



ECO gateway for XI/ON I/O system, SmartWire

**Part no.** XNE-1SWIRE  
**Catalog No.** 140043  
**EL-Nummer (Norway)** 4520682

**Delivery program**

Function			XI/ON technology modules
Function			XN Slice module
Short Description			Connection of up to 16 motor starters (Eaton) Up to 3 XNE-1SWIRE per XI/ON node

**Technical data**

**General**

Standards				EN 61000-6-2 EN 61000-6-4 EN 61131-2
Potential isolation				Yes, through optocoupler
Ambient temperature				
Ambient temperature, operation		°C		0 - +55
Storage, transport	ø	°C		-25 - +85
Relative humidity				
Relative humidity				5 - 95 % (indoor), Level RH-2, no condensation (for storage at 45°C)
Ambient conditions, mechanical				
Degree of Protection				IP20
Harmful gases		ppm		SO <sub>2</sub> : 10 (rel. humidity < 75%, no condensation) H <sub>2</sub> 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
Electromagnetic compatibility (EMC)				
ESD	Air/contact discharge	kV		EN 61000-4-2
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				EAC
Other technical data (sheet catalogue)				Technical Data

**Terminations**

Rated data				according to VDE 0611 Part 1/8.92 /
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			IEC/EN 60947-7-1
Connection design in TOP direction			Push-In spring-cage terminals
Stripping length	mm		8
Clamping range			max. 0.14 - 1.5 mm <sup>2</sup>
Connectable conductors			
"e" solid H07V-U	mm <sup>2</sup>		0.25 - 1.5
"f" flexible H 07V-K	mm <sup>2</sup>		0.25 - 1.5
"f" with ferrules without plastic collar according to DIN 46228-1 (ferrules crimped gas-tight)	mm <sup>2</sup>		0.25 - 1.5
"f" with ferrules with plastic collar according to DIN 46228-1 (ferrules crimped gas-tight)	mm <sup>2</sup>		0.25 - 0.75
Connectable conductors			
"e" solid H07V-U	mm <sup>2</sup>		0.25 - 1.5
"f" flexible H 07V-K	mm <sup>2</sup>		0.25 - 1.5
"f" with ferrules without plastic collar according to DIN 46228-1 (ferrules crimped gas-tight)	mm <sup>2</sup>		0.25 - 1.5
"f" with ferrules with plastic collar according to DIN 46228-1 (ferrules crimped gas-tight)	mm <sup>2</sup>		0.25 - 0.75

### Analog input modules

Rated voltage through supply terminal	U <sub>L</sub>		24 V DC
Rated current consumption from supply terminal	I <sub>L</sub>	mA	0
Rated current consumption from module bus	I <sub>MB</sub>	mA	≤ 60
Diagnostics			4

### Analog output modules

Rated voltage through supply terminal	U <sub>L</sub>		24 V DC
Rated current consumption from supply terminal	I <sub>L</sub>	mA	0
Rated current consumption from module bus	I <sub>MB</sub>	mA	≤ 60

### Digital outputs

Rated voltage through supply terminal	U <sub>L</sub>		24 V DC
Rated current consumption from the supply terminal (at load current = 0 mA)	I <sub>L</sub>	mA	0
Rated current consumption from module bus	I <sub>MB</sub>	mA	≤ 60
Power loss	P	W	Normally 1.5
Number of diagnostic bytes			4

### Digital inputs

Rated voltage through supply terminal	U <sub>L</sub>		24 V DC
Rated current consumption from supply terminal	I <sub>L</sub>	mA	0
Rated current consumption from module bus	I <sub>MB</sub>	mA	≤ 60

### Relay modules

Rated voltage through supply terminal	U <sub>L</sub>		24 V DC
Rated current consumption from supply terminal	I <sub>L</sub>	mA	0
Rated current consumption from module bus	I <sub>MB</sub>	mA	≤ 60
Power loss	P	W	Normally 1.5

### Power supply module

Rated voltage through supply terminal	U <sub>L</sub>		24 V DC
Rated current consumption from supply terminal	I <sub>L</sub>	mA	0
Rated current consumption from module bus	I <sub>MB</sub>	mA	≤ 60
Supply voltage SWIRE	U <sub>SW</sub>		24 V DC
Supply current SWIRE (LIN line at full load)			≤ 600 mA
Power supply SmartWire (contactor)			24 V DC 3 A
SWIRE connection			SWIRE-line: 1 XNE-1 SWIRE module per XI/ON station: ≤ 3 SWIRE modules per line: ≤ 16 Data per SWIRE module: max. 4I/4Q Supply of SWIRE nodes (short-circuit proof): 17 V DC Supply current of all nodes (short-circuit proof): ≤ 500
Diagnostics			4
Insulation voltage			
between interface and module bus/system voltage		V <sub>eff</sub>	500

between interface and field voltage			None
Power loss	P	W	1.5
<b>Counter module</b>			
Rated voltage through supply terminal	$U_L$		24 V DC
Rated current consumption from supply terminal	$I_L$	mA	0
Rated current consumption from module bus	$I_{MB}$	mA	$\leq 60$

### Measuring modes

Diagnostics			4
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### Interfaces

Rated voltage through supply terminal	$U_L$		24 V DC
Rated current consumption from supply terminal	$I_L$	mA	0
Rated current consumption from module bus	$I_{MB}$	mA	$\leq 60$
Power loss	P	W	Normally 1.5
Insulation voltage			
between interface and module bus/system voltage		$V_{eff}$	500
Number of diagnostic bytes			4

## 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	1.5
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.

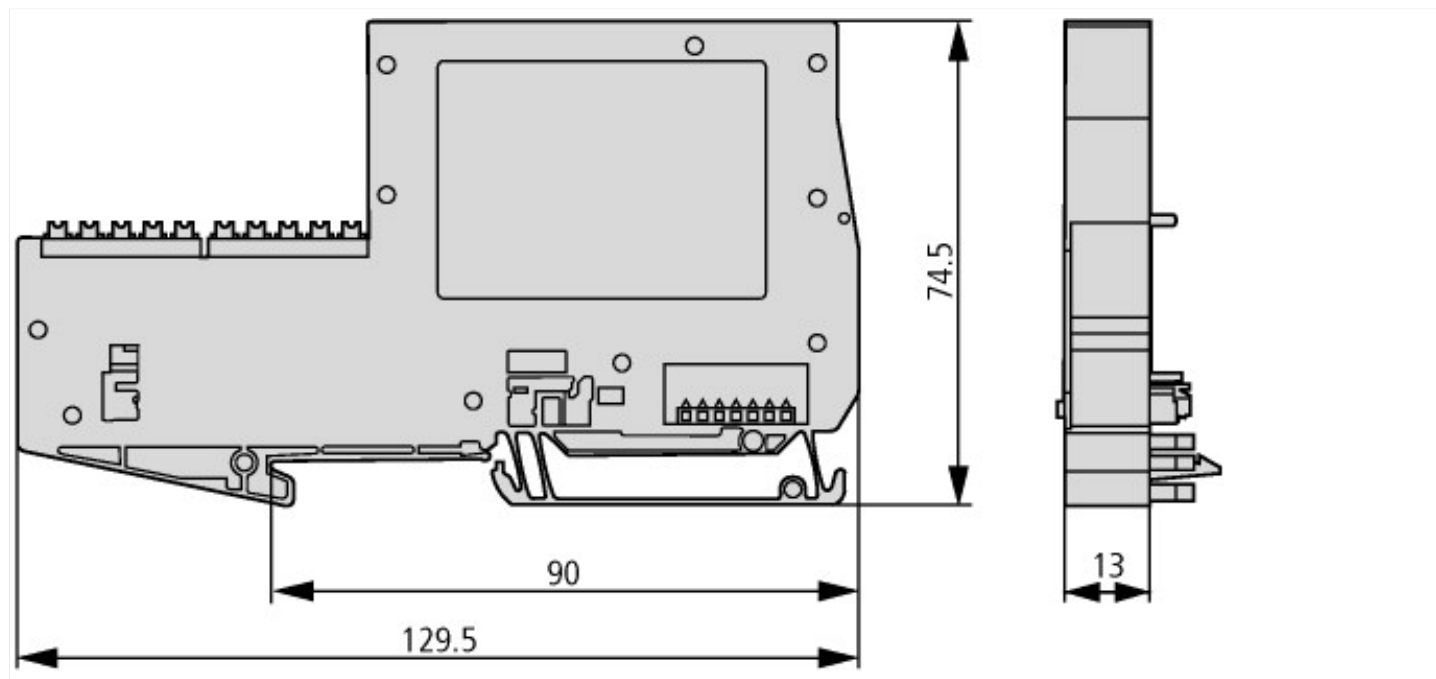
## Technical data ETIM 7.0

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
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 SERCOS		No
Supporting protocol for PROFINET IO		No
Supporting protocol for PROFINET CBA		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
Degree of protection (IP)		IP20
With potential separation		Yes
Fieldbus connection over separate bus coupler 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. 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	13
Height	mm	129.5
Depth	mm	74.5

## Approvals

Product Standards		IEC/EN 6113-2; CE marking
North America Certification		Request filed for UL and CSA
Specially designed for North America		No
Current Limiting Circuit-Breaker		No
Degree of Protection		IEC: IP20, UL/CSA Type: -

## Dimensions



Dimensions

## Assets (links)

### Declaration of CE Conformity

00002416

### Manuals

MN05002016Z\_DE (German)

MN05002016Z\_EN (English)

## Additional product information (links)

### User manual XI/ON technology module XNE-1SWIRE MN05002016Z

Benutzerhandbuch XI/ON Technologiemodul XNE-1SWIRE MN05002016Z - Deutsch [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN05002016Z\\_DE.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05002016Z_DE.pdf)

User manual XI/ON technology module XNE-1SWIRE MN05002016Z - English [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN05002016Z\\_EN.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05002016Z_EN.pdf)

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