

Schneider Series Service Manual

TSXDSY16T2

1. Description

The TSXDSY16T2 is a discrete output module from Schneider Electric's TSX Micro PLCs series. This module features 16 solid-state outputs and operates at a discrete output voltage of 24 V DC, which is suitable for various applications that require reliable performance.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Type Discrete output module
Product	Line TSX Micro PLCs
Part	Number TSXDSY16T2
EAN	3389110717600
Weight	1.00 lbs (0.45 kg)
Short-Circuit	Protection Electronic tripping on reactivation
Output	Overload Protection Electronic tripping on reactivation
Reverse	Polarity Protection Reverse mounted diode
Output	Overvoltage Protection By transil diode
Switching	Frequency 0.5/LI² Hz
Response	Time 1.2 ms
Residual	Voltage < 1.2 V
Leakage	Current < 0.5 mA at state 0
Current	per Module ≤ 7 A
Current	per Channel ≤ 0.625 A
Discrete	Output Current 0.5 A
Discrete	Output Voltage 24 V DC positive conforming to EN/IEC 61131-2, 19...30 V
Discrete	Output Type Solid state protected
Discrete	Output Number 16

3. Product Information

The TSXDSY16T2 is a discrete output module from Schneider Electric's TSX Micro PLCs series. This module features 16 solid-state outputs and operates at a discrete output voltage of 24 V DC, which is suitable for various applications that require reliable performance.

Technical specifications for TSXDSY16T2

Manufacturer Schneider Electric

Product Type Discrete output module

Product Line TSX Micro PLCs

Part Number TSXDSY16T2

EAN 3389110717600

Weight 1.00 lbs (0.45 kg)

Short-Circuit Protection Electronic tripping on reactivation

Output Overload Protection Electronic tripping on reactivation

Reverse Polarity Protection Reverse mounted diode

Output Overvoltage Protection By transil diode

Switching Frequency 0.5/LI² Hz

Response Time 1.2 ms

Residual Voltage < 1.2 V

Leakage Current < 0.5 mA at state 0

Current per Module ≤ 7 A

Current per Channel ≤ 0.625 A

Discrete Output Current 0.5 A

Discrete Output Voltage 24 V DC positive conforming to EN/IEC 61131-2, 19...30 V

Discrete Output Type Solid state protected

Discrete Output Number 16

Description

The TSXDSY16T2, part of Schneider Electric's TSX Micro PLCs line, is a comprehensive discrete output module tailored for diverse automation systems. It can accommodate 16 discrete outputs and operates effectively at a rated output voltage of 24 V DC, adhering to EN/IEC 61131-2 standards. The module is capable of sourcing up to 0.5 A per output channel, contributing to enhanced system performance.

Specialized protection features are integrated into the design. Electronic tripping safeguards against overload conditions and short circuits during reactivation, ensuring operational safety. A reverse-mounted diode also provides reverse polarity protection, safeguarding the device from miswired connections. Additionally, transil diodes enable output overvoltage protection, further enhancing operational reliability.

During regular operations, this module maintains a minimal leakage current of less than 0.5 mA when in the off state. The residual voltage stays below 1.2 V, ensuring clean switching performance. The module achieves a swift response time of just 1.2 ms, enabling effective real-time control and feedback processes. With a specified switching frequency of 0.5/LI² Hz, the TSXDSY16T2 caters to varying signal requirements, making it adaptable for numerous applications. The maximum current rating for the module is set at 7 A, allowing for robust connectivity options in demanding environments.

Range of Product

Modicon Premium Automation platform

Product or Component Type

Discrete output module

Discrete output number

16

Discrete output type

Solid state protected

Discrete output voltage

24 V DC positive EN/IEC 61131-2 19...30 V

Discrete output current

0.5 A

Complementary

Current per channel

0.625 A

Maximum current per module

7 A

Maximum leakage current

0.5 mA at state 0

[Ures] residual voltage

1.2 V

Response time

1.2 ms

Switching frequency

0.5/LI² Hz

Output overvoltage protection

By transil diode

Reverse polarity protection

Reverse mounted diode

Output overload protection

Electronic tripping on reactivation

Short-circuit protection

Electronic tripping on reactivation

Preactuator voltage detection threshold

16 V

Minimum load impedance

48 W

isolation resistance

> 10 MOhm 500 V

Power dissipation

(1.1 W + 0.75 W x No of outputs x current per module)

Marking

CE

Electrical connection

Screw terminal block

Current consumption

80 mA 5 V DC

Module format

Standard

Net Weight

0.75 lb(US) (0.34 kg)

Environment

Dielectric strength

1500 V 50/60 Hz 60 s

Standards

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

CSA C22.2 No 142

93/68/EEC

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

89/336/EEC

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

UL 508

IEC 61131-2

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

73/23/EEC

92/31/EEC

Product Certifications

DNV

RMRS

GL

BV

ABS

RINA

LR

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
US1PC2222558
Discount Schedule
PC22
GTIN
3389110717600
Returnability
No