

# ledix

ZAMEL Sp. z o.o.

ul. Zielona 27, 43-200 Pszczyna, Poland  
Tel. +48 (32) 210 46 65, Fax +48 (32) 210 80 04  
www.zamel.com, e-mail: export@zamel.pl

# zamel

## DESCRIPTION

ZSL series switched-mode power supplies are designed for a direct use in home LED lighting installations. Their modular construction allows for an easy and comfortable mounting indoor to horizontal and vertical surfaces. The 12 V DC output voltage power supplies are available in a wide range of output power (25÷150 W). The built-in protections guarantee a continuous and undisturbed operation of all connected LED elements. The power supplies are equipped with output voltage adjustment within the minimum range of  $\pm 10\%$  by means of a potentiometer. Metal casing ensures proper power supply cooling and prolongs its life.

## FEATURES

- For use in household LED installations.
- 12 V DC output voltage of high stability.
- Wide range of output power.
- Overvoltage and short-circuit protections.
- No-load operation resistance.
- Free mounting indoor only.
- Output voltage adjustment by means of a potentiometer within a minimum range of 10% nominal voltage.



**CAUTION**

Connect this product to a single-phase power system according to applicable electrical and safety standards and regulations. See this Manual for the wiring instructions. Installation, wiring and adjustment/setting shall only be done by qualified electricians who have read and understood this User Manual and the functions of the product. Do not open or otherwise disassemble the product housing; otherwise the product warranty will be void and an electrocution hazard may occur. Prior to installing and wiring this product, make sure that the wiring to be connected is not live. The conditions and methods of transport, storage and operation of this product may affect its performance. Do not install the product if any of its components are missing, the product is damaged or deformed in any way. If any malfunctions are found, consult the manufacturer.



Do not dispose of this device with other waste! In order to avoid harmful effects on the environment and human health, the used device should be stored in designated areas. For this purpose, you can dispose of household waste free of charge and in any quantity to a collection point set up, as well as to the shop when you buy new equipment.

## TECHNICAL DATA

	ZSL-25-12	ZSL-35-12	ZSL-60-12	ZSL-100-12	ZSL-150-12
<b>Input parameters</b>					
Input voltage range:	110÷260 V AC				
Input frequency range:	50 / 60 Hz				
Input current:	0,3 A	0,38 A	0,65 A	0,85 A	1,05 A
Power supply consumption during no load:	~0,5 W	~0,6 W	~1,5 W	~0,9 W	~3,9 W
Efficiency:	85 %	75 %	80 %	83 %	83 %
Power factor:	0,5				
<b>Output parameters</b>					
Nominal output voltage:	12 V DC				
Nominal output current:	2,5 A	3 A	5 A	8,5 A	12,5 A
Output current range:	0÷2,5 A	0÷3 A	0÷5 A	0÷8,5 A	0÷12,5 A
Nominal output power:	25 W	35 W	60 W	100 W	150 W
Ripples and noises (max):	200 mVpp				
U adjustment range:	10,5÷13,5 V	8,5÷13 V	11,3÷13,2 V	11,5÷12,8 V	10,8÷15 V
Voltage tolerance:	1 %				
Output voltage time increase (max):	~15 ms				
Output backup time (max):	~80 ms				
<b>Other parameters</b>					
Overload protection:	Yes – returnable (app. 180÷200% Pn)				
Output short-circuit protection:	Yes – returnable				
Thermal protection:	No				
Resistance to idle state:	Yes				
Operating temperature:	-20÷+60°C				
Protection class:	I				
Overvoltage category:	II				
Casing protection degree:	IP20				
Mounting:	free				
Operating position:	Free (horizontal or vertical plane)				
Dimensions (mm):	87x59x32,5	87x59x32,5	110x78x36,5	162x99x42	200x98x42,5
Weight:	100 g	115 g	195 g	340 g	385 g
Reference standard:	PN-EN 55015, PN-EN 61547, PN-EN 6100-3-2, PN-EN 6100-3-3, PN-EN 61347-1				

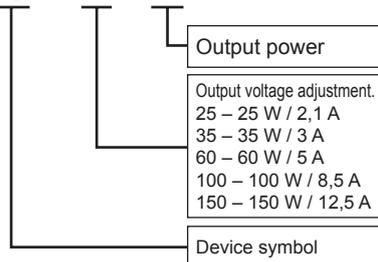
## MOUNTING

1. Disconnect power supply by the phase fuse, the circuit-breaker or the switch-disconnector combined to the proper circuit.
2. Check if there is no voltage on connection cables by means of a special measure equipment.
3. Connect the cables with the terminals of ZSL-XX-12 power supply in accordance with the installing diagram.
4. After connecting the cables protect the terminals with a cover (refers to ZSL-60-12, ZSL-100-12, ZSL-150-12).
5. Switch on the power supply from the mains.
6. If required adjust the appropriate Uout value by means of a potentiometer.

## PRODUCT FAMILY

The ZSL power supplies belong to the product family:

### ZSL - XX - 12



## LEGEND OF SYMBOLS

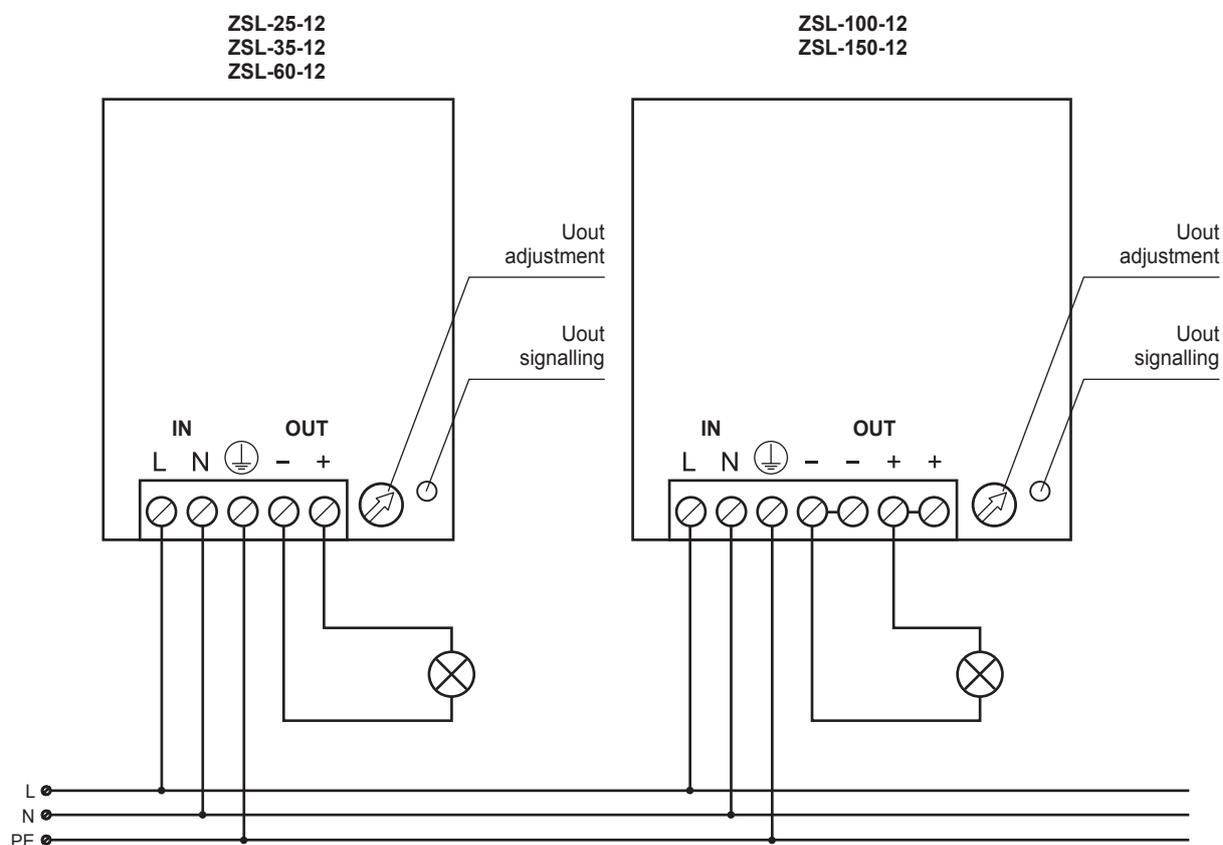


Output voltage adjustment.



Device made in protection class I.

## DIAGRAM



## WARRANTY CARD

There is 24 months guarantee on the product.

1. ZAMEL Sp. z o.o. assures 24 months guarantee for the product.
2. The manufacturer's guarantee does not cover any of the following actions:
  - a) mechanical damage during transport, loading / unloading or under other circumstances,
  - b) damage caused by incorrect product mounting or misuse,
  - c) damage caused by unauthorised modifications made by the PURCHASER or any third parties to the product or any other devices needed for the product functioning,
  - d) damage caused by Act of God or any other incidents independent of the manufacturer - ZAMEL Sp z o.o.
  - e) supply sources (batteries) included in the device during selling (if they are included).
3. The PURCHASER shall lay any claims in writing to the dealer or ZAMEL Sp. z o.o.
4. ZAMEL Sp. z o.o. is liable for processing any claim according to current Polish legislation.
5. ZAMEL Sp. z o.o. shall process the claim at its own discretion: product repair, replacement or money return.
6. The PURCHASER's statutory rights in any applicable legislation whether against the retailer arising from the purchase contract or otherwise are not affected by this warranty.

Salesman stamp and signature, date of sale.