



Bus refreshing module XI/ON, 24 V DC

Part no. XN-BR-24VDC-D
Article no. 140071

Delivery program

| | | | |
|-------------------|--|--|--|
| Function | | | XI/ON power supply modules |
| Function | | | XN Slice module |
| Short Description | | | System power supply 24 V DC for generation of power for module bus and gateway (XN-GW-...) Field power supply module with 24 V DC nominal voltage |
| For use with | | | XN-P3T-SBB XN-P3S-SBB XN-P4T-SBBC XN-P4S-SBBC XN-P3T-SBB-B XN-P3S-SBB-B XN-P4T-SBBC-B XN-P4S-SBBC-B |

Technical data

General

| | | | |
|---|--|-----|---|
| Standards | | | EN 61000-6-2 EN 61000-6-4 EN 61131-2 |
| Potential isolation | | | Yes, through optocoupler |
| Ambient temperature | | °C | 0 - +55 |
| Storage | 9 | °C | -25 - +85 |
| Relative humidity | | | 5 - 95 % (indoor), Level RH-2, no condensation (for storage at 45°C) |
| Harmful gases | | ppm | SO ₂ : 10 (rel. humidity < 75%, no condensation) H ₂ S: 1.0 (rel. humidity < 75 %,no condensation) |
| Vibration resistance, operating conditions | | | according to IEC/EN 60068-2-6 |
| Mechanical shock resistance | | g | according to IEC 60068-2-27 |
| Continuous shock resistance (IEC/EN 60068-2-29) | | | According to IEC 60068-2-29 |
| Drop and topple | | | According to IEC 60068-2-31, free fall according to IEC 60068-2-32 |
| Degree of Protection | | | IP20 |
| Electromagnetic compatibility (EMC) | | | |
| ESD | Air/contact discharge | kV | EN 61100-4-2 |
| Electromagnetic fields | (0.08...1) / (1.4...2) / (2...2,7) GHz | V/m | EN 61100-4-2 |
| Burst | | | EN 61100-4-4 |
| Surge | | | EN 61100-4-5 |
| Radiated RFI | | V | EN 61100-4-6 |
| Emitted interference (radiated, high frequency) | (30...230 MHz) / (230...1000 MHz) | dB | EN 55016-2-3 |
| Voltage fluctuations/voltage dips | | | EN 61131-2 |
| Type test | | | to EN 61131-2 |
| Approvals | | | CE, cULus |
| Other technical data (sheet catalogue) | | | Technical Data |

Supply modules

| | | | |
|---------------|------------------|------|----|
| System supply | U _{sys} | V DC | 24 |
|---------------|------------------|------|----|

| | | | |
|--|-----------|------|-------------------------------------|
| Coordination type "1" | U_{sys} | V DC | 18 ... 30 |
| Coordination type "2" | U_{sys} | V DC | 4.7 ... 5.3 |
| Field voltage | U_L | | 24 V DC |
| Admissible range | | | 18-30 V DC |
| Rated insulation voltage | U_i | V AC | 500 |
| Residual ripple | | % | According to EN 61131-2; ripple < 5 |
| Maximum operating current | I_{EI} | A | 10 |
| Maximum system supply current | I_{MB} | A | 1.5 |
| Number of diagnostic bytes | | | 4 |
| Base module without gateway power supply | | | |
| without C connection | | | 2-/3-wire XN-P3x-SBB-B |
| with C connection | | | 4-wire XN-P4x-SBBC-B |
| Power loss | P | W | 1.3 |

Notes

Permissible range for system supply:

For U_{sys} = 24 V DC: 18 - 30 V DC (to EN 61131-2)

Design verification as per IEC/EN 61439

| Technical data for design verification | | | |
|--|------------|----|--|
| Rated operational current for specified heat dissipation | I_n | A | 0 |
| Heat dissipation per pole, current-dependent | P_{vid} | W | 0 |
| Equipment heat dissipation, current-dependent | P_{vid} | W | 0 |
| Static heat dissipation, non-current-dependent | P_{vs} | W | 1.3 |
| Heat dissipation capacity | P_{diss} | W | 0 |
| Operating ambient temperature min. | | °C | 0 |
| Operating ambient temperature max. | | °C | 55 |
| Degree of Protection | | | IP20 |
| IEC/EN 61439 design verification | | | |
| 10.2 Strength of materials and parts | | | |
| 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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 Insulation properties | | | |
| 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 6.0

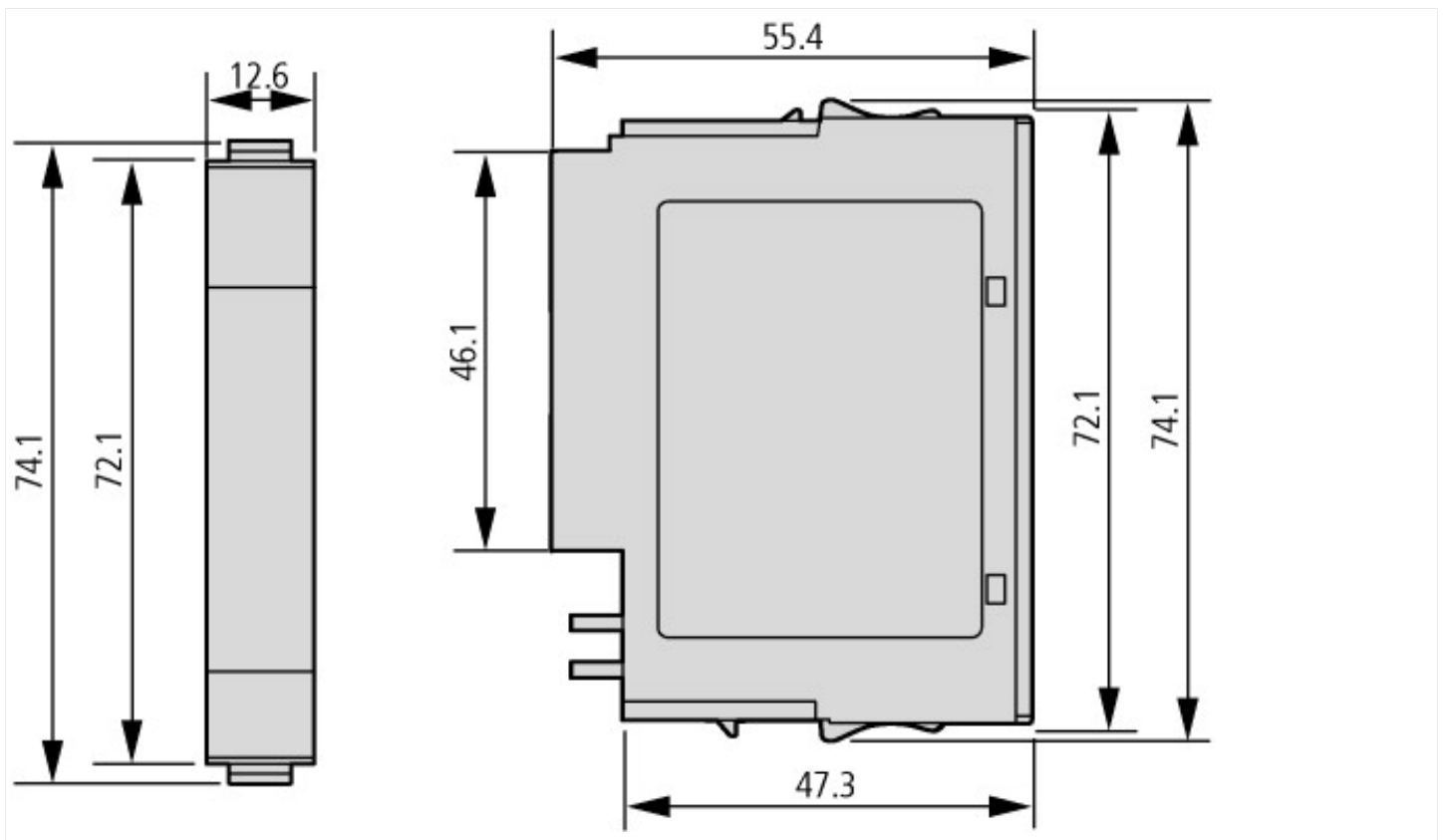
| | | |
|---|---|--------------------------------|
| PLC's (EG000024) / Fieldbus, decentr. periphery - power supply/segment module (EC001600) | | |
| Electric engineering, automation, process control engineering / Control / Field bus, decentralized peripheral / Field bus, decentralized peripheral - feed and segment module (ecl@ss8.1-27-24-26-10 [BAA071010]) | | |
| Supply voltage AC 50 Hz | V | 0 - 0 |
| Supply voltage AC 60 Hz | V | 0 - 0 |
| Supply voltage DC | V | 18 - 30 |
| Voltage type of supply voltage | | DC |
| Number of HW-interfaces industrial Ethernet | | 0 |
| Number of HW-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 other | | 1 |
| With optical interface | | 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 build in possible | | No |
| Rack-assembly possible | | No |
| Suitable for safety functions | | No |
| Category according to EN 954-1 | | |
| SIL according to IEC 61508 | | None |
| Performance level acc. 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 |
| Width | mm | 12.6 |
| Height | mm | 74.1 |
| Depth | mm | 55.4 |

Approvals

| | | |
|--------------------------------------|--|--|
| Product Standards | | UL 508; CSA-C22.2 No. 142; IEC/EN 6113-2; CE marking |
| UL File No. | | E205091 |
| UL Category Control No. | | NRAQ, NRAQ7 |
| CSA File No. | | UL report applies to both US and Canada |
| CSA Class No. | | 2252-01, 2252-81 |
| North America Certification | | UL recognized, certified by UL for use in Canada |
| Specially designed for North America | | No |
| Current Limiting Circuit-Breaker | | No |
| Degree of Protection | | IEC: IP20, UL/CSA Type: - |

Dimensions



Dimensions

Additional product information (links)

MN05002010Z Manual Digital XI/ON modules, power supply modules

MN05002010Z Handbuch Digitale XI/ON-Module Versorgungsmodule - Deutsch

ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05002010Z_DE.pdf

MN05002010Z Manual Digital XI/ON modules, power supply modules - English

ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05002010Z_EN.pdf

