Product data sheet

Specifications



Discrete Output Module + Base, 16 Out, 24V DC, 500mA, Source, Protected, Ext Supply, 1/2 Wires, Hardened, Modicon Edge I/O NTS

NTSDDO1602XAHK

Product availability: Stock - Normally stocked in distribution facility

Main

Range of Product	Modicon Edge I/O NTS
Product or Component Type	Discrete output module kit
Kit composition	NTSDDO1602XAH module NTSXBA0200H base
Mandatory accessory	2x NTSXTB18_0_XH terminal block
Product Compatibility	NTSN.....
Range Compatibility	Logic/motion controller - Modicon M262 Modicon M580 Third party
Device Application	Industrial application in severe environment
Discrete output number	16
Group of output channels	2 groups of 8 channels
Discrete output logic	Positive logic (source)
Discrete output voltage	24 V DC
Operating Mode	Synchronous/Isochronous

Complementary

Discrete output number	16 transistor
Output wiring mode	1 or 2 wires
Discrete output current	500 mA per channel 4 A per group 8 A per module
Discrete output frequency	1 kHz for resistive load 0.5/LI² Hz for inductive load
Response time on output	90 µs maximum (turn on) 110 µs maximum (turn off)
Maximum leakage current	0.0001 mA per channel
Maximum voltage drop	<0.1 V per channel DC
Maximum tungsten load	<12 W
Paralleling of outputs	Yes for redundancy Yes for double current Yes for same group (maxium 2)
Output protection type	Transient voltage suppression per channel Short circuit protection per channel Overload/thermal protection per channel

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Output diagnostic	External power supply error per channel Short circuit error per channel
Power supply type	Bus power from power supply bus (24 Vdc) Field power from external power supply (24 Vdc)
Rated operational voltage limits	20.4...28.8 V DC
Typical current consumption	42 mA 24 V DC on the Bus current 0 mA 24 V DC on the internal field current
Electrical Connection	Screw/spring terminal block
Power dissipation in W	2.51 W maximum at 24 V DC
Isolation between group	500 V AC
Isolation between channels and bus	1500 V AC
Isolation between channels and ground	1500 V AC
Hot swapping fallback	Yes
Local signalling	1 LED (green) for module operating (RUN) 1 LED per channel (green) for channel diagnostic 1 LED (red) for module error (ERR)
Housing Colour	Grey
Mounting support	Top hat type TH35-7.5 rail IEC 60715 Top hat type TH35-15 rail IEC 60715
Height	4.8 in (121 mm)
Width	1.2 in (30 mm)
Depth	3.1 in (80 mm)
Product Weight	0.289 lb(US) (0.131 kg)

Environment

IP Degree of Protection	IP20
Protective treatment	Conformal coating
Marking	CE UKCA CULus RCM
Product certifications	CE UKCA CULus RCM Merchant Navy - EU RO MR (pending) EAC (pending) ATEX Zone 2 (pending) IECEx zone 2 (pending) CCC Ex zone 2 (pending)
Standards	EN/IEC 61131-2 EN 61010-2-201 UL 61010-2-201 IACS E10 EN/IEC 61000-6-5, interface type 1 and type 2 EN/IEC 61850-3, location G EN/IEC 60079-0 EN 50155 EN 50121-4 EN 50121-5
Directives	2014/30/EU - electromagnetic compatibility 2014/34/EU - ATEX directive 2014/35/EU
Ambient air temperature for operation	-40…158 °F (-40…70 °C)

Ambient air temperature for storage	-40…185 °F (-40…85 °C)
Relative humidity	5…95 % without condensation
Operating altitude	0...6561.68 ft (0...2000 m) without derating 2000...5000 m with derating
Pollution degree	2
Environmental characteristic	Gas resistant CX & GX combined Salt spray resistant
Vibration resistance	1 g without accessory 2 g with accessory
Shock resistance	15 g 11 ms with and without accessory)

Ordering and shipping details

Category	US1PC3318214
Discount Schedule	PC33
GTIN	3606486877722
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	5.512 in (14.000 cm)
Package 1 Width	1.772 in (4.500 cm)
Package 1 Length	3.346 in (8.500 cm)
Package weight(Lbs)	6.032 oz (171.000 g)
Unit Type of Package 2	S01
Number of Units in Package 2	8
Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	5.906 in (15.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	3.657 lb(US) (1.659 kg)

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Total lifecycle Carbon footprint	**35 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**15 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.2 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**19 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.4 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
SCIP Number	**36da5072-249a-4bb2-ac87-86507dce031e**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**

Use Longer

Lifetime extension

Repair	**No**

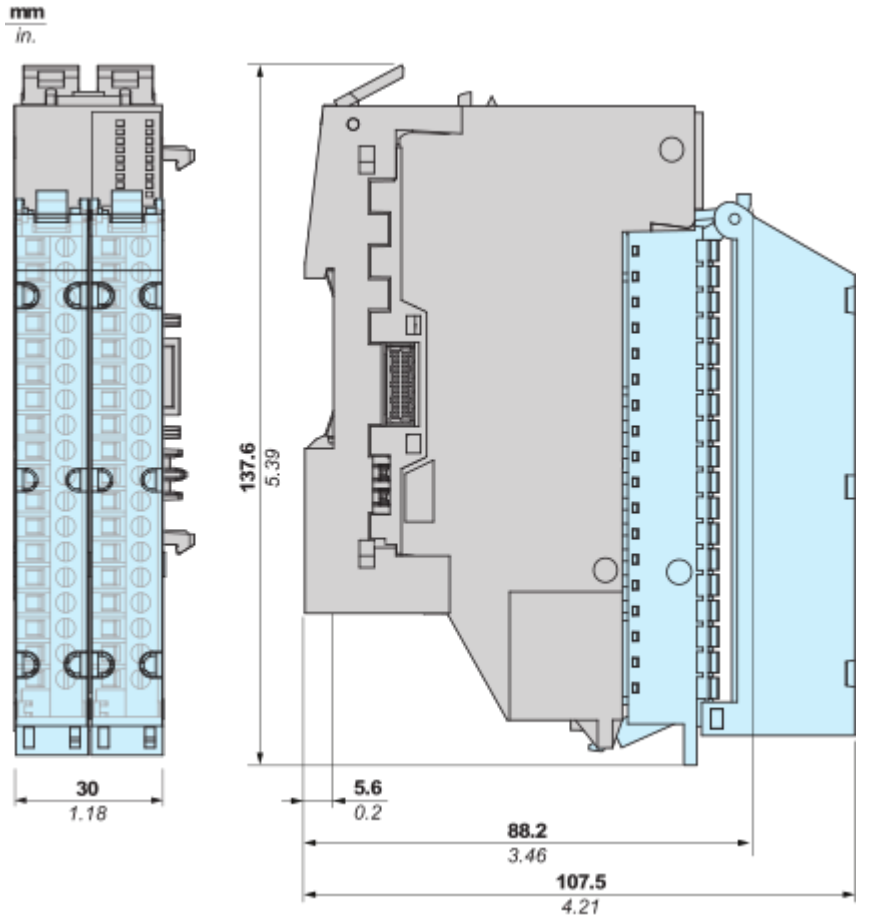
Use Again

Repack and remanufacture

Recyclability potential, in %	**0**
Circularity Profile	**End of Life Information**
Take-back	**No**

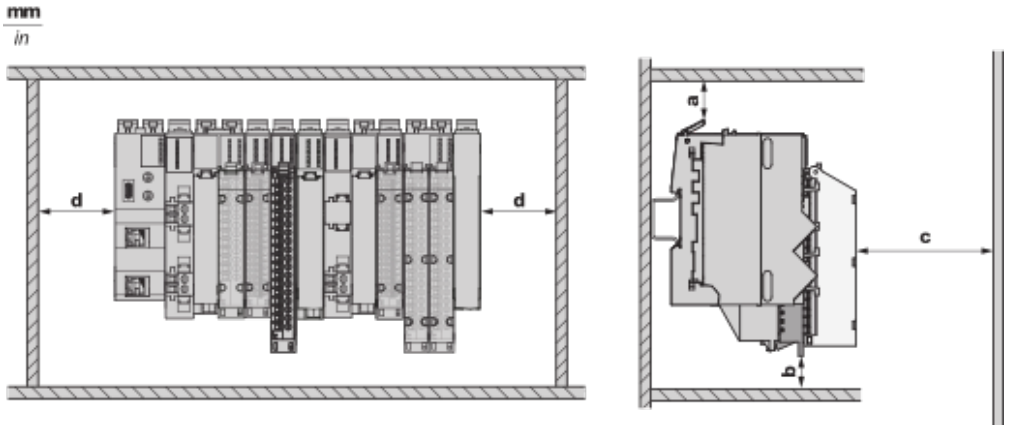
Dimensions Drawings

Dimensions



Mounting and Clearance

Minimum clearances

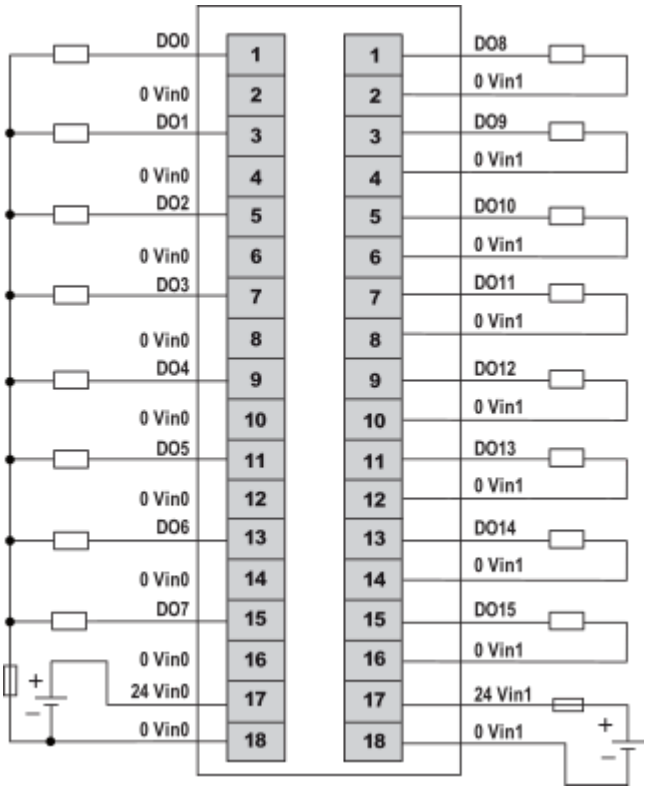


a : 50 mm (1.97 in) **b :** Without EMC kit: 25 mm (0.98 in), with EMC 55 kit: 55 mm (2.16 in) **c :** 80 mm (3.15 in) **d :** 25 mm (0.98 in)

Connections and Schema

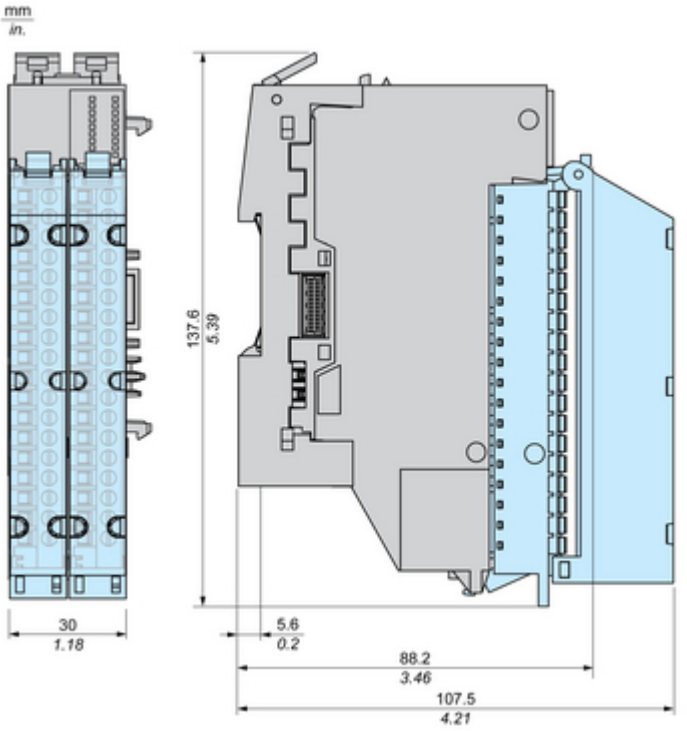
Wiring

1-wire or 2-wire connection



Technical Illustration

Dimensions



Technical Illustration

Wiring diagram

1-wire or 2-wire connection

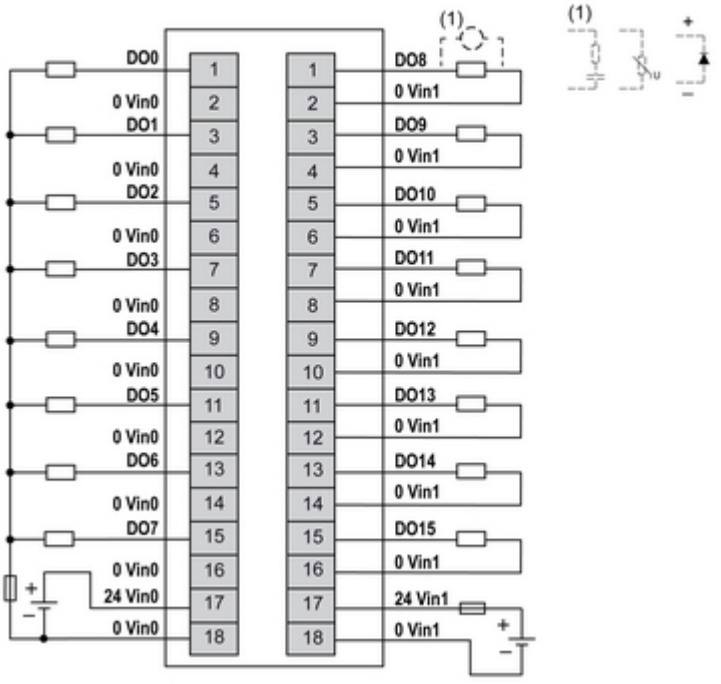
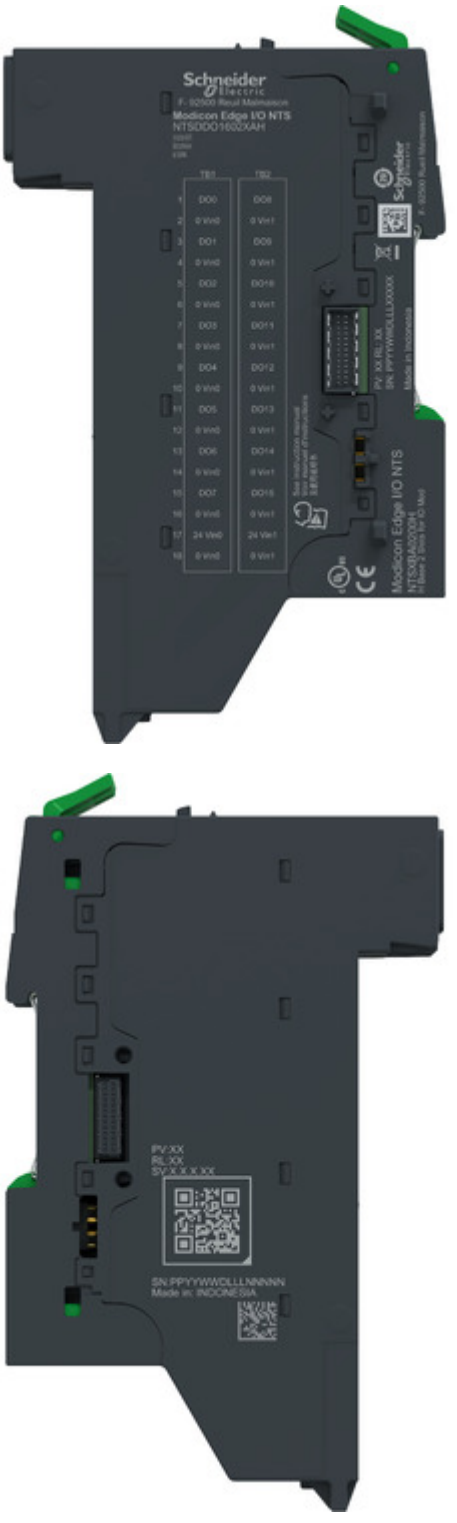


Image of product / Alternate images

Alternative









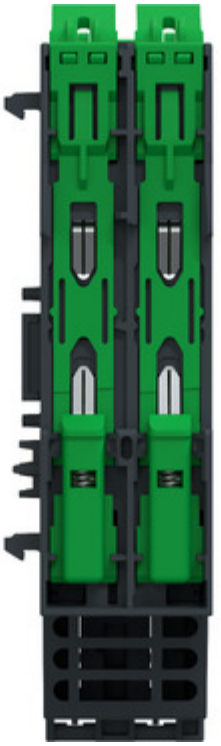


Image of product in real life situation

