

Schneider Series Service Manual

TSXDSY64T2K

1. Description

The TSXDSY64T2K is a solid-state protected module with 64 discrete outputs, specifically designed for 24 V DC positive systems within the Schneider Electric TSX Micro PLC range. It offers comprehensive protection features, including short-circuit, overload, and reverse polarity safeguards.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Line TSX Micro PLCs
Part	Number TSXDSY64T2K
EAN	3389110725582
Weight	1.00 lbs (0.45 kg)
Discrete	Output Number 64
Discrete	Output Type Solid state protected
Discrete	Output Voltage 24 V DC positive (EN/IEC 61131-2 19...30 V)
Current	per Channel ≤ 0.1 A
Current	per Module ≤ 5 A
Leakage	Current < 0.1 mA at 30 V
Tungsten	Load ≤ 1.2 W
Residual	Voltage < 1.5 V
Response	Time 1.2 ms
Paralleling	of Outputs Yes, up to 3 maximum
Output	Overvoltage Protection By transil diode
Reverse	Polarity Protection Reverse mounted diode
Output	Overload Protection Automatic trip
Short-Circuit	Protection Automatic trip
Load	Impedance > 220 W at state 1

3. Product Information

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Technical specifications for TSXDSY64T2K

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Product Line TSX Micro PLCs

Part Number TSXDSY64T2K

EAN 3389110725582

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Residual Voltage < 1.5 V

Response Time 1.2 ms

Paralleling of Outputs Yes, up to 3 maximum

Output Overvoltage Protection By transil diode

Reverse Polarity Protection Reverse mounted diode

Output Overload Protection Automatic trip

Short-Circuit Protection Automatic trip

Load Impedance > 220 W at state 1

Description

The Schneider Electric TSXDSY64T2K module is a flexible solution for applications requiring multiple discrete outputs. Specifically designed for 24 V DC systems, it comprises 64 solid-state outputs, enabling precise control in various automation scenarios.

With a maximum current rating of 0.1 A per output channel and an aggregate capacity of up to 5 A across the module, it is suitable for diverse operational requirements. Each output keeps leakage current below 0.1 mA at 30 V, ensuring efficient power usage. Maneuvering through switching demands, the module activates with a swift response time of 1.2 ms, maintaining operational integrity.

Protection mechanisms enhance the TSXDSY64T2K's reliability. It features transit diodes for output overvoltage protection and includes reverse polarity safeguards through reverse-mounted diodes. Furthermore, short-circuit and overload situations trigger automatic trip mechanisms, ensuring safety and preventing damage to connected devices. In addition, the module supports paralleled outputs, allowing up to three outputs to work in unison, thus enhancing versatility in system design. It accommodates a maximum load of 1.2 W for applications requiring tungsten loads and ensures appropriate load impedance above 220 W. The residual voltage is kept under 1.5 V, ensuring minimal residual energy is present after switching.

Range of Product

Modicon Premium Automation platform

Product or Component Type

Discrete output module

Discrete output number

64

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

5 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

(2.4 W + 0.1 W x No of outputs)

Product Compatibility

Dial and Power

Marking

CE

Electrical connection

4 connectors HE-10

Current consumption

155 mA 5 V DC

Module format

Standard

Net Weight

0.79 lb(US) (0.36 kg)

Environment

Dielectric strength

1500 V 50/60 Hz 60 s

Standards

UL 508

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

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

93/68/EEC

89/336/EEC

IEC 61131-2

CSA C22.2 No 142

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

92/31/EEC

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

73/23/EEC

Product Certifications

RINA

DNV

BV

ABS

GL

RMRS

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

3389110725582

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)

17.7 oz (503.0 g)