Emerson A6220

01 Prepare the eccentricity channel

1 Capture the installed measurement

Record collar location, sensor/driver pair, sensitivity, engineering units, range and key-reference arrangement before removing A6220.

2 Control the protection state

Place affected alarms and trips in the approved maintenance state. Record any multiplier or bypass that will be active during the work.

Application condition	Shaft bow at slow rotation below 600 rpm
Inputs	Two independent differential eddy-current channels
Reference arrangement	Suitable collar and key monitoring

A6220

02 Verify power and output circuits

1 Check the sensor driver

Confirm the selected driver can operate with the nominal -26.7 VDC sensor supply and the stated current capability.

2 Inspect proportional loads

Check each current loop and voltage receiver separately; do not use the buffered-signal socket as a proportional output.

Sensor supply	20 mA nominal; 35 mA maximum
Current output	0/4–20 mA, load <500 Ω
Voltage output	0–10 VDC, load >10 kΩ

03 Restore the configured measurement

1 Load the correct channel setup

Restore range, engineering units and sensitivity, then select the intended peak-to-peak, min/max or gap mode.

2 Allow the signal to settle

Wait for the specified 60-second configuration settling interval and distinguish it from the independently set output smoothing.

Minimum signal range	0–400 mV peak
Maximum signal range	0–8000 mV peak
Output settling	0–10 s configurable

04 Prove indications and alarms

1 Exercise a known displacement

Compare the characteristic value with a controlled input and verify the scaled current and voltage outputs.

2 Exercise the protection functions

Check alert, danger and not-OK response with the approved test procedure, including the actual downstream relay path.

Threshold range	5–100% of full scale
Threshold resolution	1% of full scale
Normal alarm delay	0–5 s per channel

A6220

05 Diagnose and release

1 Use channel-health information

A not-OK condition may originate in the power supply, sensor, cable, overload, temperature or watchdog. Separate raw-signal checks from processed-value checks.

2 Restore normal protection

Remove temporary bypass, restore the approved multiplier and retain the final configuration with the verified alarm response.

Technical basis: Emerson Protection Cards for AMS 6500 Classic Systems, A6220 specifications, November 2017.

Related product navigation

Epro PR6423/018-040 CON021

Epro PR6423/002-000 CON021

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