Electrical data

VI Piezo CHARM

VI Piezo CHARM is a single channel measuring module for the connection of a 2-wire piezoelectric sensor according to the ICP® standard. VI Piezo CHARM converts the analog measuring data provided by the connected sensor into a digital signal. This signal is pre processed and provided to the processor of the system where the CHARM is installed. Parameters for the pre processing of the measuring data are software configurable. PeakVue is supported by this CHARM. VI Piezo CHARM can be installed in AMS Asset Monitor only. The standard CHARM terminal Block KL4502X1-BA1 is required for the installation.



Electrical data				
Supply				
Sensor Supply Current	1 to 8 mA	± 5%, ± 75μA		
Sensor Excitation Voltage	> 20 VDC			
Charm Power Requirements	25 mA @ 24 VDC			
Charm Power Dissipation	0.6 W			
Signal Input				
Sensor Types	2-wire ICP®			
Nominal Signal Range	0 to +28 V			
Full Signal Range	-1.5 V to +28 V			
Input Frequency Range	0 to 40 kHz	Attenuation < 3 dB		
Dynamic Range	> 99 dB			
Input Impedance	>100 kΩ			
A/D Resolution	24 bit A/D converter			
Ассигасу				
Basic Accuracy	±0.8%, ±5.0 mV			
Accuracy Over Temperature	±0.5%, ±5.0 mV			
Environmental Conditions And Mechanical Design				
Environmental Conditions				
Operating Temperature	-40 to +70°C			
Storage Temperature	-40 to +85°C			
Humidity	5 to 95%	Noncondensing		
Ip Protection Class	IP 20	According to IEC 60529		
Shock	150 m/s ²	According to IEC 60068-2- 27, 4000 shocks per axis		



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Vibration	0.15 mm		10 to 58.1 Hz	
	20 m/s ²		58.1 to 150 Hz	
	floating sinu 20 cycles, th		According to IEC 60068-2-6	
Operating Altitude	< 2,000 m		Above sea level	
Mechanical Data				
Status Indication	LED		One red/green bicolored LED	
Weight	< 40 g (0.1 lb)		Without packaging	
Dimensions	A = 116 mm B = 47 mm (C = 11 mm (1.85 in)		
Compliance and Certifications				
CE		2014/30/EU (EN 61326-1) 2014/34/EU (EN 60079-0, EN 60079-11, EN 60079-15, DEKRA EXAM GmbH) 2011/65/EU (DIN EN 50581)		
CSA		CAN/CSA C22.2 No. 61010-1-12, UPD1:2015, UPD2:2016 UL Std. No. 61010-1 (3rd Edition) CAN/CSA C22.2 No. 60079-0:19 CAN/CSA-C22.2 No. 60079-11:14 CAN/CSA-C22.2 No. 60079-15:16 Class I Division 2 Groups ABCD T4 Class I Zone 2 A/Ex ec IIC T4 Gc		
IEC Ex		Ex ec nA nC [ic] IIC T4 Gc Ex tb [ic] IIIC T75°C Db		
ATEX		II 3G Ex ec nA nC [ic] IIC T4 Gc II 2D Ex tb [ic] IIIC T75°C Db		
Marine		DNV GL rules for classification - Ships, offshore units, and high speed and light craft		

Only specifications with indicated tolerances or limit values are required. Data without tolerances or without error limits are informative data and not guaranteed. Technology is under constant development and specifications are subject to change without notice. If not otherwise specified, all data refer to a nominal supply voltage of 24 VDC and an environmental temperature of 23°C (73°F).

Ordering Information

Model Number	Product Description
SE8701V01-PZ	AMS Asset Monitor VI Piezo CHARM

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