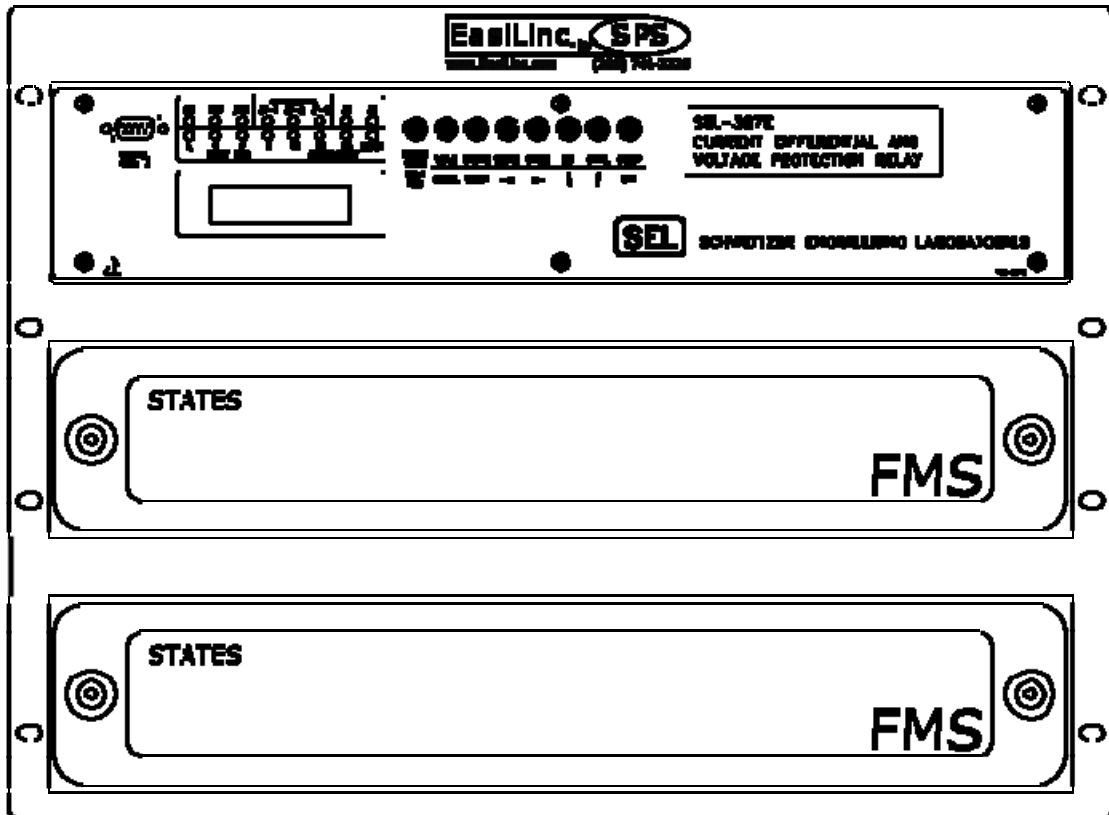


ELXFE DATASHEET

EasiLinc differential protection module
For transformer and bus protection



- Perfect for retrofit or new construction projects
- Pre-wired design minimizes installation time and complexity, maximizes space utilization
- Standard test switch assignment improves schematic and wiring design efficiency
- Event recording, SER and voltage disturbance recording functions active and configured
- Use in 19" equipment rack or panel cutout
- SEL-387E Relay and all test-switches mounted and wired
- For two or three winding transformer protection applications

The ELXFE protection module

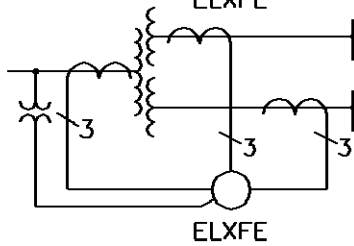
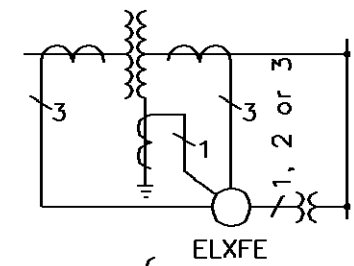
The EasiLinc ELXFE protection module simplifies your use of microprocessor-based relays for transformer protection. The module includes an SEL-387E Relay and appropriate test switches. These devices are pre-wired and installed in a mounting panel suitable for a 19" equipment rack or switchgear panel cutout. Also included are all the AC and DC application schematics you need to generate final construction prints quickly for your installation.

Using the ELXFE, you:

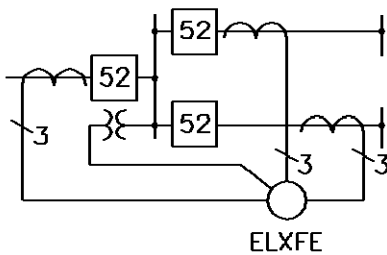
- Reduce electrical design costs by using the provided AC and DC schematics.
- Reduce installation and commissioning costs with pre-wired and pre-tested modules.
- Reduce substation automation costs by using the standard control interface.
- Standardize your design, installation, operation, and maintenance procedures.
- Obtain the accuracy, reliability and availability benefits of a high performance relay.
- Support accelerated deployment schedules by taking advantage of included design documents.

Product applications

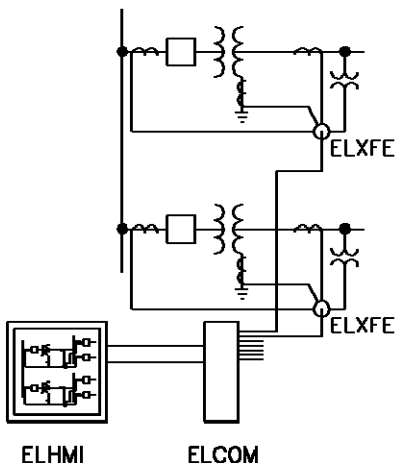
- Two winding transformer differential protection
- Restricted earth fault protection
- Current, voltage, power and frequency metering



- Three winding transformer differential protection



- Bus differential protection



- Substation communication architecture using EasiLinc modules
- Architecture may be extended to central office locations
- Modular concept supports multi-stage projects
- Advanced notification solutions, including paging and e-mail are also available

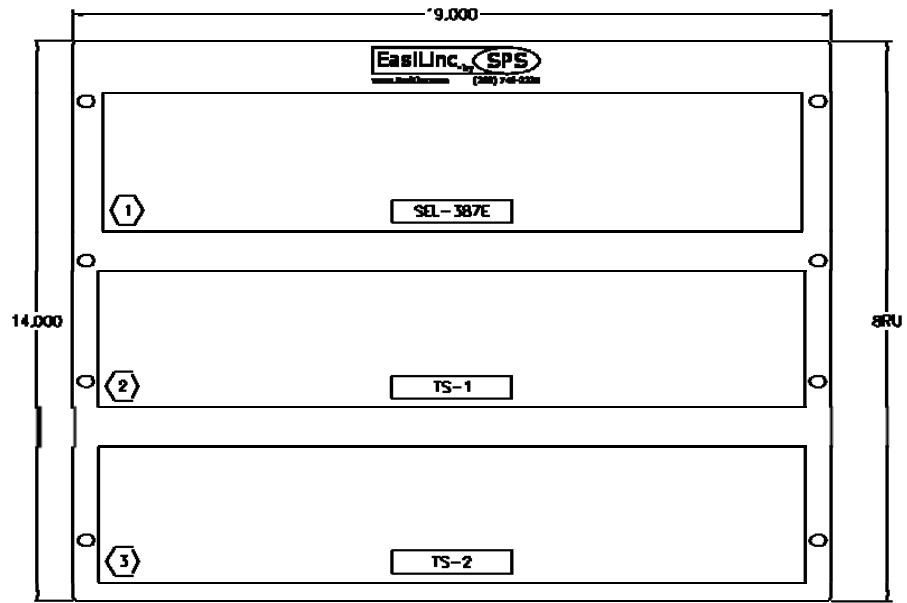
SEL- 387E Relay major features

- Sensitive two- and three-winding current differential protection with programmable single- or dual-slope percentage restraint, supervised by a choice of second- and fourth-harmonic blocking or restraint elements, plus fifth-harmonic and dc blocking elements
- Individual or combined winding overcurrent protection with one instantaneous and one time overcurrent element each phase, residual or negative sequence currents
- Through-fault recording and monitoring for use in control equations or manual monitoring
- Overexcitation (V/Hz) protection and under- / overfrequency protection
- Restricted Earth Fault (REF) logic for sensitive protection of grounded wye windings.
- Support for four-wire wye or three-wire open delta voltage measurement
- Accurate metering functions for current, voltage, real and reactive power, frequency, DC battery voltage, demand, and energy
- Front-panel LCD display indicates metered values and text messages of relay, breaker and alarm conditions
- Event reporting that automatically captures and stores 23 most recent eleven-cycle oscillographic reports detailing current, voltage, contact I/O, and protection element conditions during events
- Sequence-of-events recording that captures, time-tags, and stores 512 latest state changes of contact inputs, contact outputs, control points, and protections elements
- Voltage disturbance recording that provides information on voltage sags, swells, and interruptions
- Broad operating temperature range: -40° to $+85^{\circ}\text{C}$ (-40° to $+185^{\circ}\text{F}$)
- Type-certified to a wide range of electrical noise, temperature cycling, and seismic tests, as applicable to protective relays in utility and industrial applications

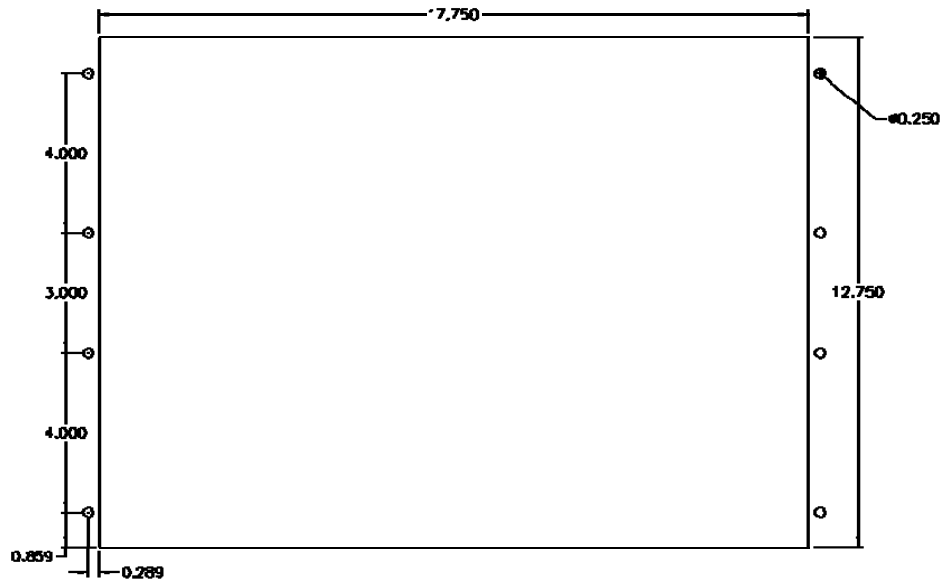
Test switch major features

- Two 30-pole STATES FMS-type test switch banks are supplied with each ELXFE
- Each relay contact input and output is double-switched to provide complete isolation
- Eight spare switch poles are available for owner use
- Switches are UL listed and CSA certified
- Clear covers allow pole markings to be viewed without removing covers
- Stud terminals and insulated ring-lugs provide secure internal connections

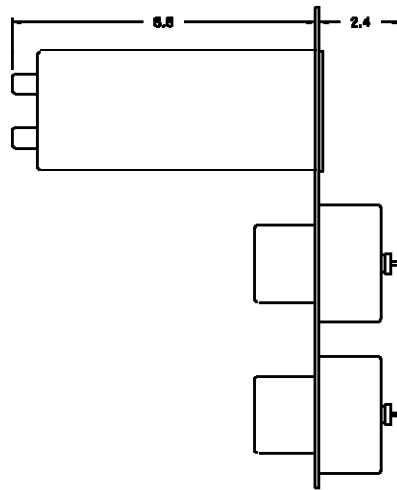
Mechanical drawings



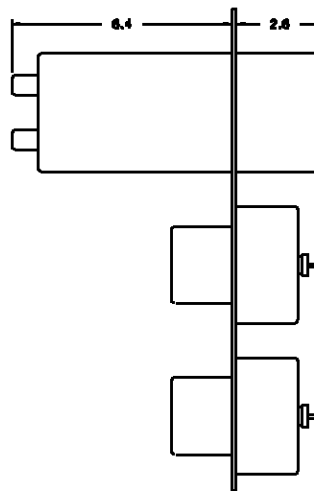
PANEL LAYOUT



CUT & DRILL TEMPLATE



SIDE VIEW (STANDARD MOUNT)



SIDE VIEW (PROJECTION MOUNT)

