URC Utility Relay Company

AC-PRO-II®

FEATURE-RICH MODERN TRIP UNIT

AC-PRO-II® is the solution you need to modernize and extend the life of your low voltage circuit breakers. In addition to the standard functions of Long-Time, Short-Time, Instantaneous, and Ground Fault (LSIG) protection, AC-PRO-II® also includes:

- ❑ Scheduled Service Reminder
- ❑ Sluggish Breaker® Detection
- ❑ USB Communications
- ❑ RS485 Modbus RTU Communications up to 115.2 Kbaud
- ❑ QUICK-TRIP® Arc Flash Reduction
- ❑ 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
- ❑ LSI Protection for Neutral

  *Requires VDM Option

Everything You Need

AC-PRO-II® is compatible with hundreds of circuit breakers and Utility Relay Company has thousands of kits to fit your exact requirements.
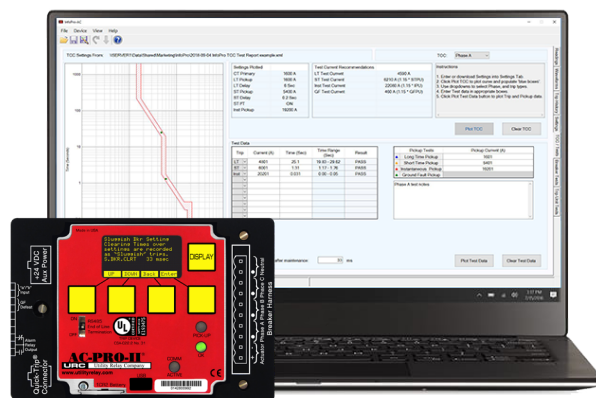
High-Quality Craftsmanship

AC-PRO-II® 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. The display portion can also be rotated to allow the trip unit to fit in a variety of different breaker configurations.
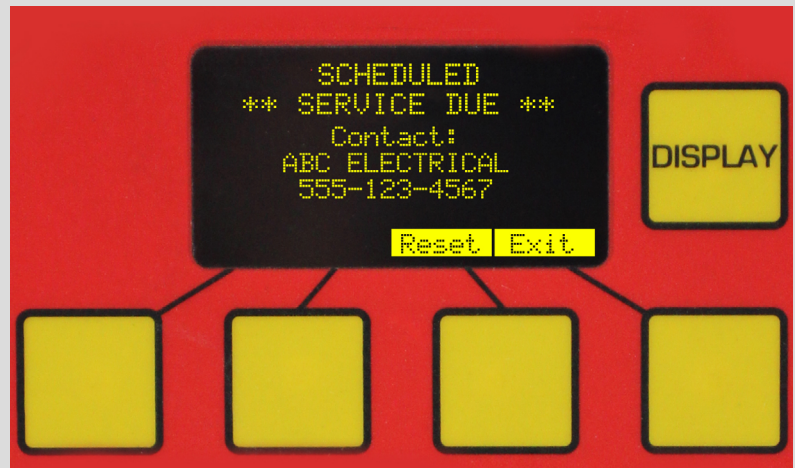
Programming

AC-PRO-II® 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 InfoPro-AC software. All settings are entered using simple parameters (no percentages or multipliers required).

REV 4.29.2022

Scheduled Service Reminder

Regular inspection and maintenance are critical for the proper function and longevity of circuit breakers. With AC-PRO-II®'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-II® screen with Scheduled Service Reminder message

QT2-Switch for QUICK-TRIP® operation

QUICK-TRIP® Maintenance Switch

The QUICK-TRIP® system is a manually controlled arc flash reduction system. It can reduce trip times when turned on and allows selective coordination between breakers when turned off. Additional components are required. Options include a basic cubicle door QT2-Switch with a pad-lockable switch and LED indicator, and/or cubicle door QT-Display*

Interface module required
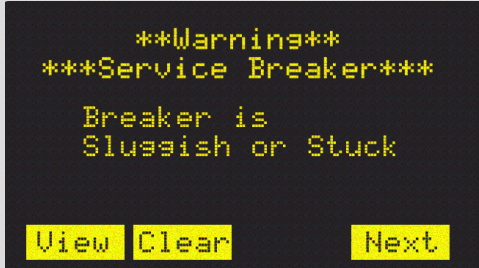
Energy and Power Data

Monitoring energy and power usage at the LV circuit breaker level can allow for better management of resources.
AC-PRO-II® 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.
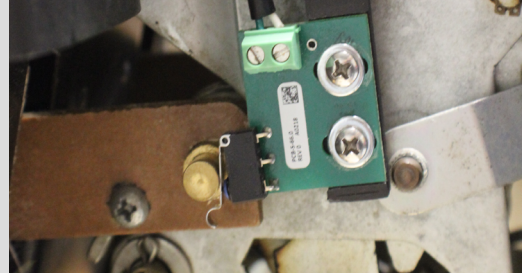
- ❑ Real and Apparent Power (KW, KVA)
- ❑ Power Factor (PF)
- ❑ Real and Apparent Energy (KWHr, KVAHr)
- ❑ Real and Apparent Power Demand (KWD, KVAD)

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-II® will alarm, indicating that maintenance is required.

AC-PRO-II® screen with Sluggish Breaker® message

Limit switch installed to enable Sluggish Breaker® detection and breaker position indication

SAFE-T-TRIP® Remote Tripping Device

The handheld SAFE-T-TRIP® device allows an operator to safely trip a breaker without standing directly in front of the switchgear. When needed, SAFE-T-TRIP® plugs into the USB port on the front of the AC-PRO-II®.

Note that SAFE-T-TRIP® helps capture the "first trip" for Sluggish Breaker® detection by using AC-PRO-II® to trip the breaker prior to removing the breaker from the cubicle.

Communications

Creating a complete power monitoring, control and communications structure for your low voltage power distribution system is easy with AC-PRO-II®. 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-II® communications are also compatible with most non-URC HMI packages including ABB/GE *EnerVista* and *Entellisys,* Eaton *Power Xpert* and *Foreseer*, and *S*chneider Electric *PowerLogic SMS-3000™*.
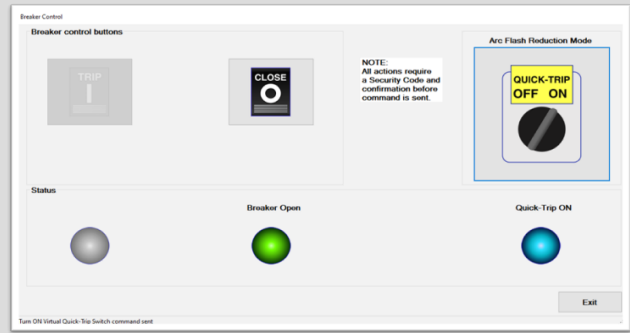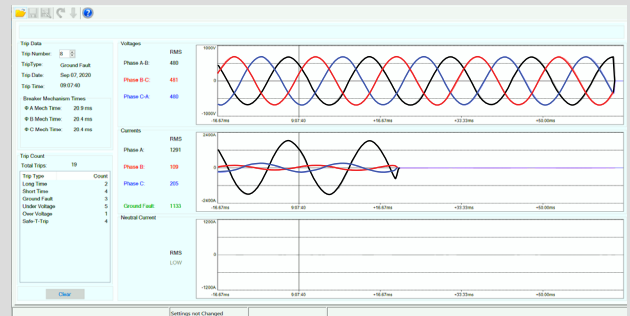

Lineup of AC-PRO-II® protected circuit breakers connected to Smart 1-Line®

InfoPro-AC Software

InfoPro-AC is a PC application that allows you to program, commission, control, and pull data from AC-PRO-II® trip units. The software is available at no charge at www.utilityrelay.com.

InfoPro-AC includes the following features:

- ❑ Provide a connection between AC-PRO-II® and a PC using USB
- ❑ Save AC-PRO-II® settings files for efficient commissioning
- ❑ Create test reports complete with results plotted on time-current curves (TCCs)
- ❑ Download and save waveforms, trip data, and breaker information
- ❑ Enable QUICK-TRIP® remotely
- ❑ Trip and Close breakers remotely

Soft QUICK-TRIP® and Breaker Control

AC-PRO-II®, in conjunction with Info-Pro-AC, allows you to remotely engage or disengage QUICK-TRIP® and to close E/O breakers. These features add additional layers of safety by letting you stand further away from the switchgear while performing risky breaker operations. Simply use our Smart 1-Line® HMI system or InfoPro-AC software to execute these tasks.
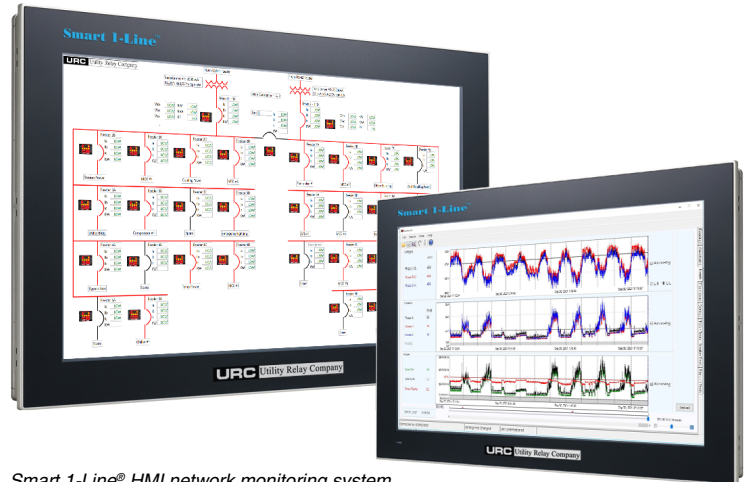

Waveform Capture (top) and the Breaker Control screen (bottom)

Smart 1-Line® HMI Network Monitoring System

Smart 1-Line® is Utility Relay Company's pre-engineered network monitoring system designed to simplify the installation and configuration of a local HMI.

Based on a rugged industrial computer with a solid-state drive and a 21.5" high-definition touchscreen, Smart 1-Line® is a turn-key solution for monitoring your AC-PRO-II® networks in one convenient location. It displays a field-configurable electronic one-line diagram with breaker readings, status, trending, remote breaker trip/close, and more.

Smart 1-Line® HMI network monitoring system

Completely Backwards Compatible

If you have an early generation AC-PRO® trip unit, know that AC-PRO-II® is completely backwards compatible, making upgrading easy. The CTs, actuators, and wiring harness from the original AC-PRO® can all be used with AC-PRO-II®.

AC-PRO-II® comes with a two-year limited warranty, found at www.utilityrelay.com/warranty.

ORDER ONLINE

Order your AC-PRO-II® kits today.
Our online Kit Ordering Guide leads you step-by-step to the perfect kit to meet your needs.

kog.utilityrelay.com