Bently Nevada 3300/55-01-04-18-18-00-00-05-00

01 Product function and configuration

Exact product role

Within a 3300 rack, Bently Nevada 3300/55-01-04-18-18-00-00-05-00 conditions two casing-vibration inputs through field-selectable filtering and presents each channel on its own 0–20 mm/s RMS scale.

Technical specification summary

Technical item	Specification
Measurement function	dual-channel machinery casing vibration
Channel count	2 independent online channels
Selected channel ranges	Channel A 0–20 mm/s RMS; Channel B 0–20 mm/s RMS
Selected transducer sensitivity	Velomitor, 100 mV/in/s
Unfiltered Velomitor frequency response	3–3000 Hz, -3 dB nominal
High-pass corner selection	3–400 Hz
Low-pass corner selection	24–3000 Hz
Recorder output selections	4–20 mA; 1–5 Vdc; 0 to -10 Vdc
Current-output load	0–600 Ω
Alarm setpoint range	0–100% of full scale
Alarm relay option	epoxy-sealed

Selected characteristics

Provides two independent online machinery-vibration channels.
Range and unit selection

Uses 100 mV/in/s Velomitor input sensitivity.
Input compatibility

Selects 0–20 mm/s RMS for Channel A and Channel B.
Output hardware

Uses epoxy-sealed alarm relays with the base range and no safety barrier.
Interface selection

Configuration notice

Match the complete 3300/55-01-04-18-18-00-00-05-00 marking, rear interface and both channel assignments before installation, then prove indication, recorder output and alarm response independently.

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02 Technical selections in context

Configured measurement path

Order-code function	Selected configuration
Measurement range	Channel A 0–20 mm/s RMS; Channel B 0–20 mm/s RMS
Input / processing	Velomitor, 100 mV/in/s
Alarm relay option	Epoxy-sealed
Safety-barrier option	None
Approval selection	None
Range multiplier	None

Signal-chain interpretation

The transducer, field wiring, monitor input, selected span and output path form one chain. Confirm them together when diagnosing scale, polarity, alarm or recorder discrepancies.

Technical decisions

Range suitability
Confirm Channel A 0–20 mm/s RMS; Channel B 0–20 mm/s RMS covers the intended machine behavior.

Input match
Use Velomitor, 100 mV/in/s and preserve its sensitivity.

Output match
Apply Epoxy-sealed relay hardware as selected.

Interface match
Apply None barrier arrangement and None multiplication.

Do not infer unspecified data

Only exact-model technical selections are stated. Installation-specific setpoints, channel destinations and machine limits must be taken from the controlled site configuration.

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03 Applications and commissioning logic

Application areas

Bearing-housing vibration
Monitor RMS casing velocity where rotor vibration is transmitted to the measurement point.

Two-channel machine protection
Apply identical RMS ranges to two identified locations while keeping the channels independent.

Filtered velocity monitoring
Select high-pass and low-pass corners for the useful machine response band.

Remote vibration recording
Send each proportional channel output to a compatible current or voltage receiver.

Commissioning logic

01	Confirm model identity and rear interface.
02	Check input family and selected range.
03	Prove channel assignment with a controlled change.
04	Test indication, recorder output and alarm behavior separately.
05	Restore normal configuration and record the result.

Selected checks

Technical check	Required value
High-pass corner selection	3–400 Hz
Low-pass corner selection	24–3000 Hz
Recorder output selections	4–20 mA; 1–5 Vdc; 0 to -10 Vdc
Current-output load	0–600 Ω
Alarm setpoint range	0–100% of full scale
Alarm relay option	epoxy-sealed

Machine application

3300/55 Dual Velocity Monitor is used for 55-family monitoring functions represented by the selected input and range. Apply site alarm limits only after the complete response is confirmed.

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04 Model-specific technical questions

Questions 1–4

Which measurement span is selected for both channels of Bently Nevada 3300/55-01-04-18-18-00-00-05-00?
Channel A and Channel B each use a 0–20 mm/s RMS range. Recorder scaling and alarm thresholds should be checked against that RMS span.

Why must the 100 mV/in/s sensitivity be retained on Bently Nevada 3300/55-01-04-18-18-00-00-05-00?
The selected input is intended for a 100 mV/in/s Velomitor signal. A different sensitivity can produce a plausible indication with an incorrect vibration value.

How are filter corners applied in Bently Nevada 3300/55-01-04-18-18-00-00-05-00?
High-pass and low-pass corners are selected with plug-in jumpers. The chosen band must suit the machine response and remain consistent on both the local and recorder paths.

What does the RMS range change in Bently Nevada 3300/55-01-04-18-18-00-00-05-00 commissioning?
The applied test and receiving recorder must be compared with RMS velocity units rather than peak velocity or peak-to-peak displacement units.

Selected hardware context

Item	Configuration
Measurement range	Channel A 0–20 mm/s RMS; Channel B 0–20 mm/s RMS
Input / processing	Velomitor, 100 mV/in/s
Alarm relay option	Epoxy-sealed
Safety-barrier option	None
Approval selection	None
Range multiplier	None

Question scope

The questions focus on the range, input and interface options in this exact model. They are not generic interchangeability claims for every monitor in the same family.

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05 Configuration, testing and related products

Questions 5–8

Which alarm relay hardware is fitted to Bently Nevada 3300/55-01-04-18-18-00-00-05-00?
The selected relay option is epoxy-sealed. Its contact energization, Alert and Danger assignments and downstream wiring still require a functional test.

Does Bently Nevada 3300/55-01-04-18-18-00-00-05-00 include a safety barrier or range multiplier?
No. The order code selects an unbarriered input interface and the base displayed range without 2X or 3X multiplication.

Which recorder interfaces can be checked on Bently Nevada 3300/55-01-04-18-18-00-00-05-00?
The monitor supports individually scaled recorder outputs for 4–20 mA, 1–5 Vdc or 0 to -10 Vdc. The connected receiver must match the selected mode and load condition.

What acceptance test should complete installation of Bently Nevada 3300/55-01-04-18-18-00-00-05-00?
Apply a known condition to one channel at a time and compare the RMS display, buffered or recorder signal, Alert and Danger response, relay contacts and return to the normal state.

Related Bently Nevada products

Bently Nevada 3300/55-01-04-12-12-00-00-05-00

Bently Nevada 3300/55-01-05-02-02-00-00-09-00

Bently Nevada 3300/65-13-01-00-00-00-00

Bently Nevada 3300/26-XX-XX-XX-00-00-01-00

Selection caution

Related links support product comparison only. Confirm input family, sensitivity, range, relay hardware, barriers and approvals for every alternative before selection.

Release criterion

Return the channel to service only after its measured response, output behavior and protection-state restoration agree with the approved machine configuration.