

Model Number 483C28		SENSOR SIGNAL CONDITIONER		Revision: C ECN #: 45020		
Performance		ENGLISH	SI	OPTIONAL VERSIONS		
Channels		8	8	Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.		
Sensor Input Type(s)		ICP®, Voltage, Bridge/Differential	ICP®, Voltage, Bridge/Differential			
Voltage Gain(ICP/Voltage Mode)		x0.1 to x200	x0.1 to x200			
Voltage Gain(Bridge/Differential Mode)		x0.1 to x2000	x0.1 to x2000			
Accuracy(Gain, x0.1 to x0.4)		± 5 %	± 5 %			
Accuracy(Gain, x0.5 to x0.99)		± 1 %	± 1 %			
Accuracy(Gain, x1.0 to x2000)		± 0.5 %	± 0.5 %			
Accuracy(Excitation)		± 1 %	± 1 %			
Input Range(Differential)		± 0 to 10 V	± 0 to 10 V			
Output Range(Minimum)		± 10 V	± 10 V			
Frequency Range(-5 %)(x100 Gain)		0.05 to 100,000 Hz	0.05 to 100,000 Hz			[5]
Frequency Range(-5 %)(≥100 Gain)		0.05 to 50,000 Hz	0.05 to 50,000 Hz			[5]
Phase Response(at 1 kHz)		± 1 °	± 1 °			
Cross Talk(maximum @ 10kHz)		-72 dB	-72 dB			
Calibration(Shunt)		Internal/External	Internal/External			
TEDS Sensor Support		Yes	Yes			
Fault/Bias Monitor/Meter(LED)		Open/Short/Overload	Open/Short/Overload			
Control Interface						
Digital Control Interface		Ethernet	Ethernet			
Environmental						
Temperature Range(Operating)		+32 to +120 °F	0 to +50 °C			
Electrical						
Power Required(direct input to unit)		AC Power	AC Power			
AC Power(47 to 63 Hz)		100 to 240 VAC	100 to 240 VAC			
AC Power		≤ 0.9 Amps	≤ 0.9 Amps			
Excitation Voltage(To Sensor)		>+24 VDC	>+24 VDC			
Excitation Voltage(Bridge Input)(Positive)		+0 to 12 V	+0 to 12 V	[1]		
Excitation Voltage(Bridge Input)(Negative)		-0 to 12 V	-0 to 12 V	[1][2]		
Input Imbalance Adjustment(Maximum, Gain <10)		± 2 V	± 2 V			
Input Imbalance Adjustment(Maximum, Gain ≥10)		± 0.2 V	± 0.2 V			
Common Mode Voltage(Maximum)		± 10 V	± 10 V			
DC Offset(Stability, Maximum RTI)		5 µV/°C	5 µV/°C			
DC Offset(AC Coupled)		≤ 50 mV	≤ 50 mV			
DC Offset(DC Coupled, Gain <100)		<10 mV	<10 mV			
DC Offset(DC Coupled, Gain ≥100)		<20 mV	<20 mV			
Current Output(Bridge Input)(Excitation, Maximum)		30 mA	30 mA			
Constant Current Excitation(To Sensor)		0 to 20 mA	0 to 20 mA			
Output Impedance		≤ 50 Ohm	≤ 50 Ohm			
Impedance(Input)		>1 MOhm	>1 MOhm			
Overload Threshold(± 0.2 Vpk)		± 10 Vpk	± 10 Vpk			
Broadband Electrical Noise(1 to 10,000 Hz)(Gain x1)		50 µV rms	50 µV rms	[3]		
Spectral Noise(1 Hz)(Gain x1)		6.0 µV/√Hz	6.0 µV/√Hz	[3]		
Spectral Noise(10 Hz)(Gain x1)		1.5 µV/√Hz	1.5 µV/√Hz	[3]		
Spectral Noise(100 Hz)(Gain x1)		1.0 µV/√Hz	1.0 µV/√Hz	[3]		
Spectral Noise(1 kHz)(Gain x1)		1.0 µV/√Hz	1.0 µV/√Hz	[3]		
Spectral Noise(10 kHz)(Gain x1)		1.0 µV/√Hz	1.0 µV/√Hz	[3]		
Broadband Electrical Noise(1 to 10,000 Hz)(Gain x10)		75 µV rms	75 µV rms	[3]		
Spectral Noise(1 Hz)(Gain x10)		20 µV/√Hz	20 µV/√Hz	[3]		
Spectral Noise(10 Hz)(Gain x10)		1.5 µV/√Hz	1.5 µV/√Hz	[3]		
Spectral Noise(100 Hz)(Gain x10)		1.0 µV/√Hz	1.0 µV/√Hz	[3]		
Spectral Noise(1 kHz)(Gain x10)		1.0 µV/√Hz	1.0 µV/√Hz	[3]		
Spectral Noise(10 kHz)(Gain x10)		1.0 µV/√Hz	1.0 µV/√Hz	[3]		
Broadband Electrical Noise(1 to 10,000 Hz)(Gain x100)		350 µV rms	350 µV rms	[3]		
Spectral Noise(1 Hz)(Gain x100)		140.0 µV/√Hz	140.0 µV/√Hz	[3]		
Spectral Noise(10 Hz)(Gain x100)		14.0 µV/√Hz	14.0 µV/√Hz	[3]		
Spectral Noise(100 Hz)(Gain x100)		8.0 µV/√Hz	8.0 µV/√Hz	[3]		
Spectral Noise(1 kHz)(Gain x100)		4.0 µV/√Hz	4.0 µV/√Hz	[3]		
Spectral Noise(10 kHz)(Gain x100)		4.0 µV/√Hz	4.0 µV/√Hz	[3]		
Broadband Electrical Noise(1 to 10,000 Hz)(Gain x1000)		3000 µV/rms	3000 µV/rms	[4]		
Physical						
Electrical Connector(ICP® Sensor Input)		BNC Jack	BNC Jack			
Electrical Connector(Bridge/Differential)		8-socket mini DIN	8-socket mini DIN			
Electrical Connector(Output)		BNC Jack	BNC Jack			
Electrical Connector(Ethernet)		RJ-45	RJ-45			
Size (Height x Width x Depth)(nominal)		1.75 in x 19.0 in x 13.7 in	44.5 mm x 482.6 mm x 348 mm			
Weight		7.0 lb	3.18 kg			
						
[6]						
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. ICP® is a registered trademark of PCB Group, Inc.						

NOTES:				
[1]Adjustable in 0.1V steps.				
[2]Negative excitation can be set to 0V or to track the positive excitation votage.				
[3]Typical, AC Coupled.				
[4]Bridge/Differential Mode, DC Coupled with 350 ohm bridge				
[5]AC coupled mode (low frequency response is 0Hz in DC Coupled mode.)				
[6]See PCB Declaration of Conformance PS023 for details.				
SUPPLIED ACCESSORIES:				
Model 017AXX Power Cord (1)				
Model EE75 PCB MCSC Control Software. (1)				
Entered: LK	Engineer: CPH	Sales: ML	Approved: ECB	Spec Number:
Date: 1/20/2016	Date: 1/20/2016	Date: 1/20/2016	Date: 1/20/2016	43990



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