Product data sheet
Characteristics

TSXAEY414
analog input module Modicon Premium - 4 I multirange

⚠ End of Commercialisation

Commercial status
End of Commercialisation :

Main

Range of product	Modicon Premium Automation platform
Product or component type	Analog input module
Input level	Low level
Analogue input number	4
Analogue input type	Current 4...20 mA Voltage +/- 10 V Voltage 0...10 V Voltage 0...5 V Voltage 1...5 V Thermocouple thermocouple B Thermocouple thermocouple E Thermocouple thermocouple J Thermocouple thermocouple K Thermocouple thermocouple L Thermocouple thermocouple N Thermocouple thermocouple R Thermocouple thermocouple S Thermocouple thermocouple T Thermocouple thermocouple U Resistor 0...3850 Ohm Resistor 0...400 Ohm Temperature probe Ni 1000 2 wires Temperature probe Ni 1000 4 wires Temperature probe Pt 100 2 wires Temperature probe Pt 100 4 wires Temperature probe Pt 1000 2 wires Temperature probe Pt 1000 4 wires Voltage - 13...63 mV Voltage +/- 5 V
Analog/digital conversion	16 bits

Complementary

Nominal read cycle time	550 ms
Measurement error	0.13 % of full scale 0...400 Ohm 25 °C 0.16 % of full scale 0...10 V 25 °C 0.19 % of full scale - 13...63 mV 25 °C 0.22 % of full scale 0...3850 Ohm 25 °C 0.22 % of full scale 0...5 V 25 °C 0.27 % of full scale +/- 10 V 25 °C 0.27 % of full scale +/- 5 V 25 °C 0.27 % of full scale 0...400 Ohm 0...60 °C 0.27 % of full scale 1...5 V 25 °C 0.39 % of full scale 0...10 V 0...60 °C 0.44 % of full scale - 13...63 mV 0...60 °C 0.45 % of full scale 0...5 V 0...60 °C 0.45 % of full scale 4...20 mA 25 °C 0.48 % of full scale 0...3850 Ohm 0...60 °C 0.5 % of full scale +/- 10 V 0...60 °C 0.5 % of full scale +/- 5 V 0...60 °C 0.56 % of full scale 1...5 V 0...60 °C 0.86 % of full scale 4...20 mA 0...60 °C 1.5 °C thermocouple B external 25 °C 1.5 °C thermocouple E external 25 °C 1.5 °C thermocouple T external 25 °C 1.5 °C thermocouple U external 25 °C 1.8 °C thermocouple J external 25 °C 10.5 °C thermocouple K internal 0...60 °C 11 °C thermocouple R internal 0...60 °C 12 °C thermocouple S internal 0...60 °C 2 °C thermocouple L external 25 °C 2 °C thermocouple N external 25 °C 2.3 °C thermocouple K external 25 °C 3.1 °C thermocouple U external 0...60 °C 3.2 °C thermocouple E external 0...60 °C 3.2 °C thermocouple R external 25 °C 3.2 °C thermocouple T external 0...60 °C 3.4 °C thermocouple S external 25 °C 3.5 °C thermocouple B external 0...60 °C 3.5 °C thermocouple B internal 25 °C 3.8 °C thermocouple J external 0...60 °C 4.1 °C thermocouple L external 0...60 °C 4.3 °C thermocouple N external 0...60 °C 4.7 °C thermocouple K external 0...60 °C 5.4 °C thermocouple U internal 25 °C 6 °C thermocouple N internal 25 °C 6 °C thermocouple R internal 25 °C 6.1 °C thermocouple E internal 25 °C 6.6 °C thermocouple S internal 25 °C 6.6 °C thermocouple T internal 25 °C 7.3 °C thermocouple J internal 25 °C 7.3 °C thermocouple U internal 0...60 °C 7.5 °C thermocouple L internal 25 °C 7.7 °C thermocouple R external 0...60 °C 7.8 °C thermocouple K internal 25 °C 8.1 °C thermocouple B internal 0...60 °C 8.1 °C thermocouple E internal 0...60 °C 8.5 °C thermocouple S external 0...60 °C 8.7 °C thermocouple N internal 0...60 °C 8.8 °C thermocouple T internal 0...60 °C 9.5 °C thermocouple J internal 0...60 °C 9.8 °C thermocouple L internal 0...60 °C 1 °C Ni 1000 25 °C 1.2 °C Pt 100 25 °C 2 °C Ni 1000 0...60 °C 2.4 °C Pt 100 0...60 °C 2.5 °C Pt 1000 25 °C 5 °C Pt 1000 0...60 °C
Isolation between channels and bus	1780 Vrms
Isolation between channels and ground	1780 Vrms
Isolation between channels	2830 Vrms
Common mode between channels	415 V AC or 200 V DC
Common mode between channels and earth	240 V AC or 110 V DC
Input overvoltage protection	-15…15 V at state 0 250 Ohm -30…30 V at state 1 250 Ohm
Electrical connection	Screw terminal block
Overcurrent	-30…30 MA at state 1 250 kOhm

Marking	CE
Current consumption	660 mA at 5 V DC
Module format	Standard
Net weight	0.32 Kg

Environment

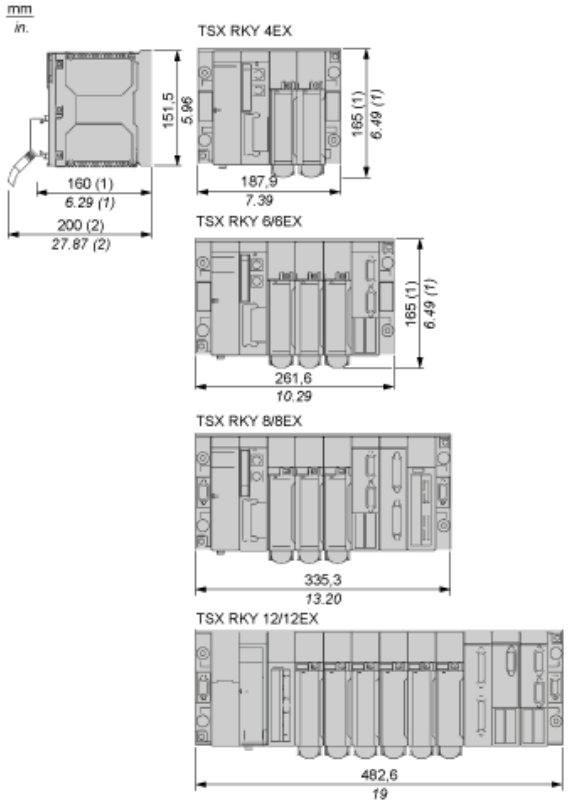
Standards	DIN 43760 IEC 584 IEC 751 DIN 43710 NFC 42-330 IEC 1131
Product certifications	DNV BV ABS RMRS RINA GL LR
Ambient air temperature for operation	0…60 °C
Ambient air temperature for storage	-25…70 °C
Relative humidity	10…95 % without condensation for operation 5…95 % without condensation for storage
Operating altitude	0...2000 m
Protective treatment	TC
IP degree of protection	IP20
Pollution degree	2

Contractual warranty

Warranty	18 months

Standard and Extendable Racks for Modules Mounting

Dimensions of Modules and Racks

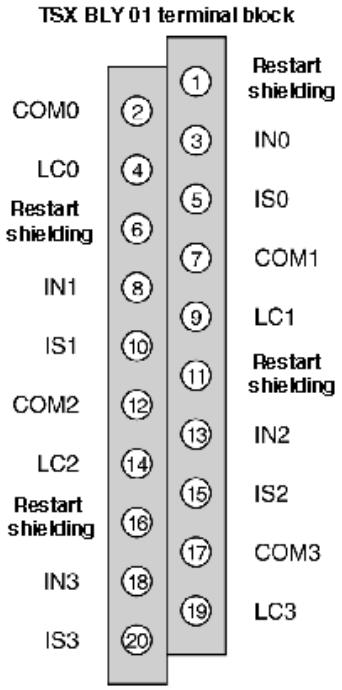


(1) With screw terminal block modules.

(2) Maximum depth for all types of modules and their associated connectors.

Analog Input Module (4-Channel, Voltage/Current/Thermocouple/Temperature Probe)

Terminal Block Pin Assignment



INx + Pole input of channel x
COMx Pole input of channel x
ISx + Pole supply of the probe
LCx Line compensation

Product Life Status :	Post commercialisation

TSXAEY414 may be replaced by any of the following products:

BMXART0414

analog input module X80 - 4 inputs - temperature

Qty 1

Reason for Substitution: End of life | Substitution date: 30 Jun 2018 |

BMXART0414

analog input module X80 - 4 inputs - temperature

Qty 1

Reason for Substitution: End of life | Substitution date: 31 Dec 2018 | Not same dimensions/design - no U/I range

BMXART0414

analog input module X80 - 4 inputs - temperature

Qty 1

Reason for Substitution: End of life | Substitution date: 31 Dec 2018 | Not same dimensions/design - no U/I range

BMXART0414

analog input module X80 - 4 inputs - temperature

Qty 1

Reason for Substitution: End of life | Substitution date: 31 Dec 2018 |

BMXART0414

analog input module X80 - 4 inputs - temperature

Qty 1

Reason for Substitution: End of life | Substitution date: 31 Mar 2019 |