

INDUSTRIAL AUTOMATION PRODUCT

3300/45-02-01-02-00

Dual Differential Expansion Monitor

Bently Nevada 3300/45-02-01-02-00 is a dual differential expansion monitor for the 3300 monitoring system. It combines paired proximity-transducer measurements to supervise differential expansion at two machine locations.

IDENTITY	VERIFIED VALUE
Manufacturer	Bently Nevada
System family	Bently Nevada 3300 Monitoring System
Part number	3300/45-02-01-02-00
Product role	Calculates differential expansion from paired proximity inputs
Lifecycle	Installed product record

DOCUMENT SCOPE

Exact-article identity, technical data, host role, installation checks, applications, precautions and engineering verification.

MODEL-SPECIFIC ENGINEERING NOTE

Install 3300/45-02-01-02-00 only in the documented Bently Nevada 3300 Monitoring System arrangement and record the exact connection and configuration before removal. Restore the approved settings, then verify diagnostics and functional response before release.

APTER POWER SALES TEAM

WHATSAPP / PHONE +86 180 3023 5313
EMAIL sales13@apterpower.com
WEBSITE www.apterpower.com



3300/45-02-01-02-00

Technical Specifications

Technical values below are limited to the named Bently Nevada product record and directly applicable manufacturer documentation.

PARAMETER	VALUE	PARAMETER	VALUE
Country of origin	USA	Transducer inputs	Paired proximity transducers
HS code	8537101190	Host system	Bently Nevada 3300
Monitor type	Dual differential expansion	Requested alias	3300/45
Measurement channels	2	Configured order number	3300/45-02-01-02-00

Verified Product Record

DATA GROUP	VERIFIED VALUE
Installed host / carrier	Bently Nevada 3300 Monitoring System
Primary system role	Calculates differential expansion from paired proximity inputs
Connection boundary	Install 3300/45-02-01-02-00 only in the documented Bently Nevada 3300 Monitoring System arrangement and record the exact connection and configuration before removal. Restore the approved settings, then verify diagnostics and functional response before release.
Controlled acceptance duty	Steam-turbine differential expansion

ENGINEERING BOUNDARY

Confirm the complete 3300/45-02-01-02-00 marking, installed host, hardware execution, terminals or connectors, wiring, grounding, configuration, accessories and controlled commissioning results.

Pre-Installation Checks

- 1

Confirm 3300/45-02-01-02-00 and the recorded 3300 rack position.
- 2

Place the machine and associated trip logic in the approved maintenance state.
- 3

Record all four transducer inputs and their two differential channel pairs.
- 4

Capture zero positions, alert/danger settings and recorder scaling before removal.

Documented Service Record

RECORD ITEM	REQUIRED ENTRY
As-found article	3300/45-02-01-02-00
Installed host	Bently Nevada 3300 Monitoring System
Connection record	Capture before removal
Controlled release	Diagnostics and functional proof

System Role and Architecture

Bently Nevada 3300/45-02-01-02-00 is a dual differential expansion monitor for the 3300 monitoring system. It combines paired proximity-transducer measurements to supervise differential expansion at two machine locations.

FUNCTION 1

Calculates differential expansion from paired proximity inputs

FUNCTION 2

Provides two independent machine-expansion channels

FUNCTION 3

Supports alert and danger supervision in the 3300 rack

FUNCTION 4

Preserves the configured order execution and channel pairing

Matched System Components

NO.	DOCUMENTED COMPONENT / ROLE
1	Bently Nevada 3300 Monitoring System
2	8537101190
3	Steam-turbine differential expansion
4	Install 3300/45-02-01-02-00 only in the documented Bently Nevada 3300 Monitoring System arrangement and record the exact connection and configuration before removal. Restore the approved settings, then verify diagnostics and functional response before release.

System Integration Record

INTEGRATION ITEM	DOCUMENTED ROLE
Host identity	Bently Nevada 3300 Monitoring System
Interface role	Calculates differential expansion from paired proximity inputs
Field / power context	Use 3300/45-02-01-02-00 only with its documented host, interfaces and accessories; record the as-found arrangement and complete a controlled functional verification after installation.
Commissioning evidence	Apply controlled paired inputs and prove both differential alarms before release.

Installation and Connection Checks

1

Inspect rack connector, grounding and input cable shields.

2

Restore the exact channel pairing and configured transducer scale factors.

3

Verify monitor OK status, zero and each recorder or display output.

4

Apply controlled paired inputs and prove both differential alarms before release.

MANUFACTURER SOURCE RECORD

3300/45 Dual Differential Expansion Monitor Datasheet
Bently Nevada publication 141507

Applications and Engineering Context

Steam-turbine differential expansion
Supervises rotor-to-casing growth using paired axial probe locations.

Compressor case-expansion monitoring
Tracks relative axial movement across documented machine reference points.

Large rotating-train startup
Provides differential expansion indication during controlled thermal growth.

3300 monitor replacement
Restores the configured two-channel monitor while retaining transducer pairing.

TECHNICAL NOTE

Install 3300/45-02-01-02-00 only in the documented Bently Nevada 3300 Monitoring System arrangement and record the exact connection and configuration before removal. Restore the approved settings, then verify diagnostics and functional response before release.

Model-Specific Acceptance Evidence

CHECK	ACCEPTANCE CONDITION
Identity	3300/45-02-01-02-00 recorded
Host / carrier	Bently Nevada 3300 Monitoring System
Physical interface	Calculates differential expansion from paired proximity inputs
Configuration	Verify monitor OK status, zero and each recorder or display output.
Functional proof	Apply controlled paired inputs and prove both differential alarms before release.

IMPORTANT NOTICE

Confirm the complete 3300/45-02-01-02-00 marking, installed host, hardware execution, terminals or connectors, wiring, grounding, configuration, accessories and controlled commissioning results.

Controlled Release Summary

RELEASE ITEM	MODEL-SPECIFIC CONDITION
Article identity	3300/45-02-01-02-00
Approved role	Steam-turbine differential expansion
Final validation	Apply controlled paired inputs and prove both differential alarms before release.

Engineering Precautions

1	Confirm 3300/45-02-01-02-00 and the recorded 3300 rack position.	2	Place the machine and associated trip logic in the approved maintenance state.
3	Record all four transducer inputs and their two differential channel pairs.	4	Capture zero positions, alert/danger settings and recorder scaling before removal.
5	Inspect rack connector, grounding and input cable shields.	6	Restore the exact channel pairing and configured transducer scale factors.
7	Verify monitor OK status, zero and each recorder or display output.	8	Apply controlled paired inputs and prove both differential alarms before release.

Related Products on Apter Power

MODEL	SYSTEM ROLE	APTER POWER PAGE
330103-00-04-10-02-00	metric probe	View 330103-00-04-10-02-00 page
330103-00-12-10-01-00	metric probe	View 330103-00-12-10-01-00 page
330104-00-04-10-02-05	armored probe	View 330104-00-04-10-02-05 page
330104-00-12-10-02-00	armored probe	View 330104-00-12-10-02-00 page
330104-03-06-10-02-00	armored probe	View 330104-03-06-10-02-00 page
330104-06-12-10-02-00	armored probe	View 330104-06-12-10-02-00 page
330105-02-12-10-02-05	reverse-mount probe	View 330105-02-12-10-02-05 page
330106-05-30-10-02-05	reverse-mount probe	View 330106-05-30-10-02-05 page

MANUFACTURER SOURCE RECORD

3300/45 Dual Differential Expansion Monitor Datasheet
Bently Nevada publication 141507

APTER POWER SALES TEAM

WHATSAPP / PHONE +86 180 3023 5313
EMAIL sales13@apterpower.com
WEBSITE www.apterpower.com



3300/45-02-01-02-00