URC Utility Relay Company

AC-PRO-NW®

First released over 15 years ago, the MasterPact NW low voltage circuit breaker has a large install base throughout the country as well as around the world. When the Micrologic trip unit or Rogowski sensors fail, the only available solution is to track down OEM components, which is becoming increasingly difficult. Well, that has now changed.

AC-PRO-NW® brings all of the safety and reliability features you trust from URC to the MasterPact NW family of circuit breakers – LSIG protection, QUICK-TRIP® arc flash reduction, Sluggish Breaker® detection, communications, and optional power metering and voltage protection. New features include remote trip/close, delayed manual trip/close, wireless communications, scheduled service reminders, and more.

All of this designed with ease-of-installation in mind and supported by the best 24/7 technical support in the industry.

Standard Features Include:
❑ Replaces MicroLogic & Current Sensors
❑ QUICK-TRIP® Arc Flash Reduction
❑ Scheduled Service Reminder
❑ RS485, USB, & Wireless Communications
❑ Sluggish Breaker™ Detection
❑ Delayed Manual Trip/Close
❑ Optional Voltage Divider Module (VDM)
   Provides Voltage, Power and Energy Features.

Everything You Need
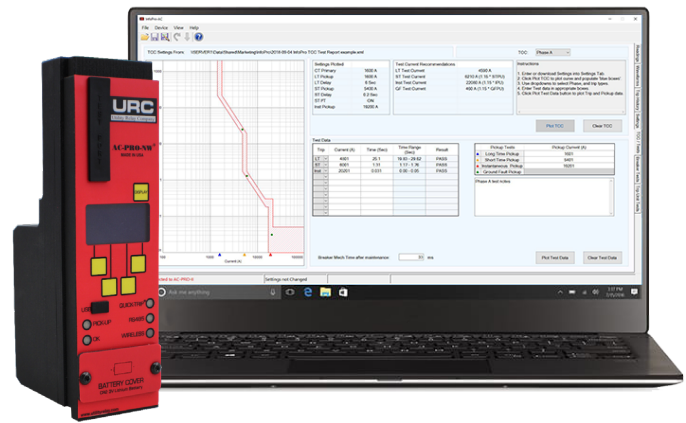AC-PRO-NW® retrofit kits come complete and ready to install.

High-Quality Craftsmanship
AC-PRO-NW® is made in America using first-rate components: conformal-coated circuit boards, and contamination resistant membrane keyboard. The easy-to-read multi-line OLED display provides real time monitoring of 3-phase, neutral, and ground fault currents.
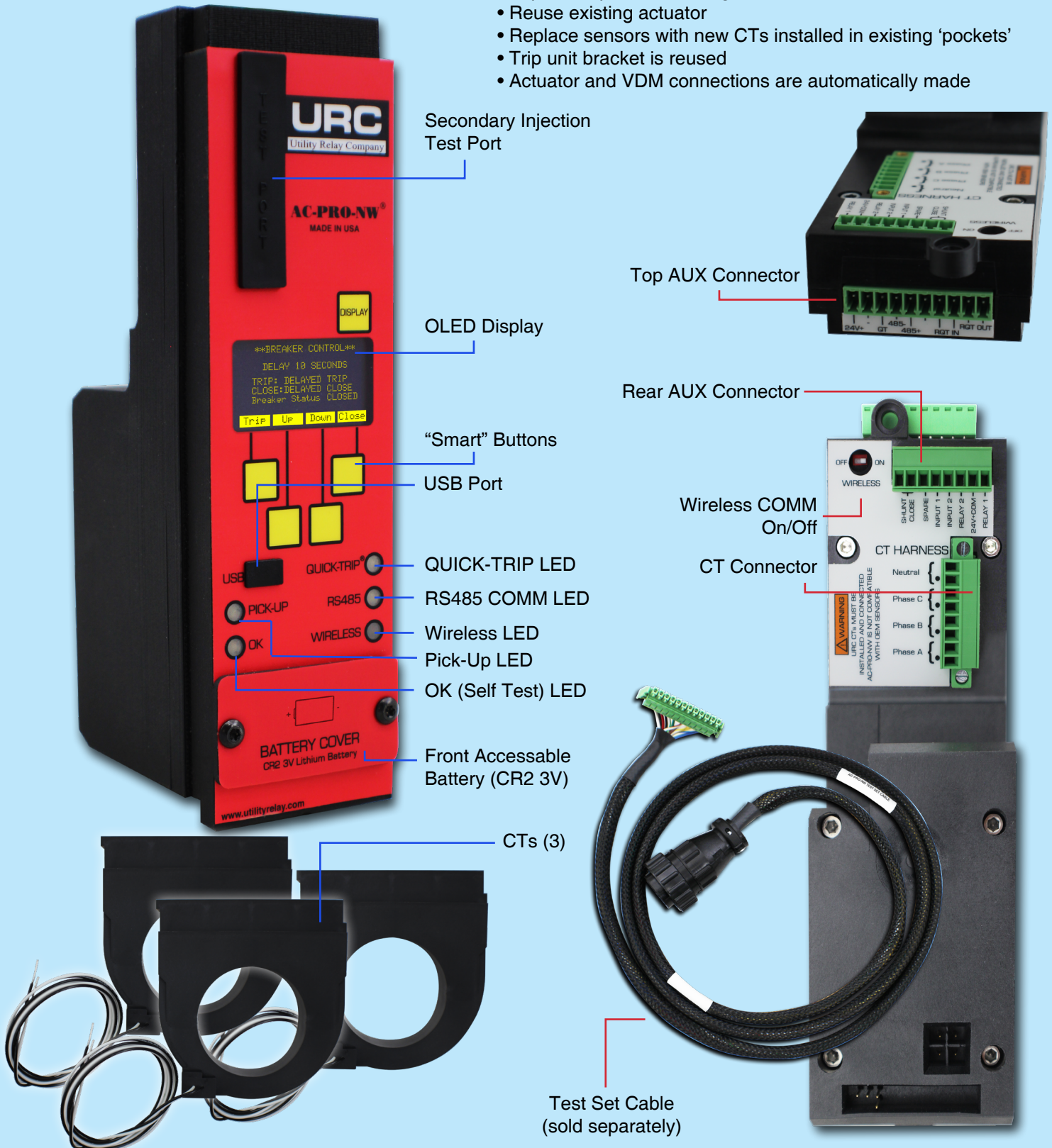
Programming
Programming AC-PRO-NW® is done by using either the OLED multi-line display and "smart" buttons that change their function according to the information displayed, or via the USB port with our InfoPro software. All settings are entered using simple parameters. (No percentages or multipliers required)

REV 2.17.2022

KIT OVERVIEW

- Trip unit replaces Micrologic
- Reuse existing actuator
- Replace sensors with new CTs installed in existing 'pockets'
- Trip unit bracket is reused
- Actuator and VDM connections are automatically made

URC
Utility Relay Company

AC-PRO-NW®
MADE IN USA

TEST PORT

Secondary Injection Test Port

DISPLAY

BREAKER CONTROL
DELAY 10 SECONDS
TRIP: DELAYED TRIP
CLOSE: DELAYED CLOSE
Breaker Status CLOSED

Trip | Up | Down | Close

OLED Display

"Smart" Buttons

USB Port

USB

QUICK-TRIP

RS485

WIRELESS

PICK-UP

OK

QUICK-TRIP LED

RS485 COMM LED

Wireless LED

Pick-Up LED

OK (Self Test) LED

BATTERY COVER
CR2 3V Lithium Battery

Front Accessable Battery (CR2 3V)

www.utilityrelay.com

Top AUX Connector

24V+ | GT | 485- | 485+ | RQT IN | RQT OUT

Rear AUX Connector

OFF ON
WIRELESS

SHUNT | CLOSE | SPARE | INPUT 1 | INPUT 2 | RELAY 2 | 24V+COM | RELAY 1

Wireless COMM On/Off

CT HARNESS

Neutral
Phase C
Phase B
Phase A

CT Connector

⚠ WARNING
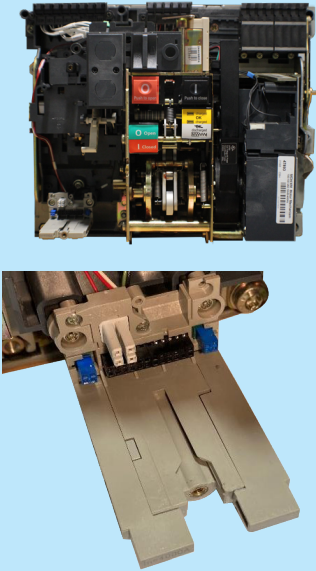URC CTs MUST BE INSTALLED AND CONNECTED
AC-PRO-NW IS NOT COMPATIBLE WITH OEM SENSORS

CTs (3)

Test Set Cable (sold separately)

INSTALLATION

1

Remove OEM Parts

1. Remove breaker cover
2. Disconnect trip unit top connector
3. Remove trip unit
4. Remove sensor and performer plugs
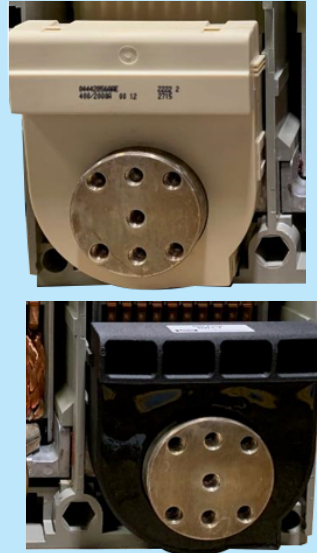5. Existing trip unit bracket will be reused

2

Replace Sensors & Wires

6. Remove Fingers and stabs
7. Loosen Arc Chute screws
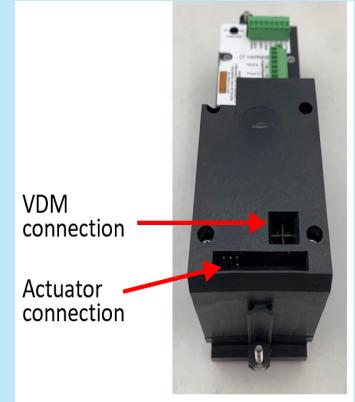8. Remove rear cover to access existing sensors
9. Remove sensors and wiring

3

Install new CTs

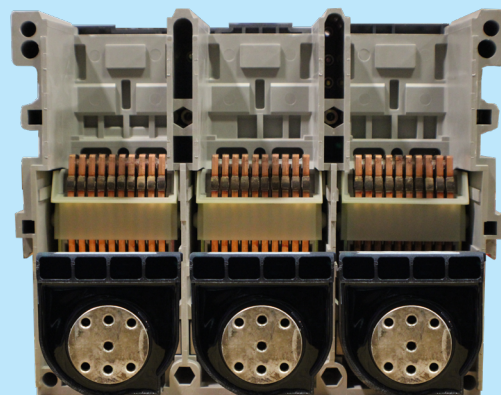10. Install new CTs into existing sensor pockets
11. Route CT wires through existing channels
12. Reinstall back cover, stabs, and fingers

4

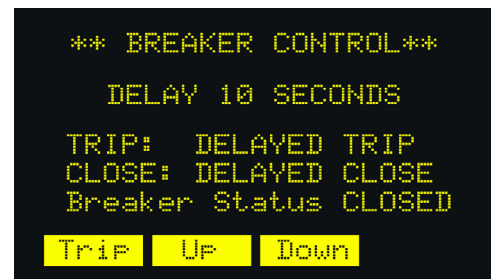VDM connection

Actuator connection

Install AC-PRO-NW

13. Plug in CT connector to rear of trip unit
14. Wire auxiliary connectors
15. Slide AC-PRO-NW onto OEM trip unit bracket
16. Actuator and VDM connections are automatically made
17. Secure AC-PRO-NW

Delayed Manual Trip/Close

Our patent-pending Delayed Manual Trip/Close feature allows you to set a countdown timer for tripping and closing* your circuit breakers. While the timer counts down, you can walk away and ensure no one is within the arc flash boundary when the operation takes place. If an arc flash incident does occur, personnel are safely out of harm's way.
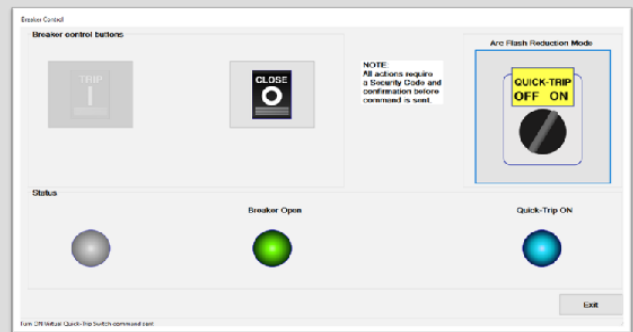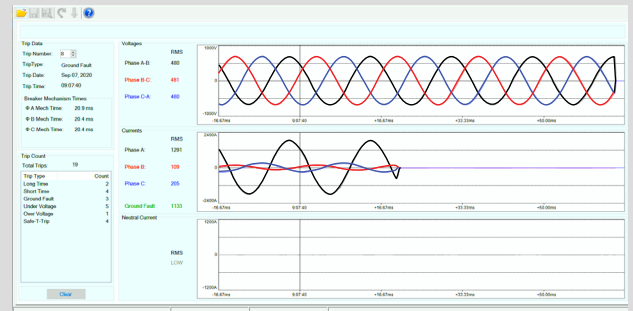
Closing requires E/O Breaker

AC-PRO-NW® screen with Delayed Trip message

InfoPro Software

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

InfoPro includes the following features:
- ☐ Connect between AC-PRO-NW® and a PC via USB or wireless
- ☐ Save AC-PRO-NW™ 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
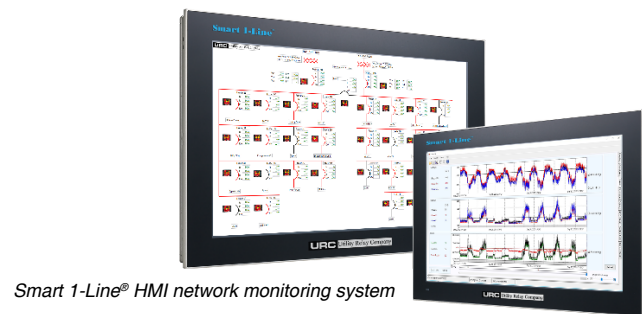- ☐ Trip and Close breakers remotely

Soft QUICK-TRIP™ and Breaker Control

AC-PRO-NW®, in conjunction with Info-Pro, allows you to remotely engage or disengage QUICK-TRIP®, trip the breaker, and 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

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

Monitor with Smart 1-Line®

Our turn-key solution for monitoring your AC-PRO-NW® networks. Smart 1-Line® is Utility Relay Company's pre-engineered network monitoring system designed to simplify the installation and configuration of a local HMI. Display 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

Wireless Communications

Communicate with AC-PRO-NW® wirelessly or using our USB dongle with InfoPro software. This programmable feature reduces installation time and can be a more convenient way to communicate with your circuit breakers. Wireless communications can be enabled by using the AC-PRO-NW® screen and buttons or a physical switch on the back of the unit.

ORDER ONLINE

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