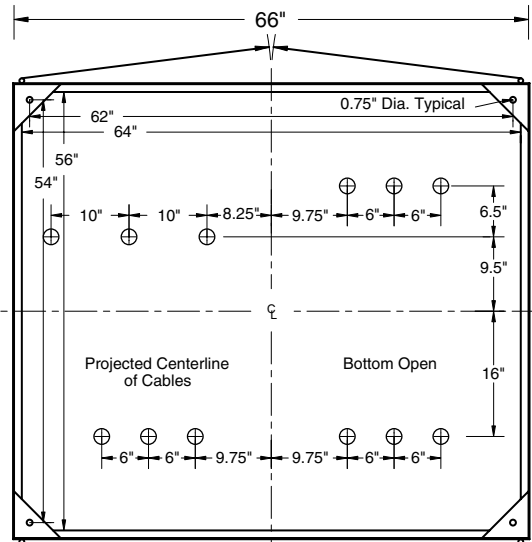
600 Amp Three-Pole S&C Mini-Rupter® Switch
 200 Amp (Max) S&C Fuse Provisions with Uni-Rupter®
 8.3/14.4-kV Grounded Wye Max Design
 95 kV BIL



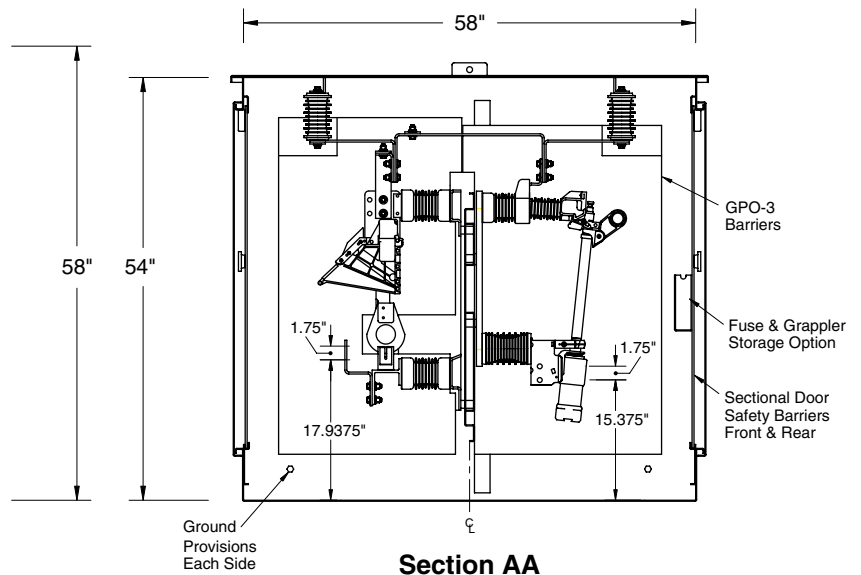
Front View
 Doors & Door Safety Barriers Removed



Rear View
 Doors & Door Safety Barriers Removed



Section BB



Section AA

Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-331S-LT-MR-SML20	SML-20 with Uni-Rupter®	SML-20 Cat. #3097	SMU-20 200K or 200E Max
EPMHG-15-331S-LT-MR-SML4	SML-4Z with Uni-Rupter®	SML-4Z Cat. #92352	SM-4 200E Max

A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

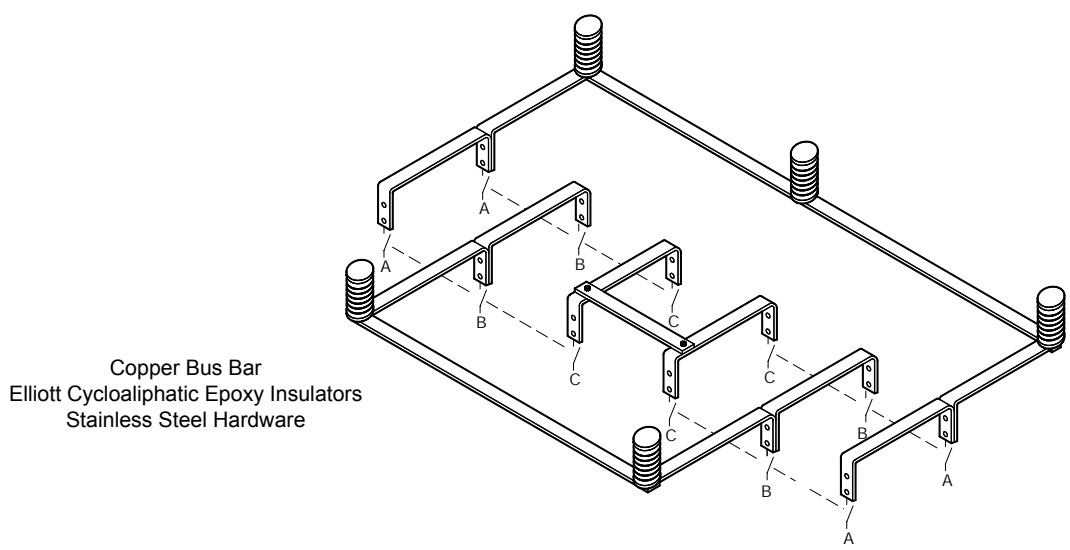
Mini-Rupter® and Uni-Rupter® are registered trademarks of S&C Electric Co.



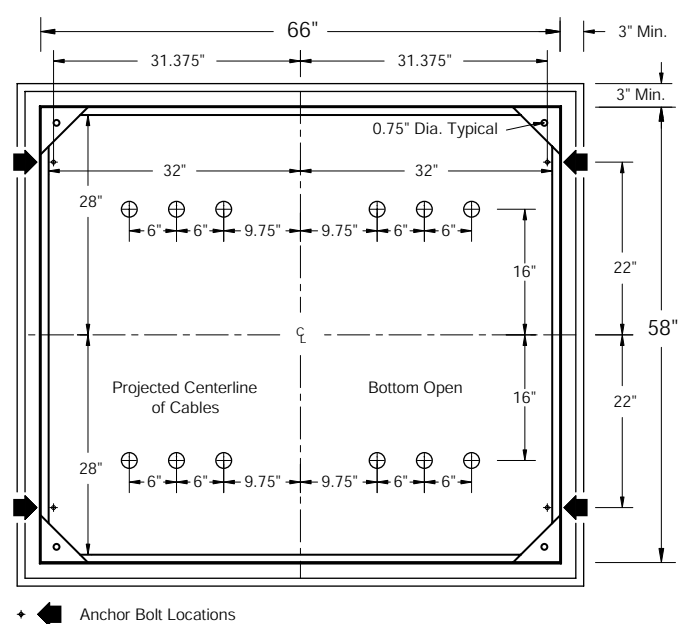
15-kV Live-Terminal 600 Amp Group-Operated Source Isolated Pad-Mounted Switchgear

200 Amp (Max) S&C SMU-20 and SM-4 Fuses

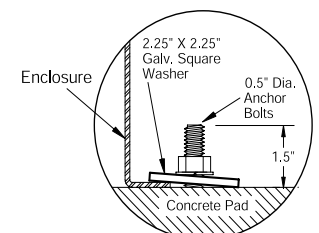
Bulletin
730-122
Page 20 2009



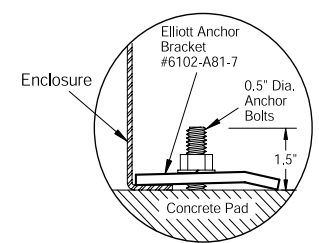
Bus Arrangement



Typical Pad Dimensions



Alternate #1



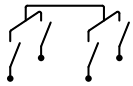
Alternate #2

Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-340S-LT-MR	N/A	N/A	N/A

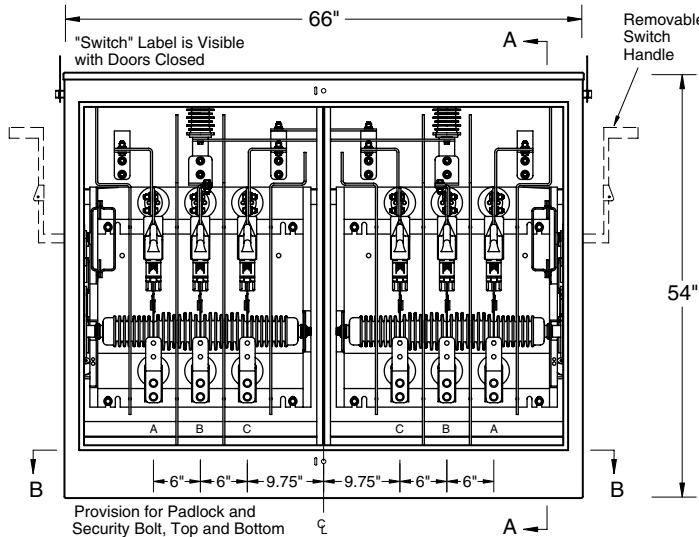
A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

Mini-Rupter® and Uni-Rupter® are registered trademarks of S&C Electric Co.

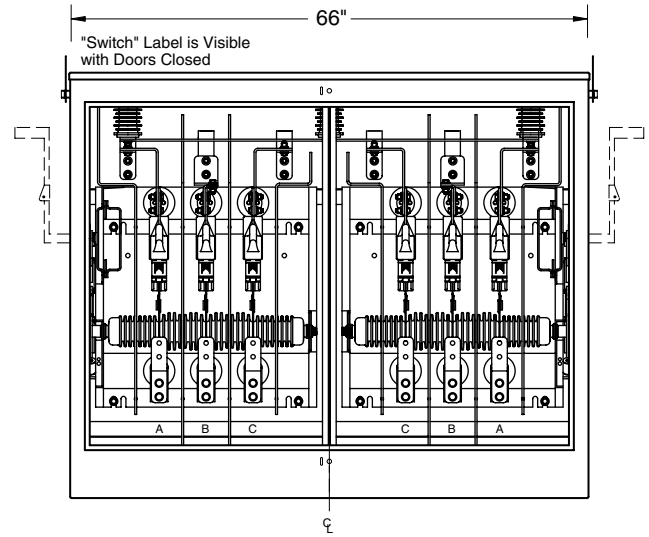
One Line Diagram



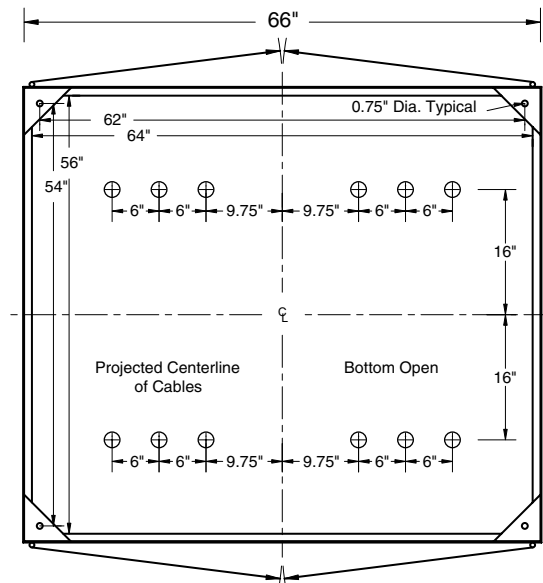
Three Phase – Four Ways per Phase
600 Amp Three-Pole S&C Mini-Rupter® Switch
8.3/14.4-kV Grounded Wye Max Design
95 kV BIL



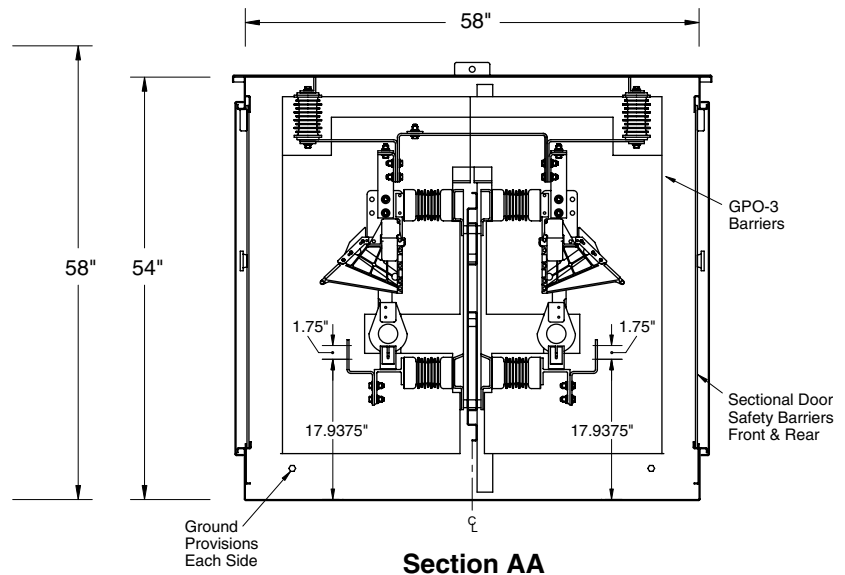
Front View
Doors & Door Safety
Barriers Removed



Rear View
Doors & Door Safety
Barriers Removed



Section BB



Section AA

Catalog Number	Fuse Mounting	Fuse End Fittings/Holder	Fuse Unit/Refill
EPMHG-15-340S-LT-MR	N/A	N/A	N/A

A 60" or 66" high enclosure can be supplied to increase cable terminating space by 6" or 12". To order a 60" high enclosure, suffix the catalog number "-60H". To order a 66" high enclosure, suffix the catalog number "-66H".

Mini-Rupter® and Uni-Rupter® are registered trademarks of S&C Electric Co.

Typical Specification - Page 1 of 2

General

The switchgear shall be 15 kV class, 95 kV BIL, 600 ampere continuous current, suitable for use on 8.3/14.4 kV grounded wye max design systems. The switchgear shall be constructed for connection to the utility system with bolt-on cable terminals and stress-relief devices (Elastimold® modular terminators, Joslyn PS terminators or equal to be supplied by the user). The switchgear shall be designed for and contain three-pole, group-operated, load-interrupter switches and/or fuse mountings that accept S&C fuses as described below. A door safety barrier shall be provided inside the door(s) as recommended in IEEE Standard C2 (National Electrical Safety Code) Rule 381G. Tamper resistance shall meet the Enclosure Security requirements of IEEE Standard C57.12.28 (Pad-Mounted Equipment—Enclosure Integrity). Together, the tamper resistance and the door safety barrier(s) shall resist unauthorized entry, protect authorized and unauthorized persons, and provide positive safety features when installed in areas accessible to the general public. The switchgear shall be constructed for outdoor installation in areas subject to heavy precipitation and in areas with windblown contamination. The equipment shall be “air-insulated” and completely assembled prior to shipment.

Enclosure Construction

The enclosure shall be tamper-resistant, all-welded construction utilizing 11-gauge minimum sheet steel. Corner plates and braces shall be used as necessary to assure rigidity. The enclosure top shall be cross-kinked to provide watershed and rigidity. The enclosure shall be open bottom with a 1-inch flange inside, all around. The door(s) shall be furnished with a stainless steel door holder that will latch the door open 100 degrees and 140 degrees and resist accidental closing. Door(s) shall be provided with provisions for padlocking and a recessed penta-head (or hex-head) security bolt to prevent unauthorized entry (coordinated to prevent installation of the padlock until the security bolt is tightened when closing the door(s) and to prevent a wrench from operating the security bolt until the padlock is removed when opening the door(s)). The security bolt shall be made captive with a stainless steel washer compressed to an oval shape to severely discourage removal. Hinges shall be stainless steel (with stainless steel pins not less than 0.3125-inch diameter) and shall be welded to both the enclosure and the door(s) to maintain door alignment for the life of the equipment. The enclosure shall be nonventilated to minimize the entrance of airborne contamination, insects, rodents or reptiles. The protective finish shall include necessary grinding, 5-stage cleaning and phosphatizing, two-component rust-inhibiting zinc rich epoxy primer and a Pad-Mount Green two-component polyurethane top coat finish (Munsell color 7GY 3.29/1.5). The primer and top coat shall be electronically monitored during application to insure proper ratio and mixing of each component. Total average thickness of paint (after curing) shall be not less than 5 mils. The protective coating shall meet the Enclosure Coating

System requirements of IEEE Standard C57.12.28 (Pad-Mounted Equipment—Enclosure Integrity). Removable lift provisions, adequate to withstand handling with normal utility equipment, shall be provided on the outside of the enclosure. Threaded openings for lift provision bolts shall be blind holes to prevent the entrance of wire or other foreign objects into the enclosure when lift provisions are removed.

Interrupter Switch

The three-pole, group-operated interrupter switch shall be S&C 15 kV class, 95 kV BIL, 600 amp Mini-Rupter® that includes a removable operating handle secured in a padlockable switch-operating hub pocket located on the outside wall of the switch compartment. The interrupter switch shall include a quick-make quick-break mechanism that will quickly and positively open and close the switch blades independent of the switch-operating hub speed. Positive stops at the switch-operating hub protect the quick-make quick-break mechanism and prevent incorrect rotation. Switch position is shown by “Open” and “Close” labels near the operating hub. An arc-chute shall be provided for each switched pole and circuit interruption shall take place within the arc-chute. Any exhaust from the arc-chute shall be vented in a controlled manner. The interrupter switch and other electrical components shall be “air-insulated” and positioned to allow visual inspection of the switch position and all internal connections and components without removing the clear-polycarbonate door safety barrier, de-energizing or removing the equipment from service. The operating hub shall be padlockable in the open or the close position. *When Option G1 is specified*, ground studs shall be provided for each terminal at the main contact end of the interrupter switch. *When Option G3 is specified*, ground studs shall be provided for each bottom terminal of the fuse mounting.

Key Interlock

When Option K is specified, a key-interlock system shall be provided that will require the operator to lock the interrupter switch(es) open to obtain the key(s) required to open the access door to the fuses.

Bus and Fuse Mountings

Bus shall be copper with all burrs and sharp corners removed prior to installation. Fuse clips and/or fuse hinges shall be keyed to prevent rotation and to maintain alignment. Positive pressure shall be assured by use of stainless steel fasteners and lock washers or compression washers at all connection points. All connections shall provide direct contact of current-carrying parts and shall not depend on current transfer through fastener thread-to-thread contact. The bus shall be arranged to allow inspection and tightening of all connections (with standard hand tools) without the necessity of removing phase barriers, ground barriers, parts of the switch or fuse mountings. Fuses and their blown-fuse indicators shall be visible (when the fuse compartment door(s) are open) without removal of the clear-polycarbonate door

Typical Specification - Page 2 of 2

safety barrier to allow easy identification of blown fuses without de-energizing or removing the fuse from service. Electrical components shall be "air-insulated" and positioned to allow visual inspection of all internal connections and components without removing the clear-polycarbonate door safety barrier, de-energizing or removing the equipment from service.

Alternate 1: Fuse provisions *without* S&C Uni-Rupter® shall accommodate S&C Fuse-Unit End Fittings Type SML-20. Fuse-Unit End Fittings, when supplied, shall accept 200 amp (max) Type SMU-20 fuse units.

Alternate 2: Fuse provisions with S&C Uni-Rupter® shall accommodate S&C Fuse-Unit End Fittings Type SML-20. Fuse-Unit End Fittings, when supplied, shall accept 200 amp (max) Type SMU-20 fuse units.

Alternate 3: Fuse provisions *without* S&C Uni-Rupter® shall accommodate S&C Fuse Holder Type SML-4Z. Fuse holders when supplied, shall accept 200 amp (max) Type SM-4 fuse refills.

Alternate 4: Fuse provisions with S&C Uni-Rupter® shall accommodate S&C Fuse Holder Type SML-4Z. Fuse holders, when supplied, shall accept 200 amp (max) Type SM-4 fuse refills.

Insulators

The switch and bus insulators shall be nontracking, self-scouring, nonweathering pressure-molded cycloaliphatic epoxy with cast-in-place inserts. Surface damage to insulators shall expose material of the same composition and characteristics so insulators with minor surface damage will not require replacement. The insulators shall provide adequate thermal cycle withstand to assure trouble-free field service in the most severe climatic conditions established by in-house testing and field-operating experience. The insulators shall be 15 kV class, 95 kV BIL and produced by a manufacturer with ten or more years experience with cycloaliphatic epoxy.

Surge Arrestors

Alternate 1: Mounting provisions for base-mounted distribution-class metal-oxide-varistor surge arrestors shall be provided at the switch and bus terminals, located so the arrestors can be installed and replaced without disturbing other components in the compartment.

Alternate 2: Three 9 kV (or 10 kV) heavy-duty base-mounted distribution-class metal-oxide-varistor surge arrestors, with silicone-rubber housings, shall be provided at the switch and bus terminals, located so the arrestors can be installed and replaced without disturbing other components in the compartment.

Barriers

Phase and ground barriers shall be provided to assure correct phase-to-phase and phase-to-ground clearances for proper operation at rated voltage. These barriers shall be glass-reinforced polyester (NEMA GPO-3 class material) not less than 0.1875-inch thick.

A removable insulating barrier with a "DANGER – Keep Out! – Hazardous voltage" sign, Elliott #7203-D2003-309, shall be located inside the door(s) on the fuse and switch compartments as recommended in Rule 381G of IEEE Standard C2 (National Electrical Safety Code). The door safety barriers shall be constructed of 0.25-inch clear polycarbonate (Lexan or equal) and shall completely close the door opening and be provided with a nonconductive safety latch requiring a positive action to remove the barrier. Handles and other hardware extending through this door safety barrier shall be nonconductive material. Handles shall be keyed to prevent rotation for secure handling. Complete visual inspection of the internal components shall be possible without removing the door safety barrier.

Grounding Provisions

High-conductivity bronze eyebolt-type ground lugs, which accept #6 through #2/0 stranded copper conductor, shall be provided in each compartment (located on each side of the door opening in an accessible position).

Accessory Equipment

An anodized aluminum nameplate shall be installed inside one door on the switch (or bus) compartment. It shall be located at the top corner farthest from the live equipment when the door is open. The nameplate will provide Type of Equipment, Model Number, Amps Continuous, kV Maximum, BIL, Serial Number, Date Manufactured and Weight of Equipment.

When enclosures have more than one door (or other access provision) each access shall be labeled in near proximity of the locking provisions with a pressure-sensitive vinyl label using letters not less than 0.375-inch nor more than 0.625-inch high. The label shall indicate the type of equipment behind the access (elbows, fuses, bus, etc.).

When specified, four anchor-bolt brackets, Elliott #6102-A81-7 or approved equal, shall be supplied with each switchgear to provide a means of clamping the equipment to the concrete pad.

When specified, grounding studs shall be provided on each terminal at the hinge end of the interrupter switch and at each terminal of the hinge end of the fuse mountings.

Packaging

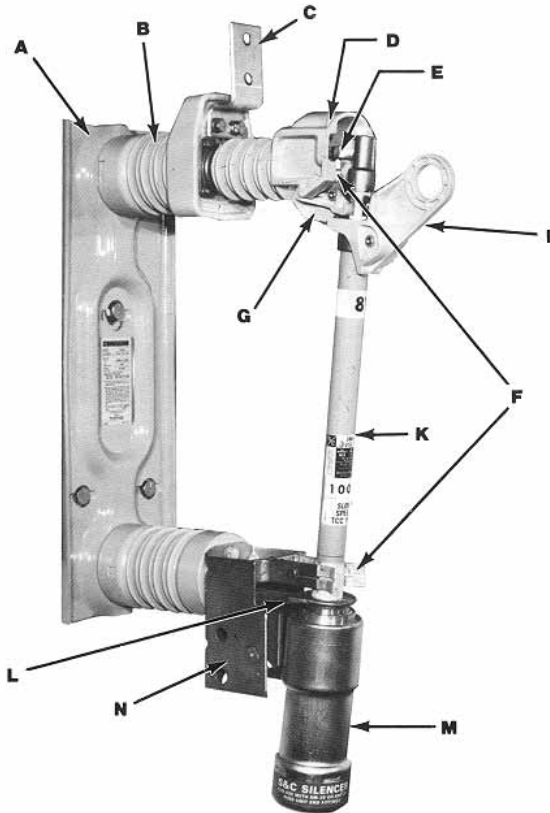
Each switchgear shall be bolted to a solid-top wood pallet (to prevent the forks of a forklift truck from entering the open bottom of the equipment) to prevent hidden damage. The equipment shall be wrapped with 0.125-inch thick polyethylene foam or other suitable material to minimize damage to the finish during shipment.

Drawings

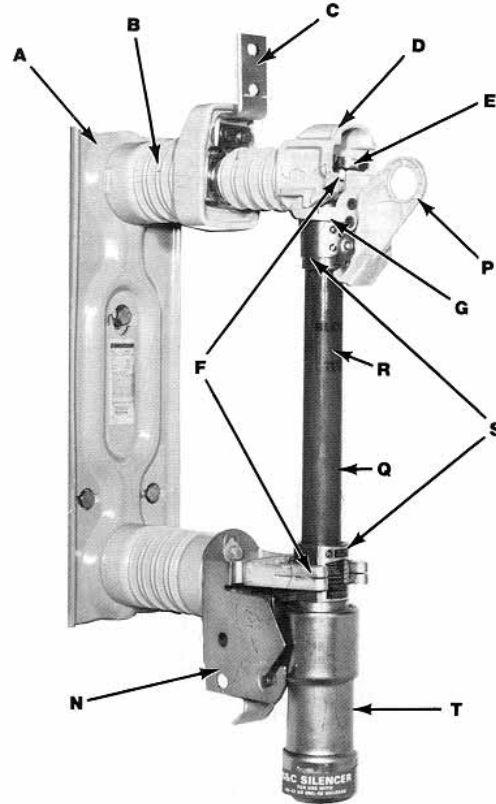
When specified, drawings shall be furnished for each switchgear that include:

- 1) enclosure dimensions and location of components.
- 2) proposed pad dimensions and location of anchor bolts.

**SML-20 Power Fuse Mounting
(45° Opening)**



**SML-4Z Power Fuse Mounting
(45° Opening)**



- A** Rugged 0.1875-inch-thick flanged, formed steel base
- B** S&C Cypoxy insulators
- C** Two-inch-wide aluminum terminal pad
- D** Uni-Rupters
- E** Fault-closing contacts
- F** Spring-backed upper and lower mounting contact are copper, heavily silver-clad
- G** Pull-ring-operated latch
- I** Upper end fitting

- K** SMU-20 Fuse Unit
- L** Aluminum-bronze lower end fitting
- M** Silencer
- N** Zinc-plated hot-rolled steel hinge
- P** Holder-latch pull ring
- Q** Translucent glass-epoxy fuse tube
- R** "Blown-fuse" indicator window
- S** Brass upper and lower ferrules
- T** Silencer

Style	Fuse Mounting Type	Ratings					
		kV			Amperes, RMS		
		Nom.	Max Des.	BIL	Max	Live Switching	Interrupting ① (Sym)
Disconnect 45° Opening Silencer Vertical	SML-20	13.8	17.0	95	200K or 200E	200	14,000
	SML-4Z	13.8	17.0	95	200E	200	12,500

① Refer to S&C catalog for additional, detailed information on interrupting ratings.