Product Manual

KNX Power Supply

OPT-PS32-111
OPT-PS64-122

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About this document

This document provides information about technical functions and installation procedures for OPT-PS32-111 and OPT-PS64-122.

Disclaimer

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Disposal of packaging

Packaging ensures the device is protected from damage during transit. All materials used in the packaging are environmentally safe and recyclable. Kindly assist us by properly disposing of the packaging in an environmentally conscious manner.

Disposal of the obsolete device

Please responsibly dispose of the obsolete device at your local electrical and electronic equipment collection point, in accordance with local regulations. Should you have any inquiries, kindly reach out to the relevant authority.

Safety and warranty label

Please note that if the security label is damaged or removed, the warranty for the product becomes void

High voltage areas are indicated by this label for your safety.

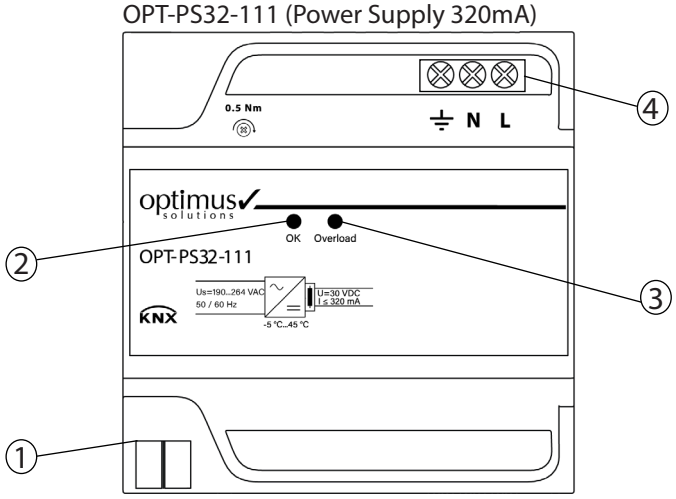
1 Product Description

(I1) is dedicated to powering the KNX line and includes an integrated choke circuit; the auxiliary output (I2) can be utilized for powering an additional line. Operational status, error status, and current usage are easily monitored via on-device indicators. An additional KNX line can be established using the auxiliary output (requires additional hardware). The permanent type relay on the device (OPT-PS64-122 model) provides status information by assuming an open contact position when mains voltage is present, and a closed contact position when mains voltage is interrupted (BMS).

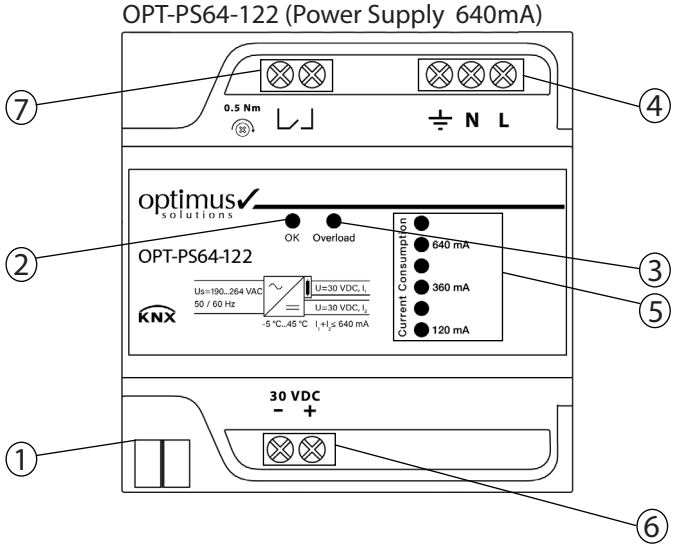
The OPT-PS32-111 is another KNX power supply variant, capable of providing 30 VDC (SELV) with a nominal current of 320mA.
These devices continuously measure output voltages, currents, and internal temperature. In events like short circuits, overloads, reverse connections, voltage deviations, and overheating, the device shuts off output voltages and expects the line to be restored by periodic checks. LED indicators provide a visual alert in case of error conditions. Upon resolution of the error, the device automatically resumes normal operations. The selection of the appropriate product is determined by experts based on the total current drawn by devices on the KNX line.

1.1 Product Models

OPT-PS32-111 (Power Supply 320mA)



OPT-PS64-122 (Power Supply 640mA)



1. KNX supply output (30VDC)
2. Device operation indicator
3. Error/warning indicator of the device
4. Mains supply
5. Output current LED indicator
6. Auxiliary Output (30VDC)
7. Mains Supply Status Relay Output (BMS)

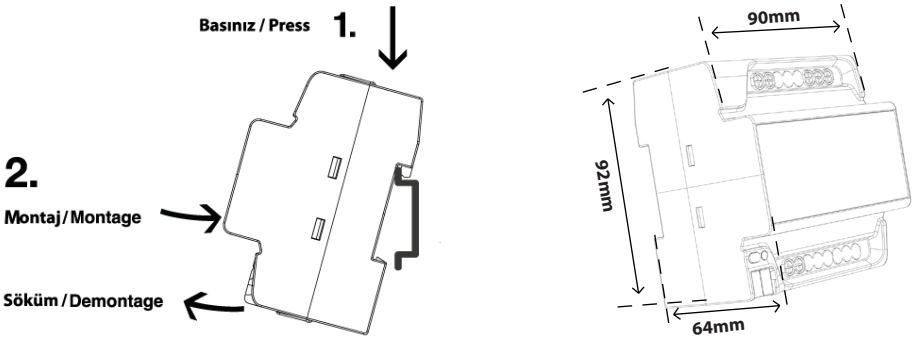
1.2 Mounting and Connection Diagrams

KNX power supplies have a special area of use, characterized by their ability to power KNX lines and provide communication capabilities. It is important to avoid using these power supplies for powering non-KNX devices. A dedicated KNX power supply is crucial for ensuring the operation of KNX lines. Standard power supplies, despite matching voltage and current specifications, are not suitable for powering KNX lines due to their specialized requirements.

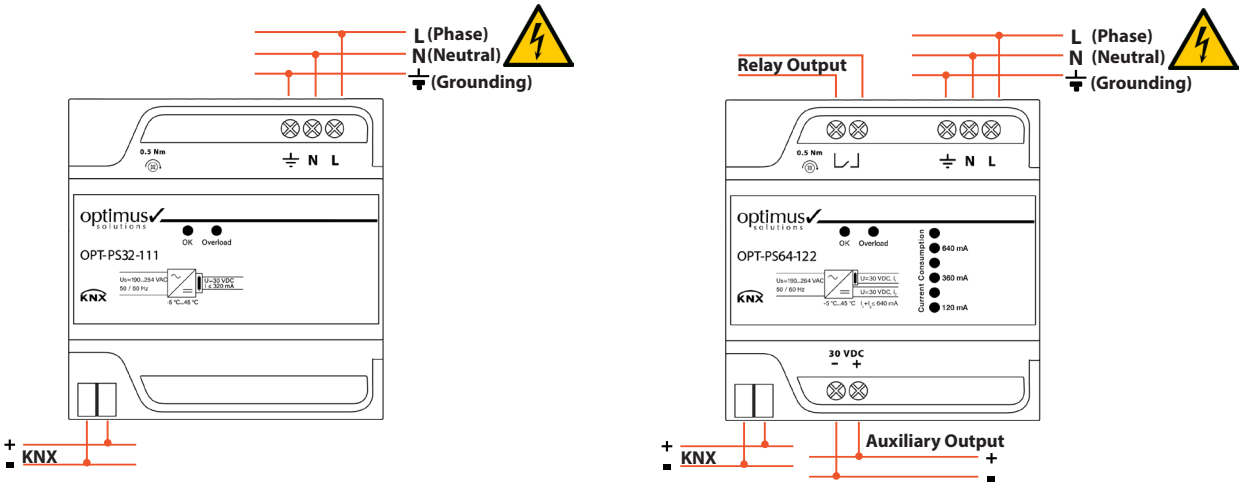
1.2.1 Installation

The device must be exclusively mounted onto an electrical panel by personnel duly authorized and proficient in KNX automation systems. Notes for authorized personnel: The device is mounted on the electrical panel. Phase, neutral, and ground connections are made as shown on the device. The device should not be used in wet or dusty environments, as the IP protection information indicates.

It can be mounted on a 35mm DIN rail as follows:



After hanging the upper part of the device onto the rail, push the lower part towards the rail until you hear a clicking sound. To remove the device from the rail, first push it downwards and pull the lower part towards yourself, releasing it from the rail, then gently push it upwards to remove it from the hanging position.
Before making electrical and data line connections, ensure that the mains is switched off and all necessary precautions have been taken. Comply with the electrical installation regulations of the country you are located. After checking the mains voltage and performing a short circuit test on the KNX line, make the connections as illustrated in the diagram. Monitor the status indicators after the power is supplied. KNX Power Supplies do not require programming. They start operating upon the activation of the electrical supply, following the completion of mounting and connections.



Making the relay connection (OPT-PS64-122 model):
The relay output on the KNX power supply is used to provide information to the upper management system (BMS). During normal operation of the device, the contact output is in an open circuit state, and in the event of a power supply interruption, it is in a short circuit state. This information can be processed by BMS.

1.3 Technical Specifications

Product Features	**OPT-PS32-111**	**OPT-PS64-122**
Supply Voltage	190...265 VAC 50 / 60 Hz	190...265 VAC 50 / 60 Hz
Power Consumption	14 W normal, 28 W maximum	24 W normal, 50 W maximum
Output Voltage - 1	30 VDC (KNX)	30 VDC (KNX)
Output Voltage - 2	Yok	30 VDC (Auxiliary output)
Output Current	320 mA	640 mA
Protection Class	IP 20	IP 20
Overload Rating	0.5 A	0.9 A
Short Circuit Current	0.8 A	1.4 A
Error Detection Time	200 ms	200 ms
Temperature Ranges	Operation -5...+45 °C Strorage -25...+55 °C	Operation -5...+45 °C Strorage -25...+55 °C
Relay Output	None	Mains status information Open contact: Device running Closed contact: Device not running
Connection Terminals	0.2...4.0 mm² cable azami 0,5 Nm	0.2...4.0mm² cable maximum 0.5 Nm
Dimensions (W x H x D)	90 x 90 x 64 mm	90 x 90 x 64 mm
Weight	Net: 245g Gross: 277g	Net: 262g Gross: 293g
Mounting	35 mm DIN rail	35 mm DIN rail
Certificate	CE	CE
Product Label Location	 The product label is on the back of the device.	 The product label is on the back of the device.
Product Label Information	optimus ✓OPT-PS32-111 KNX Power Supply 320mA P.D: OPT-PS32-111 TP S Optimus Doruk Elektrik Elektronik Otomasyon A.Ş. İstanbul / Türkiye T:(+90216)4441105 Made in Türkiye	optimus ✓OPT-PS64-122 KNX Power Supply 640mA P.D: OPT-PS64-122 TP S Optimus Doruk Elektrik Elektronik Otomasyon A.Ş. İstanbul / Türkiye T:(+90216)4441105 Made in Türkiye
Guarantee Label Location	 The guarantee label is on the underside of the device.	 The guarantee label is on the underside of the device.

2 How to Use

2.1 Maintenance and Troubleshooting

Please do not attempt to open the device under any circumstances. The contents do not include any materials that can be serviced by the user or an assembly technician. To clean off dust and similar particles, please utilize a dry cloth and restrict the cleaning to the front surface only.

The light indicators and the corresponding actions are as follows.

LED Indicators			Device Status	Tasks to be Completed
OK	Overload	Current (640mA)		
On	Off	On	Mains Voltage On, Device Operating Normally	-
Off	Flash	Off	Overload	The device continues to operate, but report the condition to the authorized personnel.
Off	On	Off	Short Circuit, High Temperature, Connection Error	Disconnect the KNX power supply line to check the line; if the issue persists, disconnect the additional power supply; if the issue still persists, there may be overheating, leave the device turned off for at least 10 minutes.
Off	Off	Off	No Mains Voltage, or a Failure	Check the fuse, main power supply, and wiring. If there are no failures, the device may be malfunctioning. Request service with the fuse in a switched off position.
Flash	Off	Off	No Mains Voltage, The device is powered by an external source	Special operating mode. KNX line running. The external power supply must meet the KNX requirements. Failures due to incorrect installation are not covered by the warranty.

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