

Specifications



Eaton 140071

Eaton XN Bus refreshing module XI/ON, 24 V DC

General specifications

PRODUCT NAME	Eaton XN Bus refreshing module
CATALOG NUMBER	140071
MODEL CODE	XN-BR-24VDC-D
EAN	7640130120518
PRODUCT LENGTH/DEPTH	55.4 mm
PRODUCT HEIGHT	74.1 mm
PRODUCT WIDTH	12.6 mm
PRODUCT WEIGHT	0.037 kg
COMPLIANCES	RoHS Compliant CE Marked
CERTIFICATIONS	UL Listed IEC/EN 61000-6-4 UL report applies to both US and Canada UL 508 CE Certified by UL for use in Canada CSA Class No.: 2252-01, 2252-81 IEC/EN 61131-2 UL Category Control No.: NRAQ, NRAQ7 cULus UL File No.: E205091 UL Recognized CSA-C22.2 No. 142 IEC/EN 61000-6-2 IEC/EN 6113-2
CATALOG NOTES	System power supply 24 V DC for generation of power for module bus and gateway (XN-GW-...)

Ambient conditions, mechanical

DROP AND TOPPLE	According to IEC 60068-2-31, free fall according to IEC 60068-2-32
SHOCK RESISTANCE	Continuous according to IEC/EN 60068-2-29 Mechanical, According to IEC/EN 60068-2-27
VIBRATION RESISTANCE	According to IEC/EN 60068-2-6

Communication

FIELD VOLTAGE	24 V DC (UL)
NUMBER OF BYTES	4 diagnostic bytes
PROTOCOL	Other bus systems

Climatic environmental conditions

AMBIENT OPERATING TEMPERATURE - MAX	55 °C
AMBIENT STORAGE TEMPERATURE - MAX	85 °C
AMBIENT OPERATING TEMPERATURE - MIN	0 °C
AMBIENT STORAGE TEMPERATURE - MIN	-25 °C
ENVIRONMENTAL CONDITIONS	Harmful gasses - SO ₂ : 10 ppm (relative humidity < 75%, no condensation) Harmful gasses - H ₂ S: 1 ppm (relative humidity < 75%, no condensation)
RELATIVE HUMIDITY	5 - 95 % (indoor, Level RH-2, non-condensing for storage at 45°C)

Design verification

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.
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)	Meets the product standard's requirements.

RADIATION	
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.
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	1.3 W

Electrical rating

POWER LOSS	Normally 1.3 W
RATED INSULATION VOLTAGE (UI)	500 V
SUPPLY CURRENT	1.5 A, IMB, Maximum system supply current, Supply modules 10 A, IEI, Maximum operating current, Supply modules
SUPPLY VOLTAGE AT AC, 50 HZ - MAX	0 VAC
SUPPLY VOLTAGE AT AC, 50 HZ - MIN	0 VAC
SUPPLY VOLTAGE AT DC - MAX	30 VDC
SUPPLY VOLTAGE AT DC - MIN	18 VDC

Features & functions

ELECTRIC CONNECTION TYPE	Screw-/spring clamp connection
FEATURES	Fieldbus connection over separate bus coupler possible
FITTED WITH:	Potential separation
FUNCTIONS	Bus diagnosis possible

Electro magnetic compatibility

AIR DISCHARGE	According to EN 61000-4-2
BURST IMPULSE	According to IEC/EN 61000-4-4
ELECTROMAGNETIC FIELDS	According to IEC EN 61100-4-2
EMITTED INTERFERENCE	30 - 230 MHz (radiated, high frequency, according to EN 55016-2-3) 230 - 1000 MHz (radiated, high frequency, according to EN 55016-2-3)
RADIATED RFI	IEC/EN 61100-4-6
SURGE RATING	According to IEC/EN 61000-4-5 Level 4
VOLTAGE DIPS	According to EN 61131-2 (Voltage fluctuations/voltage dips)

General information

ADMISSIBLE RANGE	18 - 30 V DC, Supply module
DEGREE OF PROTECTION	IP20
MOUNTING METHOD	Rail mounting possible
PRODUCT CATEGORY	XN Slice module
RESIDUAL RIPPLE	< 5 % (according to EN 61131-2)
SUITABLE AS	Segment module
SUITABLE FOR	Base modules without C-Connection: 2-/3-wire Base modules with C-connection: 4-wire
TYPE	XI/ON power supply module
USED WITH	XN-P3T-SBB XN-P3S-SBB XN-P4S-SBBC-B XN-P4S-SBBC, XN-P3T-SBB-B XN-P4T-SBBC XN-P4T-SBBC-B XN-P3S-SBB-B XN-P4S-SBBC XN-P3T-SBB-B
VOLTAGE TYPE	DC

Safety

EXPLOSION SAFETY CATEGORY FOR DUST	None
EXPLOSION SAFETY CATEGORY FOR GAS	None
POTENTIAL ISOLATION	Through optocoupler: yes

Resources

BROCHURES	eaton-xc300-modular-plc-brochure-br050008en-en-us.pdf Slice card modular I/O system for the machine building industry XN300 - brochure
DRAWINGS	eaton-io-modules-xion-xn-input-card-dimensions.eps eaton-electronic-devices-xion-xn-input-card-3d-drawing.eps
ECAD MODEL	ETN.XN-BR-24VDC-D
MANUALS AND USER GUIDES	MN05002010Z_EN
MCAD MODEL	eaton-power-supply-modules-mcad-drawings-xn-br-24vdc-d.dwg xn_br_24vdc_d.stp

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATE:



Eaton Corporation plc Eaton House
30 Pembroke Road
Dublin 4, Ireland
Eaton.com

© 2026 Eaton. All Rights Reserved.

Follow us on social media to get the latest product and support information.

