

FTPC50V-C series

50W LED Constant voltage Switching Power Supply with PFC function



■ Features:

- European AC Input
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- Built-in active PFC function
- Isolation class II
- Extremely short case size



© ELECTRICAL SPECIFICATION

MODEL	FTPC50V12-C	FTPC50V24-C
OUTPUT		
Rated Voltage	12V	24V
Rated Current	4.2A	2.08A
Rated Power	50.4W	49.92W
Power Range	0 ÷ 50.4W	0 ÷ 49.92W
Line Regulation	± 1%	
Load Regulation	± 2%	
Voltage Tolerance	[2] ± 5%	
Ripple & Noise (max.)	[3] 180mV _{p-p}	240mV _{p-p}
Setup, Rise, Holdup time	[4] 500ms, 30ms, 15ms	
INPUT		
Voltage Range	180 ÷ 264VAC	
Frequency Range	47 ÷ 63Hz	
Power Factor (typ.)	PF > 0.9 / 230VAC at full load	
Efficiency (typ.)	85%	85%
AC current (typ.)	0.3A / 230VAC	
Inrush current (max.)	60A / 230VAC(25°C)	
No Load Power Consumption (max.)	0.5W	
PROTECTIONS		
Over Current	Range: 110 ÷ 140%	
	Type: hiccup mode. Recovers automatically after fault condition is removed.	
Short Circuit	Type: hiccup mode. Recovers automatically after fault condition is removed.	
Over voltage	15 ÷ 18VDC	30 ÷ 36VDC
	Type: shut down output voltage. Re-power on to recovery.	
Over temperature	Range: 140°C ± 10°C (detect by main IC)	
	Type: shut down output voltage. Recovers automatically after fault condition is removed.	

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WORKING ENVIRONMENT

Working Temperature	-20°C ÷ 45°C
Working Humidity	20 ÷ 95% RH non-condensing
Storage Temperature and Humidity	-40°C ÷ 80°C, 10 ÷ 95% RH non-condensing
Temperature Coefficient	± 0.05% / °C (-10°C ÷ 45°C)
Vibration	10 ÷ 500Hz, 2G, 10min / cycle, period 30min. each along X, Y, Z axes

SAFETY AND EMC REGULATIONS

Safet Standards	Compliance to EN61347-1, EN61347-2-13
Withstand Voltage	IN/OUT: 5.3kVDC/1min
Isolation Resistance	IN/OUT: 50MΩ/500VDC/25°C/70%
EMC Emission	Compliance to EN55015
EMC Immunity	Compliance to EN61547; EN61000-4-2, -3, -4, -5, -6, -8, -11; EN55024
Harmonic Current	Compliance to EN61000-3-3; EN61000-3-2 class C (≥ 100% load)

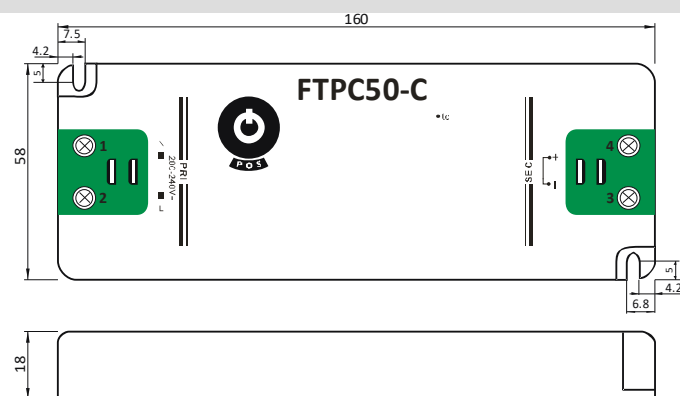
OTHERS

Dimensions	160 x 58 x 18mm (L x W x H)
Weight and Packing	0.16kg; 50pcs./ctn; ctn dimensions: 30 x 20.5 x 16cm

EAN Code	 5 902135 117903	 5 902135 119235
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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 a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment must be re-qualify to comply with EMC Directives.

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