

Model Number
682B03

4-20MA DIN RAIL SIGNAL CONDITIONER/TRANSMITTER

Revision: A
ECN #: 32835

ELECTRICAL

	ENGLISH	SI
Power Supply Voltage	23 - 25 Vdc	23 - 25 Vdc
Power Supply Current	100mA max.	100mA max.
ICP® Input Signal	100mV/g [3]	100mV/g [3]
ICP® Sensor Excitation	18Vdc/4mA, ±1V/±1mA [7], [8]	18Vdc/4mA, ±1V/±1mA [7], [8]
Temperature Sensor Input	0 - 1.2V Full Scale [6]	0 - 1.2V Full Scale [6]
Vibration Output (milliamps)	4-20mA	4-20mA
Zero	4mA ±2% of Span	4mA ±2% of Span
Span	16mA ±5.0%	16mA ±5.0%
Vibration Output (volts)	0-5/10Vdc	0-5/10Vdc
Zero	0Vdc ±2% of Span	0Vdc ±2% of Span
Span	5/10Vdc ±5.0%	5/10Vdc ±5.0%
Temperature Output (milliamps)	4-20mA	4-20mA
Zero	4mA ±2% of Span	4mA ±2% of Span
Span	16mA ±5.0%	16mA ±5.0%
Raw Vibration Output	±1% of Input Vibration	±1% of Input Vibration
Input Channels	1	1
Frequency Response:	3Hz to 10kHz [2],[4],[5]	3Hz to 10kHz [2],[4],[5]
Fault Current Output	<1mA	<1mA

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	6.4 oz. max.	181 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
Fault LED	RED	RED
Acceleration	GREEN	GREEN
Velocity	GREEN	GREEN
Displacement	GREEN	GREEN

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.

N/A

NOTES:

- Internal DIP Switch Selection:
 - Acceleration: 5.00g, 10.00g, 20.00g
 - Velocity: 0.50 in/sec, 1.00 in/sec, 2.00 in/sec
 - Displacement: 10.0 mils p-p, 20.0mils p-p, 40.0 mils p-p
 - Peak or RMS
 - 0-5 or 0-10Vdc Output
- Frequency Response Tolerances:
 - Acceleration: -3dB at 3Hz ±0.5Hz, -3dB at 10kHz ±0.5kHz
 - Velocity: -3dB at 3.5Hz ±0.5Hz, -3dB at 10kHz ±0.5kHz
 - Displacement: -3dB at 3.5Hz ±0.5Hz, 1000Hz max.
- Output measurement range is based upon input from a 100mV/g accelerometer and will be scaled inversely proportional to any percentage deviation of this input.
- Output Current/Voltage will fluctuate at frequencies below 5 Hz.
- Attenuation is -40dB/Decade
- Requires an accelerometer with TO option output.
- Jumper selectable for 18Vdc Regulated, 24Vdc Power Supply Voltage, or ICP® Sensor Excitation Disabled.
- 4mA Constant Current Diode is Internal to 682BX3.

CERTIFICATIONS:



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: LH	Engineer: NF	Sales: EGY	Approved: EB	Spec Number:
Date: 4/29/10	Date: 4/24/10	Date: 4/24/10	Date: 4/26/10	40536



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