

INDUSTRIAL AUTOMATION PRODUCT

135137-01

Position I/O Module with Internal Terminations

Bently Nevada 135137-01 is the internal-termination Position I/O module for a 3500/45 monitor. It connects Proximity, rotary-position-transducer or DC-LVDT signals to four configurable position channels.

IDENTITY	VERIFIED VALUE
Manufacturer	Bently Nevada
System family	3500/45 Position Monitor
Part number	135137-01
Country	USA
HS code	8537101190

APTER POWER SALES TEAM

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



2

Technical Specifications

Technical values below are limited to the named Bently Nevada product record.

PARAMETER	VALUE
Termination arrangement	Internal
Supported transducers	Proximator; RPT; DC LVDT
Signal inputs	1 to 4
Proximator/RPT input impedance	10 kOhm
DC LVDT input impedance	1 MOhm
Proximator/RPT power	-24 Vdc
DC LVDT power	+15 Vdc
Recorder output	4-20 mA
Recorder load	0-600 Ohm
Recorder resolution	0.3662 uA per bit

PARAMETER	VALUE
Recorder update rate	100 ms or less
Thrust sensitivity	3.94 or 7.87 mV/um
Diff. expansion sensitivity	0.394 or 0.787 mV/um
Direct-filter response	-3 dB at 1.2 Hz
Gap-filter response	-3 dB at 0.41 Hz
Measurement accuracy	+/-0.33% FS typical; +/-1% maximum
Alarm setpoint accuracy	Within 0.13% of desired value
Operating temperature	-30 to +65 degC
Storage temperature	-40 to +85 degC
Rear rack space	1 full-height slot

VERIFIED PRODUCT RECORD

DATA GROUP	VERIFIED VALUE
Installed host / carrier	3500 rack rear slot
Companion hardware	3500/45 176449-04 position monitor
Field connection	Proximator, RPT or DC LVDT
Primary system function	Connects proximity, rotary-position or DC-LVDT sensors to a 3500/45 monitor
Controlled acceptance duty	Axial thrust-position protection

3

System Role and Architecture

Bently Nevada 135137-01 is the internal-termination Position I/O module for a 3500/45 monitor. It connects Proximitors, rotary-position-transducer or DC-LVDT signals to four configurable position channels.

FUNCTION 1

Connects proximity, rotary-position or DC-LVDT sensors to a 3500/45 monitor

FUNCTION 2

Supports thrust, differential-expansion, case-expansion and valve-position configurations

FUNCTION 3

Provides the documented sensor excitation and four-channel recorder-output path

FUNCTION 4

Routes internally terminated position signals into programmable machinery alarms

Matched system components

- 3500 rack rear slot
- 3500/45 176449-04 position monitor
- Proximitors, RPT or DC LVDT
- Internal termination connectors

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	3500 rack rear slot
Companion hardware	3500/45 176449-04 position monitor
Field connection	Proximitors, RPT or DC LVDT
Primary system function	Connects proximity, rotary-position or DC-LVDT sensors to a 3500/45 monitor
Controlled acceptance duty	Axial thrust-position protection

4

Applications and Engineering Context

Axial thrust-position protection

Connects proximity, rotary-position or DC-LVDT sensors to a 3500/45 monitor

Turbine differential-expansion monitoring

Supports thrust, differential-expansion, case-expansion and valve-position configurations

Case-expansion measurement

Provides the documented sensor excitation and four-channel recorder-output path

Steam-valve position feedback

Routes internally terminated position signals into programmable machinery alarms

TECHNICAL NOTE

Confirm the installed sensor family, excitation and mechanical zero on each channel, restore the correct paired measurement function and prove travel direction plus alarm setpoints before normal operation.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	135137-01 / 135137-01 recorded
Physical interface	3500 rack rear slot
Companion check	3500/45 176449-04 position monitor
Functional proof	Connects proximity, rotary-position or DC-LVDT sensors to a 3500/45 monitor
Application test	Axial thrust-position protection

5

Engineering Precautions

1

Verify 135137-01 is paired with the documented 3500/45 monitor slot.

2

Isolate sensor excitation and recorder loops before removing internal terminals.

3

Record sensor type, channel pairing, scale, zero and travel direction.

4

Do not connect AC LVDT or rotary-potentiometer circuits to this I/O execution.

5

Confirm the configured excitation matches Proximitior, RPT or DC-LVDT hardware.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
3500/40M 176449-01	Four-channel Proximitior monitor	Open product page
125680-01	Internal-termination Proximitior I/O module	Open product page
125720-01	Four-channel relay output module	Open product page
125760-01	3500 Data Manager I/O module	Open product page
125768-01	3500 RIM RS232/RS422 I/O module	Open product page

MANUFACTURER SOURCE RECORD

3500/45 Position Monitor Datasheet

141537 Rev. T

APTER POWER SALES TEAM

WHATSAPP / PHONE +86 180 3023 5313

EMAIL sales13@apterpower.com

WEBSITE www.apterpower.com



135137-01