

Model Number
682A05

4-20MA BEARING FAULT DETECTOR

Revision: B
ECN #: 25108

ELECTRICAL

	<u>ENGLISH</u>	<u>SI</u>	
Power Supply Voltage	24 Vdc	24 Vdc	
Power Supply Current	150mA max.	150mA max.	
ICP® Input Signal	100mV/g	100mV/g	
ICP® Sensor Excitation	24Vdc/4mA, ±1V/±1mA	24Vdc/4mA, ±1V/±1mA	[1]
Overall Vibration Output (Linear Scale)	4-20mA	4-20mA	
Fault Vibration Output (Log Scale)	4-20mA	4-20mA	
Zero	4mA ±2% of Span	4mA ±2% of Span	
Span	16mA ±5.0%	16mA ±5.0%	
Frequency Response:			
- Overall Vibration	10Hz to 1kHz	10Hz to 1kHz	[3, 4]
- Fault	1kHz or 5kHz to 100kHz	1kHz or 5kHz to 100kHz	[2]
Fault Sample Time Constant	7 seconds	7 seconds	
Fault Detector Range	50g's peak	50g's peak	
Raw Vibration Output	±0.01% of Input Vibration	±0.01% of Input Vibration	
Maximum Load Resistance	500Ω	500Ω	

ENVIRONMENTAL

Warm Up	<2 minutes	<2 minutes
Operating Temperature Range	32 to 158°F	0 to 70°C
Storage Temperature Range	-40 to 257°F	-40 to 125°C
Relative Humidity	<95% (Non-Condensing)	<95% (Non-Condensing)

MECHANICAL

Case Dimension W x H x D:	0.9 x 3.9 x 4.5 in.	22.5 x 99 x 114.5 mm
Weight	5.2 oz.	145.2 grams
Material	Polyamide	Polyamide
Input/Output Electrical Connectors	Removable Screw Terminals	Removable Screw Terminals
Raw Vibration Connector	BNC Jack	BNC Jack
Screw Terminal Wire Size	24 – 14 AWG	0.2 – 2.5 mm ²
Din Rail Mount	1.38 in.	35mm

INDICATOR

Power LED	GREEN	GREEN
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All specifications are at room temperature unless otherwise specified.

OPTIONAL VERSIONS

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

NOTES:

- 1) Internal DIP Switch Selection Overall Vibration:
- Acceleration: 5.00g, 10.00g, 20.00g
- Velocity: 0.50 in/sec, 1.00 in/sec, 2.00 in/sec
- 2) Internal DIP Switch Selection Fault Detector:
- 1kHz or 5kHz high pass filter.
- 3) Frequency Response Tolerances:
Acceleration: -3dB at 10Hz ±0.5Hz, -3dB at 1kHz ±50Hz
Velocity: -3dB at 10.5Hz ±0.5Hz, -3dB at 1kHz ±50Hz
- 4) Output Current will fluctuate at frequencies below 5 Hz.
- 5) See PCB Declaration of Conformance PS051 for details.

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In the interest of constant product improvement, we reserve the right to change specifications without notice.

Form DD030 Rev.F 2/23/99

Drawn: <i>[Signature]</i>	Engineer: <i>[Signature]</i>	Sales: <i>[Signature]</i>	Approved: <i>[Signature]</i>	Spec Number:
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