DATASHEET - XN-PF-24VDC-D

Power supply module XI/ON, 24 V DC

Part no.	**XN-PF-24VDC-D**
	140070
EL Number (Norway)	**4520632**

General specifications

Product name	Eaton XN Power supply module
Part no.	XN-PF-24VDC-D
EAN	7640130121027
Product Length/Depth	55.4 millimetre
Product height	74.1 millimetre
Product width	12.6 millimetre
Product weight	0.025 kilogram
Certifications	Certified by UL for use in Canada
	UL report applies to both US and Canada
	IEC/EN 61131-2
	UL Recognized
	CE
	CSA-C22.2 No. 142
	UL 508
	IEC/EN 6113-2
	IEC/EN 61000-6-4
	UL File No.: E205091
	UL Category Control No.: NRAQ, NRAQ7
	IEC/EN 61000-6-2
	CSA Class No.: 2252-01, 2252-81
	CULus
Product Tradename	XN
Product Type	Power supply module
Product Sub Type	None

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

General information

Admissible range	18 - 30 V DC, Supply module
Current consumption	28 mA, from module bus, Supply modules
Degree of protection	IP20
Mounting method	Rail mounting possible
Product category	XN Slice module
Residual ripple	< 5 % (according to EN 61131-2)
Suitable for	Base modules with C-connection: 4-wire
	Base modules without C-Connection: 2-/3-wire
Suitable as	Segment module
Type	XI/ON power supply module
Used with	XN-P3T-SBB
	XN-P4S-SBBC
	XN-P3S-SBB
	XN-P4T-SBBC
Voltage type	DC

Ambient conditions, mechanical

Drop and topple	According to IEC 60068-2-31, free fall according to IEC 60068-2-32
Shock resistance	Mechanical, According to IEC/EN 60068-2-27
	Continuous according to IEC/EN 60068-2-29
Vibration resistance	According to IEC/EN 60068-2-6

Climatic environmental conditions

Ambient operating temperature - min	0 °C
Ambient operating temperature - max	55 °C
Ambient storage temperature - min	-25 °C

Ambient storage temperature - max		85 °C
Environmental conditions		Harmful gasses - H2S: 1 ppm (relative humidity < 75%, no condensation) Harmful gasses - SO2: 10 ppm (relative humidity < 75%, no condensation)
Relative humidity		5 - 95 % (indoor, Level RH-2, non-condensing for storage at 45°C)

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		230 - 1000 MHz (radiated, high frequency, according to EN 55016-2-3) 30 - 230 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)

Electrical rating

Power loss		Normally 1.3 W
Rated insulation voltage (Ui)		500 V
Supply current		10 A, IEI, Maximum operating current, Supply modules
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		18 V DC
Supply voltage at DC - max		30 V DC

Communication

Field voltage		24 V DC (UL)
Number of bytes		4 diagnostic bytes
Protocol		Other bus systems

Safety

Explosion safety category for dust		None
Explosion safety category for gas		None
Potential isolation		Through optocoupler: yes

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		1.3 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 - power supply/segment module (EC001600)

Electric engineering, automation, process control engineering / Control, Process Control System (PCS) / Field bus, decentralized peripheral / Field bus, decentralized peripheral - feed and segment module (ecl@ss13-27-24-26-10 [BAA071018])

Supply voltage AC 50 Hz	V	0 - 0
Supply voltage AC 60 Hz	V	0 - 0
Supply voltage DC	V	18 - 30
Voltage type (supply voltage)		DC
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		1
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
System accessory		Yes
Degree of protection (IP)		IP20
Type of electric connection		Screw-/spring clamp connection
With potential separation		Yes
With power supply module		No
Suitable as segment module		Yes

Remote module		No
Fieldbus connection over separate bus coupler possible		Yes
Bus diagnosis possible		Yes
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	12.6
Height	mm	74.1
Depth	mm	55.4