



# 290 SERIES

## HIPOT TESTERS

See how  
simple using  
our tester  
can be!



PORTABLE, RUGGED DESIGN

ADVANCED SECURITY  
SETTINGS

5 PROGRAMMABLE  
MEMORIES W/ 10 OPTIONAL

TAMPER PROOF FRONT  
PANEL CONTROLS

INCLUDES CONTINUITY  
TEST FUNCTION

AUTOMATE WITH PLC  
CONTROL OR OPTIONAL  
USB INTERFACE

REMOTE SAFETY INTERLOCK

The **290 Series** is our most popular line of Hipot testers. These testers are designed to simplify every aspect of safety testing for operators of all comfort levels. Our **290 Series** includes the most intuitive user interface in the industry and won't take up too much space on the production line. With multiple memories and an optional USB interface, you can quickly perform tests on a variety of DUT's from the front panel or with a PC. Choose from 5 different models to satisfy your testing requirements.



AC Hipot



DC Hipot



Ground  
Continuity



Insulation  
Resistance

|     | AC Hipot | DC Hipot | Ground Continuity | Insulation Resistance |
|-----|----------|----------|-------------------|-----------------------|
| 294 |          | •        | •                 |                       |
| 295 | •        |          | •                 |                       |
| 296 | •        | •        | •                 |                       |
| 297 | •        | •        | •                 | •                     |
| 298 | 500VA    |          | •                 |                       |

## RELEVANT APPLICATIONS

- MODULAR HOMES
- APPLIANCE
- LIGHTING & LED TESTING
- POWER TOOLS
- MOTORS & PUMPS
- CABLES & COMPONENTS

## SUPPLIED ACCESSORIES

- 102-069-904    Return Lead 6 ft. (1.8m)
- 102-055-913    High Voltage Lead 6 ft. (1.8m)
- 125-013-001    Input Power Cable USA
- 99-10040-01    Interlock Connector

## OPTIONS

| Description                 | 294 | 295 | 296 | 297 | 298 |
|-----------------------------|-----|-----|-----|-----|-----|
| Rear Output Kit             | •   | •   | •   | •   | •   |
| USB                         | •   | •   | •   | •   | •   |
| 10 Memory                   | •   | •   | •   | •   | •   |
| Dual Palm Remote Capability | •   | •   | •   | •   | •   |
| 3mA Current Limit           | •   | •   | •   | •   |     |
| Pulse Mode                  |     | •   |     |     |     |
| Push to Test Mode           |     | •   |     |     |     |



## SERIES FEATURES



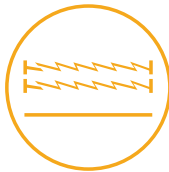
Test Setup Memories



Frequency Selection



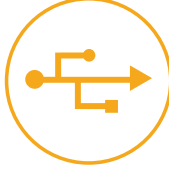
Ramp



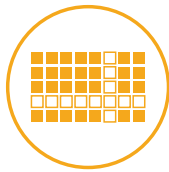
Dwell



Low Current Sense



USB (optional)



PLC Remote



Safety Agency Listed



On the Go Portability



Intuitive User Interface

| INPUT (294, 295, 296, 297, 298) |                                                |
|---------------------------------|------------------------------------------------|
| <b>Voltage</b>                  | 100-120 VAC / 200-240 VAC $\pm$ 10% Auto Range |
| <b>Frequency</b>                | 50/60 Hz $\pm$ 5%                              |
| <b>Fuse</b>                     | 3.15 A / 250 VAC Fast-Blow                     |

| DIELECTRIC WITHSTAND TEST MODE |                                                       |                                                                                                                |
|--------------------------------|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Output Rating                  | 298                                                   | AC 0-5.00 kVAC, 99.99 mA                                                                                       |
|                                | 297                                                   | AC 0-5.00 kVAC, 12.00 mA<br>DC 0-6.00 kVDC, 5.00 mA                                                            |
|                                | 296                                                   | AC 0-5.00 kVAC, 12.00 mA<br>DC 0-6.00 kVDC, 5.00 mA                                                            |
|                                | 295                                                   | AC 0-5.00 kVAC, 12.00 mA                                                                                       |
|                                | 294                                                   | DC 0-6.00 kVDC, 5.00 mA                                                                                        |
| Voltage Setting                | 298                                                   | 0-5.00 kVAC<br>Resolution: 0.01 kV<br>Accuracy: ± (1.5% of setting + 5V)                                       |
|                                | 297                                                   |                                                                                                                |
|                                | 296                                                   |                                                                                                                |
|                                | 295                                                   |                                                                                                                |
|                                | 297                                                   | 0-6.00 kVDC<br>Resolution: 0.01 kV<br>Accuracy: ± (1.5% of setting + 5V)                                       |
|                                | 296                                                   |                                                                                                                |
|                                | 294                                                   |                                                                                                                |
|                                | Output Frequency                                      | 294                                                                                                            |
| 295, 298                       |                                                       | 50/60 Hz Selectable                                                                                            |
| 296, 297                       |                                                       | DC and 50/60 Hz Selectable                                                                                     |
| Accuracy                       |                                                       | ± 0.1%                                                                                                         |
| AC Waveform                    | Sine Wave, Crest Factor = 1.3 - 1.5                   |                                                                                                                |
| DC Output Ripple               | 294                                                   | <5% ( 6 kVDC / 5mA atResistive Load)                                                                           |
|                                | 296                                                   |                                                                                                                |
|                                | 297                                                   |                                                                                                                |
| Dwell Timer                    | 0, 0.2 - 60 sec (0=continuous), 0.1 sec/step          |                                                                                                                |
| Ramp Timer                     | 0.2 - 180 sec, 0.1 sec/step                           |                                                                                                                |
| Leakage Failure Settings       | 298                                                   | AC Hi-Limit: 0.10 - 99.99 mA<br>Lo-Limit: 0 - 99.99 mA                                                         |
|                                | 297                                                   | AC Hi-Limit: 0.10 - 12.00 mA<br>Lo-Limit: 0 - 12.00 mA<br>DC Hi-Limit: 0.02 - 5.00 mA<br>Lo-Limit: 0 - 5.00 mA |
|                                | 296                                                   |                                                                                                                |
|                                | 295                                                   | AC Hi-Limit: 0.10 - 12.00 mA<br>Lo-Limit: 0 - 12.00 mA                                                         |
|                                | 294                                                   | DC Hi-Limit: 0.02 - 5.0 mA<br>Lo-Limit: 0 - 5.00 mA                                                            |
|                                | Resolution:<br>Accuracy:                              | 0.01 mA<br>± (2% of reading + 0.02 mA)                                                                         |
| Discharge Time                 | < 50 msec for no load, < 100 msec for capacitive load |                                                                                                                |

| INSULATION RESISTANCE TEST MODE (297 only) |             |                                                                                                     |
|--------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------|
| <b>Output Voltage</b>                      | Range:      | 0.1-1.00 kVDC                                                                                       |
|                                            | Resolution: | 0.01 kV                                                                                             |
|                                            | Accuracy:   | $\pm$ (1.5% of setting + 3 V)                                                                       |
| <b>Resistance Display</b>                  | Range:      | 1 - 1000 M $\Omega$                                                                                 |
|                                            | Resolution: | 1 M $\Omega$                                                                                        |
|                                            | Accuracy:   | 100-499 V $\pm$ (7% of setting + 2 M $\Omega$ )<br>500-1000 V $\pm$ (3% of setting + 2 M $\Omega$ ) |
| <b>Hi-Limit</b>                            | Range:      | 0, 1 - 1000 M $\Omega$ (0=off)                                                                      |
|                                            | Resolution: | 1 M $\Omega$                                                                                        |
| <b>Lo-Limit</b>                            | Range:      | 1 - 1000 M $\Omega$                                                                                 |
|                                            | Resolution: | 1 M $\Omega$                                                                                        |
| <b>Timer</b>                               | Range:      | 0.2 or 1.0 sec                                                                                      |
|                                            | Delay:      | 0, 0.5 - 999.99 sec (0=continuous)                                                                  |

| GENERAL SPECIFICATIONS             |                                                                                                       |                                                                                                                                                    |
|------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Continuity Feature                 | Range:                                                                                                | 1 - 1.50 Ω                                                                                                                                         |
|                                    | Resolution:                                                                                           | 0.01 Ω                                                                                                                                             |
|                                    | Accuracy:                                                                                             | ± (2% of setting + 0.02 Ω)                                                                                                                         |
| Memories                           | 5 (10 optional)                                                                                       |                                                                                                                                                    |
| Remote I/O                         | Input:                                                                                                | Test, Reset, Interlock                                                                                                                             |
|                                    | Output:                                                                                               | -Pass, Fail, Test-in-Process<br><b><u>Hardware Interlock - a relay on the high voltage output opens when the Interlock signal is disabled.</u></b> |
| 3mA AC/DC Current Limit (optional) | 294                                                                                                   | Range: 0.00 - 3.00 mA                                                                                                                              |
|                                    | 295                                                                                                   | Resolution: 0.01 mA                                                                                                                                |
|                                    | 296                                                                                                   | Accuracy: ± (2% of setting +                                                                                                                       |
|                                    | 297                                                                                                   | 0.02mA)                                                                                                                                            |
| Meter Max (optional)               | Displays the maximum voltage value recorded during a breakdown.                                       |                                                                                                                                                    |
| Imax (optional)                    | Displays the maximum leakage current value read during a test                                         |                                                                                                                                                    |
| Security                           | Option to turn On or Off, when On you can switch between two security levels:                         |                                                                                                                                                    |
|                                    | 1. Run - Operator can only run a test. No ability to change memory locations or edit test parameters. |                                                                                                                                                    |
|                                    | 2. Mem - Operator can run a test and change memory locations. No ability to edit test parameters.     |                                                                                                                                                    |
| Safety Mark                        | CE/cTUVus                                                                                             |                                                                                                                                                    |

Specifications subject to change without notice.