

Schneider Series Service Manual

TSXASY410

1. Description

The TSXASY410 from Schneider Electric is designed as part of the TSX Micro PLCs series. This unit, weighing 200 grams, is built to handle various industrial automation tasks efficiently with a compact size of 125 x 100 x 40 mm.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Line TSX Micro PLCs
Part	Number TSXASY410
EAN	3389110748031
Weight	1.00 lbs (0.45 kg)
Humidity	5 to 95% non-condensing
Storage	Temperature -40 to 85°C
Operating	Temperature 0 to 60°C
Power	Consumption 3 W
Power	Supply 24 V DC
Response	Time 1 ms per channel
Load	Impedance Minimum 2 kΩ for voltage output, maximum 500 Ω for current output
Accuracy	±0.2% of full scale
Resolution	12-bit resolution
Current	Output Range 0 to 20 mA
Voltage	Output Range 0 to 10 V
Output	Type Voltage or current
Number	of Channels 4 analog output channels

3. Product Information

The TSXASY410 from Schneider Electric is designed as part of the TSX Micro PLCs series. This unit, weighing 200 grams, is built to handle various industrial automation tasks efficiently with a compact size of 125 x 100 x 40 mm.

Technical specifications for TSXASY410

Manufacturer Schneider Electric

Product Line TSX Micro PLCs

Part Number TSXASY410

EAN 3389110748031

Weight 1.00 lbs (0.45 kg)

Humidity 5 to 95% non-condensing

Storage Temperature -40 to 85°C

Operating Temperature 0 to 60°C

Power Consumption 3 W

Power Supply 24 V DC

Response Time 1 ms per channel

Load Impedance Minimum 2 kΩ for voltage output, maximum 500 Ω for current output

Accuracy ±0.2% of full scale

Resolution 12-bit resolution

Current Output Range 0 to 20 mA

Voltage Output Range 0 to 10 V

Output Type Voltage or current

Number of Channels 4 analog output channels

Range of Product

Modicon Premium Automation platform

Product or Component Type

Analog output module

Analogue output number

4

Analogue output type

Current 0...20 mA

Current 4...20 mA

Voltage +/- 10 V

Analog/digital conversion

11 bits + sign

Complementary

Conversion time

2.5 ms

Measurement resolution

10.25 µA 0...20 mA

10.25 µA 4...20 mA

5.12 mV +/- 10 V

Electrical Connection

Screw terminal block

Measurement error

0.45 % of full scale +/- 10 V 25 °C

0.52 % of full scale 0...20 mA 25 °C

0.52 % of full scale 4...20 mA 25 °C

0.75 % of full scale +/- 10 V 0...60 °C

0.98 % of full scale 0...20 mA 0...60 °C

0.98 % of full scale 4...20 mA 0...60 °C

Isolation between channels

1500 Vrms

Isolation between channels and bus

1500 Vrms

Isolation between channels and ground

500 V

Protection Type

Overload protection

Short-circuit protection

Output voltage limits

<= 30 V

Load impedance ohmic

< 600 Ohm 0...20 mA

< 600 Ohm 4...20 mA

> 1000 Ohm +/- 10 V

Maximum load inductance

300 µH

Maximum load capacitance

0.1 µF

Marking

CE

Current consumption

900 mA 5 V DC

Module format

Standard

Terminals description PLC n°1

(14)OUT_ANA_SHIELD#

(19)OUT_ANA_SHIELD#

(18)OUT_ANA_CUR#3

(1)OUT_ANA_VOLT#0

(5)OUT_ANA_SHIELD#

(16)OUT_ANA_VOLT#3

(15)OUT_ANA_SHIELD#

(11)OUT_ANA_VOLT#2

(12)OUT_ANA_COM#2

(20)OUT_ANA_SHIELD#

(6)OUT_ANA_VOLT#1

(7)OUT_ANA_COM#1

(2)OUT_ANA_COM#0

(13)OUT_ANA_CUR#2

(4)OUT_ANA_SHIELD#

(8)OUT_ANA_CUR#1

(9)OUT_ANA_SHIELD#

(3)OUT_ANA_CUR#0

(17)OUT_ANA_COM#3

(10)OUT_ANA_SHIELD#

Net Weight

0.77 lb(US) (0.35 kg)

Environment

Standards

CSA C22.2 No 213 Class I Division 2 Group B

CSA C22.2 No 213 Class I Division 2 Group C

CSA C22.2 No 142

92/31/EEC

89/336/EEC

CSA C22.2 No 213 Class I Division 2 Group A

93/68/EEC

IEC 61131-2

73/23/EEC

CSA C22.2 No 213 Class I Division 2 Group D

UL 508

Product Certifications

GL

ABS

RINA

DNV

RMRS

LR

BV

Ambient Air Temperature for Operation
32...140 °F (0...60 °C)
Ambient Air Temperature for Storage
-13...158 °F (-25...70 °C)
Relative Humidity
10...95 % without condensation for operation
5...95 % without condensation for storage
Operating altitude
0...6561.68 ft (0...2000 m)
Protective treatment
TC
IP Degree of Protection
IP20
Pollution degree
2
Ordering and shipping details
Category
22558-TSX PREMIUM, ATRIUM & PL7 PRO
Discount Schedule
PC22
GTIN
3389110748031
Returnability
No
Country of origin
FR
Packing Units
Unit Type of Package 1
PCE
Nbr. of units in pkg.
1
Package 1 Height
2.2 in (5.5 cm)
Package 1 Width
7.09 in (18.0 cm)
Package 1 Length
10.2 in (26.0 cm)
Package weight(Lbs)
16.0 oz (453.0 g)
Description
The TSXASY410 module from Schneider Electric fits into the TSX Micro PLCs range. It measures 125 mm in width, 100 mm in height, and 40 mm in depth. At just 200 grams, this unit is lightweight yet durable, designed for operational stability in diverse environments. This component can function effectively in settings with a humidity level of 5% to 95%, free from condensation. It can withstand storage temperatures down to -40°C and operates from 0°C to 60°C during use. Powering the device requires a 24 V DC supply, ensuring efficient operation with a low power consumption of only 3 W. The TSXASY410 boasts a rapid response time of 1 millisecond per channel, which is suitable for applications that require immediate feedback. It provides four analog output channels, with a minimum load impedance of 2 kΩ for voltage output and a maximum of 500 Ω for current output. Users can expect a current output range of 0 to 20 mA and a voltage output range of 0 to 10 V from this module. Designed for precision, it maintains an accuracy of ±0.2% of full scale coupled with a resolution of 12 bits. The flexibility in output type allows it to cater to various applications, whether voltage or current output is needed. Overall, the TSXASY410 is designed for high-performance tasks in automation, ensuring measurement reliability and precision.