MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

INVENSYS TRICONEX

3636T

RELAY OUTPUT MODULE

Used with the applicable Tricon v9-v10 system configuration.

REFERENCE PACKAGE

Selected official pages follow this cover with source pagination retained.

OFFICIAL DOCUMENT

Invensys 9700077-012, February 2009

1. Power must be supplied to all points, including unused points on non-commoned panels.
2. The maximum output toggle rate enables proper operation of I/O diagnostics and detection of all normally detectable faults.

Note The 3625 can be installed in low-density systems that have been upgraded to v10.2.x or later. For more information, see Appendix I, Low-Density Chassis I/O Module Compatibility in the *Field Terminations Guide for Tricon v9–v10 Systems*.

32-Point Relay Output Modules

This figure is a simplified schematic for models 3636R and 3636T, which are non-triplicated Relay Output Modules.

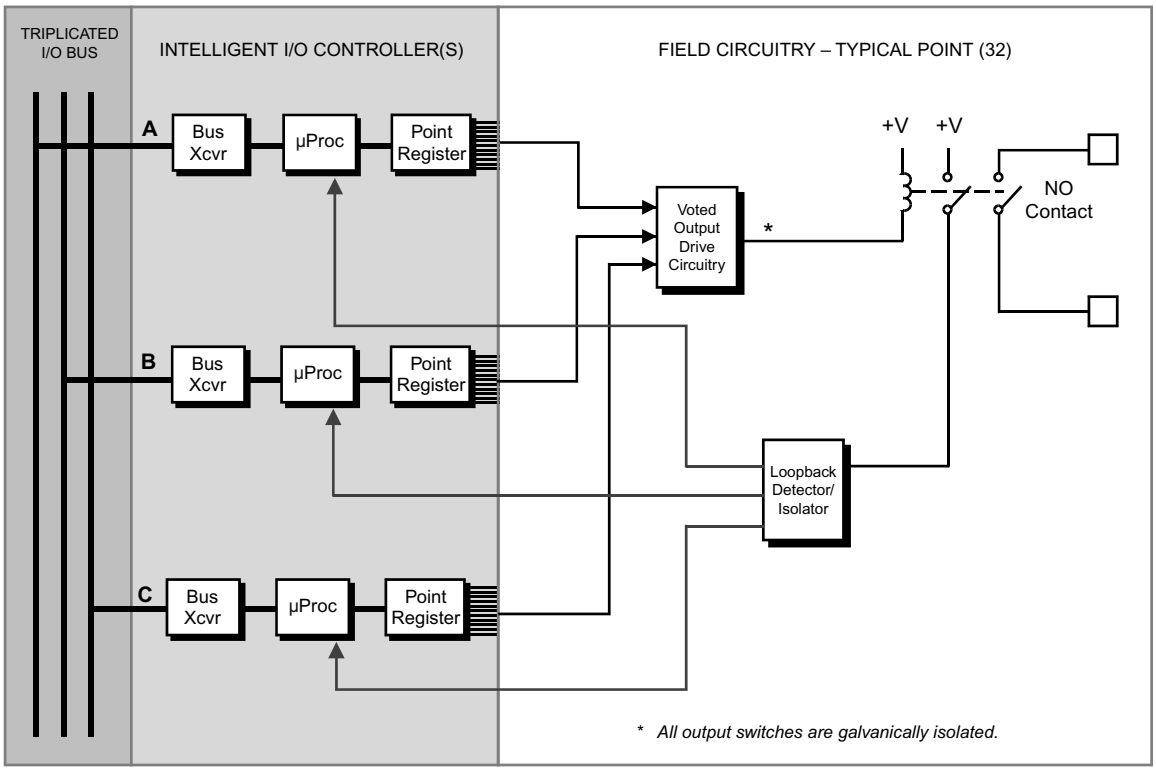

Figure 48 3636R and 3636T Simplified Schematic

This figure shows the front panels of models 3636R and 3636T.

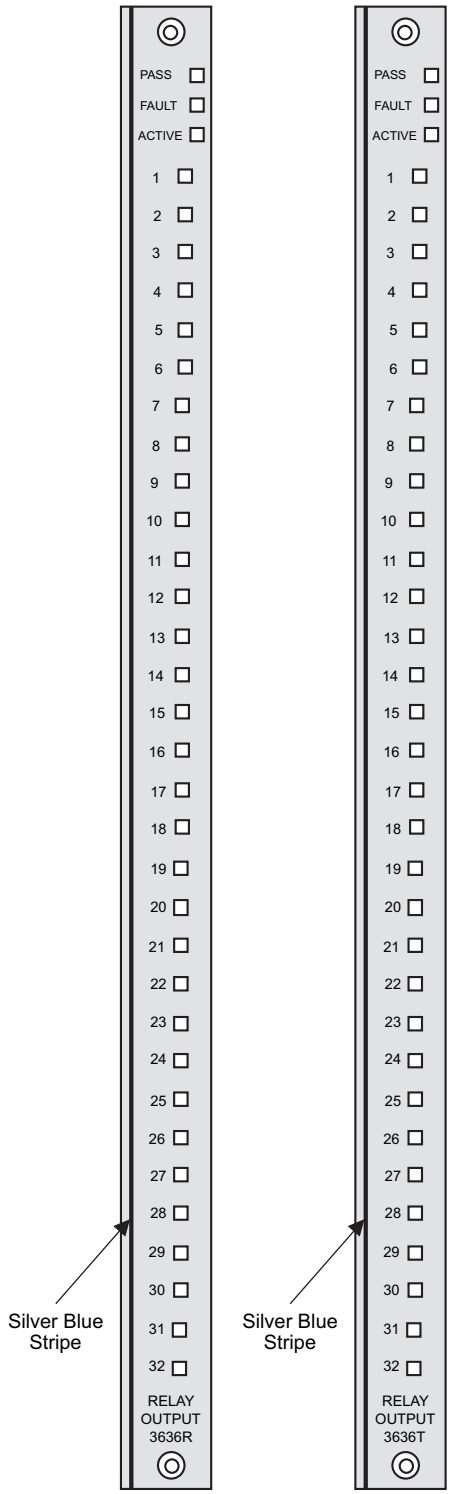

Figure 49 3636R and 3636T Front Panels

Note The Model 3636R and 3636T modules will not assert point LEDs for both primary and spare modules. Only the primary module will assert point LEDs.

3636R and 3636T Specifications

This table lists the specifications for models 3636R and 3636T, which are Non-Triplicated Relay Output Modules. Point isolation varies by model: model 3636R is 1,500 VDC; model 3636T is 2,500 VDC.

Switching Power

When switching reactive loads, you should de-rate the switching power of the outputs to 25 percent of maximum, which is 37.5 watts for DC applications. When switching incandescent lamps, the inrush current can be 10 to 15 times the rated nominal load current of the lamp. For detailed specifications regarding inrush amplitude and duration, contact the lamp manufacturer. The inrush current must be used when calculating the required output switching power.

Table 44 3636R and 3636T Specifications

Feature	Specification
Output contact	NO, normally open
Color code	Silver blue
Number of output points	32, non-commoned
Voltage range	155 VAC/VDC, maximum
Current load	2 amps maximum
Switching power, resistive See Switching Power on page 119	2000 VA, 150 watts maximum
Maximum output cycle rate	< 30 cycles per second
Expected life at maximum rated load	> 10,000 cycles
Fuses	1 per output, 2.5 amps fast-acting
Status indicator: On or Off state	1 per point
Status indicator: Module status	Pass, Fault, Active
Point isolation: 3636R	1500 VDC minimum
Point isolation: 3636T	2500 VDC minimum
Logic power: All points Off	< 10 watts
Logic power: All points On	< 20 watts

Replacing I/O Modules

This procedure explains how to install an I/O module. If an I/O module has a field fault and a module fault, resolve the field fault first.

WARNING

Before you remove a faulty I/O module, ensure the following are true:

- The Active indicator is illuminated on the hot-spare module.

  –or–

  The Active indicator is illuminated on the newly-inserted module if there was an open position in the logical slot and you inserted a replacement module.
- The Active indicator on the faulty module is off.

For fault indicators, see I/O and Communication Module Indicators on page 236.

Procedure

1. If a hot-spare module is installed and the Active indicator is on, remove the other (faulty) module by loosening the retractable fasteners, grasping the fasteners and sliding the module out of the chassis. In the unlikely event that neither module has an Active indicator on, contact the IPS Global Client Support (GCS) center.
2. Install an identical type module in the empty slot and push the module in until it is firmly seated. Tighten the retractable fasteners of the module to 10 inch-pounds.

   For the replacement module, the Pass indicator should go on after about 1 minute; the Active indicator should go on within 1 to 2 minutes.
3. If the replacement module is not a hot-spare, wait until the Active indicator of the faulty module is off, then remove the module.
4. Identify the model and serial numbers on the faulty module. Contact the IPS Global Client Support (GCS) center to obtain a Returned Material Authorization (RMA) number. Then return the module to Triconex for repair.

Note In rare cases, a field device malfunction may cause a module to fault. If replacing the module does not resolve the problem, verify that the field device is properly connected and in good working order. If the problem is still not resolved, please contact the IPS Global Client Support (GCS) center for assistance.