

Model Number  
**EX649A71**

# RECIPROCATING MACHINERY PROTECTOR

Revision: E  
ECN #: 45955

## Performance

	<u>ENGLISH</u>	<u>SI</u>	
Output	4-20 mA	4-20 mA	
Machinery RPM Range	240 to 10,000 cpm	4 to 166 Hz	[1][2]
Sampling Time	0.2 to 6.4 sec	0.2 to 6.4 sec	[2]
Weighting Factor	0.1 to 20 mA	0.1 to 20 mA	[2]
Peak Coupling Current Range	4 to 20 mA	4 to 20 mA	[2]
Shock Threshold Limit	2 to 50 g	2 to 50 g	

## Environmental

Temperature Range	-40 to 212 °F	-40 to 100 °C
Storage Temperature Range	-40 to 257 °F	-40 to 125 °C
Hazardous Area Approval	Ex ia, AExia IIC T4	Ex ia, AExia IIC T4
Hazardous Area Approval	Ex na, AExnA IIC T4	Ex na, AExnA IIC T4
Hazardous Area Approval	Class I Div 1 Groups A, B, C, D	Class I Div 1 Groups A, B, C, D
Hazardous Area Approval	Class I Div 2 Groups A, B, C, D	Class I Div 2 Groups A, B, C, D
Hazardous Area Approval	Class II Div 1 Groups E, F, G	Class II Div 1 Groups E, F, G
Hazardous Area Approval	Class III	Class III
Hazardous Area Approval	EEx ia IIC T4, Ta=100 deg C	EEx ia IIC T4, Ta=100 deg C
Hazardous Area Approval	EEx nA IIC T4, Ta=100 deg C	EEx nA IIC T4, Ta=100 deg C

## Electrical

Excitation Voltage	15 to 30 VDC	15 to 30 VDC
Load Resistance	50(Vs-15) Ohm	50(Vs-15) Ohm
Electrical Isolation	>10 <sup>8</sup> Ohm	>10 <sup>8</sup> Ohm

## Physical

Size (Height x Width)	5.8 in x 3.85 in	147 mm x 98 mm
Weight	1.1 lb	500 gm
Mounting Thread	1/4 NPT	1/4 NPT
Sensing Element	Piezoelectric Accelerometer	Piezoelectric Accelerometer
Housing Material	Stainless Steel	Stainless Steel
Sealing	Welded Hermetic	Welded Hermetic
Electrical Connection Position	Top	Top
Electrical Connections(Pin A)	4-20 mA Pos (+)	4-20 mA Pos (+)
Electrical Connections(Pin B)	4-20 mA Neg (-)	4-20 mA Neg (-)
Overload Limit (Shock)	5000 g pk	49,050 m/s <sup>2</sup> pk
Screw Terminal Wire Size	12-24 AWG	3.0 - .2mm <sup>2</sup>
Conduit Housing Thread	1" NPT Female	Not Applicable



All specifications are at room temperature unless otherwise specified.  
In the interest of constant product improvement, we reserve the right to change specifications without notice.

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## 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] 1Hz = 60 cpm (cycles per minute).
- [2] USB Programmable
- [3] See PCB Declaration of Conformance PS053 or PS070 for details.

Entered: LK      Engineer: BAM      Sales: MC      Approved: BAM      Spec Number:  
Date: 9/21/2016      Date: 9/21/2016      Date: 9/21/2016      Date: 9/21/2016      **39464**

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