



URC Utility Relay Company

AC-PRO-GRAND™

ROLL-IN REPLACEMENT BREAKER

AC-PRO-GRAND™ is a roll-in replacement circuit breaker requiring no modifications to the cubicle and minimal downtime to install. It contains a brand-new low voltage air circuit breaker with an AC-PRO® trip unit, along with a compartment adapter allowing for installation into existing switchgear.

- ☐ No Cubicle Modifications
- ☐ Minimal Downtime
- ☐ Feature-Rich Trip Unit
- ☐ Familiar AC-PRO® Functionality
- ☐ Exceptional Service & Support



Sometimes a trip unit upgrade and breaker retrofit is insufficient to keep a circuit breaker safe and fully functional, and the only option is to replace the circuit breaker.

AC-PRO-GRAND™ allows you to keep the existing switchgear intact and simply replace the failed or outdated circuit breaker with a new circuit breaker utilizing a customized compartment adapter.



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With hundreds of thousands of installations around the world, AC-PRO® trip units bring many modern features to your low voltage switchgear. In addition to the standard functions of Long-Time, Short-Time, Instantaneous, and Ground Fault (LSIG) protection, AC-PRO-GRAND™ includes:

- ☐ Scheduled Service Reminder
- ☐ Sluggish Breaker® Detection
- ☐ Delayed Manual Trip/Close
- ☐ USB Communications
- ☐ RS485 Modbus RTU Communications up to 115.2 Kbaud
- ☐ QUICK-TRIP® Arc Flash Reduction (ERMS or RELT)
- ☐ Trip History Including Waveform Capture
- ☐ Over/Under-Voltage Alarm and Trip*
- ☐ Power and Power Demand Metering*
- ☐ Reverse Power Protection*
- ☐ Phase Loss* and Current Unbalance Protection
- ☐ Close E/O Breaker Control
- ☐ CT Auto-Polarity Correction
- ☐ Zone Block Output Signal

**Requires VDM Option*

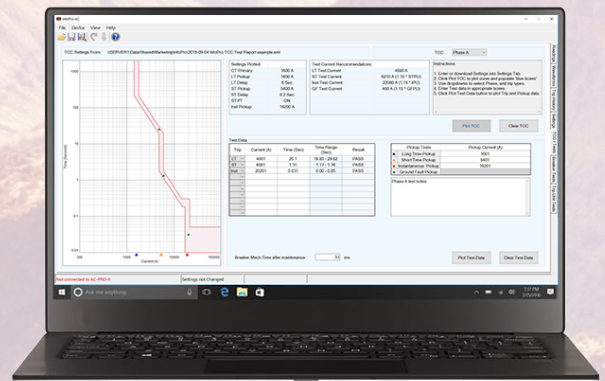


High-Quality Craftsmanship

AC-PRO-GRAND™ is made in America using first-rate components: conformal-coated circuit boards, contamination resistant membrane keyboard, and all metal, nickel-plated enclosure. The easy-to-read multi-line OLED display provides real time monitoring of 3-phase, neutral, and ground fault currents.

Programming

AC-PRO-GRAND™ was designed with ease-of-installation in mind. Settings are easily programmed using either the OLED multi-line display and “smart” buttons that change their function according to the information displayed, or via the USB port with our free InfoPro-AC software. All settings are entered using simple parameters (no percentages or multipliers required).

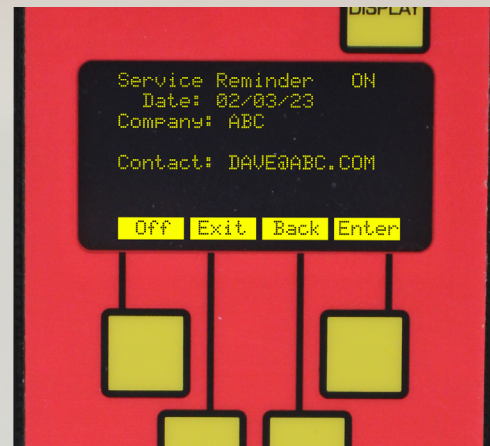


InfoPro-AC Software Displaying Time Current Curve

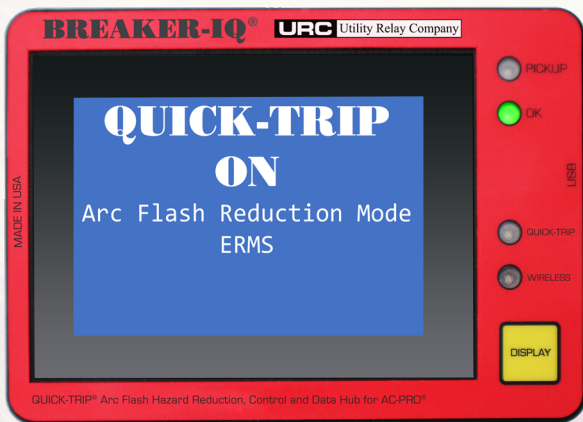
Scheduled Service Reminder

Regular inspection and maintenance are critical for the proper function and longevity of circuit breakers.

With AC-PRO-GRAND™'s Scheduled Service Reminder, you can program a reminder date for breaker service. You can even enter company name and contact information so that on the reminder date, a "Service Reminder" screen will appear, and the service company can be called in to perform the preventative maintenance. In addition, the Scheduled Service Reminder can trigger an alarm relay operation and/or a communications alarm.



AC-PRO-GRAND™ screen with Scheduled Service Reminder message



BREAKER-IQ® for QUICK-TRIP® operation

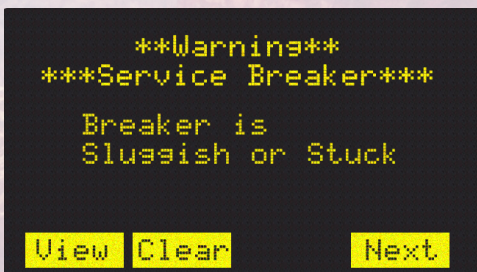
QUICK-TRIP® Arc Flash Reduction (ERMS)

The QUICK-TRIP® system is a manually controlled arc flash reduction system and comes standard on AC-PRO-GRAND™. It can reduce trip times when turned on and allows selective coordination between breakers when turned off. QUICK-TRIP® can be viewed as an energy reduction maintenance switch (ERMS) or as a reduced energy let-through (RELT) function. BREAKER-IQ® (an optional remote display) and physical switch are available.

Energy and Power Data

Monitoring energy and power usage at the LV circuit breaker level can allow for better management of resources. AC-PRO-GRAND™ equipped with a Voltage Divider Module (VDM) measures the following data and makes it available on the OLED display as well as through RS485 Modbus RTU communications for use with Smart 1-Line® or other third party HMI package.

- ☐ Real and Apparent Power (KW, KVA)
- ☐ Power Factor (PF)
- ☐ Real and Apparent Energy (KWHr, KVAHr)
- ☐ Real and Apparent Power Demand (KWD, KVAD)



AC-PRO-GRAND™ screen with Sluggish Breaker® message

Sluggish Breaker® Detection

Our patented Sluggish Breaker® detection determines if a circuit breaker opens quickly enough by capturing the mechanism time of every trip. Think of Sluggish Breaker® as a check engine indicator on your vehicle. If something is wrong with your circuit breaker, causing the mechanism's operating time to be excessive, AC-PRO-GRAND™ will alarm, indicating that maintenance is required.

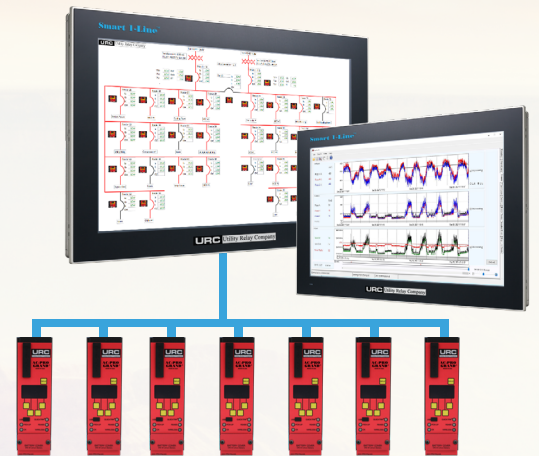


LS SUSOL Circuit Breaker

AC-PRO-GRAND™ includes brand-new premium Susol low voltage circuit breakers and racking mechanisms from LS Electric. Electrical operation is standard on these low maintenance breakers and can also be manually operated. Accessories such as UV release, Bell Alarm, and second Shunt Trip are available. Accessories are modular, simplifying field service and modifications.

Communications

Creating a complete power monitoring, control and communications structure for your low voltage power distribution system is easy with AC-PRO-GRAND™. Communications come standard utilizing Modbus RTU protocol. Using Utility Relay Company's Smart 1-Line® HMI device, you can remotely view breaker status, enable/disable the QUICK-TRIP® maintenance switch, trip or close breakers, view historical data, and more. AC-PRO-GRAND™ communications are also compatible with most non-URC HMI packages including ABB/GE *EnerVista* and *Entellisis*, Eaton *Power Xpert* and *Foreseer*, and Schneider Electric *PowerLogic SMS-3000™*.



Modernization Portfolio

1

RETROFIT ESSENTIALS



AC-PRO-II



AC-PRO-MP



AC-PRO-NW

ZERO-Hertz



2

RETROFIT VOLTAGE + POWER



AC-PRO-II-VDM



AC-PRO-MP-VDM



AC-PRO-NW-VDM

3

ROLL-IN REPLACEMENT



AC-PRO-GRAND