

Schneider Series Service Manual

TSXDSY16S5

1. Description

The TSXDSY16S5 is a discrete output module from Schneider Electric's TSX Micro PLCs series, designed for reliable performance in industrial applications. It supports triac-protected outputs and operates within a voltage range of 48 to 240 V AC, making it suitable for diverse operational needs.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Type Discrete output module
Product	Line TSX Micro PLCs
Part	Number TSXDSY16S5
EAN	3389110876246
Weight	1.00 lbs (0.45 kg)
Response	Time < 10 ms deactivation, < 10 ms activation
Output	Overvoltage Protection Ge-Mov
Discrete	Output Number 16
Discrete	Output Type Triac protected
Discrete	Output Voltage 48...240 V AC conforming to EN/IEC 61131-2, 41...264 V
Current	per Channel ≤ 1 A
Current	per Module ≤ 12 A
Current	Consumption 220 mA at 5 V DC
Electrical	Connection Screw terminal block
Marking	CE
Power	Dissipation 0.85 W + 1 W x number of outputs x current per module
Isolation	Resistance > 10 MOhm at 500 V
Short-circuit	Protection 5 A, integrated fuse fast blow
Output	Overload Protection 5 A, integrated fuse fast blow
Range	of Product
Modicon	Premium Automation platform
Product	or Component Type
Discrete	output module
Discrete	output number
16	
Discrete	output type
Triac	protected
Discrete	output voltage
48...240	V AC EN/IEC 61131-2 41...264 V
Compl	

3. Product Information

The TSXDSY16S5 is a discrete output module from Schneider Electric's TSX Micro PLCs series, designed for reliable performance in industrial applications. It supports triac-protected outputs and operates within a voltage range of 48 to 240 V AC, making it suitable for diverse operational needs.

Technical specifications for TSXDSY16S5

Manufacturer Schneider Electric

Product Type Discrete output module

Product Line TSX Micro PLCs

Part Number TSXDSY16S5

EAN 3389110876246

Weight 1.00 lbs (0.45 kg)

Response Time < 10 ms deactivation, < 10 ms activation

Output Overvoltage Protection Ge-Mov

Discrete Output Number 16

Discrete Output Type Triac protected

Discrete Output Voltage 48...240 V AC conforming to EN/IEC 61131-2, 41...264 V

Current per Channel ≤ 1 A

Current per Module ≤ 12 A

Current Consumption 220 mA at 5 V DC

Electrical Connection Screw terminal block

Marking CE

Power Dissipation 0.85 W + 1 W x number of outputs x current per module

Isolation Resistance > 10 MOhm at 500 V

Short-circuit Protection 5 A, integrated fuse fast blow

Output Overload Protection 5 A, integrated fuse fast blow

Range of Product

Modicon Premium Automation platform

Product or Component Type

Discrete output module

Discrete output number

16

Discrete output type

Triac protected

Discrete output voltage

48...240 V AC EN/IEC 61131-2 41...264 V

Complementary

Current per channel

1 A

Maximum current per module

12 A

Response time

< 10 ms (activation)

< 10 ms (deactivation)

Output overvoltage protection

Ge-Mov

Output overload protection

5 A, integrated fuse fast blow

Short-circuit protection

5 A, integrated fuse fast blow

isalotion resistance

> 10 MOhm 500 V

Power dissipation

(0.85 W + 1 W x No of outputs x current per module)

Marking

CE

Electrical connection

Screw terminal block

Current consumption

220 mA 5 V DC

Module format

Standard

Net Weight	
0.68 lb(US) (0.31 kg)	
Environment	
Dielectric strength	
2000 V 50/60 Hz 60 s	
Standards	
IEC 61131-2	
73/23/EEC	
CSA C22.2 No 213 Class I Division 2 Group B	
89/336/EEC	
UL 508	
93/68/EEC	
CSA C22.2 No 213 Class I Division 2 Group D	
CSA C22.2 No 213 Class I Division 2 Group C	
CSA C22.2 No 213 Class I Division 2 Group A	
92/31/EEC	
CSA C22.2 No 142	
Product Certifications	
ABS	
RMRS	
LR	
GL	
BV	
DNV	
RINA	
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	
3389110876246	
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)

16.0 oz (453.0 g)

Description

The Schneider Electric TSXDSY16S5 discrete output module is built to serve critical tasks within micro PLC applications. It provides 16 discrete outputs that are triac protected, ensuring robust operational performance under varying loads. The module is conducive to a voltage range from 48 to 240 V AC, compliant with the EN/IEC 61131-2 standards for reliability and safety. For effective channel handling, currents can reach up to ≤ 1 A, while the cumulative output per module does not exceed 12 A.

Power consumption is nominal at 220 mA when operating at 5 V DC, ensuring efficient usage of power resources. Each output offers a rapid response time, with both activation and deactivation occurring in less than 10 milliseconds. Reliability is further enhanced with a Ge-Mov output overvoltage protection and an isolation resistance exceeding 10 MOhm at 500 V.

The TSXDSY16S5 module's design includes integrated fast blow fuses that provide both short-circuit and output overload protection at a threshold of 5 A, safeguarding against potential system faults. The electrical connections are made via a screw terminal block, allowing for straightforward and secure installation. The module is marked with CE certification, indicating compliance with relevant European standards. Power dissipation calculations are straightforward, expressed as 0.85 W plus 1 W for each output channel multiplied by the current per module, ensuring users can assess the thermal management requirements accurately.