Simplify Operation With Recloser Control Accessories

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INTRODUCTION

Within an electrical utility, several departments interact with recloser controls. Engineers commonly develop settings and analyze event reports, technicians load settings and retrieve reports, and linemen interface with the front panel to restore power.

There are many accessories available to simplify interaction with SEL recloser controls:

- SEL-2401 Satellite-Synchronized Clock

- SEL-2925 BLUETOOTH® Serial Adapter

- SEL-3031 Serial Radio Transceiver

- SEL-3505 Automation Controller

- SEL-3622 Security Gateway

- BEACON Bolt® for external indication

SEL SOLUTIONS

SEL-2401 Satellite-Synchronized Clock

Economically apply the SEL-2401 to all your recloser controls to ensure accurate time. Automatically adjust for daylight-saving time, and eliminate visits to remote recloser controls twice a year solely to adjust clocks. Quickly and easily synchronize events between substation and pole-top reclosers with ±100 nanosecond time accuracy.
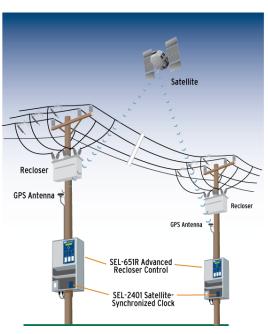

Figure 1   Cost-effectively time-synchronize event reports down the feeder or around the world

SEL-2925 BLUETOOTH Serial Adapter

Conveniently and securely communicate with your BLUETOOTH-equipped laptop, tablet, or smartphone from over 300 feet away to download settings, upload files, and provide local status and control. Enter an 8- to 16-character encryption PIN to enable communication. The SEL-2925 is always secure, using BLUETOOTH v2.1 + EDR security.

Figure 2   Conveniently communicate remotely with your recloser controls using the SEL-2925

SEL-3031 Serial Radio Transceiver

Combine three serial ports into one radio, allowing up to three different connections and protocols to operate simultaneously. The spread-spectrum radio transmits data in the license-free 900 MHz ISM band, providing secure wireless communication for up to 20 miles.

Figure 3   The SEL-3031 provides a communications path between recloser controls

SEL-3505 Automation Controller

Connect your recloser controls to the four-port SEL-3505, which bundles the communications, built-in security, and IEC 61131 logic engine of the SEL Real-Time Automation Controller (RTAC) family with an optional built-in modem, all in a small, 12 to 24 Vdc package. Communicate with any device through built-in client and server protocols. Exchange data through IEC 61850, DNP3, Modbus®, SEL Fast Messaging, MIRRORED BITS® communications, and IEEE C37.118 for synchrophasors.

Make the SEL-3505 the secure access point into your substation or plant using Lightweight Directory Access Protocol (LDAP) central authentication and role-based user authentication, access logs, and secure engineering access. Map security tags into supervisory control and data acquisition (SCADA) reports for industry-leading integration of security technologies.

Figure 4   Provide integrated intelligent electronic device (IED) access, monitoring, control, and logging through one reliable system

SEL-3622 Security Gateway

Provide a secure access point to an electronic security perimeter (ESP) with the SEL-3622 Security Gateway. The SEL-3622 functions as a router, Internet Protocol Security (IPsec) virtual private network (VPN) endpoint, and secure deny-by-default firewall. It also provides automated password management and proxy services for critical IEDs to help you with your North American Electric Reliability Corporation Critical Infrastructure Protection (NERC CIP) compliance efforts. These features save time with the ability to remotely manage passwords and accounts in cabinet-mounted recloser controls without requiring settings changes or firmware upgrades. Proxy services also provide greater accountability of user actions by tracking all access to IEDs and generating reports that detail who did what and when for each unique device.

Figure 5   Apply enhanced passwords, minimize privileges per port, and disable unnecessary ports and services for better security with the SEL-3622

BEACON Bolt

Restore power faster with drive-by lockout indication on SEL recloser controls. Use the BEACON Bolt display to provide critical control status on recloser controls, such as lockout, recloser malfunction, or battery alarm, without having to open the cabinet. Installed in an existing knockout in the bottom of the cabinet, the BEACON Bolt is simple to install. Wetting voltage is supplied through the auxiliary power supply and can be configured using a programmable contact output and powerful SELOGIC® control equations.
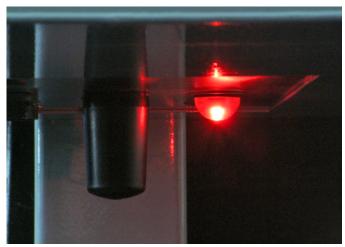

Figure 6   BEACON Bolt provides drive-by lockout indication

CONCLUSION

SEL offers the most reliable recloser controls in the industry. Simplify operator and engineering procedures when using recloser controls combined with these accessories. Enhance your ability to analyze event reports, establish local communications, and obtain drive-by external status indication, making the recloser control easier and safer to operate. Contact your SEL representative for ordering options and pricing.

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