

8C-TDIL11

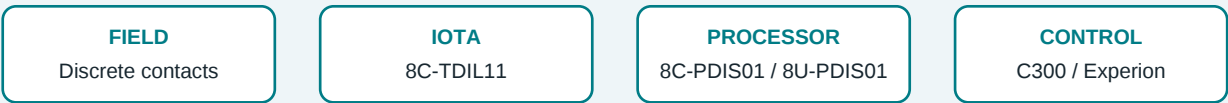
Redundant Series 8 Digital Input Sequence-of-Events IOTA

Honeywell 8C-TDIL11 is a coated redundant 32-circuit Series 8 SOE digital-input IOTA. It provides the shared field interface for paired SOE input processor modules.

MODEL IDENTITY AND VERIFIED TECHNICAL DATA

FIELD	VERIFIED VALUE
Complete model	8C-TDIL11
Part number	51306858-175
Hardware function	Digital input sequence of events IOTA
I/O circuits	32
Redundancy arrangement	Redundant
Coating	Conformal
Size code	9
Matched processors	8C-PDIS01 / 8U-PDIS01
System platform	Experion / PlantCruise Series 8 I/O

SIGNAL PATH



APTER POWER SALES TEAM

WHATSAPP / PHONE
+86 180 3023 5313

EMAIL
sales13@apterpower.com

WEBSITE
www.apterpower.com



8C-TDIL11

Verified product data

PARAMETER	VERIFIED VALUE
IOTA function	Digital input sequence of events
I/O circuits	32
IOTA configuration	Redundant
IOTA size class	12 inch / 304 mm
Coating	Conformal
Compatible I/O modules	8C-PDIS01; 8U-PDIS01

PARAMETER	VERIFIED VALUE
Field-power bus	24 VDC
Terminal style	Tool-detachable
Field termination	On-board
Signal conditioning	On-board
Redundancy interconnection	Integral on IOTA
Redundancy external cabling	Not required

Module and IOTA pairing matrix

PROCESSOR	PROCESSOR ROLE	IOTA	ARRANGEMENT
8C-PDIS01	Coated SOE digital-input processor	8C-TDIL11	Redundant
8U-PDIS01	Uncoated SOE digital-input processor	8C-TDIL11	Redundant
8C-PDIS01	Coated SOE digital-input processor	8C-TDIL11	Redundant IOTA option
8U-PDIS01	Uncoated SOE digital-input processor	8U-TDIL11	Redundant / uncoated option

OFFICIAL SERIES 8 CONTEXT

- Vertical, removable, two-tier field-wiring terminations
- High-density modular construction with the IOM mounted on the IOTA
- Internal or external field-power selection for the SOE digital-input function
- Extensive internal diagnostics and direct/reverse input indication

Honeywell PlantCruise by Experion Series 8 I/O Specification | PC03-490-100

Discrete-event signal architecture

STAGE	LAYER	HARDWARE	ENGINEERING ROLE
1	Field device	Discrete field contact	State transition
2	Termination	8C-TDIL11 IOTA	Channel termination and routing
3	Input processing	8C-PDIS01 / 8U-PDIS01	Sequence-of-events acquisition
4	Controller context	C300 / Experion	Ordered event handling and diagnostics

Commissioning verification matrix

CHECK	REQUIRED CONFIGURATION	ACCEPTANCE EVIDENCE
Product identity	8C-TDIL11 / 51306858-175	Marking matches record
Processor pairing	8C-PDIS01 or 8U-PDIS01	Assigned slot confirmed
Field-channel map	32 circuits	Terminal and channel tags retained
Event timebase	Synchronized system time	Timestamp order proven
Functional stimulus	Controlled discrete transitions	Sequence recorded correctly
Final diagnostic state	No unresolved model-specific alarm	Record retained

Engineering interpretation

The IOTA establishes the physical field interface; the paired SOE processors perform event acquisition. Commissioning therefore must retain both the channel-to-terminal identity and the processor-pair assignment. A controlled transition test should confirm that selected changes appear in the intended chronological order before the point set is returned to service.

TECHNICAL NOTE

Verify both processor identities and the redundancy role before removal; commission the restored pair with controlled input transitions and a documented failover check.

Model-specific applications

APPLICATION	8C-TDIL11 ROLE	ENGINEERING USE
Trip-sequence recording	Captures ordered discrete trips and permissive changes	Event chronology review
Switchgear event chronology	Brings breaker and auxiliary-contact transitions into SOE handling	Switching-sequence analysis
Turbine auxiliary-state capture	Records discrete machine-support state transitions	Start / trip investigation
Process interlock diagnostics	Retains ordered interlock input changes	Cause-and-effect diagnosis

Replacement and diagnostic evidence

WORK PHASE	REQUIRED RECORD
Before isolation	Complete model, part number, carrier position, processor-pair as
Before wire removal	Terminal tag, channel identity, as-found field-contact state
After hardware fit	Seating, connector integrity, matching processor and configured
After configuration	Time synchronization, diagnostics and selected channel status
Before release	Controlled transition order, event record and technician accepta

Application acceptance matrix

ACCEPTANCE ITEM	REQUIRED RESULT
Selected input state	Matches the field contact and configured channel
SOE timestamp	Uses the synchronized Experion event timebase
Transition order	Matches the controlled test sequence
Final diagnostics	No unresolved IOTA or processor diagnostic

Engineer FAQ

Q1 Which processor modules pair with 8C-TDIL11?

Use the documented Series 8 SOE processor pairing: 8C-PDIS01 or 8U-PDIS01.

Q2 How many field circuits does 8C-TDIL11 terminate?

The official Series 8 I/O specification lists 32 I/O circuits for this IOTA.

Q3 What signal role does 8C-TDIL11 perform?

It terminates discrete sequence-of-events input circuits and connects them to the paired SOE processors.

Q4 Is 8C-TDIL11 a redundant IOTA?

8C-TDIL11 is the redundant variant; verify the installed architecture before selecting a replacement.

Q5 What should be recorded before replacing 8C-TDIL11?

Record the complete marking, carrier position, processor-pair assignment, terminal wiring and channel identity.

Q6 How is 8C-TDIL11 commissioned after installation?

Synchronize the event timebase, apply controlled input transitions and confirm their chronological order.

Q7 What hardware must be checked with 8C-TDIL11?

Check the Series 8 carrier, paired SOE processors, field-contact wiring and C300 event-processing configuration.

Q8 What coating is specified for 8C-TDIL11?

The directly related Series 8 I/O specification lists conformal coating.

Related Series 8 products on Apter Power

MODEL	SERIES ROLE	APTER POWER PAGE
8C-PDIL51 51454359-175	Series 8 digital-input processor module	Open product page
8C-PDILA1	Series 8 digital-input processor module	Open product page
8C-PDOD51 51454361-175	Series 8 digital-output processor module	Open product page
8C-PDODA1 51454472-175	Series 8 24 Vdc digital-output module	Open product page
8C-TDODA1 51307149-175	Series 8 digital-output IOTA	Open product page
8C-TDODB1	Series 8 redundant digital-output IOTA	Open product page

SOURCE RECORD

- Honeywell PlantCruise by Experion Series 8 I/O Specification | PC03-490-100
- Honeywell PlantCruise by Experion Series 8 I/O Modules | Product Information Note