

FTPC50V-C2 series

50W LED Power Supply (CV)



■ Features:

- Constant voltage design
- European AC input range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Compliance to worldwide regulations for lighting



ELECTRICAL SPECIFICATION

MODEL	FTPC50V12-C2	FTPC50V24-C2
OUTPUT		
<i>RATED VOLTAGE</i>	12V	24V
<i>RATED CURRENT</i>	4.16A	2.08A
<i>CURRENT RANGE</i>	0 ÷ 4.16A	0 ÷ 2.08A
<i>RATED POWER</i>	50W	50W
<i>NO LOAD OUTPUT VOLTAGE (MAX.)</i>	12.6V	25.2V
<i>LINE REGULATION</i>	± 0.5%	± 0.5%
<i>LOAD REGULATION</i>	± 1%	± 1%
<i>VOLTAGE TOLERANCE [3]</i>	± 5%	± 5%
<i>RIPPLE & NOISE (MAX.) [2]</i>	360V _{p-p}	720V _{p-p}
<i>SETUP TIME [4]</i>	500ms / 230VAC at full load	
<i>HOLD UP TIME (MIN.)</i>	5ms / 230VAC at full load	
INPUT		
<i>VOLTAGE RANGE</i>	180 ÷ 264VAC	
<i>FREQUENCY RANGE</i>	47 ÷ 63Hz	
<i>POWER FACTOR (MIN.)</i>	PF ≥ 0.97 / 230VAC at full load	PF ≥ 0.98 / 230VAC at full load
<i>EFFICIENCY (MAX.)</i>	87%	88%
<i>AC CURRENT (TYP.)</i>	<0.3A / 230VAC	
<i>INRUSH CURRENT (MAX.)</i>	<30A / 230VAC(25°C)	
<i>NO LOAD POWER CONSUMPTION (MAX.)</i>	< 0.5W	

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PROTECTIONS

OVER CURRENT	Range: 130% 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: 150% rated output voltage.
OVER TEMPERATURE	Range: IC detect temperature
	Type: shut down output voltage. Re-power on to recovery

WORKING ENVIRONMENT

WORKING TEMPERATURE	-20°C ÷ +45°C
WORKING HUMIDITY	10 ÷ 90% RH
STORAGE TEMPERATURE AND HUMIDITY	-30°C ÷ +70°C, 10 ÷ 95% RH non-condensing

SAFETY AND EMC REGULATIONS

SAFETY STANDARDS	Compliance to EN61347-1, EN61347-2-13
EMC EMISSION	Compliance to EN55015
EMC IMMUNITY	Compliance to EN61547; EN61000-4-2, 3, 4, 5, 6
HARMONIC CURRENT	Compliance to EN61000-3-2; EN61000-3-3

OTHERS

DIMENSIONS	159.9 x 57.8 x 18mm (L x W x H)
LIFETIME	50 000 hours / 230VAC, full load, ta=45°C
MTBF	200 000 hours / 230VAC, full load, ta=45°C
WEIGHT AND PACKING	150g; 50pcs./carton; carton dimensions: 30 x 20.5 x 16 cm

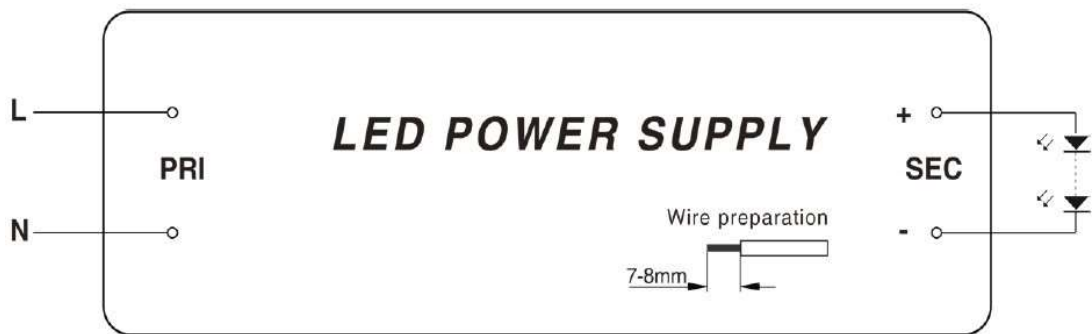
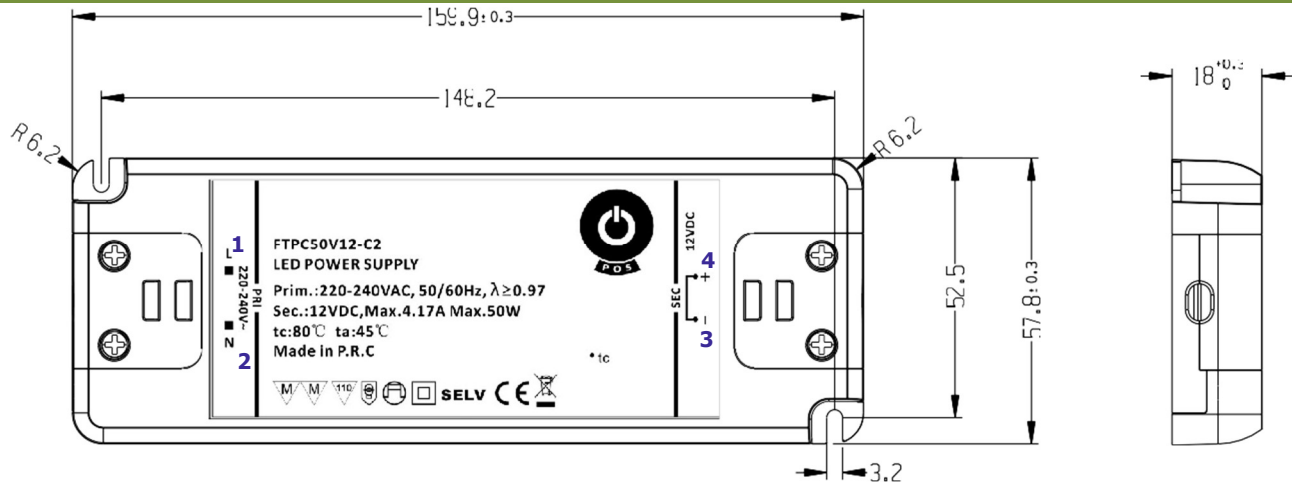
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF i 47μF parallel capacitor.
3. Tolerance includes set up tolerance, line regulation 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.

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MECHANICAL SPECIFICATION



PIN ASSIGNMENT

No.	Assignment	No.	Assignment
1	Input: AC/L	3	Output: U _{OUT} -
2	Input: AC/N	4	Output: U _{OUT} +