

Schneider Series Service Manual

TSXDSY32T2K

1. Description

The TSXDSY32T2K from Schneider Electric is a versatile output module within the TSX Micro PLC series. This unit integrates 32 discrete solid-state outputs designed to operate efficiently within industrial environments. Each channel manages a current of up to 0.1 A, with a voltage specification of 24 V DC, ensuring compliance with the EN/IEC 61131-2 standards.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Line TSX Micro PLCs
Part	Number TSXDSY32T2K
EAN	3389110725575
Weight	1.00 lbs (0.45 kg)
Tungsten	Load ≤ 1.2 W
Residual	Voltage < 1.5 V
Response	Time 1.2 ms
Paralleling	of Outputs Yes, up to 3 maximum
Discrete	Output Count 32 outputs
Output	Overvoltage Protection By transil diode
Discrete	Output Type Solid state protected
Discrete	Output Voltage 24 V DC positive, compliant with EN/IEC 61131-2 standards
Current	per Channel ≤ 0.1 A
Reverse	Polarity Protection Reverse mounted diode
Output	Overload Protection Automatic trip
Short-Circuit	Protection Automatic trip
Load	Impedance > 220 Ω at state 1
Leakage	Current < 0.1 mA at 30 V
Current	per Module ≤ 3.2 A

3. Product Information

The TSXDSY32T2K from Schneider Electric is a versatile output module within the TSX Micro PLC series. This unit integrates 32 discrete solid-state outputs designed to operate efficiently within industrial environments. Each channel manages a current of up to 0.1 A, with a voltage specification of 24 V DC, ensuring compliance with the EN/IEC 61131-2 standards.

Technical specifications for TSXDSY32T2K

Manufacturer Schneider Electric

Product Line TSX Micro PLCs

Part Number TSXDSY32T2K

EAN 3389110725575

Weight 1.00 lbs (0.45 kg)

Tungsten Load $\leq 1.2\text{ W}$

Residual Voltage $< 1.5\text{ V}$

Response Time 1.2 ms

Paralleling of Outputs Yes, up to 3 maximum

Discrete Output Count 32 outputs

Output Overvoltage Protection By transil diode

Discrete Output Type Solid state protected

Discrete Output Voltage 24 V DC positive, compliant with EN/IEC 61131-2 standards

Current per Channel $\leq 0.1\text{ A}$

Reverse Polarity Protection Reverse mounted diode

Output Overload Protection Automatic trip

Short-Circuit Protection Automatic trip

Load Impedance $> 220\ \Omega$ at state 1

Leakage Current $< 0.1\text{ mA}$ at 30 V

Current per Module $\leq 3.2\text{ A}$

Description

The TSXDSY32T2K model from Schneider Electric belongs to the TSX Micro PLC series. This output module is engineered with 32 discrete outputs that are solid-state protected, ensuring high reliability. It operates at a 24 V DC positive voltage, making it suitable for various automation applications while adhering to EN/IEC 61131-2 standards. Each output channel can handle a maximum load of 0.1 A, and the module can support a total current of up to 3.2 A. A notable feature is the low residual voltage at less than 1.5 V, which contributes to energy efficiency. The response time is quick, measured at 1.2 milliseconds, facilitating responsive control in automated systems. This output module allows for paralleling outputs, enabling users to combine up to three outputs for higher load capacity. A transit diode provides protection against overvoltage, while a reverse-mounted diode achieves reverse polarity protection. Additionally, the module features automatic trip mechanisms for both overload and short-circuit conditions, enhancing operational safety and reliability. This unit maintains a leakage of less than 0.1 mA at 30 V for applications that demand low leakage currents, supporting sensitive electronic systems. Moreover, the load impedance requirement exceeds 220 ohms at state 1, ensuring compatibility with various loads. This combination of features positions the TSXDSY32T2K as a robust choice for modern industrial control needs.

Range of Product

Modicon Premium Automation platform

Product or Component Type

Discrete output module

Discrete output number

32

Discrete output type

Solid state protected

Discrete output voltage

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

Complementary

Current per channel

0.1 A

Maximum current per module

3.2 A

Maximum leakage current

0.1 mA 30 V

Maximum tungsten load

1.2 W

[Ures] residual voltage

1.5 V

Response time

1.2 ms

Paralleling of outputs

Yes : 3 maximum

Output overvoltage protection

By transil diode

Reverse polarity protection

Reverse mounted diode

Output overload protection

Automatic trip

Short-circuit protection

Automatic trip

Minimum load impedance

220 W at state 1

isolation resistance

> 10 MOhm 500 V

Power dissipation

(1.6 W + 0.1 W x No of outputs)

Product Compatibility

Dial and Power

Marking

CE

Electrical connection

2 connectors HE-10

Current consumption

140 mA 5 V DC

Module format

Standard

Net Weight

0.7 lb(US) (0.3 kg)

Environment

Dielectric strength

1500 V 50/60 Hz 60 s

Standards

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

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

CSA C22.2 No 142

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

73/23/EEC

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

IEC 61131-2

89/336/EEC

UL 508

92/31/EEC

93/68/EEC

Product Certifications

ABS

RINA

GL

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

US1PC2222558

Discount Schedule

PC22

GTIN

3389110725575

Returnability

No

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)

14.7 oz (417.0 g)