

GE Consumer & Industrial
Electrical Distribution

Entellisys™ Low-Voltage Switchgear Safety, reliability & flexibility



Entellisys low-voltage switchgear is a breakthrough in power distribution protection, control, monitoring, diagnostics and ease of use. Now, with even more advanced features, Entellisys' unique safety options, greater reliability and the flexibility to make system changes without shutdown become even more valuable.

www.entellisys.com



imagination at work

What you get from Entellisys™ low-voltage switchgear



Safety

Entellisys™ unique safety options allow operators to perform all protection, control, monitoring and diagnostics from remote locations.

- When personnel need to be near the switchgear, operators select Reduced Energy Let-Thru (RELT) mode for any circuit breakers. RELT mode works with bus differential and over-current INSTANTANEOUS SHORT TIME functions to change a circuit to minimum pick up and maximum speed (as pre-selected by the user).
- Remote Racking eliminates the need for operators to face a breaker moving between connect and disconnect positions.
- The Near-Gear Human Machine Interface (HMI) is a stand-alone unit that allows for the complete interaction with Entellisys outside the flash protection boundary.
- Remote HMI is a software package providing operators and other designated personnel secure access to Entellisys via networked or web-enabled desktops and laptops.
- A separate stack can house the CPUs, UPSs and HMI, allowing the operator to monitor and maintain key components away from live equipment.
- Advanced zone-based protection modes include bus differential, directional zone-selective interlocking, reverse current protection and multi-source ground fault protection.
- Entellisys can detect fault magnitude and location to virtually eliminate the need for cascaded time delays normally needed for selectivity.

Reliability

Entellisys™ yields greater reliability by reducing the number of components and their wiring. Redundancy and diagnostics mean greater uptime and system availability.

- The centralized architecture drastically reduces components and wiring by deploying hardened, tested multifunction devices and providing protection, control, monitoring, metering and diagnostics through software.
- Entellisys' simplified design comprises two separate but synchronized systems. With Entellisys, there is no single point of failure.
- Entellisys provides multiple levels of backup for protection and control.



- Advanced warning functionality features real-time monitoring and diagnostics, with reports based on user-set parameters so that you are informed of situations before they become problems.
- The system will issue an alarm and trigger a waveform capture whenever the current for a particular load is above the selected level and delay.
- The High Resistant Ground Fault (HRGF) feature not only identifies a fault, it also shows the location of the feeder breaker circuit where the ground fault exists and provides priority tripping in the event of multiple ground faults.
- With Entellisys, maintenance is based on actual, recorded and reported mechanical and electrical usage rather than on a fixed calendar.

Flexibility

The flexibility of Entellisys™ provides extraordinary value over the lifetime of the system. Reduced components and wiring mean faster, simpler installation.

- A simple, intuitive HMI user interface allows easy fault identification and system changes to be made quickly and easily.
- Entellisys' functionality resides in software modules that generally do not require additional hardware or wiring. It can easily accommodate late-point changes during the system build or during commissioning, usually without affecting delivery or system acceptance.
- A simplified system design greatly reduces component counts and wiring, which expedites installation.
- The system can be upgraded simply using software - without downtime, loss of productivity, new circuits or changes in frame sizes.
- The flexible logic virtual inputs and outputs provide functionality for customization and for more complex throw-over schemes.
- Entellisys offers unique mobile metering capabilities. You can assign metering to any circuit without additional CTs, wiring or system shutdown.



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