



RELIABILITY MATTERS

Cat® Medium-Voltage Switchgear and Automatic Transfer Switches





**MAKING SUSTAINABLE
PROGRESS POSSIBLE**

When it comes to electric power, product reliability is what matters most. A loss in power is not an option, whether you are protecting cell phone service or protecting lives. Cat medium-voltage switchgear and automatic transfer switches live up to the promise of Caterpillar reliability in every way.

As a provider of total solutions, Caterpillar has been a leading innovator in the technology and design of electric power products. That same technological and design expertise has been leveraged to develop our high-quality medium-voltage switchgear.

When operating at higher voltages, these systems draw lower currents, which ultimately reduces your utility costs and saves you money. Cat power systems also offer improved sustainability by providing the means to make use of biogas and methane gas as a clean, efficient power source, which helps lower your owning and operating costs and saves the environment. Cat medium-voltage switchgear systems are critical elements within those systems.

Whether preserving invaluable data or protecting lives, Cat power systems are making progress possible around the world.

**Enoree Landfill
Greenville, SC**



COMBINING PROVEN TECHNOLOGY AND CAT QUALITY TO DELIVER UNBEATABLE RELIABILITY.

Cat medium-voltage switchgear systems utilize the Eaton VacClad switchgear and VCP-W vacuum circuit breakers along with integrated, proven Cat microprocessor-based innovative control technology.

Cat Switchgear Features

- Reliability
- Redundancy features and options
- Touchscreen interface
- Simple, intuitive operation
- Advanced communications capabilities
- Integrated digital technology
- Advanced generator control and protection
- Detailed engine and electrical reports
- Best-in-class footprint

Applications

- Landfill
- Emergency/legally required standby systems
- Optional standby backup systems
- Distributed generation
- Peak shaving
- Prime power
- Data center/data processing
- Healthcare
- Critical industrial/chemical processes
- Distributed generation/co-generation
- Water/wastewater treatment
- Government/military
- Banking/credit card processing

Medium Voltage Cat Switchgear conforms to the following applicable standards:

- Nema SG-5
- ANSI/IEEE C37.20.2
- CSA-C22.2 No-31-04
- EEMAC G8-3.2.
- NFPA 70, 99, 110

Maximum Voltages

- 4.76 kV, 8.25 kV, 15 kV, 27kV & 38 kV

Continuous Current

- Circuit Breakers
1200, 2000 and 3000 A (5 and 15 kV)
- Main Bus
1200, 2000, 3000 and 4000 A (5 and 15 kV)

Cat Paralleling Controller

The Cat paralleling controller is a rugged microprocessor based synchronizer and load controller. The PL2000 and PL3000 are designed to work exclusively with Cat engine-generator sets and eliminates the need for traditional synchronizers, power factor controllers, load share modules and cross-current compensation devices by replacing them with a single, more reliable controller.

FEATURES/BENEFITS

- Auto transfer pair controllers
- Load shed/add
- Load-based generator sequencing
- Optional redundant Ethernet control network
- Engine communications
- Monitors generator set
- Replicates generator set alarms and shutdowns
- True distributed processing
- Deterministic network
- Fully programmable generator set protective functions
- Multiple password access levels available
- True RMS sensing

PL 3000

The PL 3000 is the most feature-rich Cat switchgear product offering. The superior graphics and operator interface, along with the ability to perform historical data trending and unlimited alarm/event logging make it the most sophisticated and versatile product offering.

PL 3000 Features:

- 19-inch color display TFT, with Surface Acoustic Wave Touchscreen operator interface
- Full functional modes of operation
- True distributed processing
- Redundancy features and options
- Optional connectivity features
- Redundant touchscreen available
- Historical trending capability
- Extensive alarm and event logging
- Optional Ethernet/Modbus full-feature remote

Operator Interface:

- Generator Set Control
- Metering
- Enhanced capabilities for ATS operations and historical trending
- Load Shed Control
- Generator Demand Priority Control
- System Control
- Annunciator Screens
- Engine Monitoring



PL 2000

PL 2000 controller supports a wide range of capabilities for demanding applications. It surpasses the switchgear industry offerings in all aspects. Cost-effective without sacrificing dependability, the PL 2000 is state-of-the-art and performs all the same power monitoring, generator control and switchgear operations as the PL 3000 except historical trending capabilities and alarm/event logging.

PL 2000 Features:

- 12-inch or 15-inch color operator interface TFT, resistive touchscreen
- Full functional modes of operation
- True distributed processing
- Redundancy features and options
- Optional connectivity features
- Redundant touchscreen available
- Ethernet/Modbus full-feature remote ready
- Limited alarm and event logging available

Operator Interface:

- Generator Set Control
- Metering
- System Control
- Load Shed Control
- Generator Demand Priority Control
- Annunciator Screens
- Engine Monitoring





**ARE YOU CONFIDENT
WHEN YOU HAVE TO
TRANSFER POWER?**



With Cat Medium-Voltage ATS and switchgear you can be.

Cat MV ATS is perfect for any emergency or backup system and suitable for service entrance use. Providing reliable automatic transfer to standby power when:

- The normal power source fails
- peak shaving is desired
- The normal power source is unreliable
- Backup power is required by code or local regulations

The Cat medium-voltage ATS is available in:

- 5KV, 15KV, 27KV
- Nema 1 Enclosure
- Nema 3R Enclosure
(sheltered aisle or aisleless)
- Open or closed transition transfer



WE ARE WHERE YOU ARE

Your Cat dealer along with the Cat product support team provides complete equipment management solutions for your electric power system. Our global dealer network makes you feel at home. You can count on personal support from experts at the dealership backed up by Cat field engineers who will serve you with dedication, experience and know-how for your electric power system. The Cat dealer network is the strongest in the world. With nearly 200 locally owned businesses, 1,800 dealer branch stores and almost 100,000 employees, our worldwide dealer organization has the local expertise, specialists and extensive parts inventory you'll need – no matter where you or your business is providing power.

To find your nearest dealer go to: www.cat-electricpower.com.

