

MCHQ100V-E series

100W LED Constant Voltage Switching Power Supply



■ 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



⊙ ELECTRICAL SPECIFICATION

MODEL	MCHQ100V12-E	MCHQ100V24-E
OUTPUT		
Rated Voltage	12V	24V
Rated Current	8.33A	4.17A
Rated Power	99.96W	100.08W
No load Voltage (max.)	12.6V	25.2V
Line Regulation	± 1%	25.2V
Load Regulation	± 2%	
Tolerance	[2] ± 3%	
Ripple & Noise (max.)	[3] 180mV _{p-p}	250mV _{p-p}
Setup, Rise, Holdup time	[4] 500ms, 15ms, 20ms	
INPUT		
Voltage Range	200 ÷ 277VAC	
Frequency Range	47 ÷ 63Hz	
Power Factor (typ.)	PF > 0.9 / 230VAC at full load	
Efficiency (typ.)	85%	85%
AC current (typ.)	0.7A / 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.	
Over Voltage	Max. 18V	
	Type: shut down output voltage. Re-power on to recovery.	
Over Temperature	Range: 110°C ± 10°C	
	Type: shut down output voltage. Re-power on to recovery.	

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WORKING ENVIRONMENT

Working Temperature	-40°C ÷ +60°C, max t _c = 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 – TUV certificate
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 – TUV certificate
Harmonic Current	Compliance to EN61000-3-2 class C

OTHERS

Lifetime	30 000h at full load and max. Rated ambient temperature
Dimensions	205 x 46 x 38.5mm (L x W x H)
Weight and Packing	0.46kg; 10pcs./box; box dimensions: 26.5 x 19 x 25.5cm

EAN Code	 5 9 0 2 1 3 5 1 2 2 0 8 2	 5 9 0 2 1 3 5 1 2 2 7 3 0
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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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