Specifications

Eaton 140054

Catalog Number: 140054

Eaton XN Digital output module XI/ON, 24 V DC, 2DO(relays), changeover contact XN-2DO-R-CO



General specifications

Product Name
Eaton XN Output module

Catalog Number
140054

EAN
7640130120235

Product Length/Depth
55.4 mm

Product Height
74.1 mm

Product Width
12.6 mm

Product Weight
0.037 kg

Certifications
IEC/EN 6113-2
IEC/EN 61000-6-2
UL Category Control No.: NRAQ, NRAQ7
UL File No.: E205091
CE
UL Recognized
Certified by UL for use in Canada
CSA-C22.2 No. 142
CSA Class No.: 2252-01, 2252-81
IEC/EN 61000-6-4
CULus
IEC/EN 61131-2
UL 508
UL report applies to both US and Canada

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Features & Functions

Electric connection type

Screw-/spring clamp connection

Features

Fieldbus connection over separate bus coupler possible

Fitted with:

Connectable sensors for lamp loads

Connectable sensors for resistive loads

Connectable sensors for inductive loads

General

Current consumption

28 mA, from module bus, Analog input modules

20 mA, from supply terminal

Degree of protection

IP20

Lifespan, electrical

100,000 Operations (at 5 A)

1,000,000 Operations (at 0.5 A)

Mounting method

Rail mounting possible

Product category

XN Slice module

Rated load voltage

230 V AC, 30 V DC

Suitable for

Base modules without C-Connection: 4-wire

Type

XI/ON I/O module

Used with

XN-S4S-SBBS

XN-S4T-SBBS

Voltage type

AC/DC

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

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 - SO2: 10 ppm (relative humidity < 75%, no condensation)

Harmful gasses - H2S: 1 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 61100-4-2

Burst impulse

According to IEC/EN 61000-4-4

Contact discharge

According to EN 61100-4-2

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)

Electrical rating

Power loss

1 W

Rated operational voltage

24 V DC (supply terminal)

Supply voltage at AC, 50 Hz - min

0 VAC

Supply voltage at AC, 50 Hz - max

0 VAC

Supply voltage at DC - min

18 VDC

Supply voltage at DC - max

30 VDC

Uninterrupted current

Max. 2000 mA

Max. 5 A, resistive load

Communication

Protocol

Other bus systems

Input/Output

Contact type

2 changeover contacts, Relay output

Input current at signal 1

0 mA

Load current

Min. 100 mA at 12 mA (Output current per channel, 230 V AC)

Number of inputs (digital)

0

Number of outputs (digital)

2

Output current

5 A

Utilization factor

100 %

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 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.

Resources

Brochures

Slice card modular I/O system for the machine building industry XN300 - brochure

eaton-xc300-modular-plc-brochure-br050008en-en-us.pdf

Declarations of conformity

DA-DC-00003698.pdf

DA-DC-00003875.pdf

Drawings

eaton-io-modules-xion-xn-input-card-dimensions.eps

eaton-electronic-devices-xion-xn-input-card-3d-drawing.eps

eCAD model

DA-CE-ETN.XN-2DO-R-CO

Manuals and user guides

MN05002010Z_EN

mCAD model

DA-CS-xn_1rs485_422

DA-CD-xn_1rs485_422

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.



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