

Schneider Series Service Manual

TSXPSY5500M

1. Description

The TSXPSY5500M power supply module from Schneider Electric operates effectively in both 200-240 V AC and 100-120 V AC voltage ranges, proving versatile in power management applications. This module is built for a range of network frequencies, supporting operations at 50/60 Hz.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Line TSX Micro PLCs
Part	Number TSXPSY5500M
EAN	3389110725629
Weight	1.00 lbs (0.45 kg)
Primary	Voltage 200-240 V AC (190-264 V) / 100-120 V AC (85-140 V)
Network	Frequency 50/60 Hz
Module	Type Power Supply Module
Network	Frequency Limits 47-63 Hz
Input	Current 500 mA at 240 V / 1700 mA at 100 V
Operating	Altitude 0 to 2000 meters
Relative	Humidity 10 to 95% without condensation for operation, 5 to 95% without condensation for storage
Storage	Temperature -25 to 70 °C
Operating	Temperature 0 to 60 °C
Local	Signalling 1 LED for battery fault (red), 1 LED for presence of voltages (green), 1 LED for presence of sensor voltage (green)
Inrush	Current 38 A at 240 V / 38 A at 100 V
Total	Useful Secondary Power 50 W
Secondary	Power 35 W at 5 V DC / 19 W at 24 V DC
Current	at Secondary Voltage 7 A at 5 V DC / 0.8 A at 24 V DC (sensor power supply) / 0.8 A at 24 V DC (relay power supply)
Protection	Type Internal fuse (4 A, 5 x 20 mm, time-delayed), overload

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Technical specifications for TSXPSY5500M

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Inrush Current 38 A at 240 V / 38 A at 100 V

Total Useful Secondary Power 50 W

Secondary Power 35 W at 5 V DC / 19 W at 24 V DC

Current at Secondary Voltage 7 A at 5 V DC / 0.8 A at 24 V DC (sensor power supply) / 0.8 A at 24 V DC (relay power supply)

Protection Type Internal fuse (4 A, 5 x 20 mm, time-delayed), overload protection, overvoltage protection, short-circuit protection

Description

The Schneider Electric TSXPSY5500M is a robust power supply module designed for use within the TSX Micro PLCs series. This module functions within an input voltage range of 200-240 V AC (with limits of 190-264 V) and handles a secondary input of 100-120 V AC (between 85-140 V). It accommodates network frequencies at a nominal frequency of 50/60 Hz and can accept variations within a 47-63 Hz range.

This unit requires an input current of 500 mA at 240 V and 1700 mA at 100 V and can be employed at altitudes of up to 2000 meters above sea level. Humidity tolerance ranges from 10 to 95% during operation and 5 to 95% during storage, ensuring adaptability to various environments. The operating temperature falls within the range of 0 to 60 °C, while it can endure storage temperatures from -25 to 70 °C.

Signaling capabilities are provided via three LEDs: one red LED indicates battery faults, while two green LEDs signal the presence of system voltages, including sensor voltage. The module can manage inrush currents of up to 38 A at both 240 V and 100 V. Total useful secondary power output reaches 50 W, with dedicated outputs of 35 W at 5 V DC for general use and 19 W at 24 V DC for additional components. The module can supply currents of 7 A at 5 V DC and 0.8 A at 24 V DC for both sensor and relay power supplies.

Protection features include an internal time-delayed fuse rated at 4 A and additional safeguards for overloads, overvoltages, and short circuits, ensuring the reliability and safety of connected devices.

Range of Product

Modicon Premium Automation platform

Product or Component Type

Power supply module

Complementary

Primary voltage

100...120 V AC 85...140 V

200...240 V AC 190...264 V

Network Frequency

50/60 Hz

Network frequency limits

47...63 Hz

Input current

1700 mA 100 V

500 mA 240 V

Inrush current

38 A 100 V

38 A 240 V

I²t on activation

2 A².s 240 V

4 A².s 100 V

It on activation

0.11 A.s 100 V

0.11 A.s 240 V

Protection type

Internal fuse 4 A 5 x 20 mm time-delayed primary circuit

Overload protection secondary circuit

Overvoltage protection secondary circuit

Short-circuit protection secondary circuit

Total useful secondary power

50 W

Secondary power

19 W 24 V DC

35 W 5 V DC

Current at secondary voltage

0.8 A 24 V DC relay power supply

0.8 A 24 V DC sensor power supply

7 A 5 V DC

Insulation resistance

>= 100 MOhm primary/ground

>= 100 MOhm primary/secondary

Marking

CE

Local signalling

1 LED (green) for presence of sensor voltage (24V)

1 LED (green) for presence of voltages (OK)

1 LED (red) for battery fault (BAT)

Module format

Double

Net Weight

1.37 lb(US) (0.62 kg)

Environment

Immunity to microbreaks

10 ms

Dielectric strength

2000 V primary/earth

2000 V primary/secondary

Standards

73/23/EEC

CSA C22.2 No 142

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

92/31/EEC

UL 508

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

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

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

IEC 61131-2

89/336/EEC

93/68/EEC

Product Certifications

RMRS

LR

ABS

GL

RINA

DNV

BV

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

3389110725629

Returnability

No

Packing Units

Unit Type of Package 1

PCE

Nbr. of units in pkg.

1

Package 1 Height

3.7 in (9.5 cm)

Package 1 Width

7.09 in (18.0 cm)

Package 1 Length

10.2 in (26.0 cm)

Package weight(Lbs)

34.3 oz (971.0 g)