

# ERTS

## Electronic Recloser Test Simulator



- **Rugged, Small, Light Weight, Field Portable**
- **14, 19, and 32 pin Cable Adapters Built-in**
- **Used with Megger Relay Test Systems**
- **Simulate Three-Pole or Single-Pole Trip and Reclose**
- **Use Sequencer Test to Easily Perform Trip and Reclose Tests on both Electronic Controller and Recloser**

### DESCRIPTION

The Megger Model ERTS, Electronic Recloser Test Simulator unit, is designed to interconnect to Megger Models MPRT, SMRT, and FREJA 400/500 relay test systems for easy field testing of electronically controlled reclosers. The ERTS has 14, 19 and 32 pin cable adapters to directly interface with the most common forms of reclosers such as the G&W Viper®, Elastimold® MVR, with SEL 351R and SEL 651R, and Cooper Forms 4, 5 and 6 reclosers.

### APPLICATIONS

The ERTS provides the interface between the Megger relay test system and the recloser. The ERTS is used to test both the electronic recloser control and test the electrical operation of the recloser. The three different multi pin connectors provide flexibility in the different types of reclosers that the ERTS can simulate and test. The Megger relay test units provide the individual test currents and voltages through the interface unit, and monitor the individual trip and reclose circuits from the simulator.

The relay test systems are controlled by the Relay Test and Management Software (RTMS) Sequencer test screen to simulate pre-fault, fault, and reclose scenarios. Sequencer test templates are provided for 2, 3 and 4 shots to lockout scenarios. The sequencer test can be easily re-programmed by the user for single pole trip and reclose if desired. Different trip and reclose tests can be saved to the software memory for recall and test at a later date. Test results can also be saved to the internal memory of the software for download into a database at a later time and date.

### FEATURES AND BENEFITS

**Small, Light Weight, Rugged** – Designed for years of in-the-field use with rugged light weight fiberglass reinforced plastic enclosure with rubber sealed lid.

**Simulate three-pole or single-pole trip and reclose** – Each Megger relay test set comes with the RTMS software<sup>1</sup> for a PC, which includes the Sequencer test. The optional Smart Touch View Interface (STVI) hand-held controller also includes the Sequencer test. The Sequencer test is already programmed to conduct a 4-shot three pole trip and reclose test. The user can easily reprogram (no special training required) the sequencer test for single pole trip and reclose, or for 2 or 3 shot trip and reclose, and then save the test(s) for testing in the field.

**Test both the Electronic Controller and the Recloser on the pole simultaneously** – 14, 19, and 32 pin cable adapters are provided for both the Electronic Control box as well as for the Recloser. Test voltages and currents from the relay test system are input to the Electronic Controller and trip and reclose outputs are passed through the ERTS to the recloser on the pole. The recloser operations are recorded by the relay test system as seen through the ERTS. This allows both the controller and the recloser to be tested simultaneously saving valuable time.

**Run more automated tests using AVTS test modules for specific manufacturers relays** – Each SMRT unit comes with Advanced Visual Test Software (AVTS) Basic software, which includes test modules for testing specific reclosing relays such as the SEL 651R. Besides the trip and reclose tests, the SEL test modules include tests for the various protection elements in the relay such as

<sup>1</sup>The FREJA 400 and 500 Series units are controlled by the FREJA Local software

synch-check, under/over voltage, and frequency elements, etc., for more complete testing capabilities. The SEL test modules are Megger One-Touch™ tests, which provide quick and easy full automatic testing, including automatic download of the relay setting.

**Three of the most popular cable adapters** – The ERTS comes with three of the most popular cable adapters (14, 19, and 32 pins) providing maximum flexibility and use for the most common electronic controllers.

**Interfaces with older MPRT units as well as new SMRT or FREJA units** – The ERTS unit is designed to operate with either the older Megger relay test set Model MPRT or the new SMRT or FREJA 400/500 series units using the RTMS software<sup>1</sup> running either on a PC or when using the optional STVI controller.

**SPECIFICATIONS<sup>2</sup>**

**Binary Inputs –**

To monitor operation of trip and reclose contacts 6 binary inputs are provided. Either three pole or single pole trip and reclose can be monitored. The binary inputs can be programmed for either dry or wetted contacts.

**Input Rating:** up to 300 V AC/DC

**Binary Outputs –**

The ERTS has 4 independent, galvanically isolated, output relay contacts to accurately simulate the recloser contacts, both single pole and three pole, as well as the Lock Out contact.

**High Current Output Relays 1 to 4:**

**AC Rating:** 400 V max., I<sub>max</sub>: 8 A, 2000 VA

**DC Rating:** 300 V max., I<sub>max</sub>: 8 A, 80 W

**Response Time:** <10ms

**Environmental**

**Operating Temperature:** 32 to 122° F (0 to 50° C)

**Storage Temperature:** -13 to 158° F (-25 to 70° C)

**Relative Humidity:** 5 - 90% RH, Non-condensing

**Conformance Standards**

**Safety:** EN 61010-1

**Shock:** EN/IEC 60068-2-27

**Vibration:** EN/IEC 68-2-6

**Transit Drop:** ISTA 1A

**Free Fall:** EN/IEC 60068-2-32

**Drop / Topple:** EN/IEC 60068-2-31

**Dimensions**

7.2 H x 12.6 W x 11.4 D in.

18.1H x 31.5 W x 28.5 D cm

**Weight**

5.8 lbs. (2.61kg)

**Enclosure**

The unit comes housed in a rugged, lightweight enclosure. It features a large oversized rubber cushioned handle, and removable lid. IP63 rating (with cover lid closed)

**Ordering Information**

<b>Item</b>	<b>Model No.</b>
Electronic Recloser Test Simulator	ERTS

Optional Accessories	Part No.
 <p><b>14 Pin Test Cable</b> Recloser Test Cable, 14-pin cable 6 ft. (180 cm) long, RoHS compliant, use with testing Recloser Controls with 14 pin connectors</p>	<b>90025-655</b>
 <p><b>14 Pin Test Cable</b> Recloser Test Cable, 14-pin cable 20 ft. (600 cm) long, RoHS compliant, use with testing elevated Recloser Controls with 14 pin connectors.</p>	<b>90025-656</b>
 <p><b>32 Pin Test Cable</b> Recloser Test Cable, 32-pin cable 6 ft. (180 cm) long, RoHS compliant, use with testing Recloser Controls with 32 pin connectors</p>	<b>90025-657</b>
 <p><b>32 Pin Test Cable</b> Recloser Test Cable, 32-pin cable 20 ft. (600 cm) long, RoHS compliant, use with testing elevated Recloser Controls with 32 pin connectors</p>	<b>90025-658</b>
 <p><b>19 Pin Test Cable</b> Recloser Test Cable, 19-pin cable 6 ft. (180 cm) long, RoHS compliant, use with testing Recloser Controls with 19 pin connectors</p>	<b>90025-659</b>
 <p><b>19 Pin Test Cable</b> Recloser Test Cable, 19-pin cable 20 ft. (600 cm) long, RoHS compliant, use with testing elevated Recloser Controls with 19 pin connectors</p>	<b>90025-660</b>
 <p><b>8 Pin Test Cable</b> Recloser Test Cable, black, 210 cm (84") long, use with testing Recloser Controls with 8 pin connectors for separate input voltages</p>	<b>90026-604</b>

<sup>2</sup>Megger reserves the right to change product specifications at any time without notice.

