



**Analog input card XI/ON, 24 V DC, 1AI (meter, 32Bit)**

**Part no.** XN-1CNT-24VDC  
**Catalog No.** 140069

**EL-Nummer (Norway)** 4520644

**Delivery program**

|                   |  |   |
|-------------------|--|---|
| Function          |  | XI/ON technology modules  |
| Function          |  | XN Slice module   |
| Short Description |  | 1 Digital input/24 V DC<br>1 Digital outputs/24 V DC<br>Counting modes: infinite, once only or periodic count<br>Frequency, rotational speed or period count<br>Acquisition of signals from rotary encoders (track A/B) |
| For use with      |  | XN-S4T-SBBS<br>XN-S4S-SBBS  |

**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  |
| 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   |            |    |  |  |
| 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 7.0

PLC's (EG000024) / Fieldbus, decentr. periphery - function-/technology module (EC001601)

Electric engineering, automation, process control engineering / Control / Field bus, decentralized peripheral / Field bus, decentralized peripheral - function-/technology module (ecl@ss10.0.1-27-24-26-05 [BAA066014])

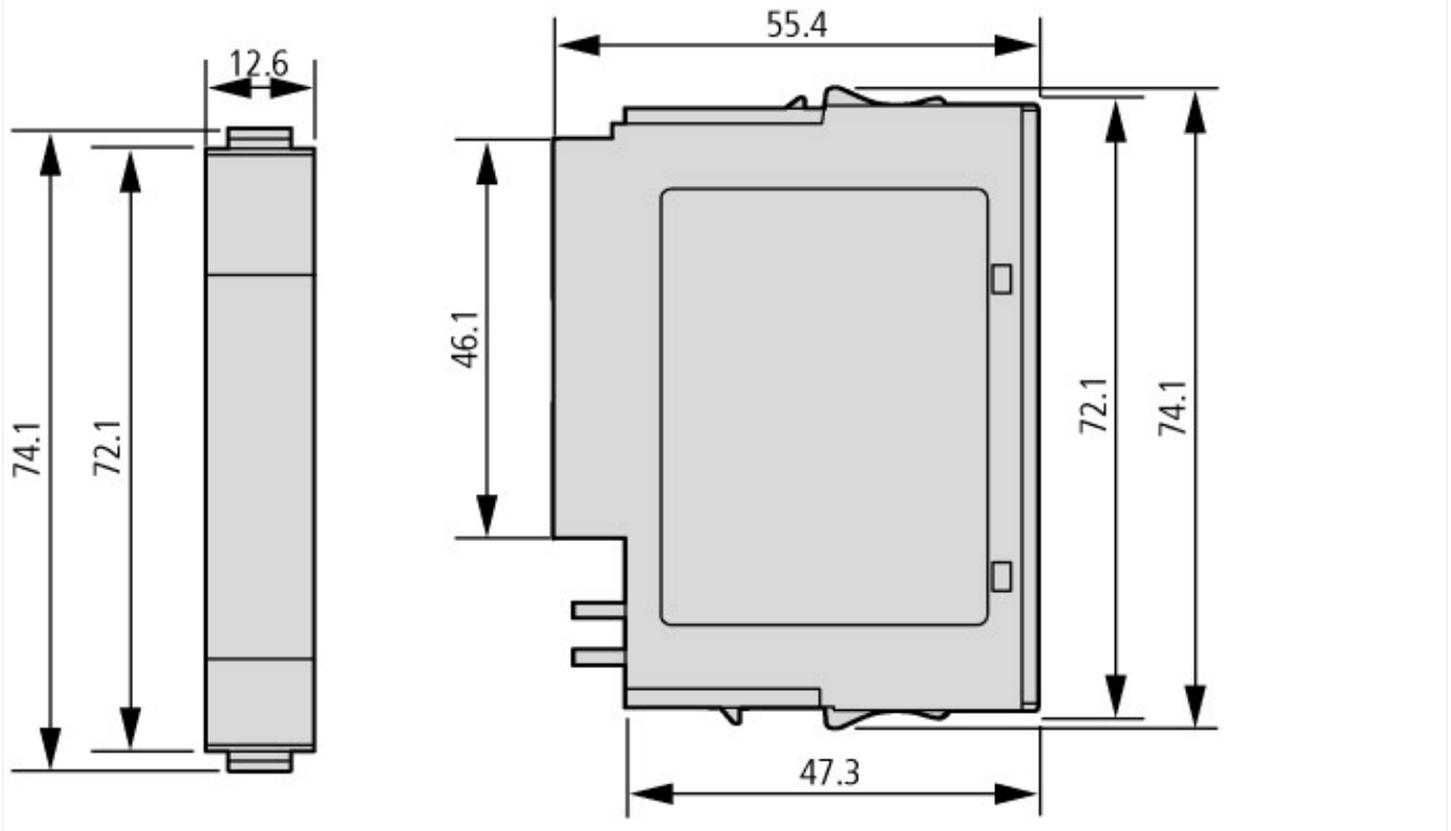
|   |   |         |
|---|---|---------|
| Supply voltage AC 50 Hz                             | V | 0 - 0   |
| Supply voltage AC 60 Hz                             | V | 0 - 0   |
| Supply voltage DC                                   | V | 11 - 30 |
| Voltage type of supply voltage                      |   | 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                       |   | 1       |
| With optical interface                              |   | No      |
| Supporting protocol for TCP/IP                      |   | No      |
| Supporting protocol for PROFIBUS                    |   | Yes     |
| Supporting protocol for CAN                         |   | Yes     |
| 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                   |   | Yes     |
| 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           |   | No      |
| 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                               |   | Yes     |
| Suitable for weighting                              |   | No      |
| Suitable for temperature control                    |   | No      |

|  |  |    |       |
|--|--|----|-------|
| Suitable for welding control                               |  |    | No    |
| Suitable for pressure control                              |  |    | No    |
| Suitable for NC  |  |    | No    |
| Function electronic positioning available                  |  |    | Yes   |
| Suitable for CNC   |  |    | No    |
| Suitable for SSI   |  |    | No    |
| Suitable for incremental data detection                    |  |    | Yes   |
| Suitable for detection absolute value                      |  |    | Yes   |
| Flux controller possible                                   |  |    | 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    |
| Single-axis controller possible                            |  |    | Yes   |
| Suitable for multi-axis positioning                        |  |    | No    |
| Single-axis positioning possible                           |  |    | Yes   |
| Function block restart blockage                            |  |    | No    |
| Function block automatic reset                             |  |    | No    |
| Contact 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                    |  |    | Yes   |
| Function block access control                              |  |    | No    |
| Degree of protection (IP)                                  |  |    | IP20  |
| Degree of protection (NEMA)                                |  |    |       |
| Fieldbus connection over separate bus coupler possible     |  |    | Yes   |
| Frequency measurement                                      |  |    | Yes   |
| Rail mounting possible                                     |  |    | No    |
| 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. 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 | 50.6  |
| Height   |  | mm | 114.8 |
| Depth  |  | mm | 74.4  |

## 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   |

## Dimensions



Dimensions

## Additional product information (links)

### User manual XI/ON technology module XN-1CNT-24VDC MN05002012Z

Benutzerhandbuch XI/ON Technologiemodul XN-1CNT-24VDC MN05002012Z - Deutsch [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN05002012Z\\_DE.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05002012Z_DE.pdf)

User manual XI/ON technology module XN-1CNT-24VDC MN05002012Z - English [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN05002012Z\\_EN.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05002012Z_EN.pdf)

Technical Data <http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=14.111>