

A6210

Thrust Position Monitor

Emerson A6210 is a dual-channel monitor for thrust position, differential expansion and rod position in AMS 6500 Classic systems. Each channel accepts a compatible eddy-current sensor system and can be configured for the documented measurement mode.

BRAND	Emerson	ORIGIN	USA
MODEL	A6210	PRODUCT	Thrust Position Monitor
FAMILY	AMS 6500 Classic Protection System	SOURCE	Protection Cards for AMS 6500 Classic Systems; November 2017

MANUFACTURER SOURCE RECORD

Protection Cards for AMS 6500 Classic Systems
Protection Cards for AMS 6500 Classic Systems; November 2017

APTER POWER SALES TEAM

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Product Overview

SYSTEM FUNCTION

Emerson A6210 is a dual-channel monitor for thrust position, differential expansion and rod position in AMS 6500 Classic systems. Each channel accepts a compatible eddy-current sensor system and can be configured for the documented measurement mode.

FUNCTION 1

Supports three selectable axial-position measurement modes

FUNCTION 2

Processes two independent eddy-current channels

FUNCTION 3

Provides buffered sensor and 0–10 V gap outputs

FUNCTION 4

Applies configurable alarm delay to machinery-position limits

TECHNICAL NOTE

Preserve the selected thrust, differential-expansion or rod-position mode and its mechanical zero before replacing A6210. Verify sensor gap, direction, zero reference and every alarm output after the monitored shaft or rod is in its approved condition.

Technical Data and Acceptance

PARAMETER	VERIFIED VALUE
Complete model	A6210
Channels	2
Measurement modes	Thrust position; differential expansion; rod position
Compatible sensors	PR6422, PR6423, PR6424, PR6425
Buffered signal	-1 to -24 V; input above 100 kΩ
Gap output	0–10 V
Gap accuracy	±1%
Operating temperature	0–65 °C
Power	6 W / 250 mA at 24 VDC

ENGINEERING BOUNDARY

Preserve the selected thrust, differential-expansion or rod-position mode and its mechanical zero before replacing A6210. Verify sensor gap, direction, zero reference and every alarm output after the monitored shaft or rod is in its approved condition.

Acceptance Path

1 IDENTITY

A6210 and both channel modes are recorded.

2 REFERENCE

Mechanical zero and polarity are restored.

3 RESPONSE

Displayed and analog positions follow known movement.

4 PROTECTION

All configured axial-position alarms operate correctly.

Applications and Engineering FAQ

APPLICATION	ENGINEERING CONTEXT
Steam-turbine thrust position	Tracks rotor axial location against configured protection limits.
Differential expansion monitoring	Measures relative axial growth between rotating and stationary structures.
Reciprocating rod position	Observes rod movement with an approved eddy-current arrangement.
Dual-channel axial protection	Uses two channels for independent or voting-based position logic.

Model-Specific FAQ - Part 1

QUESTION	ANSWER
Which variables can Emerson A6210 measure?	It can be configured for thrust position, differential expansion or rod position.
How many independent inputs does Emerson A6210 provide?	A6210 has two measurement channels.
Which transducer families are documented for Emerson A6210?	The reference lists PR6422, PR6423, PR6424 and PR6425 eddy-current systems.
What is the Emerson A6210 buffered-signal range?	The buffered sensor signal is documented from -1 to -24 V with input impedance above 100 kΩ.

FAQ, Related Products and Source

QUESTION	ANSWER
What gap output does Emerson A6210 provide?	A6210 provides a 0–10 V gap output with $\pm 1\%$ stated accuracy.
Why must mechanical zero be preserved when replacing Emerson A6210?	Thrust and differential-expansion protection depend on the installed reference position and polarity, so an arbitrary zero can reverse or offset the protection limits.
What rack supply load does Emerson A6210 impose?	The card is specified at 6 W or 250 mA from 24 VDC.
How should Emerson A6210 direction be commissioned?	Move the monitored member in a known axial direction and verify sensor voltage, displayed position, analog output and alarm logic all change with the recorded polarity.

MANUFACTURER SOURCE RECORD

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Related Products on Apter Power

MODEL	APTER POWER PAGE
Bently Nevada 1900-27-03	View Bently Nevada 1900-27-03
Bently Nevada 1900-55	View Bently Nevada 1900-55
Bently Nevada 1900-65A	View Bently Nevada 1900-65A
Bently Nevada 1900-65A-167699-02	View Bently Nevada 1900-65A-167699-02
Bently Nevada 1900-65A-167699-02-034712	View Bently Nevada 1900-65A-167699-02-034712
Bently Nevada 190501-00-00-CN	View Bently Nevada 190501-00-00-CN
Bently Nevada 190501-10-00-00	View Bently Nevada 190501-10-00-00
Bently Nevada 128608-02	View Bently Nevada 128608-02

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