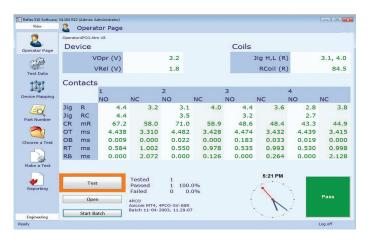


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# REFLEX 510 – CONTACTOR TEST SYSTEM

**High Power Test** 





The Reflex 510 is a versatile modular parametric test system designed for production testing and engineering analysis of contactors. It tests in accordance with the MILPRF-83536A electrical characteristics test procedure.

## **Key Features**

- Compliant with MIL 83536A & 6106L
- Form A, B, C contact styles
- Multi-pole configurations up to 64 contacts
- · Low, medium, high power DC contact loads
- AC and DC Coil drive
- Easy to use Artworks software
- Comprehensive data logging
- Automatic report generation
- 19" rack mounting
- EEPROM based fixture ID for automated test program selection.
- Built in functional test capability

## Overview

The Reflex 510 complements the ART range of parametric relay test equipment to provide high quality test capability for contactors. ART's common user interface provides compatibility across the RT290 and Reflex parametric product ranges. A flexible architecture allows the systems to be easily optimised for different test requirements. The Reflex 510 is also available as a high power relay test system which tests relays up to 40 PCO contacts. Please contact ART for more details.

#### Menu-based Software

Test sequences are simple, clear and built from pre-written test types to CECC, IEC or custom formats using menu selection. A 'Relay Wizard' macro allows a complete device test to be built from a few simple questions and answers. Test sequences can be run, re-tested, cycled or step-executed to enable fast development of a test program.

Standard Internal contact loads	50mV / 50mA, 6V / 100mA, 28V / 100mA
Standard External contact loads	0 - 30V / 0 - 30A
Max no. contacts	18 PCO
Coil types	AC/DC monostable or DC dual coil latching
Coil drive	DC: 0 - 100V / 10A, AC: 0 - 250V / 5A

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## **Product Features**

## System architecture

The system comprises of a standard 9U high 19 inch rack, which is sub-divided into three smaller 3U high 19 inch racks. The racks are used to locate a variety of different module types configured according to the contactor test requirement.

A Windows based PC controller and a number of 19" rack mounting programmable power supplies complete the configuration. These power supplies are used to provide coil and contact load power as required.

The Reflex 510 comprises of 6 main elements:

- Measurement rack
- Load rack
- Coil interface rack
- Power loads and load power supplies
- PC controller
- Artworks software

#### Measurement rack

Analogue measurement, switch control, power regulation and intermediate contact load modules are configured in the upper 3 U rack. The main system power switch and associated power indicator is mounted on the front of this rack.

#### Load rack

High-current contact switching modules, conditioning modules to protect the analogue instrumentation and an interface panel to the external contact load power supply are configured in the central 3U rack, together with interface wiring to the front panel device coil and contact connectors.

## Coil interface rack

The lower 3U rack houses a universal input, switched mode system power supply, which is controlled by the front panel power key switch. The rest of the lower rack houses the coil control and coil measurement interface circuitry.

#### Power loads and power supplies

19" rack mounting programmable laboratory style power supplies provide coil and contact load power as required. For very high power real load testing, the system can be configured to control a power contactor, for use with user supplied external power and load hardware.

## PC controller

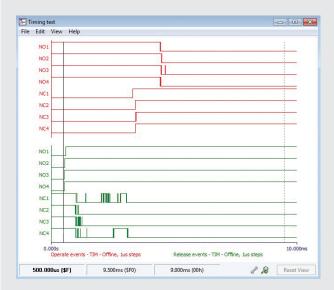
A 19" rack mounting or external free standing PC is used to control the system using the supplied Artworks software which runs under Windows 2000, XP, Vista or Windows 7 operating systems.

#### Calibration

In addition to the built-in functional test capability, an optional Reflex calibration module and adaptor cable can be used to provide full system calibration.

#### Artworks software

The operator display presents the user with a clear view of the test data. Test programs can be quickly loaded or new programs created using the test program wizard. Data logging can be enabled or disabled by the operator as required.



Example: timing test screen shot

The system performs a comprehensive set of self-test checks at the time the system is switched on and the software initialised. Power rail and system temperature monitoring features are also measured along with basic system functionality.

The test programs are compatible with the entire RT290 and Reflex parametric test system range thus allowing programs to be easily transferred between machines.

See also: Reflex 10M Medium Power test system



