

Schneider Series Service Manual

TSXDMZ28AR

1. Description

The TSXDMZ28AR is a discrete I/O module from Schneider Electric's TSX Micro PLCs series. It can operate efficiently within a temperature range of -25°C to +70°C, making it suitable for various environments.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Type Discrete I/O module
Product	Line TSX Micro PLCs
Part	Number TSXDMZ28AR
EAN	3389110540444
Weight	1.00 lbs (0.45 kg)
Operating	Temperature -25°C to +70°C
Power	Consumption 3 W
Isolation	500 V AC between channels and logic
Response	Time 10 ms
Input	Impedance 3.4 kΩ
Input	Current 7 mA per channel
Input	Voltage 24 V DC
Number	of Channels 28 (16 inputs and 12 relay outputs)
Certifications	CE, UL, CSA
Mounting	DIN rail
Humidity	5% to 95% non-condensing
Storage	Temperature -40°C to +85°C
Range	of product
Modicon	TSX Micro automation platform
Product	or component type
Discrete	relay I/O base
Discrete	input number
16	screw terminal block
Discrete	input voltage
100...120	V AC
Discrete	input frequency
47...63	Hz
Discrete	input current
11	mA 50 Hz
13	mA 60 Hz
Complementary	
Input	voltage limits
>=	74 V at state 1
<	20 V at state 0
Current	state 0 guaranteed
<=	4 mA
Current	state 1 guaranteed
>=	6 mA
Response	time
<	10 ms output
11...18	ms input at state 0

3. Product Information

The TSXDMZ28AR is a discrete I/O module from Schneider Electric's TSX Micro PLCs series. It can operate efficiently within a temperature range of -25°C to +70°C, making it suitable for various environments.

Technical specifications for TSXDMZ28AR

Manufacturer Schneider Electric

Product Type Discrete I/O module

Product Line TSX Micro PLCs

Part Number TSXDMZ28AR

EAN 3389110540444

Weight 1.00 lbs (0.45 kg)

Operating Temperature -25°C to +70°C

Power Consumption 3 W

Isolation 500 V AC between channels and logic

Response Time 10 ms

Input Impedance 3.4 kΩ

Input Current 7 mA per channel

Input Voltage 24 V DC

Number of Channels 28 (16 inputs and 12 relay outputs)

Certifications CE, UL, CSA

Mounting DIN rail

Humidity 5% to 95% non-condensing

Storage Temperature -40°C to +85°C

Range of product

Modicon TSX Micro automation platform

Product or component type

Discrete relay I/O base

Discrete input number

16 screw terminal block

Discrete input voltage

100...120 V AC

Discrete input frequency

47...63 Hz

Discrete input current

11 mA 50 Hz

13 mA 60 Hz

Complementary

Input voltage limits

>= 74 V at state 1

< 20 V at state 0

Current state 0 guaranteed

<= 4 mA

Current state 1 guaranteed

>= 6 mA

Response time

< 10 ms output

11...18 ms input at state 0 to state 1 50 Hz

9...16 ms input at state 0 to state 1 60 Hz

11...24 ms input at state 1 to state 0 50 Hz

10...22 ms input at state 1 to state 0 60 Hz

Input compatibility

2-wire proximity sensor

Load type

Capacitive

Current consumption

125 mA

Power dissipation in W

5.6 W

Output voltage limits

19...264 V AC

10...34 V DC

Contacts type and composition

NO

Power consumption in VA

50 VA 24 V AC-12 resistive

110 VA 48 V AC-12 resistive

220 VA 110 V AC-12 resistive

220 VA 220 V AC-12 resistive

24 VA 24 V AC-15 inductive

24 VA 48 V AC-15 inductive

220 VA 220 V AC-15 inductive

110 VA 110 V AC-15 inductive

Power consumption in W

40 W 24 V DC-12 resistive

24 W 24 V DC-13 inductive

Isolation voltage

1500 V 1 s

Insulation resistance

>= 10 mOhm

Net weight

1.1 lb(US) (0.5 kg)

Environment

Standards

IEC 1131-2 Type 2

[Ith] conventional free air thermal current

3 A

Packing Units

Unit Type of Package 1

PCE

Number of Units in Package 1

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 1 Weight

22.9 oz (650.0 g)

Description

Schneider Electric offers the TSXDMZ28AR, a discrete I/O module specifically engineered for their TSX Micro PLCs series. This unit can function under a wide range of temperatures from -25°C to +70°C. It consumes minimal power, rated at just 3 W, which enhances its efficiency. Isolation specifications ensure a safe operation, providing 500 V AC separation between channels and logic.

The module incorporates 28 channels, including 16 input channels and 12 relay outputs, allowing for versatile applications in various control processes. It works with an input voltage of 24 V DC and features an input impedance of 3.4 kΩ. The response time for each channel is a quick 10 ms, with an input current requirement of 7 mA per channel.

The compact dimensions of the TSXDMZ28AR measure 125 mm in length, 32 mm in width, and 90 mm in height, and it weighs 0.3 kg, making it efficient for integration into different systems. The unit is designed for DIN rail mounting, which is frequently preferred in industrial environments. It also operates well in varied humidity levels, maintaining performance in conditions ranging from 5% to 95% non-condensing.

For storage, the module withstands extreme temperatures of -40°C to +85°C, ensuring reliability even in harsh conditions. The TSXDMZ28AR adheres to international certification standards, including CE, UL, and CSA, which underscores its quality and compliance in safety and performance features.