303 *Series*

Uses:

- Parametric Testing
  - Commercial
  - Military
  - Aerospace
- Production Testing
- Batch Sorting (Binning)
- Screening
- Quality Assurance Testing

Features:

- Voltage Tests to 1200VDC
- Current Tests to 10A
- Frequency Tests to 800Hz
- 0.5% Basic Measurement Accuracy
- Programmable Test Voltage and Current
- Four-terminal Kelvin Connections
- Text and Graphical Display of Data Reports
- Histograms for Statistical Analysis
- Easy Programming and User-friendly System Control
- Handler Interface for Automated Applications
- Multiple Test Terminal Configuration
- Internal Calibration Verify

For more detailed specifications, visit
www.semitek.com
Call 1-888-SEMITEK
or (972) 783-8100
Fax: (972) 783-8293
e-mail: info@semitek.com

Relay Test System

Introduction

The 303-Relay Test System tests the integrity of electromechanical relays and switches. The system can perform an array of tests and control output binning in a fraction of the time of any other tester on the market. Ease of use and overall system flexibility make the 303 ideal for applications in development, incoming inspection, and production line testing.

System Overview

Test capabilities:
- Pull In/Drop Out • Contact Voltage Drop • Insulation Leakage • Variable AC Coil Frequency • Timing • Coil • Semiconductor • Isolation • Contact

Operation: The 303 Tester Operating System (TOS) is compatible with Microsoft Windows XP. Engineers program and operators control the 303 from the TOS Main Window. Engineers use the TOS Build Editor to generate and maintain test files specifying every action of the tester. Easy to use, large icons guide the operator to access and run the appropriate test file. Pass/Fail indicators are clearly visible from the display along with a detailed report of the actual test results. Histograms for each test action can also be viewed for statistical analysis. Test results are stored in comma delimited text files for analysis and by virtually any external programs.

SemiTek INTERNATIONAL

• **PARAMETRIC** • **AC DIELECTRIC** • **LIFE** • **STICK/MISS** •

303 Series

Relay Test System

<div style="writing-mode: vertical">S Y S T E M   D E T A I L S</div>

Specifications

Test	Range	Accuracy
Pull In/Drop Out		
Voltage Source	20 to 280VDC	0.5%
Current Meter	200uA to 200mA	0.5%
Contact Voltage Drop (Contact Resistance)		
Programmable to 1A test current, 20A optional		
	20mV to 2V	1%
Coil Resistance		
	10 ohm to 100k ohm	0.5%
Insulation Leakage (Up to 1200 VDC)		
	up to 200uA	1%
Variable AC Coil Frequency		
	to 800Hz	

	Range	Resolution	Accuracy
Time Operate, Release, Bounce			
Operate	4s		
Release	4s	1us	10us
Bounce	100ms		

Programming

Engineers use the Build Editor within TOS to generate and maintain test file data instructions. These instructions can also be maintained using Microsoft's Excel® if so desired.

To program, you select the desired preformatted modules and specify the stimulus and acceptance criteria required. Online help is provided for each module to complete the required test instruction.

There are general modules to specify a variety of system commands such as Pause, Wait, Message, and Time/Date.
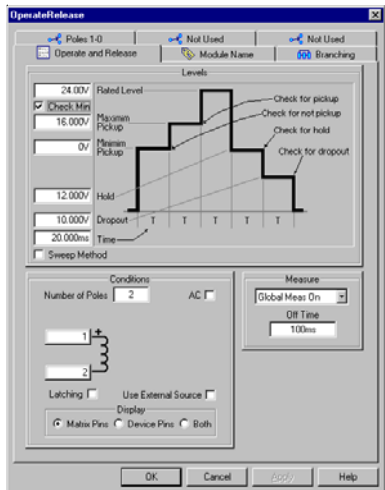
Relay modules define coil and contact tests to determine the acceptance of the device under test. Custom modules may be written to perform special or unique tests as necessary. The Categories module is a defined list of modules to sort devices based upon passing or not passing specific modules.

Operation
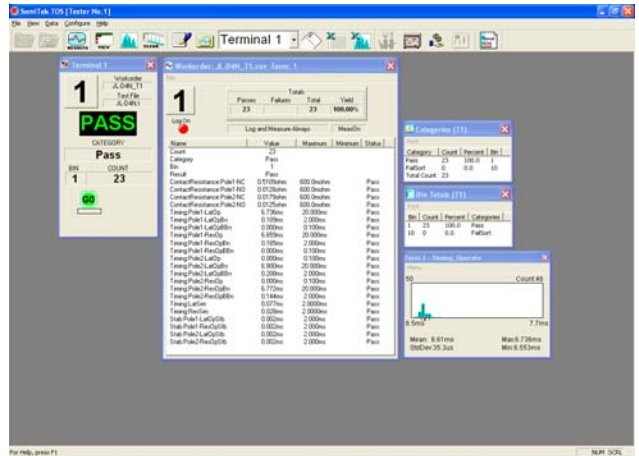
The 303 TOS software is user-friendly and provides easy-to-follow instructions for operating the tester.

The TOS Main Window provides access to test files, output data reports, and views of the active Test Terminals which appear as separate windows. Individual test programs and other system functions are accessible from the Main Menu.

A summary of the test data appears in the Category and Bin Totals windows while real-time individual test results appear in the Output window.

Test results can be exported to Microsoft Excel® in various formats. As an option, Histograms for each test action can be viewed from TOS for statistical analysis.

Each function is password programmable, and a complete diagnostic and calibration procedure is included.

Configuration

The 303 comes in a bench-top or rack-mount configuration. Easily removable plug-in cards provide flexibility to configure the tester for any application.

Options include:
- Additional Relay Matrix Cards for high pin-count devices and multiple test terminals.
- Remote Test Terminals for manual and multiple test sites.
- Variable Frequency Test to 800Hz
- Contact Current Test to 10A
- Customized Interface Fixtures.
- Handler Interface for automated test.

SemiTek INTERNATIONAL

408 N. Bowser Road
Richardson, Texas USA 75081
(972) 783-8100 Fax (972) 783-8293
e-mail: info@semitek.com
www.semitek.com