



*Electrical Distribution Solutions*

# UL 1558 LV Switchgear Capabilities Overview



- **UL 1558 Low Voltage (LV) switchgear provides protection, metering, switching, control and automation of LV electrical systems in commercial and industrial applications**
- **Provides connectivity to primary distribution lines, feeders, motors, transformers, generators, filters, capacitor banks through cables and bus duct**
- **Application scope includes transfer schemes, generator control, generator/utility paralleling, motor control, load management and service entrance rating where required**
- **Cells contain draw out breakers configured to meet applications and optimize space**
- **Standard offering is non-insulated bus; insulated bus optional**
- **Breakers allow for viewing of flags, manual control, manual spring charging, trip unit adjustment and levering between positions without opening the breaker door**
- **Standard offering is rear cover access; rear doors optional**
- **Maximum bus ampacity: 6000A**
- **Manufactured per UL requirements, and applicable NEMA and ANSI standards**
- **Provide replacement/upgrade of existing equipment and fitting new gear to existing equipment capabilities**
- ***Vendor neutral; freedom to use best equipment for the application or to meet your preferences***
- ***Design/Build and Custom Switchgear Specialists***
- ***Protection, metering, control, automation and integration expertise***

**PowerSecure UL-1558 Low Voltage Switchgear has the following features:**

- The breakers are removable (draw out). The draw out mechanism allows movement between connected, test and disconnected positions.
- The draw out mechanism is self-aligning and self-coupling with respect to the primary and secondary circuits.
  - Optional: Automatic grounded metal shutters cover the primary circuit when the removable breaker is in the disconnected, test, or removed position.
- Mechanical interlocks are provided to maintain a proper and safe operating sequence and to ensure matching ampacities between the circuit breaker and cell.
- Grounded metal barriers are applied to isolate instruments, meters, protective relays, indicators and other secondary control devices and their associated wiring from all primary circuit elements.
- Primary bus and connections are not insulated; insulation optional.
- Enclosure doors may be used to mount instruments, meters, protective relays, indicators and other secondary control devices and their associated wiring.
- Optional grounded metal barriers are available to enclose the primary circuit components (breakers, switches, fuses, bus, instrument transformers, and control power transformers) from the cable connections.

**Applicable Standards***UL (Underwriters Laboratory)*

- 1558 Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear
- 1066 Low-Voltage AC and DC Power Circuit Breakers Used in Enclosures

*ANSI: American National Standards Standard Institute*

- C37.11 Power Circuit Breaker Control
- C37.13 Low-Voltage AC Power Circuit Breakers Used in Enclosures
- C37.16 Preferred Ratings, Related Requirements, and Application Recommendations for Low-Voltage AC (635 V and below) and DC (3200 V and below) Power Circuit Breakers
- C37.17 Trip Devices for AC and General Purpose DC Low Voltage Power Circuit Breakers
- C37.20.1 Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear
- C37.51 Conformance Testing of Metal-Enclosed Low-Voltage AC Power Circuit Breaker Switchgear Assemblies
- C37.100 Definitions for Power Switchgear

*NEMA: National Electrical Manufacturers Association*

- SG-3 Low-Voltage Power Circuit Breakers
- SG-5 Power Switchgear Assemblies
- SG 6 Power Switching Equipment