



# Zhitao Group

ZHITAO GROUP

Industrial Power Supply

## Product Specifications

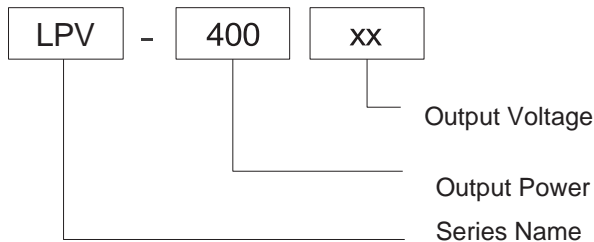
# LPV-400

- Product Category: 400W Waterproof Power Supply
- Version Number: ZTAO3.0
- Release Date: May 1st, 2025

### Product Overview

The LPV-400W series is a waterproof AC-to-DC LED driver power supply designed for constant voltage and constant power output. It features an AC input voltage range of 180~264VAC and offers 12V, 24V, 36V, and 48V output options. Boasting a high conversion efficiency of up to 94%, it utilizes self-cooling technology. It features a gold-plated casing and IP67 rating. High protection level design.

### Model encoding



### Product Characteristics

- 180~264VAC AC input range
- constant voltage and constant power mode
- Ip67 protection level
- Protection Types: Short Circuit / Overload / Overvoltage / Overtemperature
- Natural Air Cooling
- Suitable for Dry, Humid, and Rainy Environments
- 100% Full Load Burn-in Test
- 3-Year Warranty



### Application Areas

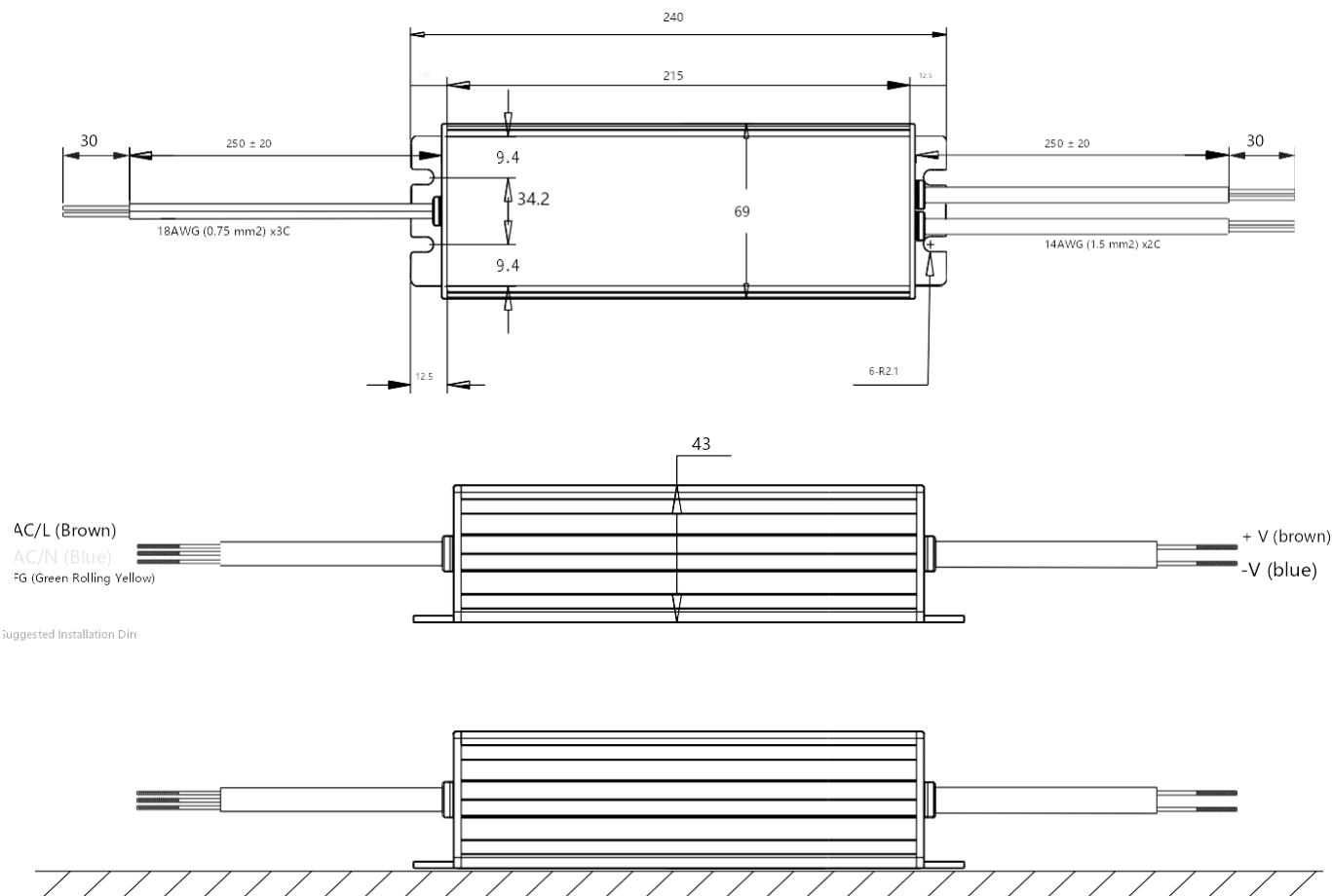
Street Lighting, Wall Washers, Courtyard Lights, Fishing Lights, Floodlights, Building Lighting, Plant Lighting, Electronic Instruments and Devices, etc. (excluding information technology equipment)

01-01

## Electrical Specifications

Model Number		LPV-400-12	LPV-400-24	LPV-400-36	LPV-400-45	LPV-400-48
Output	DC Output Voltage	12V	24V	36V	36V	48V
	Rated Current	29A	16.5A	11A	8.8A	8.3A
	Current Range	0~29A	0~16.5A	0~11A	0~8.8A	0~8.3A
	Rated Power	348W	396W	396W	396W	398.4W
	Ripple & Noise (Maximum)	180mVp-p	200mVp-p	220mVp-p	220mVp-p	220mVp-p
	Voltage Accuracy	±3%	±2%	±2%	±2%	±2%
	Linearity Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load Regulation	±2%	±0.5%	±0.5%	±0.5%	±0.5%
	Start-up & Rise Time	2000ms, 30ms / 230VAC (at full load)				
	Hold Time	20ms / 230VAC (at full load)				
Input	Input Voltage	180~264VAC selected through switch		235~370VDC (switch on 230VAC)		
	Input Frequency	50~60HZ				
	Efficiency	90%	92%	93%	93.5%	94%
	Input Current	4.0A/230VAC				
	Leakage Current	< 3mA/240VAC				
Protection	Overload Protection	100~110% Overcurrent Limit of Rated Power Protection Mode: Hiccup-type protection, automatically recovers after abnormal conditions are removed				
	Overvoltage Protection	115%~135% Overvoltage Protection Activated by Rated Output Voltage Protection Mode: Output Voltage Shutdown, Recovers Upon Restart				
	Overtemperature Protection	95°C±10°C (JK1 is tested on the transformer side/Mos tube surface) Protection Mode: Output Voltage Shutdown, Automatic Recovery After Temperature Drop				
Environment	Operating Temperature	-20°C ~+60°C				
	Operating Humidity	20~90% RH without condensation				
	Storage Temperature / Humidity	-40~+80 °C 10~95% RH, no condensation				
	Vibration Resistance	10~500HZ, 5G, 10 minutes/cycle, X, Y, Z each 60 minutes				
Safety	Pressure Resistance	Input to output: 1.5KVAC; Input to ground: 1.5KVAC; Output to ground: 500VAC				
	Insulation Resistance	Input to output, input to ground, output to ground: 100 Ohms/500VDC/25°C/70%RH				
Other	Product Dimensions	240*69*43mm (L*W*H)				
	Packaging	1.26kg/16pcs/21.5Kg/0.026 cubic meters				
Remarks	<ol style="list-style-type: none"> <li>All parameters, unless otherwise specified, are measured at 230VAC voltage input, rated load, and 25 °C conditions.</li> <li>Ripple and noise voltage were measured on a 20MHz bandwidth oscilloscope with 0.1μ and 47μ capacitors added to the ends of a 12-inch twisted pair cable, measured at a 20MHz bandwidth.</li> <li>Accuracy: Includes setting error, line regulation, and load regulation.</li> <li>Line Regulation Measurement Method: Tested from low voltage to high voltage under rated load.</li> <li>Load Regulation Measurement Method: From 0% to 100% of rated load.</li> <li>Startup time is measured under cold start conditions. Rapid and frequent power-on and power-off may increase startup time.</li> </ol>					

Dimensions and mounting  
 (mm)



Suggested Installation Dir

Pinout	Function
L	AC LINE
N	AC NETURAL
⊕	EARTH
-V	DC output -
-V	DC output -
+V	DC output +
+V	DC output +

4-M4 Customer system mounting hole

mounting screws: M4

Mounting torque: 8Kgf.cm (0.8Nm)

Remarks:

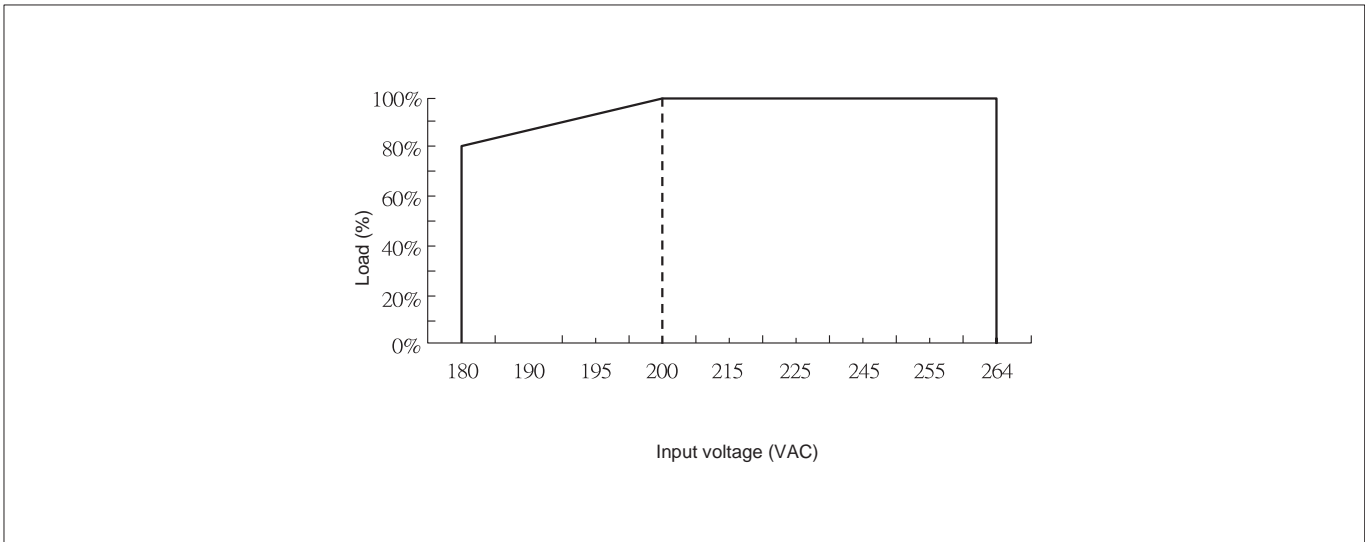
Unit: mm [inch]; tolerance not specified is ±0.5 [±0.020]

Terminal Pin No. Assignment

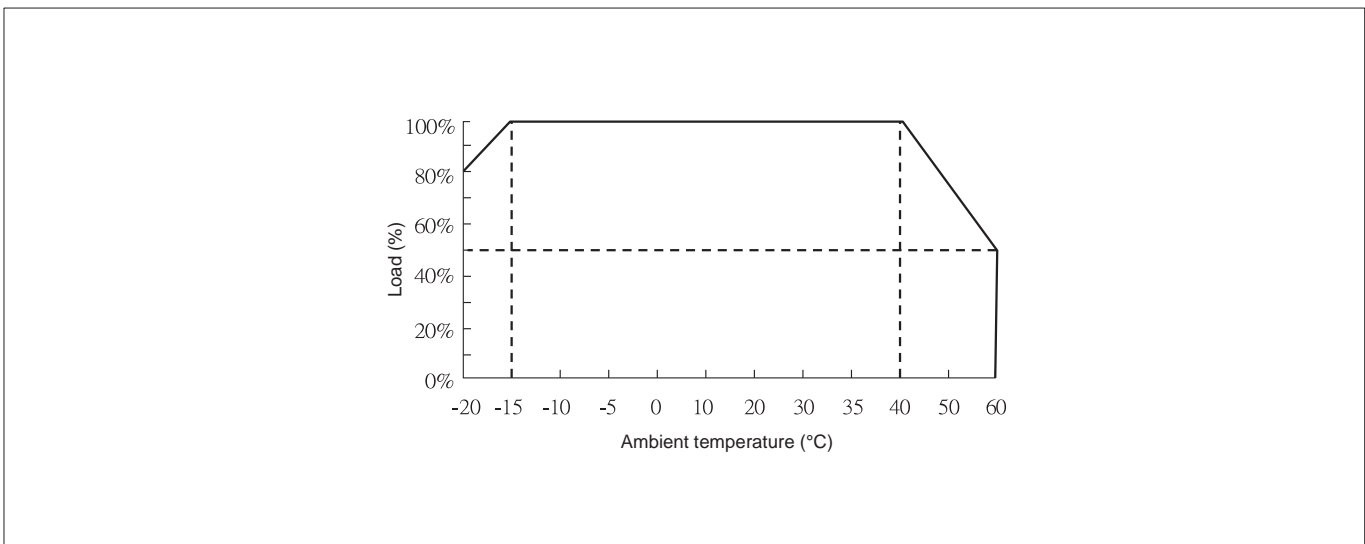
Input (black three core)		Output (black two core)	
Brown	AC/L	Brown	DC OUTPUT +V
Blue	AC/N	Blue	DC OUTPUT -V
Green & yellow	⊕ : Ground		

### Characteristic Curve

Input voltage VS Output load



Ambient temperature VS Output load



Note:

1. For more detailed test data, please contact our technical support for the application notes for the corresponding product.
2. This product is suitable for use in natural air convection environments. For use in enclosed environments, please contact our technical support.