

Innovative Power Distribution Solutions

PRODUCT GUIDE

G&W Electric

Innovating Since 1905

After a century of engineering exceptionally longlasting electrical distribution and transmission solutions, G&W Electric knows power. And more importantly, we know the power of listening. By taking time to understand your application and asking the right questions, we develop solutions tailored to your needs. The answer may be our time-tested switches that keep power running seamlessly in mission-critical applications, or an advanced automation system for next-generation grids. Whatever your challenge, you'll experience decades of high performance — and your needs will always be heard.





WHO WE ARE AT A GLANCE

G&W Electric is a global leader in power grid distribution and transmission. Our expansive suite of innovative products includes:

- · Padmount switches
- Submersible underground vault switches
- Sensors for advanced applications in system efficiency (CVR and Volt/VAR) and power quality
- Reclosers and load break switches
- Power grid automation solutions
- Current limiting system protection
- Distribution and transmission cable accessories

Overhead Distribution Switchgear and Reclosers

Our selection of distribution reclosers and overhead switchgear meet 15.5kV to 38kV system rating requirements (800A continuous current, 12.kA rms symmetrical interrupting) for direct pole, padmount and substation applications. Their flexible designs include options for manual and remote operation, as well as integration with distribution automation and automatic transfer control solutions. Our reclosers and overhead switches are electronically controlled vacuum fault interrupter switchgear, making them more reliable for voltage switching and protection.

The Viper®-ST, Viper®-S and Viper®-SP come with a dead tank design that reduces interruptions from wildlife interferences and provides added safety for the operators with the modules being at ground potential.

Viper-HV High-Voltage Pole Top Recloser

- Requires no oil or SF6 for easy maintenance
- · Reclosers, CTs, and voltage sensors in one device
- Rated to 72.5kV
- Fully automated solution for faster fault isolation

Viper-ST Medium-Voltage Recloser

- · Solid dielectric, independent pole operated recloser
- Rated to 40.5kV
- Reliable, maintenance-free performance
- · Flexibility to isolate single or two faulted phases on three phase circuits

Viper-S Three Phase Recloser

- · Mechanically ganged three phase recloser
- Rated to 38kV
- · Electronically controlled vacuum fault interrupters
- · Maintenance-free benefits of a solid dielectric insulated device

Viper-SP Single Phase Recloser

- Single phase recloser paired with SEL-351RS Kestrel
- · Rated to 38kV
- · Variety of configurations and side-ready solutions
- · Maintenance-free benefits of a solid dielectric insulated device

Diamondback Loadbreak Switch

- · Solid dielectric, three phase loadbreak switch for overhead applications
- Reliability of vacuum bottles
- · Maintenance-free benefits of a solid dielectric insulated device



Switchgear and Cabinets

Our submersible underground switchgear are available with solid dielectric or gas insulation for padmount or vault applications, and engineered for optimum reliability and operator safety. They are designed and tested to IEEE standards.

Gas Switchgear

- · Gas insulated padmount and vault switches
- Can be operated manually or via various distribution automation solutions
- Rated up to:
 - 15.5kV through 38kV
 - 40kA asymmetrical momentary
 - 630A to 900A continuous current

Trident® Solid Dielectric Switchgear

- Suitable for use in challenging environments (e.g., flooding, wildlife intrusion, extreme weather conditions)
- Rated up to:
 - 16kA at 15.5kV for select models
- 12.5kA for 15.5kV, 27kV, 29.3kV or 38kV

Trident with SafeVu® Visible Break

- Provides a visible break disconnect switch in series with vacuum interrupter
- No need to remove elbows or use external mounted linkage systems to provide a visible open
- Redundant mechanical interlocks ensure vacuum bottle is open before operating a visible break switch



Gas-insulated Padmount



Solid Dielectric Vault



Integral visible break in the open position

Power Grid Automation

Choose from a range of pre-engineered or custom designed automation solutions – from basic automatic transfer schemes to advanced Fault Location, Isolation and Service Restoration (FLISR) configurations.

Fault Isolation and Restoration

Our preconfigured fault detection location, isolation and service restoration (FDIR) systems include a comprehensive selection of fully distributed intelligence and peer-to-peer communications and local controllers.

Master Station Solution

Leveraging a DMS/SCADA system coupled with intelligent switchgear and reclosers, our master station solution provides a full complement of power distribution automation capabilities.

Voltage Loss Reconfiguration/ Automatic Transfer

Whether you need a stand alone automatic transfer switch or an advanced multiple source system reconfiguration package, our flexible solutions will help you reduce outage times and costs while improving reliability.

Remote Terminal Units

Our multipurpose remote terminal units (RTUs) can help you maintain critical communications between your master station and remote devices.





The G&W Electric LaZer® Distribution Automation System represents the culmination of decades of designing and implementing innovative power automation solutions. With our comprehensive menu of preengineered automation solutions — from the most simple automatic transfer schemes to the most complex SCADA/master station configurations you can rely on us to meet your specific application needs. These solutions feature full system integration of new and existing components to maximize your technology investments.



Current Limiting System Protection

G&W Electric offers a wide variety of commutating current limiters offering overcurrent protection of systems rated 15.5kV through 38kV. Different devices are available depending on the overcurrent interrupting and current limitation requirements. Typical applications include power transformer protection, system upgrades, reactor bypass, co-generation and closing bus ties. Current limiters consist of CLiP[®], CLiP[®]-LV, Power Assisted Fuses, High Current Limiters and Encapsulated Fuses.



CLiP-LV Current Limiting Protector

Single-phase and three-phase protection with remote enable/disable in systems rated: • 2.8 - 38kV

Continuous current up to 5000A



CLiP Current Limiting Protector

Overcurrent protection device that interrupts potentially damaging fault current. Works with voltages: • Up to 750V

- · Continuous currents up to 4000A
- UL Rated

High-Accuracy Current and Voltage Sensors

G&W Electric's sensor technology is designed to cover a wide range of applications from metering-class measurements and analytics to protection. These high accuracy sensors can help make critical decisions for optimizing the grid and can be integrated with protection equipment enabling grid reliability and resilience.

Outdoor Solutions

G&W Electric sensors are suitable for installation in pole-mounted and substation applications and are available as a voltage only (VS) or a combination current voltage sensor (CVS).

- Available as a voltage only or a combination current voltage sensor
- Suitable for installation in pole mounted and substation applications
- Typically mounted on reclosers, switches or as a stand alone unit

Indoor Solutions

G&W Electric sensors are suitable for installation in air or gas insulated switchgear and are available as a voltage only (VS) or a combination current voltage sensor (CVS).

- Available as a voltage only or a combination current voltage sensor
- Suitable for installation in air or SF6 insulated switchgear
- Typically mounted on copper busbars replacing post insulators
- Available with optional additional output for voltage presence indication

Features & Benefits

- Versatility with one sensor for metering and protection applications
- High accuracy measurement up to 0.5 class over the temperature range
- · High frequency measurement bandwidth
- Safety with low energy outputs and isolation from primary





38kV Accusense Voltage Sensor (VS-38-0)



24kV Voltage Sensor (VS-24-I)



and voltage sensor

(CVS-24-0)

Combination Current and Voltage Sensor (CVS-24-I)

Transmission and Distribution Cable Accessories

Transmission Cable Accessories

G&W Electric offers a variety of transmission cable accessories for extruded dielectric cable systems. Cabling is available for outdoor applications through 345kV and includes porcelain or composite insulator options and premolded designs.

- · Accessories for extruded solid dielectric cable
- Python[®] outdoor PAT style transmission terminations
- Python SSC style dry type transmission terminations
- · Accessories for oil impregnated paper cables
- Cable joints
- Transition joints





Distribution Cable Terminations



Distribution Cable Accessories

Distribution Cable Terminations

G&W Electric offers a wide range of distribution cable terminations, through 46kV. Cable terminations feature high-grade, wet process porcelain insulators for superior electrical performance, tracking resistance and mechanical strength.

Distribution Splices and Joints

Our portfolio includes distribution cable splices and cable joints for a wide range of cable types, through 35kV — from simple tape splice kits to innovative epoxy molded designs that provide elbow interfaces for quick disconnect and reconnect of cable sections. Cable joints can be installed within underground vaults or direct buried.

TJNT33 Distribution Cable Joint

Contact us today +1.708.388.5010 or info@gwelectric.com



Since 1905, G&W Electric has been a leading provider of innovative power grid solutions including the latest in load and fault interrupting switches; reclosers; sensors; system protection equipment; power grid automation; transmission and distribution cable terminations; and joints and other cable accessories. G&W Electric is headquartered in Bolingbrook, Illinois, U.S.A., with manufacturing facilities and sales support in more than 100 countries, including Canada, Italy, China, Mexico, Brazil, India and Singapore. We help our customers meet their challenges and gain a competitive edge through a suite of advanced products and technical services.

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