

# PSV-60-12 series

60W Waterproof IP67 Single Output Switching Power Supply



## ■ Features:

- Constant voltage design
- European AC input range
- Protections: Short circuit / Overload / Over voltage/ Over temperature
- Cooling by free air convection
- 100% full load burn-in test
- Isolation class II
- Fully encapsulated with IP67 level
- Fully isolated plastic case

LPS IP67   

## ELECTRICAL SPECIFICATION

MODEL	PSV-60-12
<b>OUTPUT</b>	
Rated Voltage	12V
Rated Current	5A
Rated Power	60W
Current Range	0 ÷ 5A
Line Regulation	± 1%
Load Regulation	± 2%
Voltage Tolerance	[2] ± 3%
Ripple & Noise (max.)	[3] 150mV <sub>p-p</sub>
<b>INPUT</b>	
Voltage Range	180 ÷ 264VAC; 254 ÷ 370VDC
Frequency Range	47 ÷ 63Hz
Efficiency (typ.)	85%
AC current (typ.)	0.57A / 230VAC
<b>PROTECTIONS</b>	
Overload	Range: 110 ÷ 150 % rated output power
	Type: hiccup mode, recovers automatically after fault condition is removed.
Short circuit	Type: hiccup mode, recovers automatically after fault condition is removed.
Over voltage	Range: 17 ÷ 24VDC
	Type: Shut off output voltage, recovers automatically after fault condition is removed.
Over temperature	Range: 120 ± 20°C (detect on main control IC)
	Type: Shut off output voltage, recovers automatically after fault condition is removed.

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## WORKING ENVIRONMENT

<b>Working Temperature</b>	-20°C ÷ 60°C (Refer to Derating Curve)
<b>Working Humidity</b>	20 ÷ 90% RH non-condensing
<b>Storage Temperature and Humidity</b>	-40°C ÷ 80°C, 10 ÷ 95% RH non-condensing
<b>Vibration</b>	10 ÷ 500Hz, 2G, 10min / cycle, period 60min. each along X, Y, Z axes

## SAFETY AND EMC REGULATIONS

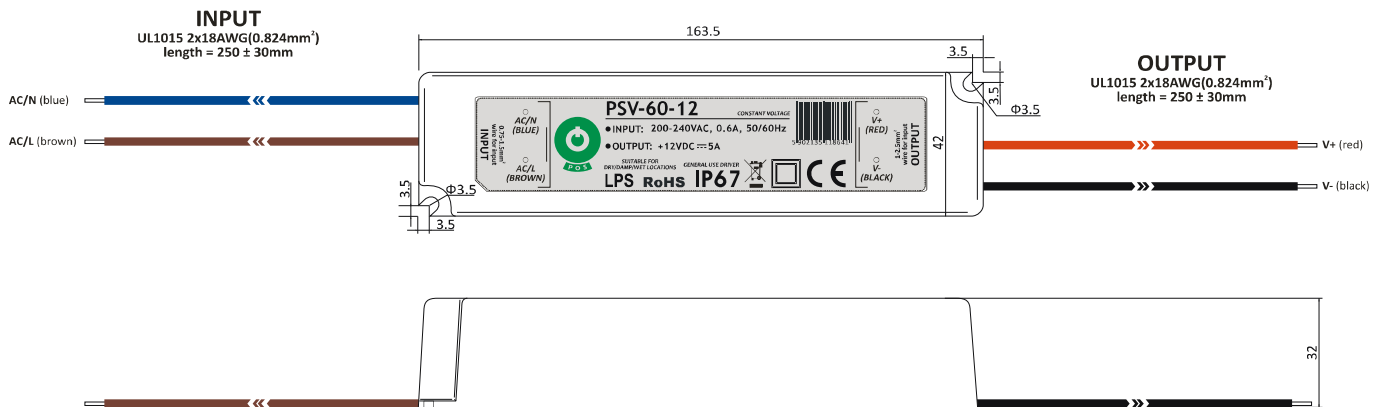
<b>Safety Standards</b>	I-P/O-P: 3kVAC
<b>Withstand Voltage</b>	Compliance to EN60950-1
<b>Isolation Resistance</b>	Compliance to EN55022
<b>EMC Emission</b>	Compliance to EN55024; EN61000-4-2, -3, -4, -5, -6, -8, -11
<b>EMC Immunity</b>	Compliance to EN61000-3-3; EN61000-3-2
<b>Harmonic Current</b>	I-P/O-P: 100MΩ (500VDC/25°C/70%)

## OTHERS

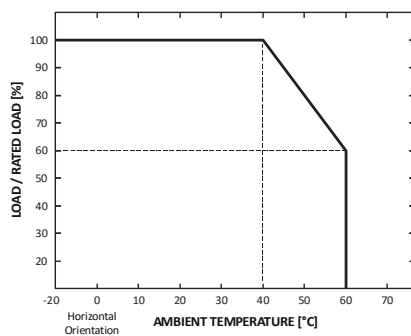
<b>Dimensions</b>	163.5 x 42 x 32mm (L x W x H)
<b>Weight and Packing</b>	380g; 56pcs./box; box weight and dimensions: 22kg; 40 x 26 x 29cm

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Tolerance includes set up tolerance, line regulation and load regulation.
3. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF i 47μF parallel capacitor.
4. Setup and rise time is measured from 0 to 90% rated output voltage.
5. Power supply is considered as component not intended to apply by end-user. Power supply meets safety and EMC standards however the final equipment with power supply must be re-quality to comply with EMC Directives.

## MECHANICAL SPECIFICATION



### DERATING CURVE



### STATIC CHARACTERISTIC

