Bently Nevada 2300/25-00

01 Function and selected configuration

Product function

Bently Nevada 2300/25-00 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.

2300/25-00

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 final 00 selects the no-approvals configuration; do not apply hazardous-area classifications from other variants.

What frequency band is specified for the SPA output of 2300/25-00?

SPA response is 10-3000 Hz within+/-5%. This is separate from the configurable channel measurement filters.

2300/25-00

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

2300/25-00 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.

2300/25-00

04 Engineering selection decisions

What does the final 00 select on 2300/25-00?

It is the no-approvals option for the 2300/25 SPA-output monitor. Do not infer an explosive-atmosphere certification from the family name.

Is the SPA signal of 2300/25-00 equivalent to a 4-20 mA process loop?

No. The SPA output uses high/low AC and DC gap signal paths for the Trendmaster interface rather than the current-loop output arrangement of 2300/20.

How does 2300/25-00 detect a contact-input request?

Contact inputs activate over 0-10 kilohms and deactivate from 150 kilohms to open circuit. Use the assigned lockout, bypass or reset input.

Can the relay circuits of 2300/25-00 be validated only from a displayed alarm?

No. Check the programmed alarm, relay state and actual field circuit. The monitor does not provide output feedback determination for the relay contact path.

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.

2300/25-00

05 Configuration boundary and references

Lifecycle and support

The current manufacturing and factory-support phase of 2300/25-00 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 991-06-70-03-05
- Bently Nevada 991-25-70-01-00

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

Product enquiries