

Honeywell 8C-TDODB1

Redundant DO IOTA / Exact identity and technical profile

This reference isolates the exact published characteristics and engineering boundary of Honeywell 8C-TDODB1 without borrowing values from a neighboring model.

Exact model	8C-TDODB1
Spare part number	51307151-175
Output channels	32
Output type	24 Vdc source
Configuration	Redundant
IOTA size	12 inch

TECHNICAL MARKER

32 source outputs

TECHNICAL MARKER

Redundant 12-inch IOTA

TECHNICAL MARKER

8C-PDODA1 companion modules

TECHNICAL MARKER

Four groups of eight channels

Technical boundary

The exact model and its published data govern this reference. Similar family names, suffixes or physical appearance do not establish the same electrical or software behavior.

Identity evidence	Read 8C-TDODB1 from the installed label and procurement record
Function evidence	Confirm the published redundant do iota role in the Experion Series 8 Digital Output system
Configuration evidence	Retain the project, mapping, range, address or interface assigned to this position
Release evidence	Link final diagnostics to a witnessed field or operator response

TECHNICAL DECISION

Accept 8C-TDODB1 only when its identifier and installed-system role agree.

CHANGE BOUNDARY

Any redesign beyond the documented 8C-TDODB1 position requires separate engineering approval.

Honeywell 8C-TDODB1

Redundant DO IOTA / Published characteristics

This matrix groups the published 8C-TDODB1 characteristics that control identification, configuration and engineering review. Each entry remains tied to the exact redundant do iota record.

Exact model	8C-TDODB1
Spare part number	51307151-175
Output channels	32
Output type	24 Vdc source
Configuration	Redundant
IOTA size	12 inch
Companion IOM	8C-PDODA1
Channel grouping	Four groups of eight
Module coating	Coated
Safe value	User configurable HOLD or SHED behavior

INTERPRETATION

Use every 8C-TDODB1 value with the exact installed configuration.

DESIGN RECORD

Retain the drawing, project and channel or interface assignments that make 8C-TDODB1 data actionable.

Nameplate check	Manufacturer and full reference agree with the controlled record
Range check	Published operating or signal data agree with the configured use
Interface check	Backplane, terminal, cable, network or memory arrangement is documented
Limit check	Loading, channel count, supply or lifecycle constraint is reviewed
Evidence close	Source title and applicable product record are retained with the decision

NO BORROWED VALUES

Another Honeywell suffix cannot fill a missing 8C-TDODB1 parameter.

ENGINEERING OUTPUT

Record the exact value used, its purpose and any unresolved item before selection.

Honeywell 8C-TDODB1

Redundant DO IOTA / System role and data flow

Redundant solenoid banks

Maintains a documented 24 Vdc output path through paired modules.

Motor-control commands

Drives grouped interposing devices from protected source outputs.

Critical valve manifolds

Provides 32 bussed outputs with a redundant IOTA arrangement.

High-availability package I/O

Uses paired output modules and recorded safe values.

Signal and configuration path

Field layer	Sensors, loads, terminal or operator interface assigned by the design
Module layer	8C-TDODB1 performs its published redundant do iota role
Control layer	PLC project, address map or runtime application interprets the exchanged data
Acceptance layer	Diagnostics and intended process response are witnessed together

Engineering boundary

Application examples describe system roles only. They do not establish automatic interchangeability, replacement approval or suffix equivalence.

Observed input	Field, network or operator condition presented to 8C-TDODB1
Published action	The documented redundant do iota function processes that condition
Configured interpretation	PLC logic, HMI project or station mapping assigns system meaning
Expected output	A defined state, value, message or command is produced
Acceptance proof	The complete path is witnessed under controlled conditions

APPLICATION RECORD

Tie each 8C-TDODB1 use case to the installed drawing or project tag.

EXCEPTION CONTROL

Document and resolve any behavior that differs from the approved response.

Honeywell 8C-TDODB1

Redundant DO IOTA / Engineering decisions

SUPPORTED IDENTITY

8C-TDODB1

PUBLISHED FUNCTION

Redundant DO IOTA

SYSTEM CONTEXT

Experion Series 8 Digital Output

UNSUPPORTED INFERENCE

A nearby model, suffix or family resemblance

Model-specific questions

8C-TDODB1 51307151-175: how many bussed 24 Vdc outputs terminate on the IOTA?

The redundant IOTA supports 32 source-output channels.

8C-TDODB1 51307151-175: is this the non-redundant IOTA?

No. 8C-TDODB1 is the redundant 12-inch version; 8C-TDODA1 is the non-redundant 9-inch version.

8C-TDODB1 51307151-175: what behavior applies on communication loss?

The user-configured output behavior can hold the last value or shed to a configured safe value.

8C-TDODB1 51307151-175: how is field protection checked?

Inspect group protection and prove that a faulted channel is detected without disturbing unaffected outputs.

8C-TDODB1 51307151-175: which output module is the documented companion?

The Series 8 specification pairs the IOTA with 8C-PDODA1 digital-output modules.

8C-TDODB1 51307151-175: how are the channels grouped?

The 32 outputs are arranged as four groups of eight channels.

8C-TDODB1 51307151-175: what must be captured before replacement?

Record both IOM identities, channel loads, group supplies, safe values and the as-found output state.

8C-TDODB1 51307151-175: what completes redundant commissioning?

Verify both module states, controlled failover behavior, all required output responses and the final diagnostic record.

Decision closeout

Close the 8C-TDODB1 technical review with the exact identifier, applicable published limits and the installed configuration assumptions explicitly recorded.

Question coverage	Identity, function, configuration and field handling addressed
Open item	Any unanswered exact-model point is listed without guessed data
Decision owner	Responsible engineering or maintenance role identified
Supporting record	Drawing, project revision, readings and witnessed result attached

APPROVAL

The 8C-TDODB1 decision is accepted only within the documented scope.

REVIEW TRIGGER

A different suffix, wiring arrangement, project or application requires a new review.

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Redundant DO IOTA / Evidence and support

Exact product	Honeywell 8C-TDODB1
Technical class	Redundant DO IOTA
Platform	Experion Series 8 Digital Output
Evidence use	Exact-model characteristics and engineering boundary
Record with	Installed drawing, project and acceptance evidence
Retained evidence	Nameplate, source title, configuration baseline and field record
Installation evidence	Isolation, conductor/connector record and post-work inspection
Commissioning evidence	Diagnostics, measurements and intended response
Final record	Responsible witness, date, exceptions and approved disposition

VERIFIED APTER POWER CATALOG REFERENCES

Navigation only; compatibility, substitution and manufacturer endorsement are not implied.

51405098-100

[View 51405098-100 page](#)

Honeywell 51304518-150 APM Advanced Controller Board

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MANUFACTURER EVIDENCE RECORD

Honeywell Series 8 I/O Modules Specification

Experion Series 8 I/O specification

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Send the exact model, quantity, destination and requested condition for a quotation.

