Product data sheet

Specifications



Temperature Input Module + Base, 2 Isolated In, RTD, ThC, mV, 2/3/4 Wires, Modicon Edge I/O NTS

NTSART0214K

Product availability: Non-Stock - Not normally stocked in distribution facility

Main

Range of Product	Modicon Edge I/O NTS
Product or Component Type	Temperature input module kit
Kit composition	NTSART0214 module NTSXBA0100H base
Mandatory accessory	NTSXTB12_0_H terminal block
Product Compatibility	NTSN.....
Range Compatibility	Logic/motion controller - Modicon M262 Modicon M580 Third party
Device Application	Industrial Application
Analogue input number	2
Operating Mode	Asynchronous

Complementary

Analogue input type	Voltage +/- 40 mV Voltage +/- 80 mV Voltage +/- 160 mV Voltage +/- 320 mV Voltage +/- 640 mV Voltage +/- 1.28 V RTD Ni 100/Ni 1000 RTD Pt 100/Pt 1000 RTD Cu 10/50/100 RTD JPt 100/1000 RTD high precision Cu50/100, Ni100/1000, Pt100/1000 Resistor 150/300/600/2000/4500 Ohm Thermocouple type J/K/R/S/B/T/N/E/C/L/U
Input wiring mode	2, 3 or 4 wires for RTD and resistance inputs 2-wire for thermocouple and voltage inputs
Analogue input resolution	16 bits with overflow
Permitted overload on inputs	+/- 2.4 % over voltage range
Input impedance	1 MOhm typical
Sampling duration	60 ms at 50Hz rejection per channel 60 ms at 60Hz rejection per channel
Input protection type	Over voltage protection
Input diagnostic	Underflow error per channel Overflow error per channel Broken wire error per channel Hardware error per channel Calibration error per channel CJC error per channel Internal field power supply error per channel
Type of Cable	Shielded cable

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

Temperature drift	+/- 0.003 %/°C
Measurement error	<= 0.05 % FS 25 °C <= 0.09 % FS - 20…60 °C
Non-linearity	<= 0.01 % FS voltage/resistive input <= 0.01 % FS thermocouple/RTD input
Common mode rejection	100 dB
Power supply type	Bus power from power supply bus (24 Vdc) Field power from power supply field (24 Vdc)
Rated operational voltage limits	20.4...28.8 V
Typical current consumption	36 mA 24 V DC on the Bus current 16.8 mA 24 V DC on the internal field current minimum 20.2 mA 24 V DC on the internal field current maximum
Power dissipation in W	1.4 W maximum at 24 V DC
Maximum cable distance between devices	Shielded cable <164.04 ft (50 m) Shielded cable <656.2 ft (200 m)
Isolation between channels	530 V AC
Isolation between channels and bus	1500 V AC
Isolation between channels and field pwr	1000 V AC
Isolation between field power and bus	1500 V AC
Hot swapping fallback	Yes
Local signalling	1 LED green module operating (RUN) 1 LED per channel green channel diagnostic 1 LED red 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	3.9 in (100 mm)
Width	0.6 in (15 mm)
Depth	3.1 in (80 mm)
Product Weight	0.161 lb(US) (0.073 kg)

Environment

IP Degree of Protection	IP20
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 EN/IEC 61850-3 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	-4…140 °F (-20…60 °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) 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	3606486877449
Returnability	No
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	4.724 in (12.000 cm)
Package 1 Width	1.181 in (3.000 cm)
Package 1 Length	3.346 in (8.500 cm)
Package weight(Lbs)	3.598 oz (102.000 g)
Unit Type of Package 2	S01
Number of Units in Package 2	16
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	4.248 lb(US) (1.927 kg)

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	**26 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**5 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.1 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**20 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.2 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**
EU RoHS Directive	Compliant By Exemption
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
California proposition 65	**WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov**

Use Longer

Lifetime extension

Repair	**No**

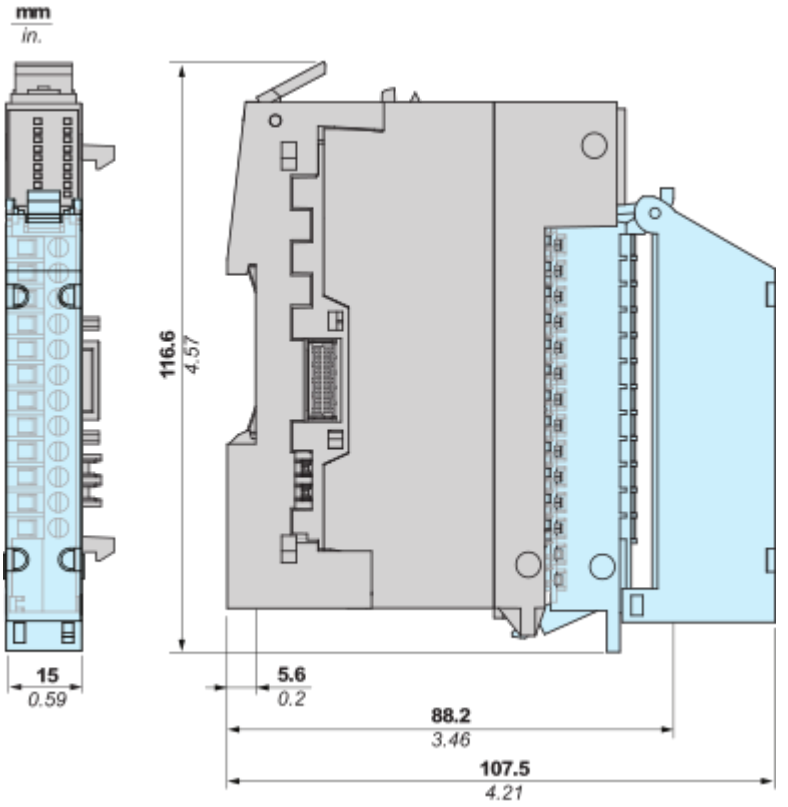
Use Again

Repack and remanufacture

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

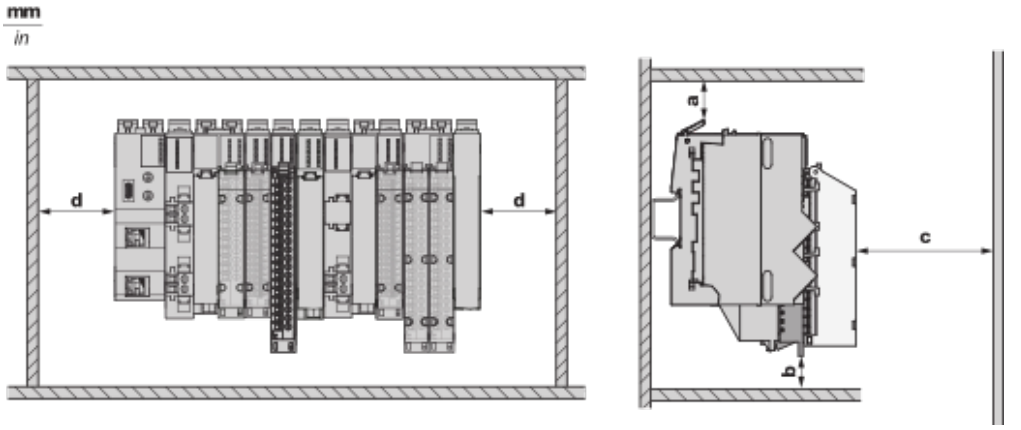
Dimensions Drawings

Dimensions



Mounting and Clearance

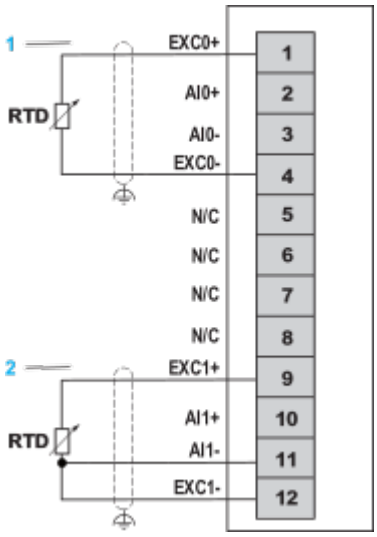
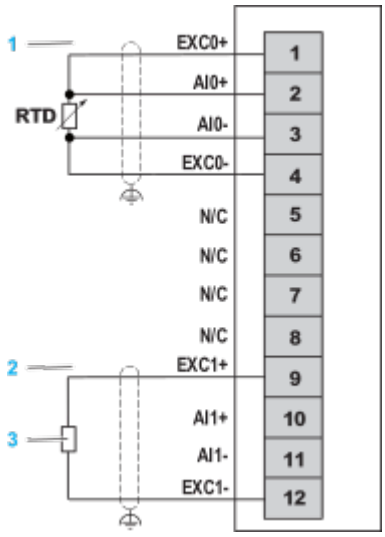
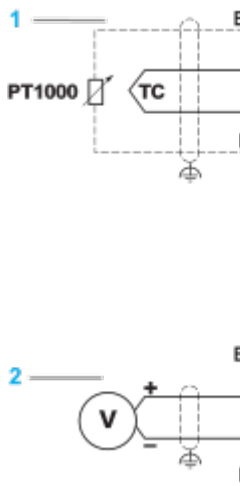
Minimum clearances



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)

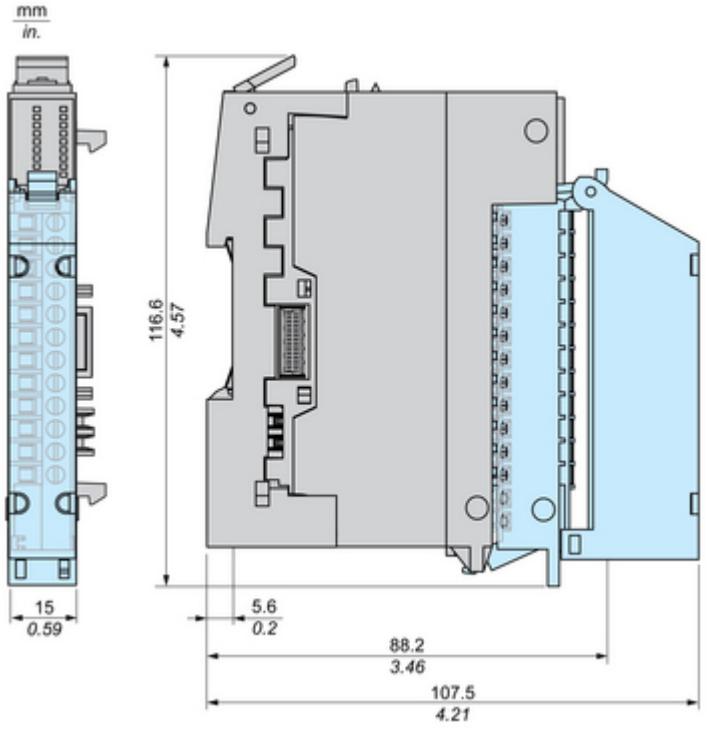
Connections and Schema

Wiring

		
1 : 2-wire connection **2** : 3-wire connection	**1** : 4-wire connection **2** : 2-wire connectio **3** : Resistance	**1** : 2-wire connection for extern **2** : 2-wire connection

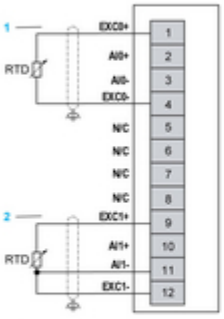
Technical Illustration

Dimensions

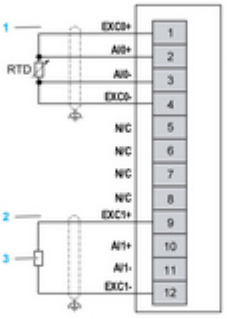


Technical Illustration

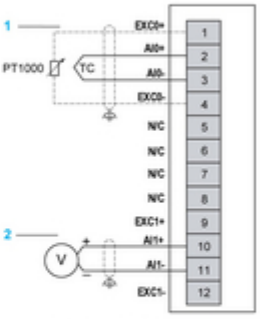
Wiring diagram



1 : 2-wire connection
2 : 3-wire connection



1 : 4-wire connection
2 : 2-wire connectio
3 : Resistance

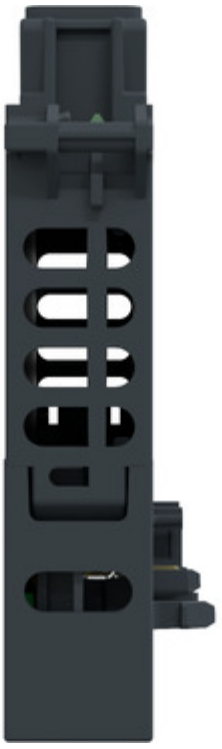


1 : 2-wire connection for external CJC
2 : 2-wire connection

Image of product / Alternate images

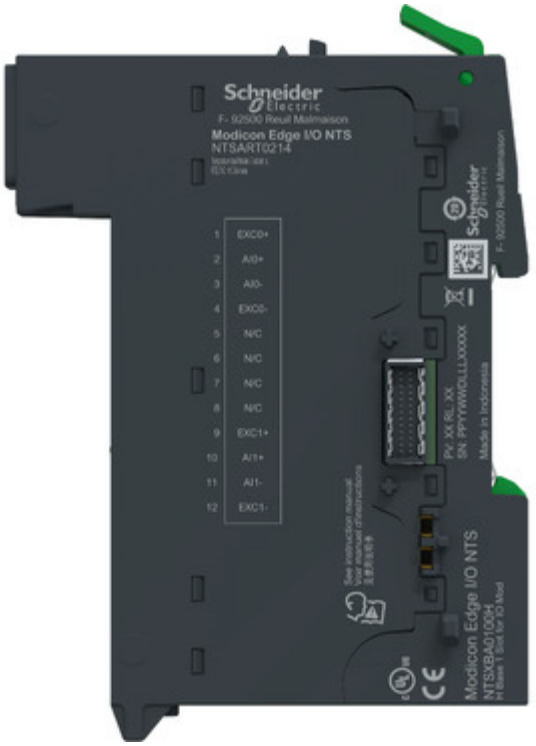
Alternative






PV:XX
RL:XX
SV:X.X.X.XX
SN:PPYYWWLLLNNNNN
Made in: INDONESIA




Schneider Electric
F- 92500 Rueil Malmaison
Modicon Edge I/O NTS
NTSART0214
1 EXC0+
2 AI0+
3 AI0-
4 EXC0-
5 N/C
6 N/C
7 N/C
8 N/C
9 EXC1+
10 AI1+
11 AI1-
12 EXC1-
Modicon Edge I/O NTS
NTSXBA01000H