

INDUSTRIAL AUTOMATION PRODUCT

10209/2/1

Sixteen-Channel 24 Vdc Digital Output Module

Honeywell 10209/2/1 is a 16-channel 24 Vdc digital-output module for the Fail Safe Controller. It sources low-power field loads under FSC control and removes output energy on watchdog shutdown.

IDENTITY	VERIFIED VALUE
Manufacturer	Honeywell
System family	Fail Safe Controller
Part number	10209/2/1
Country	USA
HS code	8537101190

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Technical Specifications

Technical values below are limited to the named Honeywell product record.

PARAMETER	TECHNICAL VALUE
Output channels	16
Output supply	24 Vdc
Rated output current	100 mA maximum
Load power	2.5 W maximum
Output type	Solid-state source
Short-circuit protection	Yes
Lamp load	50 mA; 1.2 W maximum
Load capacitance	1 uF maximum
Voltage drop	<1.2 Vdc at 100 mA
Off-state current	<0.1 mA
Watchdog input	4 mA
Module size	4 TE; 3 HE
5 Vdc current	35 mA
24 Vdc current	85 mA without load
Key coding	A9; C21

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System Role and Architecture

Honeywell 10209/2/1 is a 16-channel 24 Vdc digital-output module for the Fail Safe Controller. It sources low-power field loads under FSC control and removes output energy on watchdog shutdown.

FUNCTION 1

Switches sixteen low-power 24 Vdc loads

FUNCTION 2

Sources field current from solid-state outputs

FUNCTION 3

De-energizes outputs through the watchdog on shutdown

FUNCTION 4

Protects output channels against short circuits

Matched system components

- FSC I/O rack
- 24 Vdc field supply
- A9/C21 keyed position
- Protected resistive or inductive load

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	FSC I/O rack
Companion hardware	24 Vdc field supply
Field connection	A9/C21 keyed position
Primary system function	Switches sixteen low-power 24 Vdc loads
Controlled acceptance duty	Low-power trip indication

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Applications and Engineering Context

Low-power trip indication

Switches sixteen low-power 24 Vdc loads

Safety relay pilot commands

Sources field current from solid-state outputs

FSC annunciator outputs

De-energizes outputs through the watchdog on shutdown

Shutdown-sequence signaling

Protects output channels against short circuits

TECHNICAL NOTE

Check A9/C21 keying and the external load against the channel limit, confirm suppression for inductive circuits and prove watchdog de-energization during the safety test.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	10209/2/1 / 10209/2/1 recorded
Physical interface	FSC I/O rack
Companion check	24 Vdc field supply
Functional proof	Switches sixteen low-power 24 Vdc loads
Application test	Low-power trip indication

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Engineering Precautions

1

Verify the complete 10209/2/1 marking and its assigned Fail Safe Controller position before work.

2

Isolate the energy associated with FSC I/O rack before disconnecting 10209/2/1.

3

Protect the 10209/2/1 connectors and electronic assembly using approved ESD controls.

4

Record the as-found 24 Vdc field supply connections and configured assignment before replacement.

5

Confirm A9/C21 keyed position matches the approved installation record for 10209/2/1.

6

Restore 10209/2/1 under controlled conditions and review its model-specific diagnostics.

7

Complete a documented functional test for low-power trip indication before release.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
10002/1/2	FSC control and I/O system module	Open product page
10005/1/1	FSC system module	Open product page
10012/1/2	FSC system interface module	Open product page
10014/F/F	FSC dual RS-232 communication module	Open product page

MANUFACTURER SOURCE RECORD

Honeywell Fail Safe Controller Hardware Manual
FS02500 software 3.00

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