Reflex40

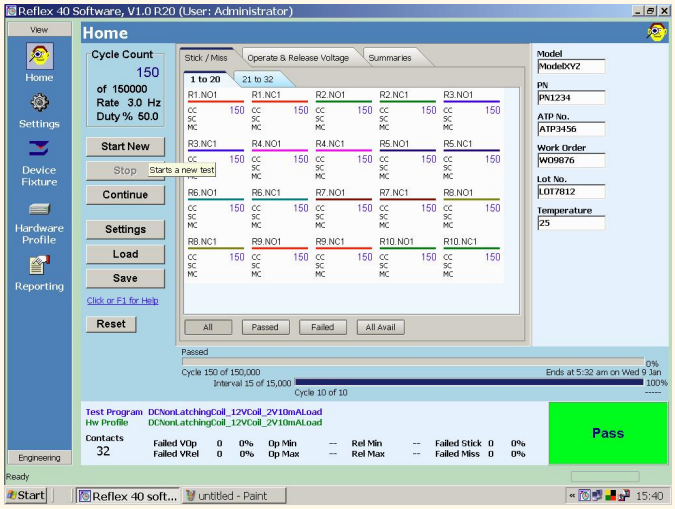
Relay Life Stick & Miss Test System

The Reflex 40 Relay Life Stick and Miss Test System is designed specifically for use in relay contact monitoring applications where extended contact cycling is required. It is compliant with MIL-PRF-83536 and MIL 202 test procedures. Up to 128 relay contacts may be simultaneously monitored.

The Reflex 40 is a special configuration of ART's highly modular REFLEX test system architecture and is equipped with threshold function contact cards and supplied with the ARTWorks Stick/Miss test software. The system confirms correct opening and closing of relay contacts as the relay is energised and de-energised and can also be programmed to perform coil voltage Pull-In and Drop-Out testing.

Key features:

- Compact 19" rack mounting system
- Compliant with MIL 83536 & MIL 202
- Contact types A, B or C or custom
- 16 channel Stick/Miss modules
- Expandable from 16 to 128 channels
- Pull-in/ Drop-Out voltages
- 32 Channel Load modules.
- External protection module for inputs > 8V
- AC or DC coil power supplies
- DC load power supply
- Easy to use ARTWorks software
- Full data logging of Stick / Miss events



Software:

An external PC controller running the Windows based ARTWorks Stick/Miss software allows the user to specify:

- Coil Voltage
- Cycle Rate
- Contact Format
- Timing Measurement Window
- Stick/ Miss Thresholds

Programmable contact voltage drop threshold levels allow the open and closed voltage limit to be configured. The system can be run either in Stop-on-Fail mode or Continuous Mode. When the system is running a detailed status of each device contact is displayed indicating:

- Cycle count
- Stick & Miss count for each contact
- Pull-In/ Drop-Out Voltage

Coil voltage Pull-In and Drop-Out testing can also be tested on an interval basis for both single coil or dual coil latching relays. In this mode the coil voltage is ramped up in order to determine the Pull-in voltage or ramped down to determine the Drop-Out voltage.

System Architecture: The test system comprises of a number of modules mounted into a 19" 6U rack (which is sub-divided into two 19" 3U racks).

The load and measurement modules are in the upper rack and the coil control in the lower section. The type and number of modules fitted can be varied according to the particular test requirement.

The system is controlled by an external PC via a parallel port connection and powered using an integral universal input switched mode power supply.

Stick / Miss testing: This is designed to confirm the correct opening and closing of the DUT relay contacts as the relay is energised and de-energised. Form A, B or C contacts can be monitored on each relay state change.

The ARTWorks Stick/Miss test software allows the user to specify the coil voltage, operating frequency, contact format and the precise measurement window timing during which the contact state is to be monitored. Programmable contact voltage drop threshold levels allow the open and closed voltage limited to be configured.

When the system is running a detailed status of each device contact is displayed indicating the cycle count, number of sticks and number of misses for that contact. The system can be programmed to stop at a particular number of stick or misses failures or to continue to the end of the sequence whilst recording the number of failures.

Pull-in and drop-out testing: In this mode the coil power supply is ramped up in order to determine the pull-in voltage and either ramped down for a single coil monostable relay or ramped up on the reset coil for dual coil latching relays.

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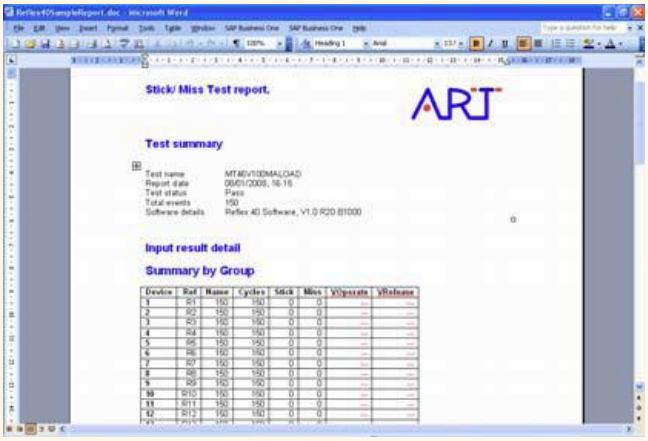
Coil / Load Power supplies: 19" rack mounting 1U programmable PSUs provide the DC load power and DC coil power. If AC coil power is required this can be provided using an optional 2U 19" rack mounting PSU. The power supplies are controlled from the ARTworks environment using an RS232 port on the host PC or from a USB port/hub using a suitable RS232 adaptor.

Calibration: Comprehensive calibration and functional testing is performed using the rack mounted calibration module in conjunction with the calibration adapter. The software prompts the user through a sequence of calibration steps to verify the performance and functionality of system measurement modules and switching functions.

Flexible reporting: Data can be viewed, printed or exported to print or datalog files, this data can then be inserted into a wide range of spreadsheet and data-base packages. The integrated reporting package can be used to automatically generate customised



Microsoft Word based reports.

On-line help documentation: All hardware and software documentation is supplied in an 'on-line' form. One key-press calls up test and operational information in a context-sensitive display.

System configuration: Reflex 40 can be easily configured from a range of standard REFLEX life test modules and components. Applied Relay Testing will be pleased to offer you a quotation based on your test requirements.