Bently Nevada 2300/25

01 Function and selected configuration

Product function

Bently Nevada 2300/25 brings continuous machine measurements, alarm handling and the existing Trendmaster data path together for essential machinery with a small sensor-point count.

Selected configuration

The 2300/25 combines two synchronized vibration inputs with a dedicated speed channel. Configured measurements include acceleration, velocity, displacement and speed, with alarm setpoints and available bandpass or nX measurements appropriate to the application.

Functional path

Vibration / speed sensors	Configured measurements	Alarm and buffered signals	SPA / Ethernet / relays

Measurement paths	Two vibration channels plus one speed input
Plant interface	Trendmaster SPA and Ethernet Modbus
Protection outputs	Two programmable relays

Its SPA output supports the Trendmaster DSM/System 1 Classic data path, while Ethernet provides configuration and Modbus communication. The SPA frequency response is 10-3000 Hz within+/-5%; that interface limit is distinct from the wider configurable input measurement filters.

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02 Technical operating envelope

Vibration inputs	2
Speed input	1
Input conversion	Independent 24-bit ADCs
Power input	18-36 VDC
Maximum consumption	7.5 W
SPA frequency response	10-3000 Hz;+/-5%

Ethernet	10/100Base-T
Relays	2 SPDT dry-contact outputs
Buffered outputs	3 BNC:2 vibration,1 speed
SPA high/low AC	8 Vpp /1.6 Vpp
SPA DC gap	0 to-20 VDC

Input filter limits, SPA bandwidth and relay ratings are different specifications. Use the configured measurement and actual field-circuit environment.

Signal interpretation

Its SPA output supports the Trendmaster DSM/System 1 Classic data path, while Ethernet provides configuration and Modbus communication. The SPA frequency response is 10-3000 Hz within+/-5%; that interface limit is distinct from the wider configurable input measurement filters.

Interface boundary

Two programmable relays and local contacts support alarm handling, bypass, configuration lockout and latched reset. Three BNC buffered outputs expose the two vibration signals and speed signal for diagnosis. The base designation does not specify an approval option; verify the supplied full marking.

What role does the third input of 2300/25 serve?

It provides a dedicated speed/Keyphasor path for supported proximity, magnetic-pickup or proximity-switch sensors and time-synchronous measurements.

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03 System integration and applications

Essential-machine protection

Continuously compare configured vibration measurements with alarm setpoints.

Existing Trendmaster integration

Bring monitor signals into a compatible DSM SPA infrastructure.

Synchronous machine diagnosis

Use the speed/Keyphasor input with configured synchronized measurements.

Local maintenance access

Observe live status and buffered signals while applying controlled bypass/reset functions.

System and supply context

2300/25 requires its configured transducers, power source and associated monitoring connections. A housing, sensors, DSM or network equipment is separate unless itemized.

Application boundary

Use the two vibration channels and speed channel for the assigned machine points. Protection setpoints and supported sensor types must match the machinery application.

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04 Engineering selection decisions

How does 2300/25 pass data to a Trendmaster installation?

Its SPA interface supports connection to the existing DSM SPA infrastructure and System 1 Classic arrangement.

Which measurements can the two main channels of 2300/25 acquire?

They accept compatible acceleration, velocity or proximity inputs with synchronized sampling. Measurement type and scale are configured for each application.

Can 2300/25 communicate through Modbus?

Yes. Modbus over Ethernet is supported, with 10/100Base-T communication for configuration and integration.

What relay form is provided by 2300/25?

Two dry-contact SPDT outputs support programmed alarm use. Contact ratings depend on the applicable environment and must be checked for the actual circuit.

Restore the alarm baseline	Load the retained measurement groups, filters, setpoints and relay states. Confirm configuration-lockout and bypass contacts are in their intended test condition.
Verify the SPA and relay paths	Confirm the receiving Trendmaster signal and actual relay circuit behavior. An on-screen alarm alone does not establish the external contact path.

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05 Configuration boundary and references

Lifecycle and support

The current manufacturing and factory-support phase of 2300/25 is not confirmed. Apter Power availability is assessed separately from manufacturer lifecycle status.

Replacement assessment

Retain the SPA-output identity, transducer scales, speed configuration, relay logic and actual approvals. A2300/20 current-output unit is a different interface selection.

Document roles

Use the original manufacturer excerpt for its preserved technical tables and drawings. This product brief explains selection and system context. The separate installation guide covers preparation, connection, tests and handover; it does not replace manufacturer instructions.

Technical basis

Bently Nevada 2300/20 and 2300/25 Vibration Monitors, 105M0340 Rev.AD.

Related product navigation

- Bently Nevada 991-01-XX-01-00 MOD:288865-01
- Bently Nevada 991-06-70-02-00

These are related references, not confirmed substitutes or an automatically approved assembly.

Product enquiries