

Model Number

682A02**ICP® SIGNAL CONDITIONER**Revision: A
ECN #: 15998**ELECTRICAL CHARACTERISTICS**

	ENGLISH	SI	
Excitation Voltage (± 1 VDC)	18 VDC	18 VDC	[1]
Excitation Current (± 1 mA)	4/10 mA	4/10 mA	[2]
Voltage Gain	1/10/100	1/10/100	[2]
Amplitude Linearity	$\leq 2\%$	$\leq 2\%$	
Frequency Response (± 1 dB)	60 - 6,000,000 cpm	60 - 6 000 000 cpm	[3]
Noise, Gain 1:			
Broadband Electrical Noise (1-10 kHz)	50 μ V	50 μ V	[4]
Spectral Noise (@ 10 mA): 10 Hz	0.8 μ V/ $\sqrt{\text{Hz}}$	0,8 μ V/ $\sqrt{\text{Hz}}$	[4]
100 Hz	0.5 μ V/ $\sqrt{\text{Hz}}$	0,5 μ V/ $\sqrt{\text{Hz}}$	[4]
1 kHz	0.5 μ V/ $\sqrt{\text{Hz}}$	0,5 μ V/ $\sqrt{\text{Hz}}$	[4]
10 kHz	0.6 μ V/ $\sqrt{\text{Hz}}$	0,6 μ V/ $\sqrt{\text{Hz}}$	[4]
Noise, Gain 10:			
Broadband Electrical Noise (1-10 kHz)	400 μ V	400 μ V	[4]
Spectral Noise (@ 10 mA): 10 Hz	7.5 μ V/ $\sqrt{\text{Hz}}$	7,5 μ V/ $\sqrt{\text{Hz}}$	[4]
100 Hz	3.6 μ V/ $\sqrt{\text{Hz}}$	3,6 μ V/ $\sqrt{\text{Hz}}$	[4]
1 kHz	3.2 μ V/ $\sqrt{\text{Hz}}$	3,2 μ V/ $\sqrt{\text{Hz}}$	[4]
10 kHz	6.0 μ V/ $\sqrt{\text{Hz}}$	6,0 μ V/ $\sqrt{\text{Hz}}$	[4]
Noise, Gain 100:			
Broadband Electrical Noise (1-10 kHz)	3.5 mV	3,5 mV	[4]
Spectral Noise (@ 10 mA): 10 Hz	80 μ V/ $\sqrt{\text{Hz}}$	80 μ V/ $\sqrt{\text{Hz}}$	[4]
100 Hz	40 μ V/ $\sqrt{\text{Hz}}$	40 μ V/ $\sqrt{\text{Hz}}$	[4]
1 kHz	32 μ V/ $\sqrt{\text{Hz}}$	32 μ V/ $\sqrt{\text{Hz}}$	[4]
10 kHz	50 μ V/ $\sqrt{\text{Hz}}$	50 μ V/ $\sqrt{\text{Hz}}$	[4]

POWER REQUIREMENTS

Voltage ($\pm 10\%$)	24 VDC
Current (maximum)	60 mA
Fuse	1 A

ENVIRONMENTAL CHARACTERISTICS

Temperature Range	32 to 158 °F	0 to 70 °C
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PHYSICAL CHARACTERISTICS

Size	3.1 x 3.3 x 0.97	78,7 x 83,8 x 24,6 mm
Weight	0.194 lb	0,088 kg
Mounting	Din Rail	Din Rail
Input/Output Connector	Terminal Strip	Terminal Strip

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.

-None-**NOTES:**

- [1] If unit is used in conjunction with a sensor having a bias over 13 VDC, full scale output may be affected or sensor may not power up.
 [2] Internally jumper selectable.
 [3] 1 Hz = 60 cpm (cycles per minute).
 [4] Typical value.

SUPPLIED ACCESSORIES:

None

All specifications are at room temperature unless otherwise specified.

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

Form DD030 Rev.E 2/20/98

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