

FTPC100V-D series

100W LED Triac Dimmable Switching Power Supply (CV)



■ Features:

- Constant voltage design
- Protections: Short circuit / Overload / Over temperature
- AC phase cut (leading or trailing edge) dimmable
- Cooling by free air convection
- Compliance to worldwide regulations for lighting



© ELECTRICAL SPECIFICATION

MODEL	FTPC100V12-D	FTPC100V24-D
OUTPUT		
Rated Voltage	12V	24V
Rated Current	8.33A	4.17A
Current Range	0 ÷ 8.33A	0 ÷ 4.17A
Rated Power	100W	100W
No Output Voltage (max.)	12.6V	25.2V
Line Regulation	± 1%	
Load Regulation	± 1%	
Voltage Tolerance [3]	± 3%	
Ripple & Noise (max.) [2]	300mV _{p-p}	
Setup, Rise Time [4]	500ms, 100ms / 230VAC at full load	
Hold up Time (typ.)	10ms / 230VAC at full load	
INPUT		
Voltage Range	220 ÷ 240VAC	
Frequency Range	47 ÷ 63Hz	
Power Factor (typ.)	PF > 0.9 / 230VAC at full load	
Efficiency (typ.)	85%	
AC current (typ.)	<1A / 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: 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 Temperature	Range: 110°C ± 10°C
	Type: shut down output voltage. Re-power on to recovery.

WORKING ENVIRONMENT

Working Temperature	-20°C ÷ +45°C
Working Humidity	45 ÷ 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 , EN 62493
Withstand Voltage	IN/OUT: 3.75kVAC
EMC Emission	Compliance to EN55015
EMC Immunity	Compliance to EN61547
Harmonic Current	Compliance to EN61000-3-3; EN61000-3-2

OTHERS

Dimensions	200 x 63 x 30mm (L x W x H)
Weight and Packing	0.45kg; 25pcs./box; box dimensions: 34 x 20.5 x 18.5cm

EAN Code



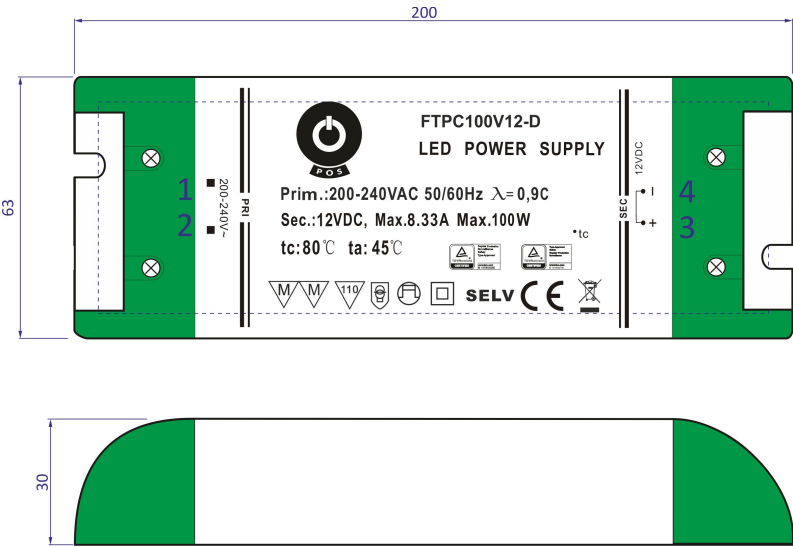
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1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF i 47μF parallel capacitor.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

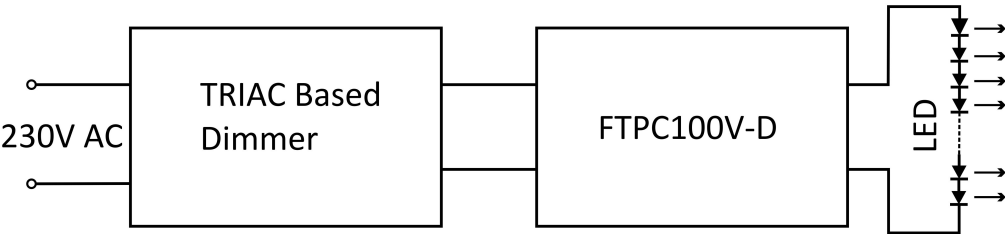
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PIN ASSIGNMENT

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

EU DECLARATION OF CONFORMITY

For the following equipment:

Part No.:	FTPC100VX-D(X = 12, 24)
Batch No.:	S19xxxxxxxxx

Is herewith confirmed to comply with the requirements set out in the Council Directive, the following standards were applied:

ROHS Directives 2011/65/EU, 2015/863/EU

Low Voltage Directive 2014/35/UE:

Standard	Description
EN 61347-1:2015	Lamp controlgear. General and safety requirements
EN 61347-2-13:2014 + A1:2017	Lamp controlgear. Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules
EN 62493:2015	Assessment of lighting equipment related to human exposure to electromagnetic field

Electromagnetic Compatibility Directive 2014/30/UE:

Standard	Description
EN 55015:2013 + A1:2015	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
EN 61000-3-2:2014	Electromagnetic compatibility (EMC). Limits. Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
EN 61000-3-3:2013	Electromagnetic compatibility (EMC). Limits. Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection
EN 61547:2009	Equipment for general lighting purposes. EMC immunity requirements

Power supply is considered as component of final equipment 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 and LVD Directives.

Gliwice, 25.01.2019r.

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NIP 631-24-57-646 REGON 240105606

Pieczęć firmy

K 1 JOWNIK
Dział Techniczny

Łukasz Jaromin

Podpis i pieczęć osoby