Foxboro FBM219 P0916RH

Installation & Commissioning Guide

Foxboro FBM219 P0916RH is a discrete i/o interface module for mixed discrete sensing and controlled switching. It operates with the signal-specific termination assembly and module Fieldbus and provides twenty-four inputs plus eight outputs.

PRODUCT ROLE AND VERIFIED FEATURES

Feature 1

Provides twenty-four inputs plus eight outputs for its discrete i/o interface module function.

Feature 2

Handles mixed discrete sensing and controlled switching through the documented Foxboro system path.

Feature 3

Works with the signal-specific termination assembly and module Fieldbus.

Feature 4

Input and output groups are isolated according to the selected termination assembly.

VERIFIED DATA SNAPSHOT

Discrete inputs	24 channels
Discrete outputs	8 channels
Supported levels	15 to 60 V dc; 120 V ac/125 V dc; 240 V ac through the matched TA
Filter/debounce	No filtering, 4, 8, 16 or 32 ms

SYSTEM RELATIONSHIP

Field connection → **I/O module** → **Rack interface** → **Monitor channel**

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Pre-installation readiness

READINESS GATE

Identity

Compare the complete marking with the approved work order and installed record.

System match

Confirm the receiving channel, mating components and controlled configuration.

Physical condition

Inspect mounting surfaces, connectors, terminals, cable and support hardware.

Work controls

Apply authorized isolation, bypass, access and restoration procedures.

TECHNICAL PROFILE FOR THE WORK

Discrete inputs

24 channels

Discrete outputs

8 channels

Supported levels

15 to 60 V dc; 120 V ac/125 V dc; 240 V ac through the matched TA

Filter/debounce

No filtering, 4, 8, 16 or 32 ms

Output action

Sustained or momentary with configurable fail-safe behavior

IMPORTANT NOTICE

Resolve every unmatched interface, configuration or receiving-system condition before removal or installation.

SOURCE AND WORK CONTROLS

Manufacturer source	Invensys, I/A Series FBM219 Discrete I/O Interface Module, PSS 21H-2Z19 B4.
Evidence boundary	Technical statements are limited to the identified product or applicable manufacturer family.
Selection control	Use the complete ordering string and verify the installed system before purchase or installation.

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Installation sequence

CONTROLLED WORK STEPS

01	Match the complete FBM219 P0916RH marking to the work order and installed position before removal.
02	Confirm the signal-specific termination assembly and module Fieldbus before disconnecting any interface.
03	Keep mixed discrete sensing and controlled switching within the documented electrical or pneumatic range.
04	Record terminal designations, polarity, common, shield and cable routing before disconnection.
05	Inspect mounting, connector keying, terminal condition and retention hardware before installation.
06	Restore the controlled database, range, alarm, filter and fail-state settings before energization.
07	Review local indicators and controller diagnostics during the controlled startup sequence.
08	Prove the intended response across twenty-four inputs plus eight outputs and record the acceptance result before release.

CONNECTION RECORD

As found	Photograph and label every connection and installed orientation before removal.
Mechanical	Record mounting position, support, clearance and connector engagement.
Electrical	Record polarity, common, shield, channel assignment and cable route.
Configuration	Preserve approved settings, scaling, alarm logic and acceptance limits.
As left	Record the final physical condition and any controlled deviation.

Field connection → **I/O module** → **Rack interface** → **Monitor channel**

WORK HOLD POINTS

Before removal	Identity, position, wiring, orientation and controlled settings recorded.
Before connection	Mating interfaces, condition and routing reviewed.
Before power-up	Mechanical work, wiring, shielding and configuration independently checked.
Before release	Static value, dynamic response and protection behavior accepted.

Commissioning and functional proof

COMMISSIONING SEQUENCE

Initial state

Observe status at power-up and check for unexpected fault or alarm indication.

Static value

Verify the expected bias, gap, loop, contact or channel value for the application.

Dynamic response

Apply the approved machine or test stimulus and confirm response and scaling.

Protection path

Verify the configured alarm, relay, data or receiving-system behavior.

APPLICATION-SPECIFIC EVIDENCE

System maintenance

Restores the documented discrete i/o interface module function in an existing Foxboro control system.

Signal-path service

Supports controlled testing of mixed discrete sensing and controlled switching at the assigned system position.

Planned replacement

Provides an exact-identity replacement path after the signal-specific termination assembly and module Fieldbus has been verified.

Commissioning

Allows the responsible engineer to prove configuration, diagnostics and response for twenty-four inputs plus eight outputs.

ACCEPTANCE RECORD

Identity	Complete marking and final installed position recorded.
Physical inspection	Mounting, connectors, terminals and routing checked.
Channel status	Expected status and configured measurement confirmed.
Functional test	Required output or protection response demonstrated.
Restoration	Bypasses removed and operating state approved.

COMMISSIONING QUESTIONS

How many points are handled by Foxboro FBM219 P0916RH?	The module provides 24 discrete inputs and 8 discrete outputs.
Which voltage classes can its termination assemblies support?	Matched TAs cover low-voltage dc, 120 V ac/125 V dc and 240 V ac applications.

Release record and technical references

CLOSEOUT QUESTIONS

How can input debounce be configured?	Available selections are no filtering or 4, 8, 16 and 32 ms.
Which output behaviors are configurable?	The application can use sustained or momentary outputs with controlled fail-safe and fallback settings.
Why must the termination assembly be identified first?	The TA determines signal conditioning, current limiting, fusing, relay arrangement and the applicable voltage interface.
What protection may be required for an inductive load?	Use the approved diode or metal-oxide-varistor suppression specified for the connected output circuit.
Which indicators assist point testing?	Front LEDs show module operation and the states of the discrete input and output points.
What is a complete I/O acceptance test?	Exercise all assigned inputs and outputs, verify filtering and fail-safe action, and confirm controller status over the module Fieldbus.

RELATED MODELS FOR INSTALLATION PLANNING

Honeywell MC-TAOX12-51304335-125	Installation-planning reference. Review the complete ordering string before selection.
Honeywell CC-PAON01-51410070-176	Installation-planning reference. Compare the required interface and system position.
Siemens 6DS1412-8RR	Installation-planning reference. Confirm the execution independently for the intended task.

MANUFACTURER SOURCE AND FINAL CONTROL

Manufacturer source	Invensys, I/A Series FBM219 Discrete I/O Interface Module, PSS 21H-2Z19 B4.
Evidence boundary	Technical statements are limited to the identified product or applicable manufacturer family.
Selection control	Use the complete ordering string and verify the installed system before purchase or installation.

IMPORTANT NOTICE	Release the equipment only after the responsible site authority accepts the recorded result.

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