PRODUCT INFORMATION DASHBOARD

Honeywell 51306975-175

Digital Output IOTA

Honeywell 51306975-175 is the Cx-TDOD51 Series C 24 VDC bussed, nonredundant digital-output IOTA used with the Cx-PDOD51 output module.

PRODUCT ROLE

32 bussed 24 VDC output channels

SYSTEM

Experion Series C 24 VDC digital output

INTERFACE

Cx-PDOD51 module pairing

SERVICE FOCUS

Point-level overcurrent shutdown

Exact-model highlights

- 32 bussed 24 VDC output channels
- Cx-PDOD51 module pairing
- Internal or external field-power selection
- Point-level overcurrent shutdown

Release questions

IDENTITY

Is the complete 51306975-175 code confirmed?

INTERFACE

Do field signals and companion equipment match?

SETTINGS

Are installed parameters and mappings preserved?

ACCEPTANCE

Have normal, fault and recovery states been tested?

Technical data

Product identity	Cx-TDOD51 digital output IOTA
Part number	51306975-175
I/O function	24 VDC digital output
Output architecture	Bussed, nonredundant
Associated I/O module	Cx-PDOD51
Physical format	9-inch nonredundant IOTA
Output channels	32
Maximum channel load	100 mA per channel
Terminal allocation	TB1 channels 1-16; TB2 channels 17-32
Supply selection	Internal or external 24 VDC through TB3
Fault response	Affected point shuts down and enters Manual
Overcurrent diagnostic	Over-current Soft Failure
Product introduction	Series C Release 410

Application safeguards

SAFEGUARD 1

Match part number 51306975-175 and the Cx-TDOD51 identity before moving any field conductor.

SAFEGUARD 2

Confirm that the installed output electronics are Cx-PDOD51 before inserting the IOTA into service.

SAFEGUARD 3

Record all thirty-two channel assignments and label TB1 and TB2 conductors before isolation.

SAFEGUARD 4

Do not exceed the documented 100 mA maximum load on any individual output channel.

Common applications

Discrete actuator control

Terminates 24 VDC output circuits for relays, indicators and other low-current field loads.

Series C cabinet output

Forms the field-interface layer beneath a Cx-PDOD51 digital-output module.

Mixed supply planning

Allows the cabinet design to select internal or external 24 VDC field power at TB3.

Point-isolated fault service

Keeps unaffected channels operating when one output detects an overcurrent condition.

Interface checklist

- Module side: Cx-PDOD51 24 VDC digital-output module
- Field side: Thirty-two output points divided between TB1 and TB2
- Supply interface: TB3 selection for internal or external 24 VDC and return
- Protection behavior: A shorted point is shut down while unaffected channels continue operating

Installation snapshot

STEP 1

Photograph the IOTA label, output-module label and cabinet position.

STEP 2

Save the channel configuration and current diagnostic state.

STEP 3

Isolate field energy and prove the selected output circuits de-energized.

STEP 4

Label conductor polarity and terminal position before disconnection.

Model-specific FAQ

Q1 Which I/O module pairs with Honeywell 51306975-175?

The Cx-TDOD51 IOTA pairs with the Cx-PDOD51 Series C digital-output module.

Q2 How many outputs does Honeywell 51306975-175 terminate?

It terminates thirty-two 24 VDC digital-output channels.

Q3 How are the channels divided on Honeywell 51306975-175?

TB1 carries channels 1 through 16, and TB2 carries channels 17 through 32.

Q4 What is the maximum load per channel on Honeywell 51306975-175?

The documented maximum load is 100 mA for each channel.

Q5 Can Honeywell 51306975-175 use external field power?

Yes. TB3 provides selection points for internal or external 24 VDC supply and return.

Q6 What happens when one Honeywell 51306975-175 output is shorted?

The affected point detects the overcurrent, shuts down and enters Manual while unaffected channels continue operating.

Q7 Which diagnostic reports overcurrent on Honeywell 51306975-175?

The channel reports an Over-current Soft Failure until the fault is repaired.

Q8 What should be checked before energizing Honeywell 51306975-175?

Verify the Cx-PDOD51 pairing, channel assignments, load current, TB3 supply selection and external-power polarity before enabling outputs.

Product precautions

1. Match part number 51306975-175 and the Cx-TDOD51 identity before moving any field conductor.
2. Confirm that the installed output electronics are Cx-PDOD51 before inserting the IOTA into service.
3. Record all thirty-two channel assignments and label TB1 and TB2 conductors before isolation.
4. Do not exceed the documented 100 mA maximum load on any individual output channel.
5. Verify the TB3 internal-versus-external 24 VDC selection before energizing field loads.
6. Never reverse the polarity of an external 24 VDC supply connected through the IOTA.
7. Investigate an Over-current Soft Failure at the affected point before returning that channel from Manual.
8. Commission every serviced output under a controlled plan and confirm unaffected channels remain stable.

Related products

Verified related products on ApterPower

Honeywell 8C-PAOHA1 51454469-275
Series 8 HART output module
View Honeywell 8C-PAOHA1 51454469-275

Honeywell CC-PAOX01 51405039-275
Series C analog-output module
View Honeywell CC-PAOX01 51405039-275

Honeywell FS-TSFIRE-1624
Safety Manager fire I/O module
View Honeywell FS-TSFIRE-1624

Contact Apter Power

PHONE +86 180 3023 5313
EMAIL sales13@apterpower.com
WEBSITE www.apterpower.com

Share the exact 51306975-175 nameplate, application and required quantity for a model-specific quotation.