DATASHEET - XN-322-2DMS-WM



Weigh module, 2 DMS, 24 bits

Part no.

XN-322-2DMS-WM 178793



Powering Business Worldwide^{*}

General specifications	
Product name	Eaton XN-322 Weigh module
Part no.	XN-322-2DMS-WM
EAN	7640130098275
Product Length/Depth	104.2 millimetre
Product height	16.8 millimetre
Product width	80.3 millimetre
Product weight	0.061 kilogram
Certifications	UL File No.: E135462 IEC/EN 61000-6-4 IEC/EN 61000-6-2 CULus CE IEC/EN 61131-2
Product Tradename	XN-322
Product Type	Weigh module
Product Sub Type	None
Catalog Notes	 4 / 4 The max. heat dissipation is specified as the maximum power produced inside the device's housing. Voltage Weigh module, 2DMS, 24Bit Weigh slice module for connecting two Wheatstone bridges (strain gauge load cells). With a 24-bit resolution, readings will be available with an accuracy of ±0.035%. Wheatstone bridge, configurable measurement range
Features & Functions	
Features	Fieldbus connection over separate bus coupler possible
Fitted with:	Parameterizable Software input filter
General information	
Current consumption	50 mA (typ.), for +5 V power supply (internal), Power supply - Input 34 mA (typ.), for +24 V, Power supply - Input
Degree of protection	IP20 NEMA 1
Mounting method	Rail mounting possible
Number of channels	2, Analog Inputs
Overvoltage category	III
Pollution degree	3
Product category	XN-322 weigh module
Resolution	24 Bit (Analog inputs)
Suitable for	Weighting
Туре	XN300 technology module
Used with	XN300 XN-312
Voltage type	DC
Ambient conditions, mechanical	
Height of fall (IEC/EN 60068-2-32) - max	1 m
Mounting position	Horizontal
Shock resistance	15 g, Mechanical, Half-sinusoidal shock 11 ms, 18 Impacts
Vibration resistance	5 - 8.4 / 8.4 -150 Hz, 3,5 mm / 1 g
Climatic environmental conditions	
Air pressure	795 - 1080 hPa (operation)
Ambient operating temperature - min	0 °C
Ambient operating temperature - max	60 °C

Ambient storage temperature - max	85 °C
Climatic proofing	Dry heat to IEC 60068-2-2 Damp heat, constant, to IEC 60068-2-3
Environmental conditions	Condensation: prevent with appropriate measures
Relative humidity	0 - 95 % (non-condensing)
Electro magnetic compatibility	
Air discharge	8 kV/4 kV, Air/contact discharge, ESD
Burst impulse	1 kV, Signal cable 2 kV, Supply cable
Electromagnetic fields	10 V/m at 0.08 - 1.0 GHz (according to IEC EN 61000-4-3) 1 V/m at 2 - 2.7 GHz (according to IEC EN 61000-4-3) 3 V/m at 1.4 - 2 GHz (according to IEC EN 61000-4-3)
Emitted interference	47 dB (at 230 - 1000 MHz, Class A, radiated, high frequency) 40 dB (at 30 - 230 MHz, Class A, radiated, high frequency)
Radiated RFI	10 V
Surge rating	0.5/0.5 kV, Supply cable, balanced/unbalanced), EMC 1 kV, Signal cable, unbalanced, EMC
Voltage dips	Voltage dips: 10 ms/Voltage fluctuations: Yes
Terminal capacities	
Terminal capacity	0.2 - 1.5 mm ² , flexible without ferrule, H07V-K 0.25 - 1.5 mm ² , with ferrules without plastic collar according to DIN 46228-1 (ferrule crimped gas-tight) 0.25 - 1.5 mm ² , with ferrules with plastic collar according to DIN 46228-1 (ferrules crimped gas-tight) 0.2 - 1.5 mm ² , solid, H07V-U 24 - 16 AWG
Gauge pin	A1 (according to IEC/EN 60947-1)
Stripping length (main cable)	10 mm
Insulating material group	
Electrical rating	
Rated control supply voltage	5 V (X1, X2, Sensor/transmitter supply)
Rated operational current (Ie)	Max. 66.3 A (supply output)
Rated operational voltage	160 V (terminations)
Supply voltage at AC, 50 Hz - min	0 V AC
Supply voltage at AC, 50 Hz - max	0 V AC
Supply voltage at DC - min	0 V DC
Supply voltage at DC - max	0 V DC
Communication	
Connection	Push-in spring-cage terminal (plug-in connection) in TOP direction
Protocol	Other bus systems
Input/Output	
Load current	Not specified by plug manufacturer
Safety	
Explosion safety category for dust	None
Explosion safety category for gas Potential isolation	None Sensor/transmitter supply: no Analog inputs: no
Design verification	
Equipment heat dissipation, current-dependent Pvid	0 W
Heat dissipation capacity Pdiss	0 W
Heat dissipation per pole, current-dependent Pvid	0 W
Rated operational current for specified heat dissipation (In)	0 A
Static heat dissipation, non-current-dependent Pvs	1.295 W
10.2.2 Corrosion resistance	Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures	Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat	Meets the product standard's requirements.
10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects	Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation	Meets the product standard's requirements.
10.2.5 Lifting	Does not apply, since the entire switchgear needs to be evaluated.

10.2.6 Mechanical impact	Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions	Meets the product standard's requirements.
10.3 Degree of protection of assemblies	Meets the product standard's requirements.
10.4 Clearances and creepage distances	Meets the product standard's requirements.
10.5 Protection against electric shock	Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components	Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections	Is the panel builder's responsibility.
10.8 Connections for external conductors	Is the panel builder's responsibility.
10.9.2 Power-frequency electric strength	Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage	Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material	Is the panel builder's responsibility.
10.10 Temperature rise	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating	Is the panel builder's responsibility.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 9.0

Programmable logic controllers PLC (EG000024) / Fieldbus, decentr. periphery - function-/technology module (EC001601)

Electric engineering, automation, process control engineering / Control, Process Control System (PCS) / Field bus, decentralized peripheral / Field bus, decentralized peripheral - function-/ technology module (ecl@ss13-27-24-26-05 [BAA066019])

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Supply voltage AC 50 Hz	V	0 - 0
Supply voltage AC 60 Hz	V	0 - 0
Supply voltage DC	V	0 - 0
Voltage type (supply voltage)		DC
Number of functions		0
Number of HW-interfaces industrial Ethernet		0
Number of interfaces PROFINET		0
Number of HW-interfaces RS-232		0
Number of HW-interfaces RS-422		0
Number of HW-interfaces RS-485		0
Number of HW-interfaces serial TTY		0
Number of HW-interfaces parallel		0
Number of HW-interfaces wireless		0
Number of HW-interfaces USB		0
Number of HW-interfaces other		2
With optical interface		No
Supporting protocol for EtherCAT		No
Supporting protocol for TCP/IP		No
Supporting protocol for PROFIBUS		No
Supporting protocol for CAN		No
Supporting protocol for INTERBUS		No
Supporting protocol for ASI		No
Supporting protocol for KNX		No
Supporting protocol for Modbus		No
Supporting protocol for Data-Highway		No
Supporting protocol for DeviceNet		No
Supporting protocol for SUCONET		No
Supporting protocol for LON		No
Supporting protocol for PROFINET IO		No
Supporting protocol for PROFINET CBA		No
Supporting protocol for SERCOS		No
Supporting protocol for Foundation Fieldbus		No
Supporting protocol for EtherNet/IP		No
Supporting protocol for AS-Interface Safety at Work		No

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Appendant operation agent (Ex ib) No	Performance level according to EN ISO 13849-1	None
	Appendant operation agent (Ex ia)	No
Explosion safety category for gas None	Appendant operation agent (Ex ib)	No
	Explosion safety category for gas	None

Explosion safety category for dust None Certified for UL hazardous location class II No Certified for UL hazardous location class III No Certified for UL hazardous location class III No	
Certified for UL hazardous location class II No	
Certified for UL hazardous location class III No	
Certified for UL hazardous location division 1 No	
Certified for UL hazardous location division 2 No	
Certified for UL hazardous location group A (acetylene) No	
Certified for UL hazardous location group B (hydrogen) No	
Certified for UL hazardous location group C (ethylene) No	
Certified for UL hazardous location group D (propane) No	
Certified for UL hazardous location group E (metal dusts) No	
Certified for UL hazardous location group F (carbonaceous dusts) No	
Certified for UL hazardous location group G (non-conductive dusts) No	
Width mm 80.3	
Height mm 16.8	
Depth mm 104.2	