01 / Identity and job scope

HIMA

F3238

Input Module

Product role

HIMA F3238 is an eight-channel HIQuad input module for NAMUR proximity switches or contacts with a resistor network.

Field switch
NAMUR or resistor network

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F3238
Eight input channels

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HIQuad system
Configured safety evaluation

Applicability

F3238 is an eight-channel initiator input module. Intrinsic-safety values apply to the certified circuit arrangement and its external capacitance/inductance conditions; module identification alone does not establish a complete safety-loop approval.

Hardware and configuration

F3238 evaluates eight inputs from NAMUR proximity switches or contacts equipped with a resistor network. HIMA identifies short-circuit and open-circuit diagnostics for this initiator-input design. The HIQuad product classification includes SIL 3 capability, while the achieved safety function still depends on the configured system, approved revision and field loop.

Planning basis

This Apter Power guide supports identification and engineering planning. Apply the complete manufacturer and machine-builder procedures for the actual installation.

02 / Configuration and interface readiness

Item	Configuration relationship
Platform	HIQuad
Input channels	8
Input sources	NAMUR proximity switches; contacts with resistor network
Line diagnostics	Short-circuit and open-circuit monitoring
Safety capability	SIL 3 in the applicable approved system
UB1 supply	24 V DC, −15%/+20%
UB2 supply	5 V DC, ±10%

Technical context

The IECEx circuit specification gives a 24 V DC supply circuit UB1 with −15%/+20% tolerance and a separate 5 V DC UB2 supply with ±10% tolerance. The certified ambient range is 0–60 °C. These supply values belong to the module circuits and must not be confused with the intrinsically safe field-loop output limits.

What line diagnostics are identified for F3238?

The module design provides short-circuit and open-circuit monitoring; use the appropriate field-device and resistor-network arrangement.

What supply circuits are specified for F3238?

UB1 is 24 V DC with −15%/+20% tolerance, and UB2 is 5 V DC with ±10% tolerance.

03 / Installation and connection decisions

Check complete approval

Match module revision and the complete system approval before installation.

Match field devices

Use the correct NAMUR sensor or contact resistor network for the intended loop.

Review entity parameters

Check Uo, Io, Po and the applicable external capacitance and inductance limits together.

Separate supply circuits

Distinguish the 24 V and 5 V supply circuits from the intrinsically safe field connections.

Installation context

The intrinsically safe control circuits have Uo 9.9 V, Io 15 mA and Po 38 mW. Permitted external capacitance and inductance depend on the gas or dust group and whether both are considered together; the higher separate maxima cannot simply be combined. Certified switches or contacts may be located in hazardous areas from Zone 0 when the complete installation meets the applicable approval conditions.

What certified ambient range applies to F3238?

The IECEx attachment specifies an ambient range of 0–60 °C for the module.

What intrinsic-safety output limits apply to F3238?

The certified control-circuit limits are Uo 9.9 V, Io 15 mA and Po 38 mW; the full entity and wiring conditions must also be satisfied.

04 / Functional acceptance planning

Application	Controlled review
NAMUR switching signals	Evaluate suitable proximity-switch states through the approved initiator-input circuit.
Resistor-network contacts	Use contacts with the required network so that signal states and line faults can be distinguished.
Hazardous-area field loops	Connect certified field devices using entity parameters and wiring conditions appropriate to the location.
Safety-system maintenance	Retain the module revision, channel assignments and validated safety application during replacement.

Can separate capacitance and inductance maxima be combined for F3238?

No. The certificate specifies separate and mixed-consideration limits. Select the correct group and combined condition for the complete loop.

Does F3238 by itself establish a SIL 3 safety function?

No. Module capability is part of an approved system. The configured logic, revision, field devices and application validation determine the complete safety function.

Release boundary

Perform the authorized channel and fault-response validation before returning the safety function to service.

Record
Keep the original configuration

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Test
Observe controlled response

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Release
Authorize normal operation

05 / Technical handover and support

Retained information

Keep the complete F3238 marking, host identity, connection photographs, configuration backup and controlled-test results in the service record.

Support planning

Confirm current support and replacement guidance with HIMA for the installed identity and configuration. Apter Power availability and dispatch are separate quotation matters.

Reference basis

HIMA HIQuad technical product overview; IECEx TUR 18.0006 Issue 2, attachment Revision 02.

Apter Power technical summary; not a manufacturer-issued manual. Apply the original instructions for the actual installation.

Related industrial automation products

Navigation only; no substitution or compatibility claim.

HIMA HIMatrix F1 DI 1601 SILworX

HIMA K9203A

HIMA F-BASE RACK 02 R

Discuss your installed configuration

Send the full unit marking and connection details.

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