

# POS-50-C series

50W Switching Power Supply (CV)



POS-50-12-C, POS-50-12-C

POS-50-24-C



## ■ Features:

- Constant voltage design
- Universal AC input range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection



## Ⓢ ELECTRICAL SPECIFICATION

MODEL	POS-50-5-C	POS-50-12-C	POS-50-24-C
OUTPUT			
Rated Voltage	5V	12V	24V
Voltage Adjustment	4.5 ÷ 5.5V	10.0 ÷ 13.3V	21.5 ÷ 26.5V
Rated Current	10A	4.2A	2.2A
Current Range	0 ÷ 10A	0 ÷ 4.2A	0 ÷ 2.2A
Rated Power	50W	50.4W	52.8W
Line Regulation	± 0.5%		
Load Regulation	± 0.5%		
Voltage Tolerance [3]	± 1%		
Ripple & Noise (max.) [2]	80mV <sub>p-p</sub>	120mV <sub>p-p</sub>	240mV <sub>p-p</sub>
Setup, Rise Time, at full load [4]	1000ms, 30ms / 230VAC		2000ms, 30ms / 230VAC
Hold up Time (typ.)	30ms / 230VAC at full load		
INPUT			
Voltage Range	90 ÷ 264VAC		
Frequency Range	47 ÷ 63Hz		
Power Factor (typ.)	PF > 0.6 / 230VAC at full load		
Efficiency (typ.)	80%	85%	88%
AC current (typ.)	0.56A / 230VAC	0.56A / 230VAC	0.8A / 230VAC
Inrush current (max.)	45A / 230VAC(25°C)	45A / 230VAC(25°C)	35A / 230VAC(25°C)
No Load Power Consumption (max.)	0.2W	0.2W	0.3W
PROTECTIONS			

Range: 110 ÷ 150%

### Over Current

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: 120 ÷ 145%

Type: shut down output voltage. Recovers automatically after fault condition is removed.

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## WORKING ENVIRONMENT

Working Temperature	-20°C ÷ +70°C
Working Humidity	20 ÷ 90% RH non-condensing
Storage Temperature and Humidity	-20°C ÷ +90°C, 10 ÷ 95% RH non-condensing

## SAFETY AND EMC REGULATIONS

Safety Standards	Compliance to EN60950-1
Withstand Voltage	IN/OUT: 1.5kVAC; IN/GND: 1.5kVAC; OUT/GND: 500VAC
EMC Emission	Compliance to EN55032, EN61000-3-2, EN61000-3-3
EMC Immunity	Compliance to EN55024

## OTHERS

Dimensions	99 x 82 x 30mm (L x W x H)
Weight and Packing	5V, 12V: 0.2kg; 60pcs./ctn; ctn weight and dimensions: 12.4kg; 39.5 x 23.5 x 29cm 24V: 0.2kg; 80pcs./ctn; ctn weight and dimensions: 17.5kg; 44 x 30 x 21cm

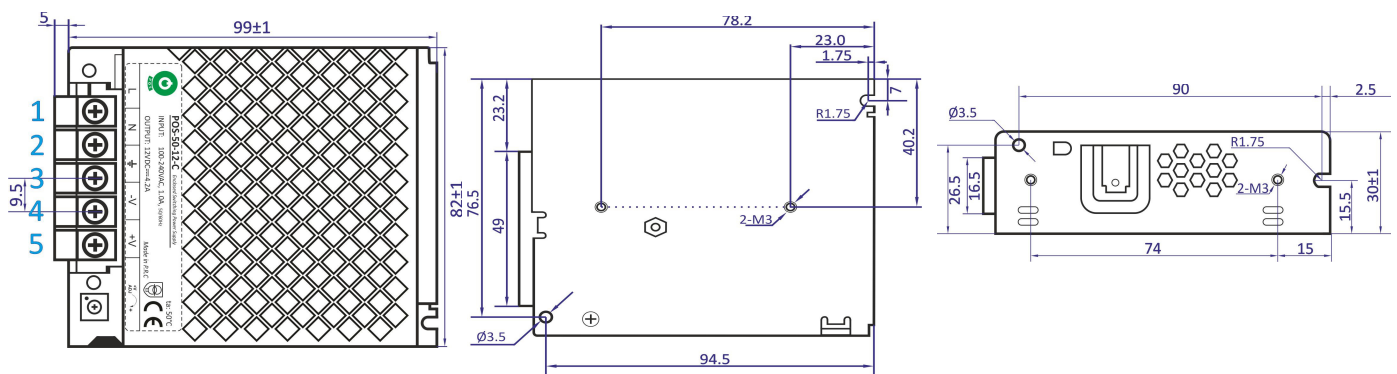
EAN Code



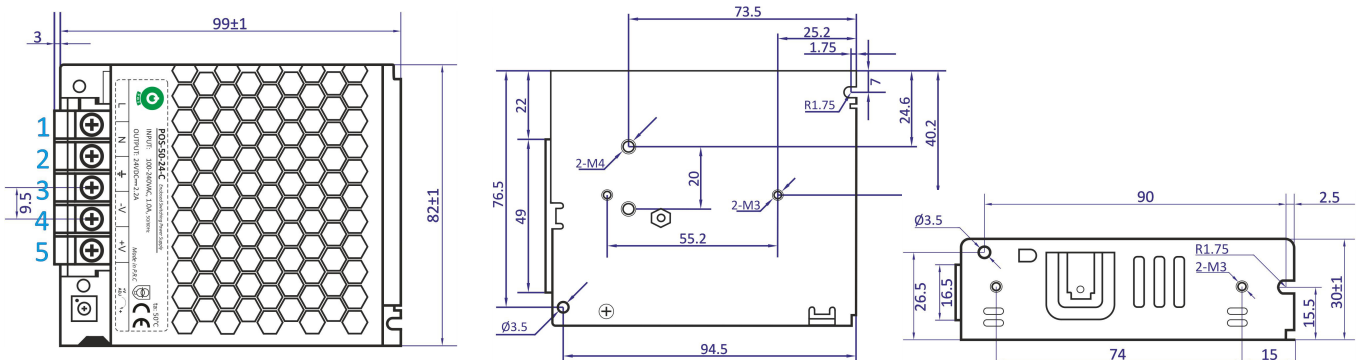
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF i 47μF parallel capacitor.
3. Tolerance includes set up tolerance, line regulation and load regulation.
4. Setup and rise time is measured from 0 to 90% rated output voltage.
5. Power supply is considered as component not indented 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

### POS-50-5-C, POS-50-12-C



### POS-50-24-C



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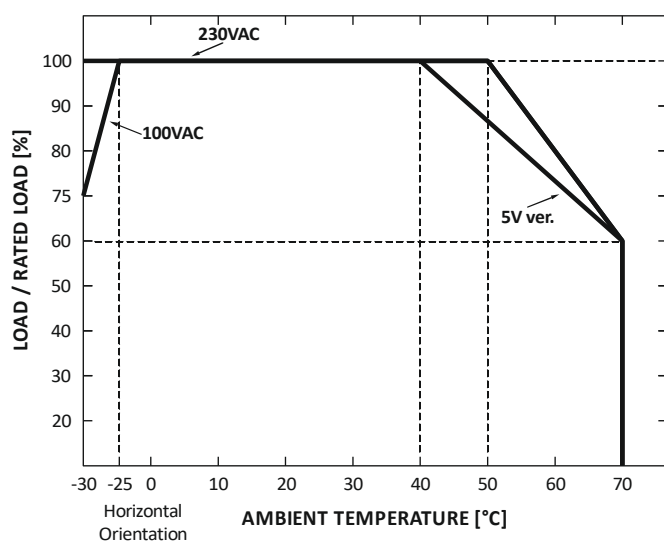
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## PIN ASSIGNMENT

No.	Assignment	No.	Assignment
1	Input: AC/N	4	Output: U <sub>OUT</sub> -
2	Input: AC/L	5	Output: U <sub>OUT</sub> +
3	GND	SVR1, VR1	Output voltage adjustment

### Ⓢ DERATING CURVE



### Ⓢ STATIC CHARACTERISTIC

