URC Utility Relay Company AC-PRO-MP-II® **MICRO-CONTROLLER BASED TRIP UNIT** WITH ADDED COMMUNICATIONS AND POWER METERING

Just as reliable as the AC-PRO-MP®, The AC-PRO-MP-II® is a plug-in, fully programmable, direct replacement trip unit for Merlin Gerin & Schneider Electric Masterpact MP, IEC, or UL rated Breakers. The AC-PRO-MP-II[®] is user programmed to replace any of the versions of STR-18M, 28D, 38S, or 58U trip units. The AC-PRO-MP-II[®] has the same protective functions, settings, and time current curves as the original STR.

MECHANICALLY INTERLOCKED Α **POP-OUT TRIPPED INDICATOR**

- **QUICK-TRIP®** D **IS STANDARD**
- **B** GRAPHIC OLED DISPLAY

- E FRONT MOUNTED TEST PORT
- **C** "SMART" PUSH BUTTONS
- **USB PORT FOR** LAPTOP & SAFE-T-TRIP®

The AC-PRO-MP-II[®] provides more advanced features:

- Modbus RTU communications (24VDC aux power required) Voltage, power, and energy metering (24VDC aux power required)
- Additional advanced features of the AC-PRO-MP® and the AC-PRO-MP-II[®] Include:
- Patented QUICK-TRIP[®] for **arc flash hazard reduction**
 - ► QUICK-TRIP[®] instantaneous & ground fault settings are standard for arc flash reduction.
 - ► The QUICK-TRIP® switch is easily accessible on the face of the AC-PRO-MP-II[™].
- Patented **Sluggish Breaker**[®] detection to help determine if the breaker mechanism needs service
- Date & time stamp of trip events
- No rating plug required
 - ▶ No physical rating plug is required. The required rating plug value is a programmed setting
- Neutral Overload Protection

The original features of the STR trip unit are still provided:

- Long-Time
- □ Short-Time
- Instantaneous
- Ground Fault
- Instantaneous on Closing (DINF)
- Over Temperature Trip



Information & Alarm Functions are Standard

- 2 Load monitoring settings with output contacts
- Pre-trip alarm contact & LED indicator
- Breaker tripped alarm output contact is programmable by type of trip
- Trip events are time stamped
- Waveform capture

Display, LEDs, & Push Buttons

- The OLED display is easy to read in either low or high ambient light conditions
- The "smart" push buttons have actions that are configured based on the display information
- A "SELF-TEST OK" LED indicates a properly operating trip unit
- A "PRE-TRIP" LED indicates a pending trip

Warrantv

2-Year limited warranty on all AC-PRO-MP-II®'s.

REV 7.24.18

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SELF-TEST Features:

The AC-PRO-MP-II[™] continuously monitors:

- The actuator connection
- Proper execution of the software routines
- The micro-controller & A/D converter

Last Trip Data

The AC-PRO-MP-II[™] retains all of the trip data for the last 8 trip events, including waveforms. This data includes a date & time stamp of each event from the internal real time clock, the trip type, & detailed information of the phase, neutral, & ground fault currents.

Sluggish Breaker® Detection

The patented Sluggish Breaker[®] detection captures the mechanism time of every trip including the "first trip" and determines if a breaker mechanism is in need of service. Capturing the mechanism time of the first operation is crucial since later operations are faster because the breaker mechanism was exercised. If a mechanism's operating time is excessive, the AC-PRO-MP-II[®] will alarm, indicating required maintenance.

Warnin9 ***Service Breaker*** Breaker is Sluggish or Stuck <mark>View Clear Next</mark>

Secondary Injection Testing

The model B-291-MP Secondary Injection test set is a single-phase test set specifically designed for testing the operation of the AC-PRO-MP-II[™]. The test set performs actual phase & ground fault tests, not simulated tests.

SAFE-T-TRIP®

The hand-held SAFE-T-TRIP[®] device provides a means for an operator to safely trip a breaker without having to stand directly in front of the switchgear. When needed, the SAFE-T-TRIP[®] plugs into the USB port on the front of the AC-PRO-MP-II[™].

SAFET-T-TRIP[®] also helps capture the "First Trip" for Sluggish Breaker[®] detection by tripping the breaker prior to removing the breaker from the cubicle.



InfoPro-MP-II Software

- Software provides direct computer to trip unit interface communication using the USB port on the AC-PRO-MP-II[™]
- Provides an easy method to view the data provided by the AC-PRO-MP-II[™] & also to download information into the trip unit

InfoPro-MP-II features:

- View the trip history from the last 8 trip events, including waveforms
- View & save the trip history & settings
- View metering data & alarm status
- Review & change settings
- View on-demand waveforms
- Firmware updates

Current Waveforms Voltage Waveforms



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