

MC-TDIA72

Thirty-Two-Channel 120 Vac Digital Input FTA

Honeywell MC-TDIA72 is a 32-channel 120 Vac digital-input field termination assembly. It optically isolates high-voltage field states and connects them to TPS Process Manager digital-input processing.

PRODUCT SNAPSHOT

BRAND

Honeywell

FAMILY

TPS Process Manager I/O

PART

51303930-150

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PRODUCT OVERVIEW

Honeywell MC-TDIA72 is a 32-channel 120 Vac digital-input field termination assembly. It optically isolates high-voltage field states and connects them to TPS Process Manager digital-input processing.

- 1

Terminates thirty-two high-voltage discrete inputs
- 2

Optically isolates field states from TPS electronics
- 3

Detects 120 Vac contact and powered-input conditions
- 4

Routes grouped digital status to the matched processor

SYSTEM COMPONENTS

TPS digital-input processor

FTA-to-IOP cable

120 Vac field-contact circuits

Screw-terminal cabinet wiring

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

TECHNICAL DATA

PARAMETER	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

PARAMETER	VALUE
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

TECHNICAL 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.

APPLICATIONS & PRECAUTIONS

COMMON APPLICATIONS

Motor-starter running feedback

Terminates thirty-two high-voltage discrete inputs

Switchgear auxiliary contacts

Optically isolates field states from TPS electronics

Heater and burner permissives

Detects 120 Vac contact and powered-input conditions

High-voltage package status inputs

Routes grouped digital status to the matched processor

PRODUCT PRECAUTIONS

- 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.
- 6 Restore MC-TDIA72 under controlled conditions and review its model-specific diagnostics.
- 7 Complete a documented functional test for motor-starter running feedback before release.

ENGINEER FAQ

Q1 Which companion hardware must be checked when replacing MC-TDIA72?

Verify TPS digital-input processor, FTA-to-IOP cable and 120 Vac field-contact circuits against the approved cabinet and project record before fitting the Thirty-Two-Channel 120 Vac Digital Input FTA.

Q3 How should engineers validate MC-TDIA72 after configuration?

Restore the documented TPS Process Manager I/O assignment, review diagnostics and run a controlled test of its role: terminates thirty-two high-voltage discrete inputs.

Q5 Which technical value is especially important during MC-TDIA72 commissioning?

Verify Isolation is 1500 Vac rms; +/-1500 Vdc and use the named manufacturer procedure for the controlled functional test.

Q7 What evidence should be retained after MC-TDIA72 returns to service?

Retain the full model identity, as-left connections, configuration, diagnostic result and the final controlled test record for motor-starter running feedback.

Q2 What wiring information should be recorded before removing MC-TDIA72?

Record terminal identifiers, polarity or phase, shields, cable tags and the as-found channel or port assignment for MC-TDIA72.

Q4 Can MC-TDIA72 be moved to a different slot or duty without review?

No. Confirm keying, companion hardware and the approved configuration before assigning MC-TDIA72 to another position or function.

Q6 What should be checked if MC-TDIA72 does not support switchgear auxiliary contacts after installation?

Check seating, FTA-to-IOP cable, 120 Vac field-contact circuits, field energy and the model-specific diagnostics before replacing additional hardware.

Q8 How is MC-TDIA72 identified before installation in a TPS Process Manager I/O cabinet?

Match the full MC-TDIA72 marking and part number 51303930-150 to the assigned position and installed TPS digital-input processor.