



Phase cut /Triac dimmable driver-PWM output

F-300W



■Features

- Output constant voltage
- UL, cUL listed, Type HL
- Universal AC input: 110-277VAC
- Power Factor: up to 0.99
- High efficiency : up to 92%
- 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 and wet location
- Flicker-free
- Dimming function:
 - Phase dimming: work with forward phase /leading edge ,MLV and Reverse phase /trailing edge ,ELV, TRIAC dimmers
- Suitable for LED lighting and moving sign applications



TYPE HL



Model		F-300W-12V		F-300W-24V	
Certificates		FCC UL cUL			
Output	DC Voltage	12V		24V	
	Rated Current	25A		12.5A	
	Rated Power	300W			
	Voltage Tolerance	±0.5V			
	Voltage Regulation	±0.5%			
	Load Regulation	±2%		±1%	
Input	Voltage Range	110-277VAC			
	Frequency Range	47-63Hz			
	Power Factor (Typ.) @ full load	0.99@120VAC 0.97@277VAC		0.99@120VAC 0.95@277VAC	
	THD (Typ.) @ full load	<20%			
	Efficiency (Typ.) @ full load	86% @120Vac 88%@277Vac		88% @120Vac 92%@277Vac	
	AC Current (Max.)	3.4A@110VAC			
	Inrush Current (Typ.)	20A, 50%, 1.9ms @120Vac 35A, 50%, 1.9ms @277Vac			
	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% constant current limiting, auto-recovery			
	Over temperature	100℃±10℃ shut down o/p voltage, automatically recover after cooling.			
Environment	Working TEMP.	-40～+60℃ (see below derating curve)			
	Working Humidity	20～95%RH, non-condensing			
	Storage TEMP. Humidity	-40～+80℃, 10～95%RH			
	TEMP .coefficient	±0.03%/℃ (0～50℃)			
	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:100MQ/500VDC/25℃/70%RH			



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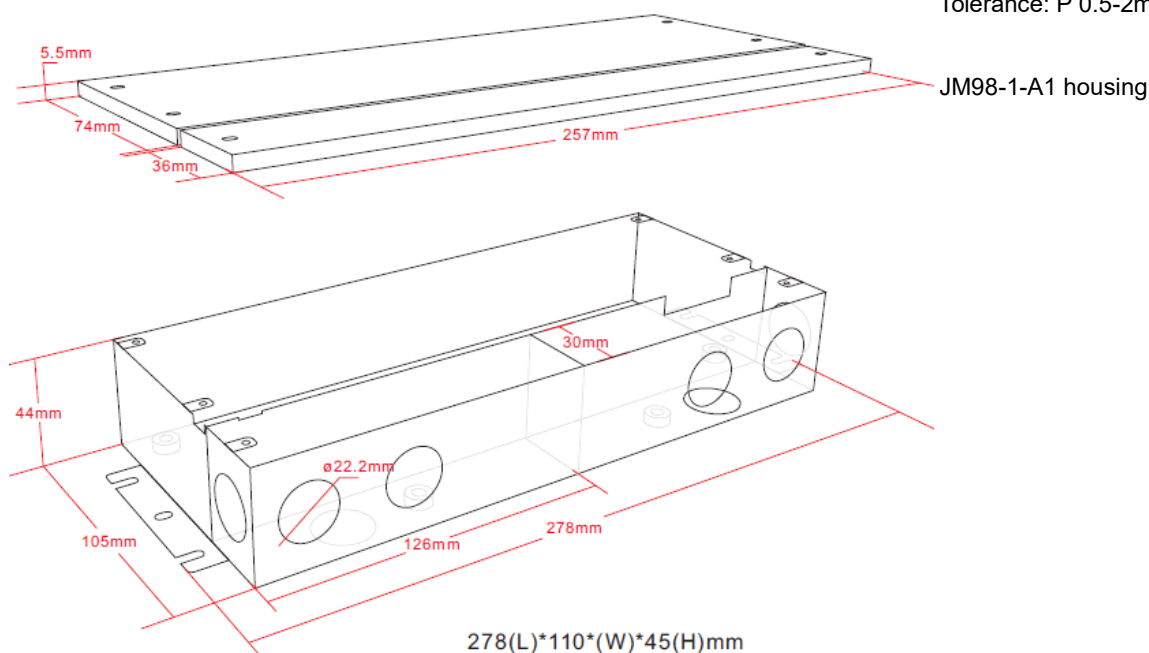
F-300W

	EMC EMISSION	FCC Part 15 B
others	Net. Weight	1.9Kg
	Size	278*110*45mm (L*W*H)
	packing	10PCS/CTN
Notes	1. All parameters if NOT specially mentioned are measured at 120VAC input , rated load and 25℃of ambient temperature. 2. To extend the driver's using life ,please reduce the loading at lower input voltage.	

■ Mechanical Specification

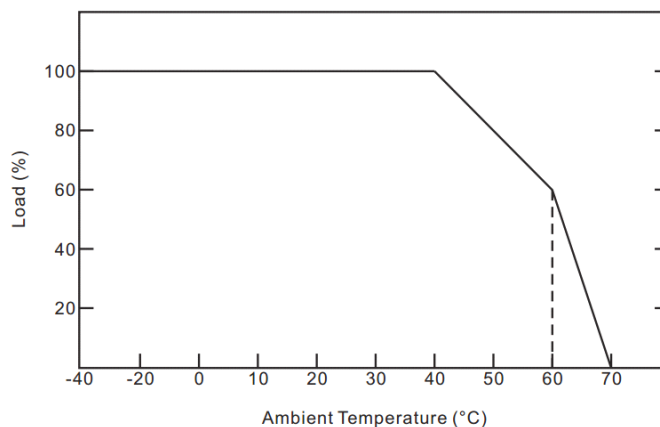
Unite: mm

Tolerance: P 0.5-2mm



- ※ Input wire 18AWG Black and White to be connected to AC L and N ,Green wire go ground,
- ※ Output wire 16AWG Red to LED Positive side (+) , Black to LED Negative side (-).

■ Derating Curve



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



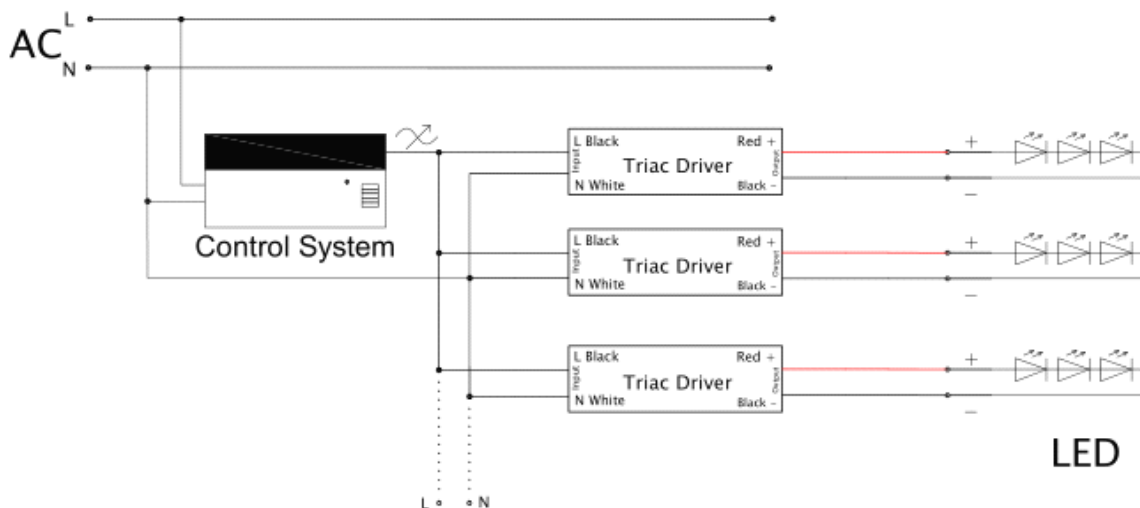
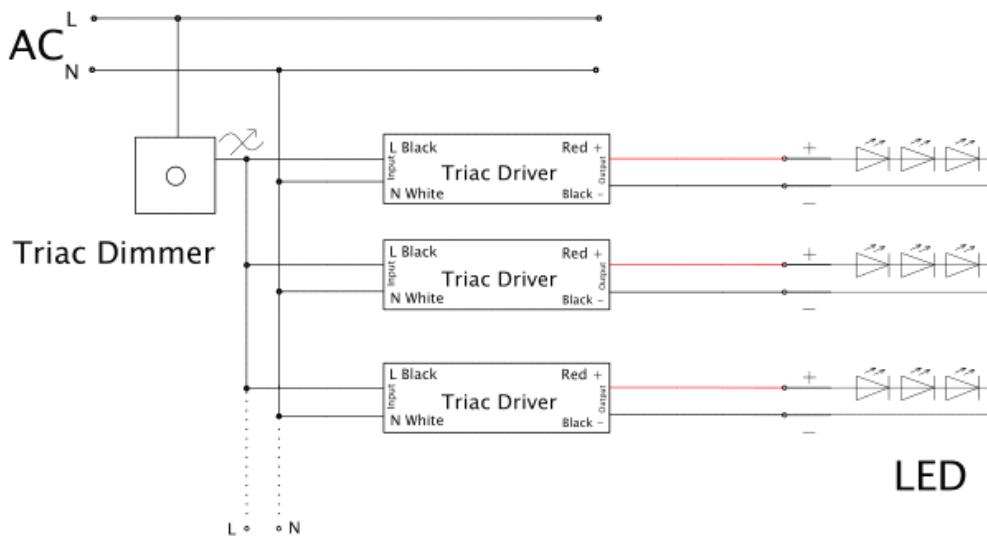
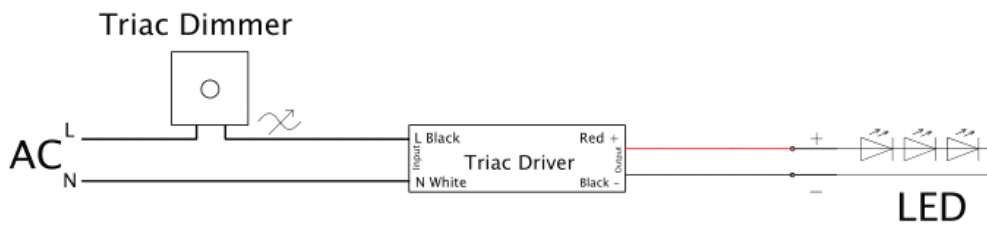
■ Dimming Operation

※ 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.

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

■ Connecting Diagram





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■ 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.