

FTPC50V series

50W Constant Voltage Single Output LED Power Supply



■ Features:

- Protections: Short circuit / Over load / Over temperature
- Cooling by free air convection
- Built-in active PFC function
- Isolation class II
- Compliance to worldwide safety regulations for lighting



ELECTRICAL SPECIFICATION

MODEL	FTPC50V12	FTPC50V24
OUTPUT		
RATED VOLTAGE	12V	24V
RATED CURRENT	4.17A	2.08A
POWER RANGE	1 ÷ 50.04W	1 ÷ 49.92W
RATED POWER	50.04W	49.92W
LINE REGULATION	± 2%	
LOAD REGULATION	± 2%	
VOLTAGE TOLERANCE [3]	± 5%	
RIPPLE & NOISE (max.) [2]	400mV _{p-p}	800mV _{p-p}
SETUP TIME [4]	2000ms	
INPUT		
VOLTAGE RANGE	180 ÷ 264VAC	
FREQUENCY RANGE	47 ÷ 63Hz	
POWER FACTOR (typ.)	PF > 0.9 / 230VAC full load	
EFFICIENCY (typ.)	85%	86%
AC CURRENT (typ.)	0.4A/230VAC	
INRUSH CURRENT (typ.)	75A / 230VAC(25°C)	
NO LOAD POWER CONSUMPTION (typ.)	< 0.5W	
PROTECTIONS		
OVERLOAD	Range: 110 ÷ 130% rated output power	
	Type: hiccup mode, auto-recovery.	
SHORT CIRCUIT	Type: hiccup mode, auto-recovery.	
OVER TEMPERATURE	Range: 110°C ± 10°C	
	Type: shut down output voltage, re-power on to recovery.	

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ENVIRONMENT

WORKING TEMPERATURE	-20°C ÷ 45°C, tc = 85°C
WORKING HUMIDITY	45 ÷ 85% RH non-condensing
STORAGE TEMPERATURE AND HUMIDITY	-30°C ÷ 70°C, 10 ÷ 98% RH non-condensing
VIBRATION	10 ÷ 500Hz, 2G, 12min / cycle, period for 30min. each along X, Y, Z axes
IP PROTECTION	IP20

SAFETY & EMC REGULATIONS

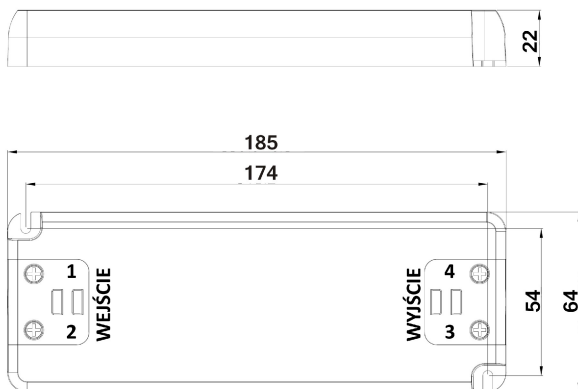
SAFETY STANDARDS	Compliance to EN61347-1, EN61347-2-13
WITHSTAND VOLTAGE	I-P/O-P: 3.75kVAC/1min
ISOLATION RESISTANCE	I-P/O-P: 2MΩ/500VDC/25°C/70%
EMC EMISSION	Compliance to EN55015
EMC IMMUNITY	Compliance to EN61547; EN61000-4-2, -3, -4, -5, -6, -8, -11
HARMONIC CURRENT	Compliance to EN61000-3-3; EN61000-3-2 class C(100% load)

OTHERS

DIMENSIONS	185 x 64 x 22mm
WEIGHT AND PACKING	0.25kg; 50pcs./box; box weight and dimensions: 14.5kg, 33 x 20.5 x 38cm

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 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-qualified to comply with EMC Directives.

MECHANICAL SPECIFICATION



Terminal Assignment		
INPUT	1	AC/N: AC neutral
	2	AC/L: AC line
OUTPUT	3	V+: DC OUTPUT +
	4	V-: DC OUTPUT -