

Schneider Series Service Manual

TSXDMZ28DR

1. Description

The TSXDMZ28DR, a discrete relay I/O base by Schneider Electric, is designed with various input and output specifications to facilitate robust control processes. It supports a wide range of output voltage and is suitable for numerous applications.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Type Discrete relay I/O base
Product	Line TSX Micro PLCs
Part	Number TSXDMZ28DR
EAN	3389110540543
Weight	1.00 lbs (0.45 kg)
Isolation	Voltage 1500 V for 1 second
Contacts	Type and Composition Normally Open (NO)
Output	Voltage Limits 10 to 34 V DC, 19 to 264 V AC
Power	Dissipation 4.5 W
Current	Consumption 160 mA positive, 131 mA negative
Load	Type Resistive
Input	Compatibility 2-wire/3-wire proximity sensor
Response	Time 0.1 to 7.5 ms (input at state 0 to state 1 and vice versa)
Input	Impedance 4 Ohm
Input	Current Limits ≤ 1.5 mA at state 0, ≥ 2.5 mA at state 1
Input	Voltage Limits ≤ 8 V at state 1
Discrete	Input Current 9 mA
Discrete	Input Voltage 24 V DC (negative)
Discrete	Input Number 16 screw terminal blocks

3. Product Information

The TSXDMZ28DR, a discrete relay I/O base by Schneider Electric, is designed with various input and output specifications to facilitate robust control processes. It supports a wide range of output voltage and is suitable for numerous applications.

Technical specifications for TSXDMZ28DR

Manufacturer Schneider Electric

Product Type Discrete relay I/O base

Product Line TSX Micro PLCs

Part Number TSXDMZ28DR

EAN 3389110540543

Weight 1.00 lbs (0.45 kg)

Isolation Voltage 1500 V for 1 second

Contacts Type and Composition Normally Open (NO)

Output Voltage Limits 10 to 34 V DC, 19 to 264 V AC

Power Dissipation 4.5 W

Current Consumption 160 mA positive, 131 mA negative

Load Type Resistive

Input Compatibility 2-wire/3-wire proximity sensor

Response Time 0.1 to 7.5 ms (input at state 0 to state 1 and vice versa)

Input Impedance 4 Ohm

Input Current Limits ≤ 1.5 mA at state 0, ≥ 2.5 mA at state 1

Input Voltage Limits ≤ 8 V at state 1

Discrete Input Current 9 mA

Discrete Input Voltage 24 V DC (negative)

Discrete Input Number 16 screw terminal blocks

Description

The Schneider Electric TSXDMZ28DR is categorized as a discrete relay I/O base specifically tailored for integration within TSX Micro PLCs. It is engineered to handle an isolation voltage of up to 1500 V for one second, ensuring adequate protection for connected equipment. This unit employs normally open (NO) contacts and operates across a versatile output voltage range. It provides output limits from 10 to 34 V DC and 19 to 264 V AC, accommodating various load requirements.

Power dissipation is rated at 4.5 W, with current consumption at 160 mA for positive and 131 mA for negative. The design is focused on resistive loads, enhancing its effectiveness in typical applications. Compatibility with both 2-wire and 3-wire proximity sensors enables flexible integration.

The TSXDMZ28DR boasts a response time ranging from 0.1 to 7.5 milliseconds, illustrating its efficiency in switching states. Input impedance is set at 4 Ohm, catering to the specific electrical characteristics of the inputs. Input current limits are ≤ 1.5 mA at state 0 and ≥ 2.5 mA at state 1, while input voltage limits reach up to ≤ 8 V at state 1.

The module accommodates a discrete input current of up to 9 mA and operates with a negative 24 V DC discrete input voltage. Users can connect their devices to one of the 16 screw terminal blocks, which facilitate a secure and reliable connection. Overall, the TSXDMZ28DR is optimized for efficient operation within various control applications.

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

24 V DC, discrete input logic: negative

Discrete input current

9 mA

Complementary

Input voltage limits

≤ 8 V at state 1

Current state 0 guaranteed

≤ 1.5 mA

Current state 1 guaranteed

≥ 2.5 mA

Input impedance

4 Ohm

Response time

0.1...7.5 ms input at state 0 to state 1

0.1...7.5 ms input at state 1 to state 0

< 10 ms output

Input compatibility

2-wire/3-wire proximity sensor

Load type

Resistive

Current consumption

160 mA positive

131 mA negative

Power dissipation in W

4.5 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 for 1 s

Insulation resistance

$\geq 10 \text{ m}\Omega$

Net weight

0.5 kg

Environment

Standards

IEC 1131-2 Type 1

[Ith] conventional free air thermal current

3 A