

# Phase cut /Triac dimmable driver-PWM output F-300W



#### **■**Features

- ·Output constant voltage
- ·UL, cUL listed, Class P, Type HL
- ·Universal AC input: 110-277VAC
- .Power Factor: up to 0.99 ·High efficiency : up to 88%
- ·Dimming range: 0-100%
- ·Load: 10-100%
- ·Protection:short circuit/over loading/ Over temperature
- ·PWM output, does not change the color index
- ·Full protection aluminum housing, for dry, damp, wet location
- ·Flicker-free
- ·Compatible with Forward phase, Reverse phase, Triac, MLV, ELV Dimmers
- ·Cooling by free air convection
- ·Suitable for LED lighting and moving sign applications



# **■**Specification

Model		F-300W-24V
Certificates		FCC UL cUL
Output	DC Voltage	24V
	Rated Current	12.5A
	Rated Power	300W
	Voltage Tolerance	±0.5V
	Voltage Regulation	±0.5%
	Load Regulation	±1%
Input	Voltage Range	110-277VAC
	Frequency Range	47-63Hz
	Power Factor (Typ.) @ full load	0.99@120VAC 0.97@277VAC
	THD (Typ.) @ full load	<20%
	Efficiency (Typ.) @ full load	88%
	AC Current (Max.)	3.4A@110VAC
	Inrush Current (Typ.)	20A, 50%, 1.9ms
	Leakage current	<0.50mA
Protection	Short Circuit	shut down o/p voltage, re-power on to recover after fault condition is removed
	Over Loading	≤120% Hiccup mode,recovers automatically after fault condition is removed
	Over temperature	100℃±10℃ shut down o/p voltage, automatically recover after cooling.
Environment	Working TEMP.	-40∼+60°C (see below derating curve)
	Working Humidity	20∼90% RH, non-condensing
	Storage TEMP. Humidity	-40∼+80℃,10∼95%RH
	TEMP .coefficient	±0.03%/°C (0~50°C)
	Vibration	10∼500Hz, 5G 10min./1 cycle,period for 60min. each along X,Y,Z axes
Safety& EMC	Safety standards	UL8750
	Withstand voltage	I/P-O/P:1.88KVac
	Isolation resistance	I/P-O/P:100MΩ/500VDC/25°C/70%RH
	EMC EMISSION	FCC Part 15 B
others	Net. Weight	1.7Kg
	Size	276*78*47mm (L*W*H)
	packing	10PCS/CTN

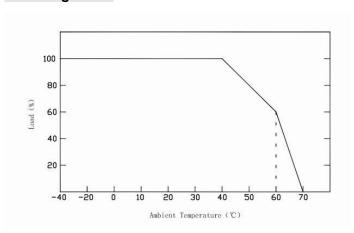


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Notes

- 1. All parameters if NOT specially mentioned are measured at 120VAC input , rated load and 25  $^{\circ}$ C of ambient temperature.
- 2. To extend the driver's using life ,please reduce the loading at lower input voltage.

## **■**Derating Curve



\*To extend their life, please refer to the Derating Curve and derate according to the temperature.

## ■ Mechanical Specification

Unite: mm Tolerance:P 0.5-2mm 276mm(10.8661") 264mm(10.3937") 252mm(9.9212") Output 78mm 0 (3.0708")0 8mm (0.3149")5mm(0.1968") 200mm(7.8740" White (N) 47mm (1.8504")200mm(7.8740"

- ※ Input Rubber wire 3\*18AWG Black and White to be connected to AC L and N ,Green wire go ground,
- \*\*Output Rubber wire, 2\*14AWG Red to LED Positive side (+), Black to LED Negative side (-). (noted that 12V 300W is with 2 group of 2\*14AWG output wires to separate the output current.)

### **■**Dimming Operation

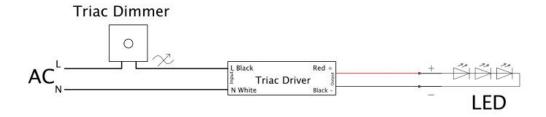
- \*\*The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of the AC phase line(L) by connection a phase/triac dimmer.
- \*\*Usually matching with Forward phase , leading edge , Magnetic low voltage, triac dimmers, or Reverse phase, trailing edge ,Electric low voltage Dimmers.

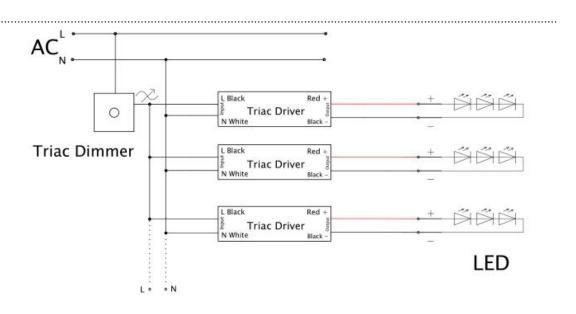


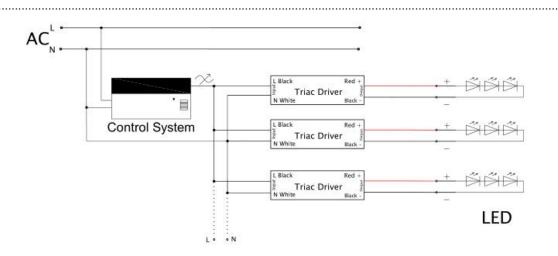
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\*\*Please try to use dimmers with power at least 1.5 times as the output power of the driver.

## **■** Connecting Diagram







#### ■ Instruction:

- 1)This driver should be installed by qualified and professional person;
- 2)Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation.
- 3)Ensure that wiring is correct before test in order to avoid light and power supply damage.