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
Type	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 - min	-20 °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 (ferrules 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	I
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	None
Potential isolation	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])

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

Supporting protocol for DeviceNet Safety	No
Supporting protocol for INTERBUS-Safety	No
Supporting protocol for PROFIsafe	No
Supporting protocol for SafetyBUS p	No
Supporting protocol for other bus systems	Yes
Radio standard Bluetooth	No
Radio standard WLAN 802.11	No
Radio standard GPRS	No
Radio standard GSM	No
Radio standard UMTS	No
IO link master	No
System accessory	Yes
Suitable for counting	No
Suitable for weighing	Yes
Suitable for temperature control	No
Suitable for welding control	No
Suitable for pressure control	No
Suitable for NC	No
Suitable for electronic positioning	No
Suitable for CNC	No
Suitable for SSI	No
Suitable for incremental data detection	No
Suitable for detection absolute value	No
Suitable for flux controller	No
Suitable for flux measurement	No
Suitable for path controller	No
Suitable for cam controller	No
Suitable for flying saw	No
Suitable for multi-axis control	No
Suitable for single-axis controller	No
Suitable for multi-axis positioning	No
Suitable for single-axis positioning	No
Function block restart blockage	No
Function block automatic reset	No
Contactor control function block	No
Function block emergency stop	No
Function block contactless working protection installation	No
Function block affirm pushbutton	No
Function block 2-hand switching	No
Function block operating mode selection	No
Function block access control	No
Degree of protection (IP)	IP20
Degree of protection (NEMA)	1
Fieldbus connection over separate bus coupler possible	Yes
Frequency measurement	No
Rail mounting possible	Yes
Wall mounting/direct mounting	No
Front built-in possible	No
Rack-assembly possible	No
Suitable for safety functions	No
SIL according to IEC 61508	None
Performance level according to EN ISO 13849-1	None
Appendant operation agent (Ex ia)	No
Appendant operation agent (Ex ib)	No
Explosion safety category for gas	None

Explosion safety category for dust			None
Certified for UL hazardous location class I			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