

Metal-Enclosed Switchgear



Rating: Not Rated Yet

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Description

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S&C Metal-Enclosed Switchgear, rated 4.16 kV through 34.5 kV, features reliable, time-tested fuses and manual or power-operated interrupter switches in rugged 11-gauge steel enclosures. These enclosures are configured into integrated packages that provide application flexibility, operating simplicity, and superior dependability in switching and protecting medium-voltage power circuits in commercial, institutional, industrial, and high-rise installations. S&C's expertise in this field has been established through 60 years of metal-enclosed switchgear design and manufacture, and is complemented by UL® listing of all S&C Metal-Enclosed Switchgear rated 4.16 kV through 13.8 kV with 600-ampere or 1200-ampere main bus.

S&C Metal-Enclosed Switchgear is available in two types—modular and custom. System II Modular Metal-Enclosed Switchgear consists of pre-engineered single-bay modules assembled into configurations that fit most application requirements. Drawing preparation and approval time is minimized, and you gain all the economies of repetitive manufacture. When modular switchgear won't fully satisfy the requirements, though, S&C's experienced team of specialists will custom design switchgear for the application.

Power-System-Matched Switching and Protection

Full-load switching, plus S&C's unique one-time and two-time duty-cycle fault closing. S&C interrupter switches carry and interrupt rated load currents, even after being inadvertently closed into available fault currents corresponding to their fault-closing ratings. You can restore power quickly without first having to repair the switches.

One-cycle total clearing with S&C SM and SML Power Fuses. Compare this to the 5 cycles or more required by circuit breakers . . . simplifies upstream coordination, minimizes short-circuit stresses on the system.

Choice of unique response curves with maintenance-free S&C Electronic Power Fuses. They provide protection unavailable with any other device—even circuit breakers, with their relays and batteries.

Three-phase protection for three-phase loads. S&C open-phase detectors and overcurrent relays isolate three-phase loads from single-phasing and other open-phase conditions.

Single-phase protection for single-phase loads. Fuses—unlike circuit breakers—selectively isolate only faulted phases of feeders serving single-phase loads.

Threefold Economy

Low purchase cost—economies inherent in the interrupter switch and fuse protection concept translate into significant first-cost savings.

Low installation cost—metal-enclosed switchgear, light in weight in comparison with breaker gear, is easy to handle and needs no foundation, no support channels . . . only a level floor or pad. Multibay lineups assemble with a minimum of interbay bolting, and inter-unit bus connections need no taping. Simple field assembly—with no relays to set and test—means less time, equipment, and manpower. Future additions are readily accommodated as your system expands.

Low maintenance cost—S&C fuses are nondamageable and do not require any maintenance or calibration to perpetuate the accuracy of their time-current characteristics. S&C interrupter switches are maintenance free . . . requiring only an occasional exercising. S&C gear just needs a check of the insulators and, if necessary, a simple cleaning.

Simplified Power-System Planning

Simple, reliable, economical—S&C Metal-Enclosed Switchgear is readily configured into basic circuit arrangements that make power-system planning and design easy . . . implementation is logical and straightforward. The basic arrangements shown here are often combined to handle even the most complex distribution system needs . . . assuring maximum service continuity for extremely critical loads.

Matchless Construction Features Assure Long Service Life

Rugged unitized 11-gauge steel construction. Each bay is a monocoque unit with an integral channel base around all four sides. There are always double walls between adjoining bays. Accurately formed, matching enclosures assure perfect alignment in multibay lineups.

No exposed bolts on enclosure sheets or roofs to attract vandals. Even future bus extensions are internally secured.

Comprehensive access controls. All doors have heavy-duty latches and hinges and are padlockable. Manual switch handles are padlockable in switch-closed and switch-open positions. Snaplocks or interlocks further limit access.

Wide bulkhead-type doors provide convenient front access for cable termination. No need for rear access; gear can be placed back-to-back or against a wall, in minimal floor space.

Inner screen doors—bolted closed—are a second barrier against inadvertent entry.

UL Category A enclosures. With simple addition of padlockable covers over windows and meters, S&C gear provides the industry's highest security for this class of equipment.

Unique Ultradur® Finishing System provides lasting corrosion protection that cuts maintenance costs. And all hardware is galvanized, zinc-nickel plated, or of stainless-steel or nonferrous materials to resist corrosion.

Special gasketing or sealants provide weathertight seals at door openings, top and side edges of adjoining bays and interbay bus openings, and the roof.

Insulating “no-drip” compound on the underside of the roof checks condensation.

S&C Cypoxy® cycloaliphatic epoxy resin insulation system insulates all live parts from ground and provides greater leakage distances. Optional through bushings provide isolation between bays.

Heavy-duty bails on all cable-termination points and ground bus accommodate portable grounding equipment.

Bus connections—protected by an oxide-inhibiting compound—are bolted to a uniform torque. Special-purpose washers and bolts maintain optimum contact pressure.