

Parameter	Test Conditions/Comments	Min	Typ	Max	Unit
POWER Requirement					
Supply Voltage		9	24	30	V
Current consumption (-D only)	Stand-by mode				mA
Current consumption (-A only)	Stand-by mode				mA
Current consumption (-L only)	Stand-by mode				mA
Current consumption (-O only)	Stand-by mode				mA
Current consumption (-T only)	Stand-by mode				mA
INDUSTRIAL DIGITAL INPUT (-D only)					
Input Type	Sourcing Input				
Isolation Voltage			2.5		kV
Input High Voltage			30		V
Input Low Voltage			12		V
Input Resistance			6.8k		Ω
INDUSTRIAL DIGITAL OUTPUT (-D only)					
Output Type	Sinking output				
Isolation Voltage			2.5		kV
Output High Voltage			30		V
Output Low Voltage			12		V
Output Current Sink (Peak Inrush)			-400	-500	mA
Output Current Sink (Continuous)			-300	-350	mA
ANALOG INPUT (-A only)					
Number of Channel			8		ch
Input High Voltage		9.7	10	10.3	V
Input Low Voltage		-9.7	-10	-10.3	V
Resolution			16		bit
Sampling Rate	8-ch continuous mode			20k	Hz
Input Impedance			1M		Ω
Bandwidth			100K		Hz
Signal-to-Noise Ratio (SNR)			95.5		dB
Third Harmonic Distortion (THD)			-107		dB
Integral Nonlinearity (INL)			±0.5		LSB
Differential Nonlinearity (DNL)			±0.5		LSB
ANALOG OUTPUT (-O only)					
Number of Channel			8		ch
Output High Voltage			5		
Output Low Voltage			0		
Resolution			16		bit
Update Rate	On-demand mode			1K	Hz
Relative Accuracy			±8		LSB
Differential Nonlinearity (DNL)				±1	LSB
Zero-Code Error			6	19	mV
Zero-Code Error Drift			±2		μV/°C
Gain Error				±1	%FSR
Gain Temperature Coefficient			±2.5		ppm
DC Crosstalk (Internal reference)			25		μV
Offset Error			±6	±19	mV
DC Output Impedance			0.5		Ω
Short-Circuit Current			30		mA
THERMOCOUPLE INPUT (-T only)					
ADC Resolution			19		bit
ADC Conversion Time	Depending on Conversion mode	90		185	ms
Temperature Range	Depending on Thermocouple type	-210		1800	°C
Nominal Temperature Resolution			0.0078125		°C
Thermocouple FullScale and Linearity Error			±0.15		%
Cold-junction Accuracy			±0.7		°C
Input Voltage Protection			±45		V
Noise Rejection Filtering	Configurable	50		60	Hz
Common-Mode Rejection			70		dB
50/60Hz Noise Rejection	Fundamental and harmonics		91		dB
RELAY OUTPUT (-L only)					
Rated Current			2		A
Limiting Continuous Current			2		A
Max. Switching Voltage (AC)			250		Vac

Parameter	Test Conditions/Comments	Min	Typ	Max	Unit
Max. Switching Voltage (DC)			220		Vdc
Min. Switching Voltage			100		$\mu$ V
Max. Switching Power			60		W
Initial Contact Resistance	10mA/30mV			50	m $\Omega$
Thermoelectric potential				10	$\mu$ V
Mechanical Endurance (0W)		100,000,000			Operations
Electrical Endurance (30W)	Resistive 125VDC/0.24A	500,000			Operations
Electrical Endurance (30W)	Resistive 30VDC/1A	500,000			Operations
Operate Time			1	3	ms
Release Time			1	3	ms
Bounce Time Max			1	5	ms