

# SEL-2414 Transformer Monitor



## Complete Monitoring and Control of Your Transformer

**NEW!**

- IEEE Thermal Model
- Through-Fault Monitoring
- acSELERATOR QuickSet® Graphical Logic Editor
- Onboard acSELERATOR QuickSet Designer® Template Storage
- RTD/Thermocouple Option
- Form B Digital Output Option
- All Components Certified UL 61010-1



### Features and Benefits

#### Reduce Transformer Downtime

Monitor and protect critical substation assets with comprehensive transformer thermal and through-fault monitoring. Monitor digital transformer alarms and status points. Measure pressure, oil level, temperatures, and process-level signals from transducers. Control cooling fans and other equipment.

#### Increase Reliability

Built to the same high standards as SEL protective relays, the SEL-2414 withstands vibration, electrical surges, fast transients, and extreme temperatures, meeting stringent industry standards. Compare our specification compliance, price, higher reliability, and worldwide, ten-year warranty to other transformer monitors.

#### Simplify Analysis

Record transformer sequence of events with the Sequential Events Recorder (SER) function. Capture short-term transformer event waveforms with the event report (oscillography) function. Record transformer trend data with the analog signal profile function.

#### Easily Integrate With SCADA

Flexible communications options provide easy integration with SCADA systems. Choose from Ethernet (Modbus® TCP, DNP3 LAN/WAN, IEC 61850, Telnet, FTP) and serial (Modbus and DNP3 RTU) protocols.

#### Choose Flexible I/O Configurations

I/O options include digital or analog outputs as well as digital, analog, RTD, thermocouple, and ac voltage and current inputs.

#### Program With Flexible Logic

Easily program with powerful logic, math, timer, counter, and edge-trigger functions. Implement logic with SELogic® control equations or standard logic gates using the acSELERATOR QuickSet graphical logic editor.

#### Create acSELERATOR QuickSet Designer Templates

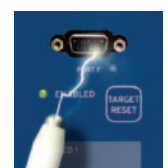
Create Designer templates of your settings to hide all settings that do not need to change for common applications. The SEL-2414 retains a copy of the template in internal memory.



Heat (+85°C)  
Cold (-40°C)



Vibration  
(15 g shock)

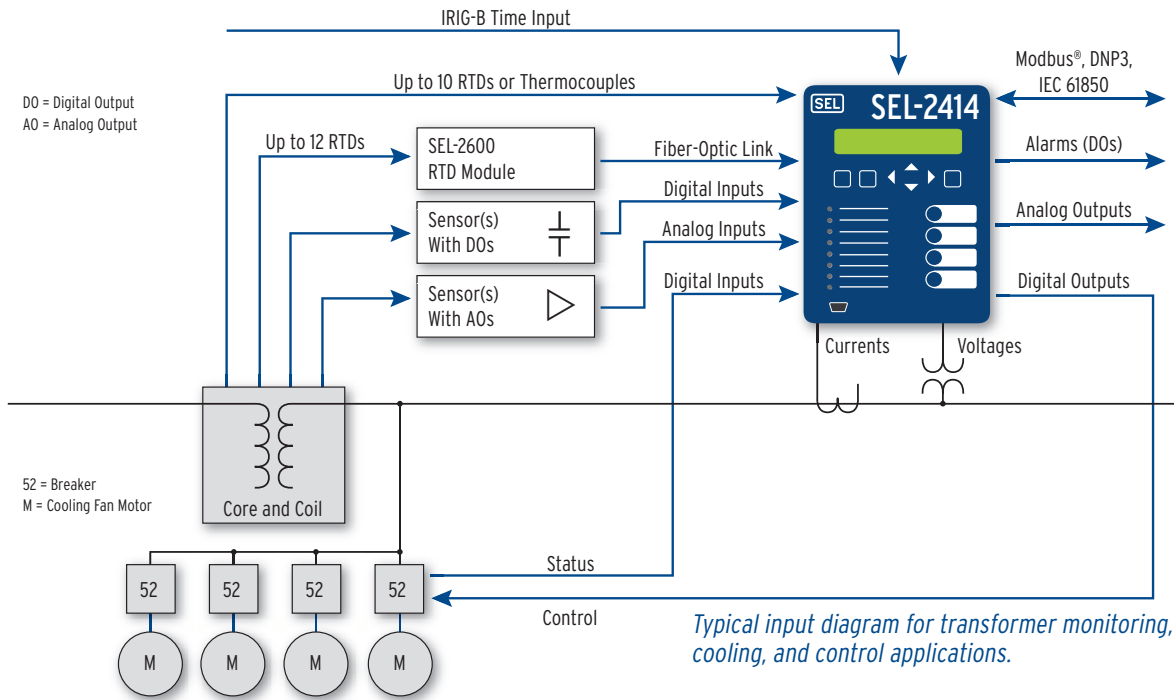


Electrostatic Shock  
(15 kV)

**Making Electric Power Safer, More Reliable, and More Economical®**

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## Functional Overview



## Feature Overview

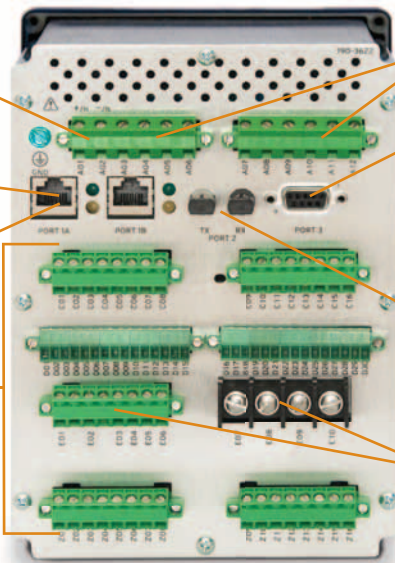
Power supply options include:

24-48 Vdc  
 110-250 Vdc  
 110-240 Vac

Modbus<sup>®</sup> TCP, Telnet, and FTP, with optional IEC 61850 and DNP3 LAN/WAN

Optional single or dual Ethernet port

Positions for optional expansion cards



2 digital inputs  
 3 digital outputs

EIA-232 serial port  
 MIRRORED BITS<sup>®</sup>  
 communications  
 Modbus

Optional fiber-optic  
 serial port

Optional voltage and  
 current inputs



## Ordering Options

- CPU Board
  - Single or dual Ethernet ports
  - EIA-232 rear port (standard)
  - IRIG-B time input (standard)
- Optional Expansion Cards
  - 8 digital inputs
  - 8 digital outputs (electromechanical)
  - 4 digital inputs/4 digital outputs (electromechanical and fast, high-current interrupting outputs)
  - 8 analog inputs
  - 4 analog inputs/4 analog outputs
  - EIA-232 or EIA-485 serial communication
  - 10 RTD or thermocouple inputs
  - 3 ac current/3-phase ac voltage inputs
- Protocol Options
  - DNP3 and DNP3 LAN/WAN
  - IEC 61850 communications
- Conformal Coating



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