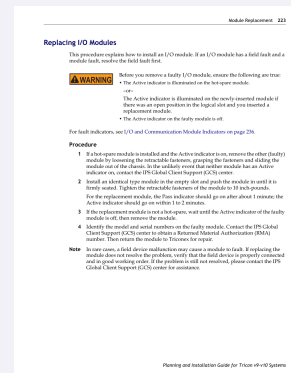


FIELD INSTALLATION QUICK GUIDE

Installation Instructions

Invensys Triconex 3502E
TMR Digital Input Module



PRODUCT	3502E
FAMILY	Tricon v9-v10
FUNCTION	TMR Digital Input Module
STATUS	Verify exact configuration

Prepared by Amikon Limited from Invensys 9700077-012, February 2009. This guide does not replace the complete manufacturer manual, site procedure, hazardous-area drawing, or approval document.

01 CONFIRM THE ORDERED CONFIGURATION

Input points	32, commoned in groups of 8
Nominal field voltage	48 VAC/VDC
Recommended input range	35-95 VAC/VDC
Maximum input voltage	95 VAC/VDC
Input frequency	DC or 47-63 Hz
Off-to-on threshold	27 VAC/VDC typical; 32 VAC/VDC worst-case
On-to-off threshold	14 VAC/VDC typical; 11 VAC/VDC worst-case

02 MOUNTING AND CONNECTION

- Confirm the exact 3502E label and 48 VAC/VDC input class.
- Check field voltage, common groups and the approved termination.
- Resolve a field fault before attributing the problem solely to the module.
- Ensure the replacement or hot spare is Active and the faulty module is not Active before removal.
- Seat an identical replacement and tighten fasteners to 10 inch-pounds.

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.



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.

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CABLE ROUTING AND CONNECTION

- Check field voltage, common groups and the approved termination.
- Resolve a field fault before attributing the problem solely to the module.
- Ensure the replacement or hot spare is Active and the faulty module is not Active before removal.
- Seat an identical replacement and tighten fasteners to 10 inch-pounds.
- Verify Pass and Active indications and test affected field signals.

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INITIAL SYSTEM CHECKS

- Confirm model identity and compatible system components before energizing.
- Verify wiring, grounding, enclosure, and applicable hazardous-area requirements.
- Confirm normal indications and fault-contact state after commissioning.
- Record the installed order number and baseline operating condition.

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CONTROLLED DOCUMENTS

Official source	Invensys 9700077-012, February 2009
Product record	3502E
Manufacturer	Invensys Triconex
Support	INFO@AMIKON.CN