

Schneider Series Service Manual

TSXDMZ28DT

1. Description

The TSXDMZ28DT model from Schneider Electric is an I/O module designed for use in TSX Micro PLC configurations. It operates at 24 V DC and consumes 132 mA of current, delivering 3.5 W of power dissipation per module and 0.15 W per channel.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Line TSX Micro PLCs
Part	Number TSXDMZ28DT
EAN	3389110540451
Weight	0.69 lbs (0.31 kg)
Current	Consumption 132 mA
Power	Dissipation 3.5 W by module, 0.15 W by channel
Operating	Voltage 24 V DC
Input	Voltage Limits ≥ 11 V at state 1, < 5 V at state 0
Output	Voltage Limits 19-30 V
Output	Current Limits 0.625 A
Maximum	Leakage Current 0.5 mA at state 0
Load	Impedance 48 Ohm
Switching	Frequency $< 0.6/LI^2$ Hz
Isolation	Voltage 1500 V for 1 second
Environmental	Standards IEC 1131-2 Type 1
Operating	Temperature -20°C to 55°C
Range	of product
Modicon	TSX Micro automation platform
Product	or component type
Discrete	solid state I/O base DC
Discrete	input number
16	1 HE-10 connector
Discrete	input voltage
24	V DC, discrete input logic: positive
Discrete	input current
7	mA
Discrete	input type
Resistive	
Discrete	output number
12	screw terminal block
Discrete	output voltage
24	V DC
Discrete	output current
0.5	mA
Discrete	output logic
Positive	
Complementary	
Inp	

3. Product Information

The TSXDMZ28DT model from Schneider Electric is an I/O module designed for use in TSX Micro PLC configurations. It operates at 24 V DC and consumes 132 mA of current, delivering 3.5 W of power dissipation per module and 0.15 W per channel.

Technical specifications for TSXDMZ28DT

Manufacturer Schneider Electric

Product Line TSX Micro PLCs

Part Number TSXDMZ28DT

EAN 3389110540451

Weight 0.69 lbs (0.31 kg)

Current Consumption 132 mA

Power Dissipation 3.5 W by module, 0.15 W by channel

Operating Voltage 24 V DC

Input Voltage Limits ≥ 11 V at state 1, < 5 V at state 0

Output Voltage Limits 19-30 V

Output Current Limits 0.625 A

Maximum Leakage Current 0.5 mA at state 0

Load Impedance 48 Ohm

Switching Frequency $< 0.6/LI^2$ Hz

Isolation Voltage 1500 V for 1 second

Environmental Standards IEC 1131-2 Type 1

Operating Temperature -20°C to 55°C

Range of product

Modicon TSX Micro automation platform

Product or component type

Discrete solid state I/O base DC

Discrete input number

16 1 HE-10 connector

Discrete input voltage

24 V DC, discrete input logic: positive

Discrete input current

7 mA

Discrete input type

Resistive

Discrete output number

12 screw terminal block

Discrete output voltage

24 V DC

Discrete output current

0.5 mA

Discrete output logic

Positive

Complementary

Input voltage limits

≥ 11 V at state 1

< 5 V at state 0

Current state 0 guaranteed

≤ 1.5 mA

Current state 1 guaranteed

≥ 2.5 mA

Input impedance

3.4 Ohm

Response time

≤ 0.5 ms from state 1 to state 0 output

≤ 0.5 ms from state 0 to state 1 output

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

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

Input compatibility

2-wire/3-wire proximity sensor

Current consumption

132 mA

Power dissipation in W
3.5 W by module output
0.15 W by channel output
5 W input
Output voltage limits
19...30 V
Output current limits
0.625 A
Maximum leakage current
0.5 mA at state 0
[Ures] residual voltage
0.3 V
Load impedance ohmic
48 Ohm
Switching frequency
< 0.6/LI² Hz
Output overvoltage protection
By zener diode
Output short-circuit protection
By current limiter and electronic circuit breaker
Reverse polarity protection
Reverse diode on power supply
Paralleling of outputs
Yes : 2 maximum
Isolation voltage
1500 V for 1 s
Net weight
0.425 kg
Environment
Standards
IEC 1131-2 Type 1

Description

The TSXDMZ28DT I/O module from Schneider Electric is engineered for reliability in automation processes within TSX Micro PLCs. It operates on a 24 V DC power supply, drawing a current of 132 mA for efficient functionality. Each module dissipates a total power of 3.5 W, divided as 0.15 W per channel to manage heat efficiently. The module's input voltage requirements demand at least 11 V to register as active (state 1) and less than 5 V for inactive (state 0). All output voltages are maintained between 19 and 30 V, while the output current is limited to 0.625 A to ensure compatibility with connected devices.

Leakage current is kept minimal, with a maximum of 0.5 mA recorded in an inactive state, which safeguards system integrity. The module's load impedance is established at 48 Ohm, accommodating various load types effectively. Furthermore, the switching frequency is limited to under 0.6/LI² Hz, enabling precise control in response operations. This product also features an isolation voltage rated for 1500 V for a period of one second, reinforcing safety standards. Constructed to withstand operational environments, this module operates within a temperature range of -20°C to 55°C.

The TSXDMZ28DT measures 5.5 cm in height, 18.0 cm in width, and 26.0 cm in length, with a net weight of 0.425 kg (0.937 lb). Adhering to IEC 1131-2 Type 1 environmental standards, the design ensures compatibility in demanding applications. The TSXDMZ28DT serves as a vital component within Schneider Electric's range of automation solutions.