

APTER POWER ENGINEERING REFERENCE

8C-PDOD51

Series 8 Field-Isolated Digital Output Module

The 8C-PDOD51 is a coated 32-channel Series 8 digital-output module that switches 24 Vdc field loads and supports latched, pulsed and PWM control with channel fault-option behavior.

Parameter	Technical value
Manufacturer	Honeywell
Product model	8C-PDOD51
Part number	51454361-175
System family	Experion Series 8 I/O
Document	Installation & Application Guide
Country	USA
HS code	8537101190

APTER POWER SALES TEAM

INDUSTRIAL AUTOMATION PRODUCT SUPPORT

One verified model, one engineered configuration path.

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SCAN FOR PRODUCT & QUOTE

8C-PDOD51

2. Installation Planning

The 8C-PDOD51 is a coated 32-channel Series 8 digital-output module that switches 24 Vdc field loads and supports latched, pulsed and PWM control with channel fault-option behavior.

Pre-installation sequence

- Configure FAILOPT for each final element before download.
- Confirm IOTA choice matches the redundancy design.
- Separate internally and externally powered groups as engineered.
- Test pulse and PWM timing with the real field load isolated.

Matched components

- 8C-TDOD51 or 8C-TDOD61 IOTA
- 24 Vdc field supply
- Series 8 controller database
- Field load and protective device

3. Wiring and Interface Checks

Installation item	Required technical value
Module model	8C-PDOD51
Part number	51454361-175
Output type	24 Vdc field-isolated bussed output
Channels	32
IOTA, nonredundant	8C-TDOD51; 9 inch
IOTA, redundant	8C-TDOD61; 12 inch
Output modes	Latched; pulsed; PWM
FAILOPT actions	Hold last value; shed to safe value
Field power	Internal or external
Country	USA

Interface controls

- Use only the 8C-PDOD51 hardware identity and the matched components listed for this product.
- Record wiring, polarity, addressing or channel allocation before disturbing installed conductors.
- Keep field circuits de-energized until continuity and insulation checks are complete.
- Apply the product-specific limits in the table during loop or channel testing.

4. Commissioning and Functional Test

- 1 Confirm that 8C-PDOD51 and part number 51454361-175 match the cabinet record.
- 2 Verify the connection to 8C-TDOD51 or 8C-TDOD61 IOTA before applying operating power.
- 3 Check the product function: switches discrete field loads from series 8 control logic.
- 4 Simulate or apply a controlled signal for solenoid and relay outputs.
- 5 Compare the channel indication or output state with the control database.
- 6 Record baseline values and restore the field circuit to its operating configuration.

5. Diagnostics and Return to Service

Product-specific diagnostic questions

How should an engineer verify TDOD51 versus TDOD61 on 8C-PDOD51?

Use the 8C-PDOD51 technical limit or configuration stated for TDOD51 versus TDOD61, then verify it at the installed channel before service.

What must be checked for FAILOPT hold versus shed on 8C-PDOD51?

Treat FAILOPT hold versus shed as a product-specific commissioning point and compare the field condition with the Honeywell hardware configuration.

Which system detail controls external field power isolation on 8C-PDOD51?

The required check concerns external field power isolation; confirm the connected hardware is the matched component listed for 8C-PDOD51.

Why is it important to confirm PWM timing on 8C-PDOD51?

For PWM timing, isolate the circuit, record its present configuration and apply the stated Honeywell limit before re-energization.

RETURN-TO-SERVICE CHECK

Confirm model 8C-PDOD51, cabinet wiring, control-system channel assignment and the intended field response before releasing the equipment for production.