

Typical Waterproof LED Driver (Constant Voltage)

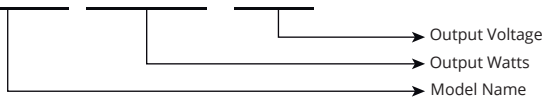
Z-PW-180W-12V

Feature

- Meet U.S.,Canada standard
- Universal input range:120-277Vac
- short circuit,over voltage and overload protection
- Suitable for dry,damp,wet locations
- UL/cUL,Class 2
- 5 years warranty
- Applied to LED advertising signs,cabinet



Z-PW-180W-12V



Class 2



Technical Specs

Z-PW-180W-12V		
OUTPUT		
Output Voltage	12Vdc	
Output Voltage Range	12Vdc±5%Vdc	
Output Current	3*5A Max	
Output Power	180W	
Output Ripple & Noise	≤500mV	
INPUT		
Input Voltage Range	120Vac-277Vac	
Input Frequency Range	50 ~ 60HZ	
Input Current	≤1.7A(120Vac)	
Surge Current (cold start)	46A @230Vac	
Power Efficiency (TYP)	88%(120Vac)	
Leakage Current	<0.75mA/240Vac	
PROTECTION		
Over-Current Protection	Shut down the output when current load ≥ 110% ,and recover automatically	
Short-Circuit Protection	Hiccup Mode,and recover automatically	
Over-Voltage Protection	Shut down the output when non-load voltage≥ 13V, and recover automatically	
ENVIRONMENT		
Working Temperature	-30°C~+60°C (See below derating curve)	
Working Humidity	10%~95%RH	
Approved Enviroments location	For dry,damp,wet locations	
Storage Temperature	~35°C~+65°C	
Storage Humidity	10%~95%RH	
IP Rating	IP67(note 1)	
Vibration	10~500Hz, 1.0mm, 15 minutes(for X、 Y、 Z each axis)	
Tcase	+90°C	
SAFETY&EMC		
Safety Standard		Design refer to UL8750,CSA C22.2 NO.250.13,CSA C22.2 NO.207-15 Design refer to EN61347-1,EN61347-2-13,EN62493
Dielectric Strength (Hi-Pot)	I/P-O/P	1.8KVAC/5mA/1min
	I/P-Case	1.8KVAC/5mA/1min
Insulation Resistance	100MΩ / 500VDC/1min	
Grounding Resistance	≤0.5Ω	
EFT	2kv on AC power line	
Surge	2kv(L-N) 4kv(L-GND, N-GND) (IEC61000-4-5)	
OTHERS		
MTBF	200Khrs.MIL-HDBK-217F(25 C)	
LIFE TIME	50,000 hours at Tc ≤ 80°C maximum case hot spot temperature	
Dimensions	9.45" *2.52" *1.26" (L*W*H) : 240*64*32mm(L*W*H)	
Weight	0.83 kg	
Outer Box Specifications	17.32" *10.83" *7.68" (L*W*H); 440*275*195mm(L*W*H)/25pcs/ctn Total 5 layer,each layer 5pcs/G.W21.5kg/N.W20.5kg(1+10%)	

Remarks:

Note 1: IP67 can be used in dry, damp, wet locations. Avoid installing in submerged environments or applications where drivers will come into direct contact with prolonged flowing or dipping water.

Test environment temperature : 25 ± 2°C;

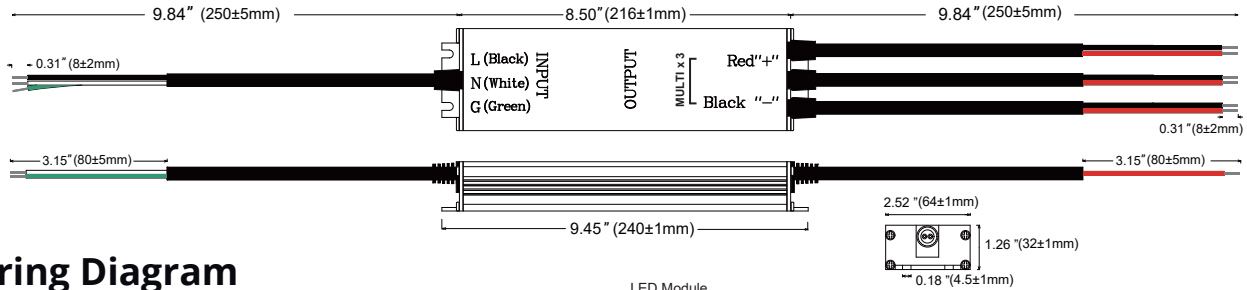
Ripple and noise measurement methods: terminal to parallel 47uF electrolytic capacity and 0.1uF ceramic capacity, in 20 MHZ Bandwidth measurement.

"The driver is suitable for connecting resistor current-limiting LED fixture (e.g. LED strip). The inrush current will be dozens of times increased if connecting built-in constant current IC current-limiting LED fixtures, the driver will activate the overloaded protection (hiccup flickering)."

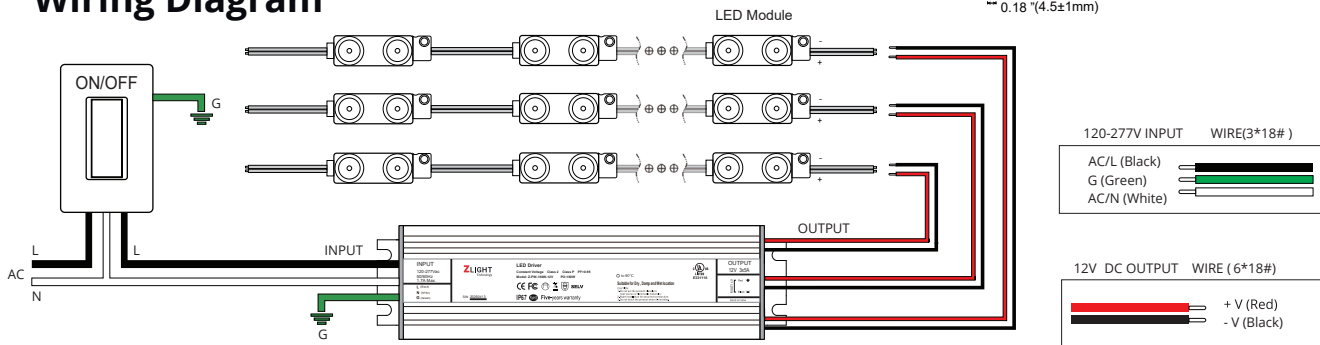
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Profile Drawing

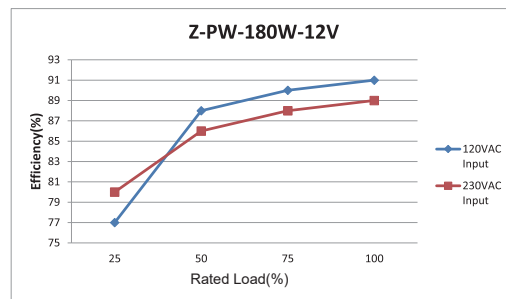
Unit: inch&mm



Wiring Diagram

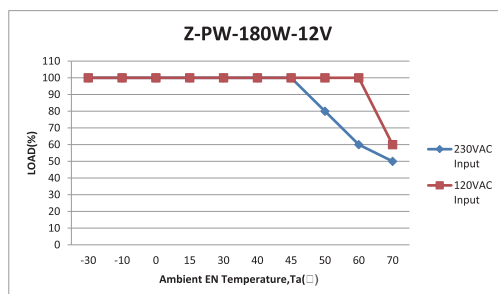


OUTPUT LOAD vs Efficiency (Input 120VAC & 230VAC)



OUTPUT LOAD vs Temperature (Input 120VAC & 230VAC)

The Z-PW-180W-12V series can be operated with cooling air temperatures between -30°C-60°C by linearly de-rating the total maximum output power (or current) by 2.0%/°C from 60°C to 70°C (see figure).



Attentions

- Please ensure that the ground wire is properly grounded and ensure it does not come into contact with the neutral wire.
- Please make the power supply installed in a well-ventilated place, to ensure that the environment temperature is appropriate.
- Do not overload the power supply with multiple appliances.
- Please do not touch the metal shell surface to avoid high temperature scald.
- Do not install in the minefield or high pressure area.
- Do not attempt to repair privately. Please contact the supplier if you have any questions.

Tips

- To be installed by a certified electrician. Please read and follow the instructions carefully before installing. Ensure all contact points are connected firmly.
- Please pay attention to the using environment, and conduct regular check and maintenance to eliminate safety risks.