



NEW!

DIN Rail Differential Charge Amplifier

Designed for use with high temperature differential charge pressure and vibration sensors

Highlights

- Convert high impedance output from differential charge sensors to low-impedance voltage output
- Conveniently mounts to any standard DIN rail
- Electronics pre-configured to include high-pass and low-pass filters
- For gas compressors, chemical plants, power generation and hazardous processes

Typical Applications

- Gas Turbine Bearing Health Monitoring
- Commissioning of Nuclear Power Plants
- Condition Monitoring of Power Generation Turbines
- Machinery Protection in Extremely High Temperature Environments
- Turbine Health Management
- Structural Damages on Gas Turbines
- Combustion Dynamics Monitoring

Hazardous Area Approvals:

CSA (Canada & US)

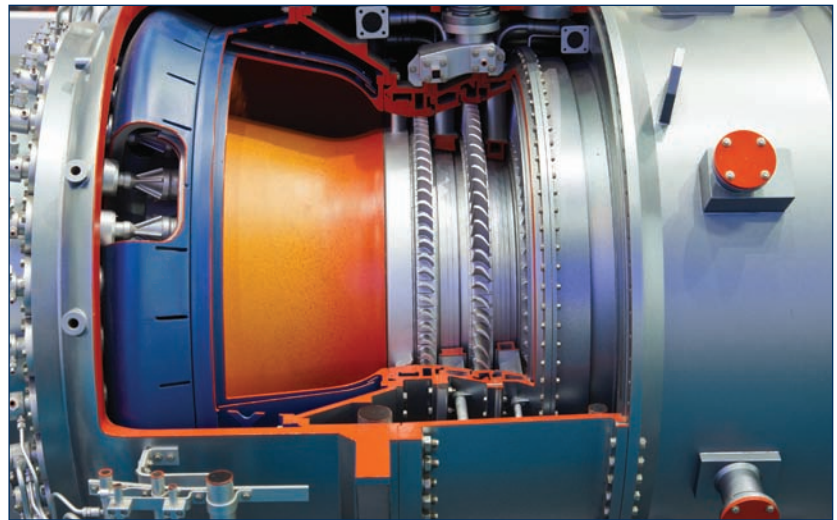
- Class I, Div. 1, Groups A, B, C, D, T4
- Class I, Div. 2, Groups A, B, C, D, T4

ATEX

- Ex ia IIC T4 Ga
- Ex nA IIC T4 Gc

IECEx

- Ex ia IIC T4 Ga
- Ex nA IIC T4 Gc



IMI Sensors has developed a new Differential DIN Rail Charge Amplifier Model EX682A40 to be used in applications such as bearing health monitoring, condition monitoring, combustion dynamics monitoring and structural damages monitoring in conjunction with high temperature differential charge pressure and vibration sensors. The new model converts the differential charge-based signal into a voltage signal via a high temperature standard 2-wire transmission cable.



Differential DIN Rail Charge Amplifier

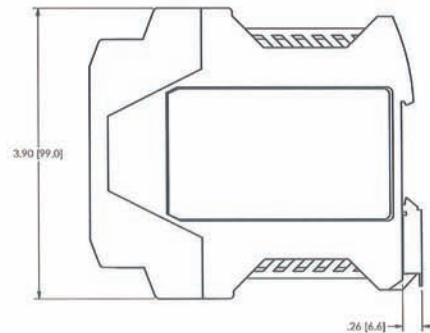
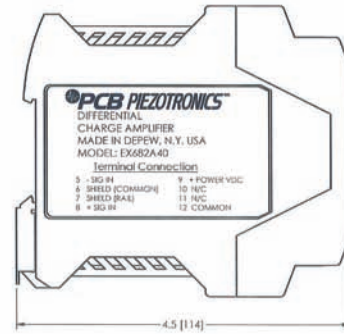
Series EX682A40



Differential DIN Rail Charge Amplifier



Technical Specifications	
Model Number	EX682A40
Performance	
Sensitivity (±5%)	10 mV/pC
Input Range	± 250 pC
Low Frequency Response (±5%)	5 Hz
High Frequency Response (±5%)	10 kHz
Non-Linearity	≤ 1.0 % FS
Environmental	
Temperature Range (Operating)	-40 to +176 °F -40 to +80 °C
Temperature Response	<1 %
Hazardous Area Approval	CSA (C-US) NRTL- Canadian Standards Association
Hazardous Area Approval	ATEX
Hazardous Area Approval	IECEX
Electrical	
Excitation Voltage	22 to 28 VDC
Constant Current Excitation	3.1 to 4.1 mA
Output Voltage	± 2.5 Vpk
Output Bias Voltage	10 to 12 VDC
Broadband Electrical Noise (1 to 10,000 Hz)	200 µV
Spectral Noise (1 Hz)	50 µV/√Hz
Spectral Noise (10 Hz)	15 µV/√Hz
Spectral Noise (100 Hz)	5 µV/√Hz
Spectral Noise (1 kHz)	2 µV/√Hz
Spectral Noise (10 kHz)	2 µV/√Hz
Resistance	>50,000 Ohm
Source Capacitance Loading	0.0003 %/pF
Physical	
Housing Material	Injected Molded Nylon
Electrical Connection (Input)	Terminal Strip
Electrical Connection (Output)	Terminal Strip
Weight	5.1 oz 145 gm



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ISO 9001 CERTIFIED ■ A2LA ACCREDITED to ISO 17025

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IMI Sensors designs and manufactures a full line of accelerometers, sensors, vibration switches, vibration transmitters, cables and accessories for predictive maintenance, continuous vibration monitoring, and machinery equipment protection. Products include rugged industrial ICP[®] accelerometers, 4-20 mA industrial vibration sensors and transmitters for 24/7 monitoring, electronic and mechanical vibration switches, the patented Bearing Fault Detector, high temperature accelerometers to +1300 °F (+704 °C), 2-wire Smart Vibration Switch, and the patented Reciprocating Machinery Protector. CE approved and intrinsically safe versions are available for most products.

Visit www.imi-sensors.com to locate your nearest sales office