

FTPC50V-D series

50W LED Triac Dimmable Switching Power Supply (CV+CC)



■ Features:

- Constant voltage + constant current design
- European AC input range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- AC phase cut (leading or trailing edge) dimmable
- Built-in active PFC function



◎ ELECTRICAL SPECIFICATION

MODEL	FTPC50V12-D	FTPC50V24-D
OUTPUT		
Rated Voltage	12V	24V
Rated Current	4.16A	2.08A
Current Range	0.5 ÷ 4.16A	0.25 ÷ 2.08A
Rated Power	50W	50W
No Load Output Voltage (max.)	12.6V	25.2V
Line Regulation	± 1%	± 1%
Load Regulation	± 6%	± 6%
Voltage Tolerance [3]	± 5%	± 5%
Ripple & Noise (max.) [2]	1.50V _{p-p}	1.50V _{p-p}
Setup, Rise Time [4]	1s, 500ms / 230VAC at full load	
Hold up Time (typ.)	1.5ms / 230VAC at full load	
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.)	75A / 230VAC (25°C)	
No Load Power Consumption (max.)	< 1W	
DIMMING		
Dimming Range	1 – 100% of rated output current	
Suitable dimmers	Triac dimmers (leading or trailing edge) compatible with capacitive or inductive load	

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PROTECTIONS

Over Current	Range: > 120%
	Type: Decrease output current. Recovers automatically after fault condition is removed.
Short Circuit	Type: Decrease output current. Recovers automatically after fault condition is removed.
Over Voltage	< 18V < 36V
	Type: shut down output voltage. Re-power on to recovery.
Over Temperature	Range: 115°C ± 10°C
	Type: Decrease output current. Recovers automatically after fault condition is removed.

WORKING ENVIRONMENT

Working Temperature	-20°C ÷ +45°C
Working Humidity	15 ÷ 85% RH non-condensing
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
Withstand Voltage	IN/OUT: 3.75kVAC
EMC Emission	Compliance to EN55015
EMC Immunity	Compliance to EN61547
Harmonic Current	Compliance to EN61000-3-2, EN61000-3-3

OTHERS

Dimensions	177 x 57.8 x 21.8mm (L x W x H)
Weight and Packing	0.2kg; 50pcs./box

EAN Code



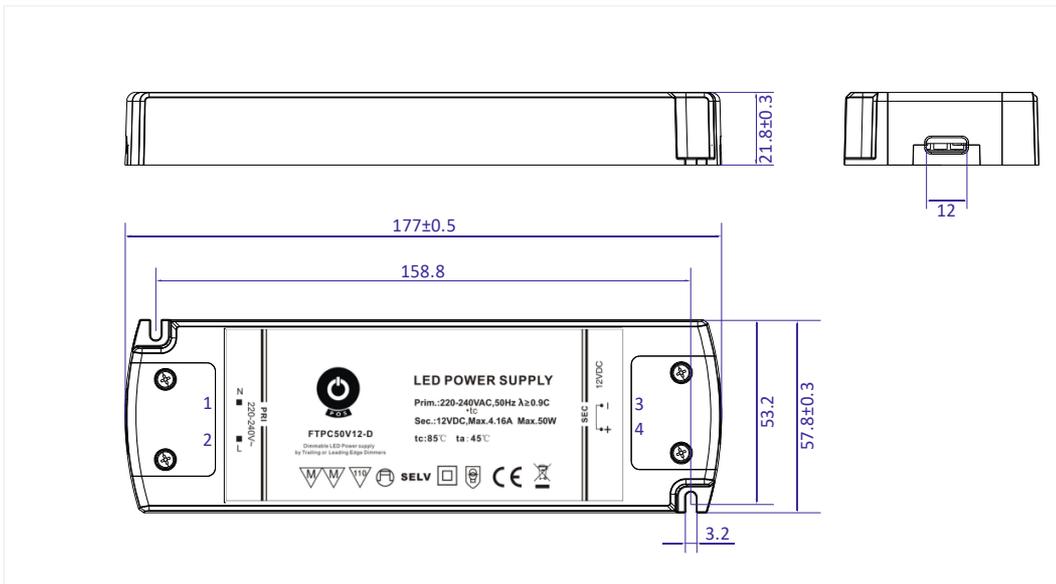
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µF i 47µF parallel capacitor.
3. Tolerance includes set up tolerance, line regulation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

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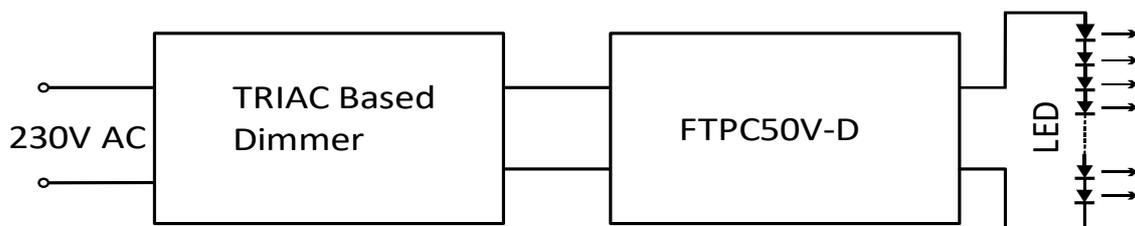
© MECHANICAL SPECIFICATION



PIN ASSIGNMENT

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

© SUGGESTED CONNECTION DIAGRAM WITH DIMMER



SUITABLE DIMMERS

HAGER-WBMD400TO

CLIPSAL 32E450LM

NIKO 310-01900

LEGRAND 78401

RECOM REDIM07