

MC-TDIA72

Thirty-Two-Channel 120 Vac Digital Input FTA

CONTROLLED ENGINEERING COPY

De-energize all 120 Vac inputs, segregate the wiring from low-voltage signals and verify every channel crosses the documented on/off thresholds before enabling interlocks.

INSTALLATION IDENTITY	REQUIRED VALUE
Complete model	MC-TDIA72
Manufacturer part	51303930-150
Hardware type	32
System family	TPS Process Manager I/O



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MC-TDIA72

01 PRE-INSTALLATION PLAN

- 1

Verify the complete MC-TDIA72 marking and its assigned TPS Process Manager I/O position before work.
- 2

Isolate the energy associated with TPS digital-input processor before disconnecting MC-TDIA72.
- 3

Protect the MC-TDIA72 connectors and electronic assembly using approved ESD controls.
- 4

Record the as-found FTA-to-IOP cable connections and configured assignment before replacement.
- 5

Confirm 120 Vac field-contact circuits matches the approved installation record for MC-TDIA72.

MATCHED HARDWARE

- TPS digital-input processor
- FTA-to-IOP cable
- 120 Vac field-contact circuits
- Screw-terminal cabinet wiring

INSTALLATION CONTROL RECORD

CONTROL ITEM	REQUIRED RECORD
Identity	MC-TDIA72 / 51303930-150 recorded
Physical interface	TPS digital-input processor
Companion check	FTA-to-IOP cable
Functional proof	Terminates thirty-two high-voltage discrete inputs
Application test	Motor-starter running feedback

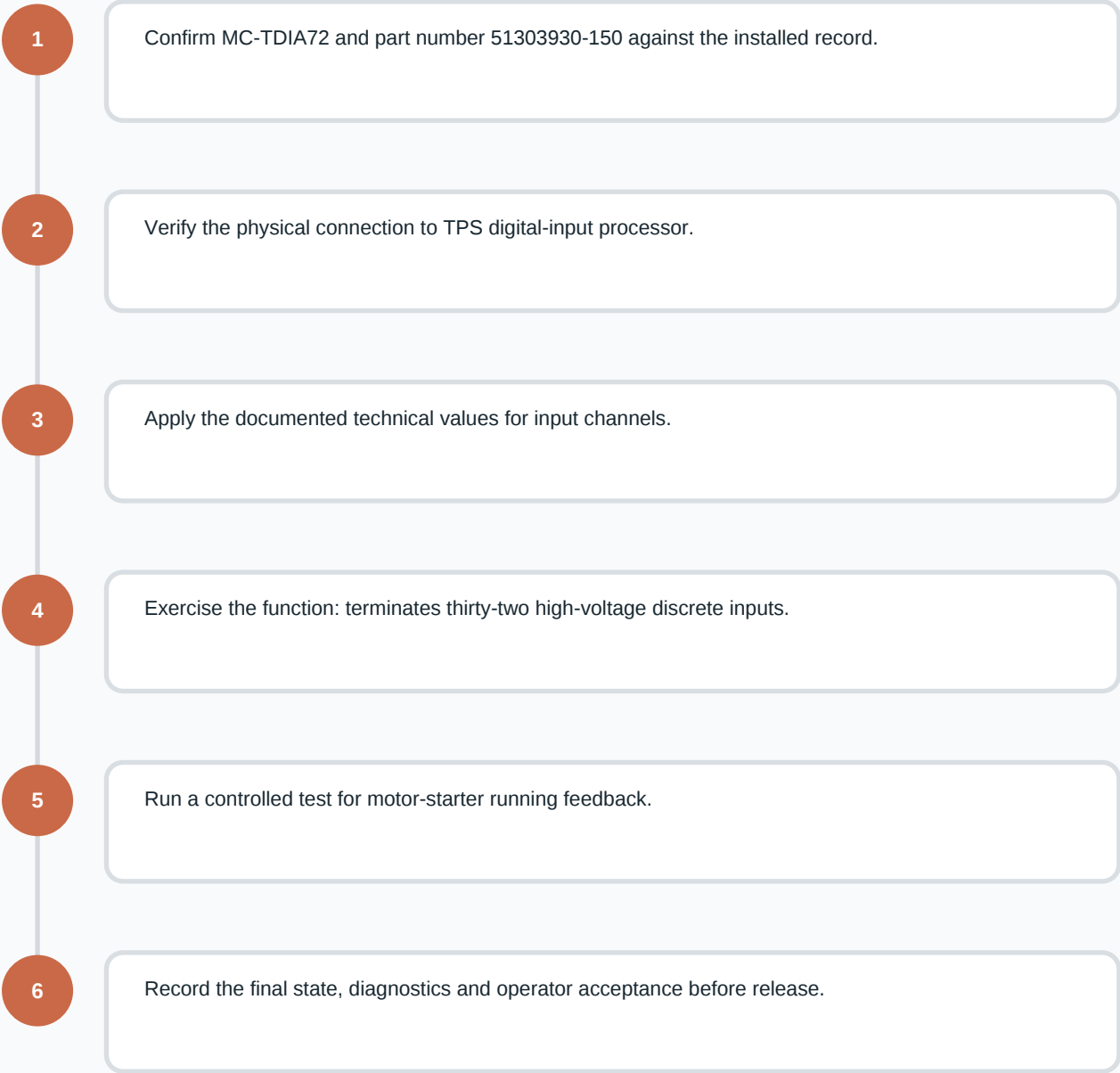
02 WIRING & INTERFACE CHECKS

CHECK ITEM	REQUIRED VALUE
Input channels	32
Nominal input	120 Vac
Input range	90 to 132 Vac
Frequency	47 to 63 Hz
Isolation	1500 Vac rms; +/-1500 Vdc
Isolation method	Optical
On current	5.2 mA minimum
Off current	1.47 mA maximum
Input delay	25 ms maximum
On field resistance	100 ohm maximum
Off field resistance	71 kohm minimum
Terminal type	Screw
Plug-in isolators	None

FIELD NOTE

De-energize all 120 Vac inputs, segregate the wiring from low-voltage signals and verify every channel crosses the documented on/off thresholds before enabling interlocks.

03 COMMISSIONING WORKFLOW



COMMISSIONING ACCEPTANCE EVIDENCE

EVIDENCE ITEM	ACCEPTANCE CONDITION
Identity	MC-TDIA72 / 51303930-150 recorded
Physical interface	TPS digital-input processor
Companion check	FTA-to-IOP cable
Functional proof	Terminates thirty-two high-voltage discrete inputs
Application test	Motor-starter running feedback

04 RETURN-TO-SERVICE RECORD

- ☐
- Restore MC-TDIA72 under controlled conditions and review its model-specific diagnostics.
- ☐
- Complete a documented functional test for motor-starter running feedback before release.
- ☐
- Confirm the intended process response before normal operation.

VERIFICATION RECORD

TECHNICIAN

DATE

CABINET / POSITION

FINAL DIAGNOSTIC STATE

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
MC-TDOR62	TPS relay-output field termination assembly	Open product page
MC-TPIX12	TPS pulse-input field termination assembly	Open product page
MC-TSIM12	TPS serial-interface field termination assembly	Open product page
MC-TAOY25	TPS analog-output field termination assembly	Open product page

SOURCE IDENTIFIERS

Honeywell TPS Process Manager I/O Specification and Technical Data
IO03-684 Rev. 2

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