# MCHQ250V-E series

250W LED Switching Power Supply (CV)



#### ■ Features:

- European AC input / Full range
- Protections: Short circuit / Overload / Over voltage / Over temperature
  - Cooling by free air convection
    - Built-in active PFC function
  - IP67 design for indoor and outdoor appliances
  - Compliance to worldwide regulations for lighting



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® ELECTRICAL SPECIFICATION					
MODEL		MCHQ250V12-E	MCHQ250V24-E		
OUTPUT					
Rated Voltage		12V	24V		
Rated Current		20A	10.4A		
Rated Power		240W	249.6W		
No load Voltage (max.)		12.6V	25.2V		
Line Regulation		± 1%			
Load Regulation		± 2%			
Tolerance	[2]	± 3%			
Ripple & Noise (max.)	[3]	$300mV_{\text{P-P}}$	300mV <sub>P-P</sub>		
Setup, Rise, Holdup time	[4]	300ms, 50ms, 5ms			
INPUT					
Voltage Range		200 ÷ 277VAC			
Frequency Range		47 ÷ 63Hz			
Power Factor (typ.)		PF > 0.9 / 230VAC pod pełnym obciążeniem			
Efficiency (typ.)		90%	90%		
AC current (typ.)		1.6A / 230VAC			
Inrush current (max.)		75A / 230VAC(25°C)			
No load power consumption (max.)		<0.5W			
OUTPUT					
Overload		Range: 105 ÷ 150%			
		Type: hiccup mode. Recovers automatically after fault condition is removed.			
Short Circuit		Type: hiccup mode. Recovers automatically after fault condition is removed.			
Our Mallana		Max. 18V	Max. 36V		
Over Voltage		Type: shut down output voltage. Re-power on to recovery.			
Over Temperature		Range: 110°C ± 10°C			
		Type: shut down output voltage. Recovers automatically after fault condition is removed.			

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WORKING ENVIRONMENT				
Working Temperature	-40°C ÷ +50°C, max t <sub>c</sub> = 90°C			
Working Humidity	45 ÷ 85% RH non-condensing			
Storage Temperature and Humidity	-40°C ÷ +80°C, 10 ÷ 95% RH non-condensing			
Working noise	<35dB at full load, pickup 10cm distance from product			
SAFETY AND EMC REGULATIONS				
Safety Standards	Compliance to EN61347-1, EN61347-2-13			
Withstand Voltage	IN/OUT: 5.3kVDC/1min			
Isolation Resistance	IN/OUT; IN/GND; OUT/GND: 50MΩ/500VDC/25°C/70%			
EMC Emission	Compliance to EN55015 – TUV certificate			
EMC Immunity	Compliance to EN61547; EN61000-4-2, -3, -4, -5, -6			
Harmonic Current	Compliance to EN61000-3-2 class C			
OTHERS				
Lifetime	50 000h at full load and max. Rated ambient temperature			
Dimensions	221 x 61.5 x 36.5mm (L x W x H)			
Weight and Packing	0.88kg; 10pcs./box; box dimensions: 26.5 x 19 x 25.5cm			
EAN Code	5 9 0 2 1 3 5 1 2 3 1 9 5	5 19 0 2 1 3 5 1 2 3 2 0 1		

- 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  $0.1\mu F$  i  $47\mu F$  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.

#### **OMECHANICAL SPECIFICATION**

