AC-PRO-MP®

MICRO-CONTROLLER BASED TRIP UNIT

Fully programmable direct plug-in replacement trip unit for Mastpact STR trip units

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

A MECHANICALLY INTERLOCKED POP-OUT TRIPPED INDICATOR	**D** QUICK-TRIP® IS STANDARD
B GRAPHIC OLED DISPLAY	**E** FRONT MOUNTED TEST PORT
C "SMART" PUSH BUTTONS	**F** USB PORT FOR LAPTOP & SAFE-T-TRIP®

### The original features are still provided:
- ❑ Long-Time
- ❑ Short-Time
- ❑ Instantaneous
- ❑ Ground Fault
- ❑ Instantaneous on Closing (DINF)
- ❑ Over Temperature Trip

Additional advanced features include:
- ❑ Patented QUICK-TRIP® for **arc flash hazard reduction**
  - ▶ The QUICK-TRIP® on/off switch is easily accessible on the face of the AC-PRO-MP®
  - ▶ QUICK-TRIP® instantaneous & ground fault settings are standard for arc flash reduction.
- ❑ Patented **Sluggish Breaker®** detection to help determine if the breaker mechanism needs service
- ❑ Date & time stamp of trip events
- ❑ No rating plug required
  - ▶ The required rating plug value is a programmed setting
- ❑ Neutral Overload Protection

Warranty
2-Year limited warranty on all AC-PRO-MP®'s.
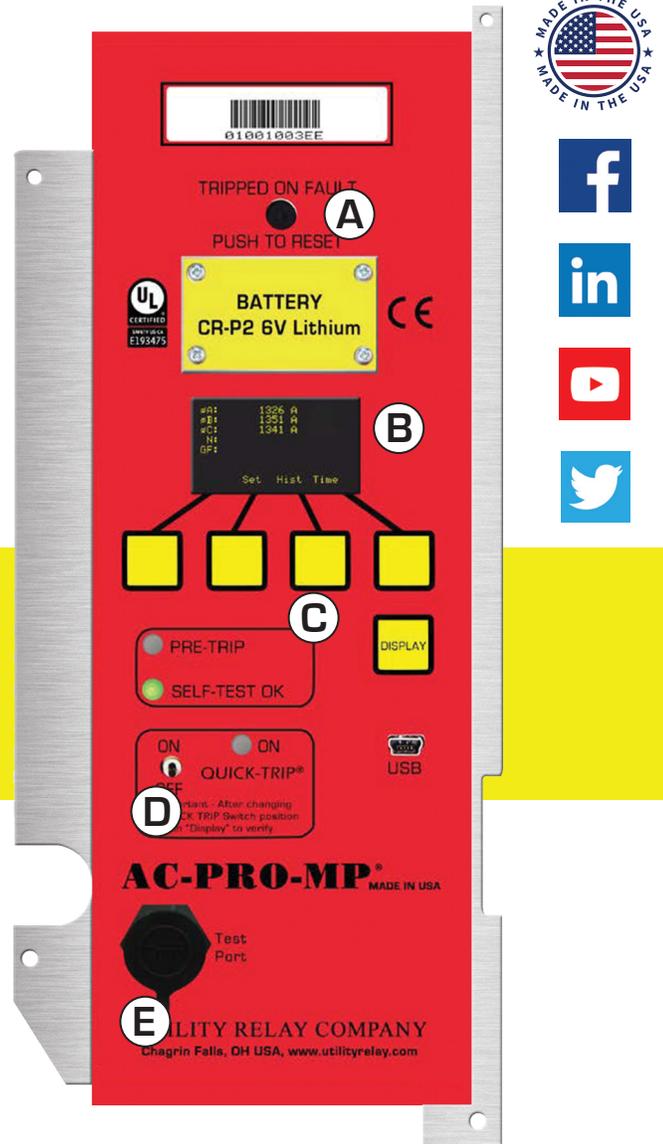
Information & Alarm Functions are Standard
- ❑ 2 Load monitoring settings with output contacts
- ❑ Pre-trip alarm contact & LED indicator
- ❑ Breaker tripped alarm output contact is programmable by type of trip
- ❑ Trip events are time stamped
- ❑ Waveform capture

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

SELF-TEST Features:

The AC-PRO-MP® continuously monitors:
- ❏ The actuator connection
- ❏ Proper execution of the software routines
- ❏ The micro-controller & A/D converter

Last Trip Data

The AC-PRO-MP® 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 operation time including on the "first trip" and determines if the breaker mechanism needs service. Capturing the mechanism time of the first operation is crucial since later operations are faster because the breaker mechanism was exercised. If the mechanism operating time is excessive, the AC-PRO-MP® will alarm that breaker maintenance is required.
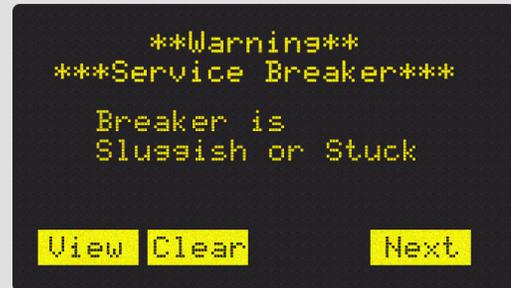
Secondary Injection Testing

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®. 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®.

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

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

Additional features of InfoPro-MP-II:
- ❏ 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
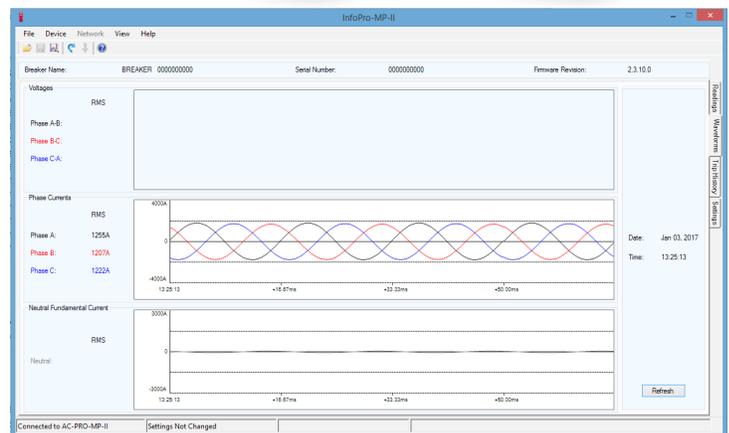
Note:
InfoPro-MP-II software is for units with front test ports. InfoPro-MP software should be used for units with side test ports.

 URC Utility Relay Company