



# IP67



## FEATURES:

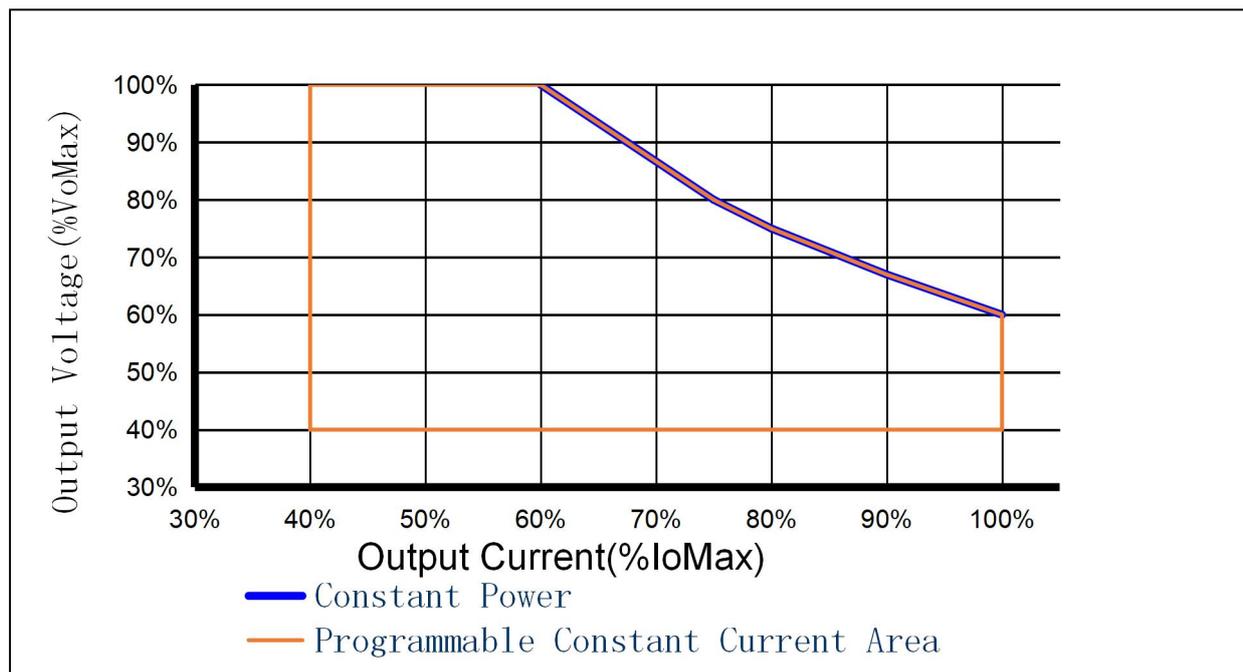
- NFC technology programmable without driver power on
- Constant power programmable design
- High efficiency (Max 92%), active power factor correction
- Ultra low THD at light load
- 0~10V/ PWM/ Timer,Dim to off option
- 12V/200mA AUX Output
- UL recognized with HL/ TL/Surge(Diff:4kV, Common:6kV)
- 5 year limited warranty

## Electrical Specifications

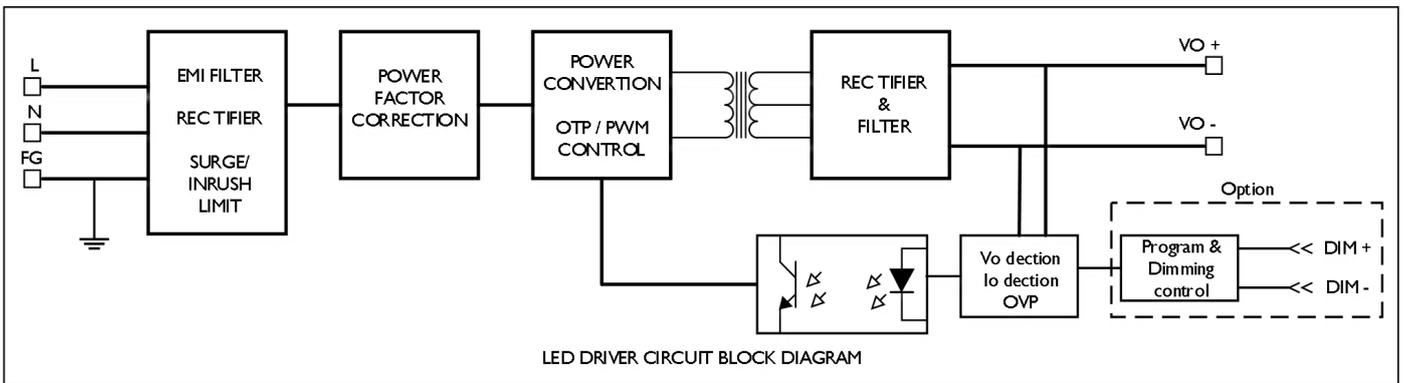
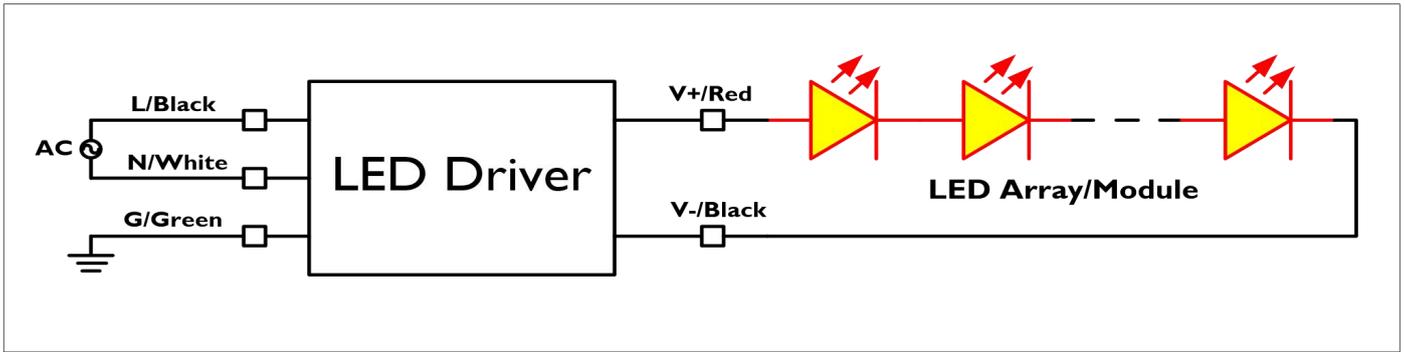
Model:		MWP250CV 24-36F	MWP250CV 36-48F	MWP250CV 48-80F	MWP250CV 80-140F	MWP250CV 140-233F
Output	Max Output Power	250W				
	Constant Power Output Voltage Range	24-36V	36-48V	48-80V	80-140V	140-233V
	Constant Power Output Current Range	6.9-10.4A	5.2-6.9A	3.2-5.2A	1.78-3.2A	1.07-1.78A
	Programmable Constant Current Region	4.1-10.4A	2.7-6.9A	2.0-5.2 A	1.2-3.2 A	1.0-1.78 A
	Open load Voltage	1.05Vp(Vp:Programmable Output Voltage)				
	Line Regulation	±0.5%				
	Load Regulation	±3%				
	Ripple & Noise Pk-Pk	3%Vo				
	Eff.@ 115Vac & 100%load	90%	91%	91%	91%	91%
	Eff.@ 230Vac & 100%load	91%	92%	92%	92%	92%
	Turn-On Delay Time	<0.8S(100Vac,100%Load)				
	Dimming	0-10V(0%-100%)				
	Temperature Coefficient Of iset	0.05%/°C				
Auxiliary output	12V/200mA					
Input	AC Current Max	2.78A Max. @100Vac				
	Rated Input Voltage Range	100-277Vac				
	Input Voltage Range	90-305Vac				
	Frequency Range	50/60Hz				
	Power Factor(PF)	PF>0.97 (Vin 230Vac 100%load),PF>0.95(Vin277Vac 70%load)				
	THD	<20% (100-277Vac,50-100%Load)				
	Standby Power	0.4W(Measured at 230Vac,Dimming off)				
	Inrush Current Max	65A @230Vac Ta=25°C				
	Leakage Current	<0.75mA @ 277Vac				
Protection	Short Circuit Protection (SCP)	In the event of a short circuit condition, there will be no damage to the driver, then automatic self-recovery will be activated.				
	Surge Protection	Line to Line: 4KV,Line to Earth: 6KV				
	Over Temperature Protection	When the Internal PCB temp reaches 105°C (±5°C), to avoid any damage to the driver, its output will be turned off.After the temperature drops below 105°C,				

		automatic self-recovery mode will be activated.
<b>Environment</b>	Ambient Temperature	Ta :-40~+70°C; Tc (max): ≦ 90°C
	Operating Humidity	20~90% RH
	Storage Temperature & Humidity	-40~+80°C, 10~95% RH
	Environment Protection Rating	UL Dry, Damp or Wet Location, IP67
	Vibration	10~500Hz 5G 12Min/Cycle, X,Y,Z axis per 72 minute
<b>Safety &amp; EMC</b>	Safety Standards	IEC/EN61347-1(GB19510-1-2009), IEC/EN61347-2-13(GB 19510.14-2009), UL8750, CSA C22.2 NO. 250.13-12
	Withstand Voltage	I/P-O/P:3.75KVac, I/P-FG:1.5KVac,O/P-FG:0.5KVac
	Insulation Resistance	I/P-O/P, >100M Ohms/500VDC/25°C/70%RH
	EMI	EN55015, FCC PART 15-CLASSB
	Harmonic Current	EN61000-3-2 Class C
	EMS	EN61000-4-2,3,4,5,6,8,11;ENV50204,EN61547,EN55024 Industry standard
<b>Others</b>	MTBF	>250kHrs to MIL-HDBK-217 at25°C,GB
	Dimensions	215*85*39.5mm (L*W*H), 8.46*3.45*1.56in (L*W*H)
	Weight	1235 ± 10g,20pcs/carton

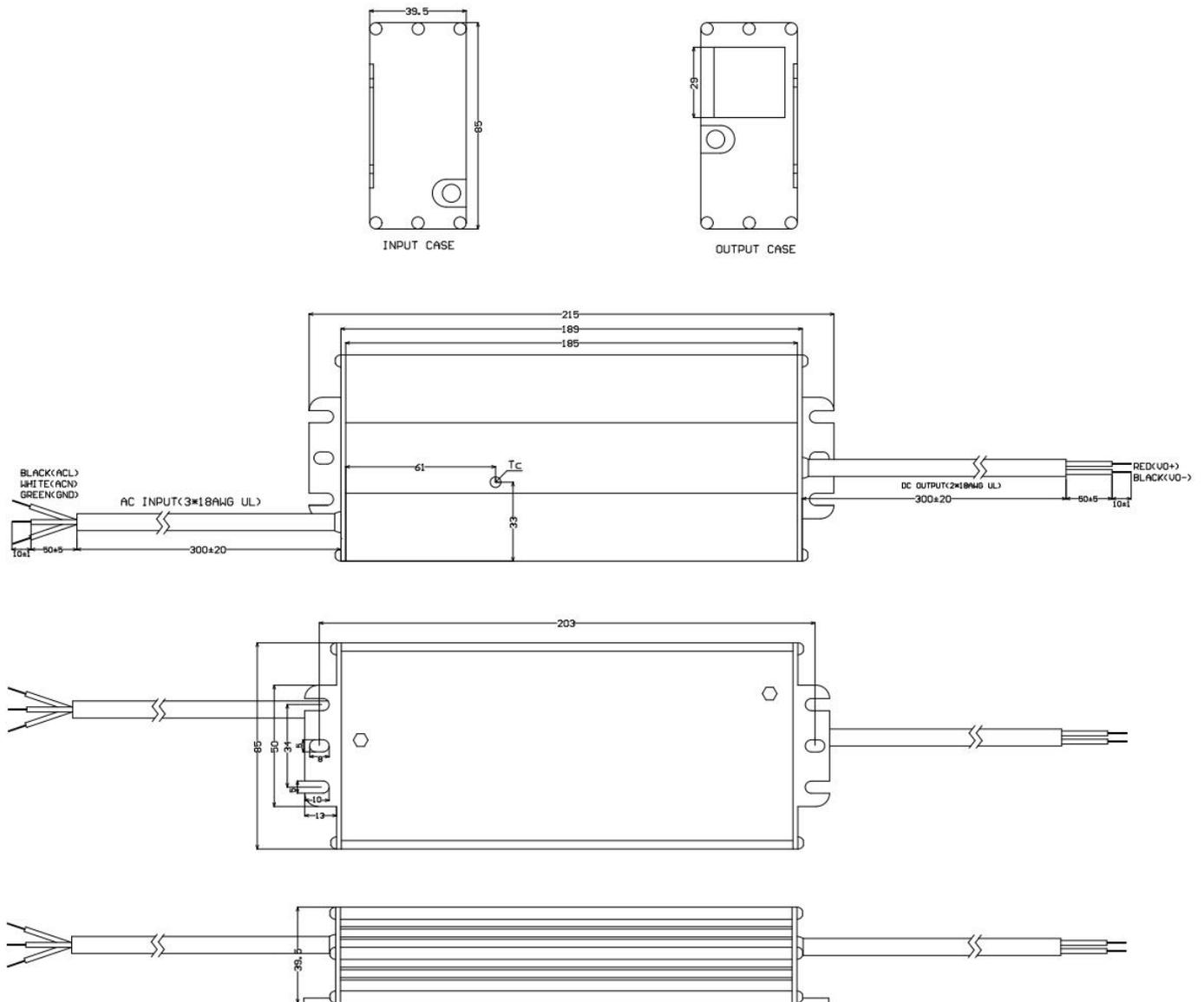
## V-I Operating Area



# Wiring Diagram



# Enclosure



## Installation & Application Notes

### Section I – Physical Characteristics

- 1.1 LED Driver shall be installed inside an electrical enclosure.
- 1.2 Wiring inside electrical enclosure shall comply with 600V/105°C rating or higher.
- 1.3 Input and output use lead-wires. Lead-wires are UL SJTW Cable 18AWG I05C/600V solid copper.
- 1.4 Special water proof should be used on the input/output cable, this product is non-potting, water maybe suck in the product.

### Section II – Performance

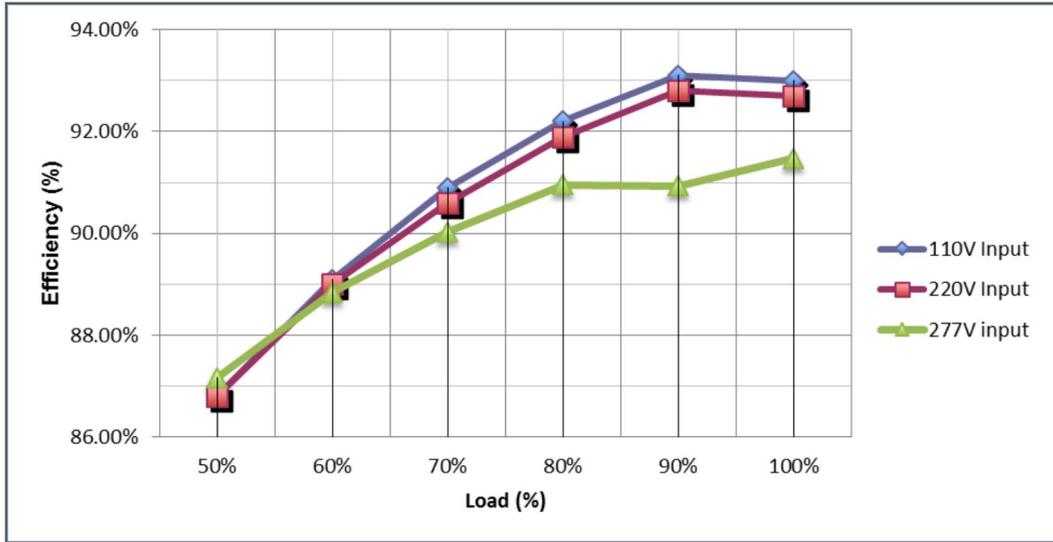
- 2.1 LED Driver has a minimum operating ambient temperature of -40°C.
- 2.2 LED Driver is certified by UL for use in a dry, damp or wet location.
- 2.3 LED Driver tolerates sustained open circuit and short circuit output conditions without damage.
- 2.4 LED Driver maximum allowable case temperature is 90°C .
- 2.5 LED Driver reduces output power to LEDs if maximum allowable case temperature is exceeded.

### Section III –Cautions

- 3.1 LED Driver should be kept away from heat source and flammable and explosive substances.
- 3.2 LED Driver Should be installed in a ventilated and good heat dissipation space.
- 3.3 High Voltage! Do not open the case without experience.
- 3.4 Make sure I/P, O/P wire joints completely watertight, to prevent electric shock & leakage of electricity.

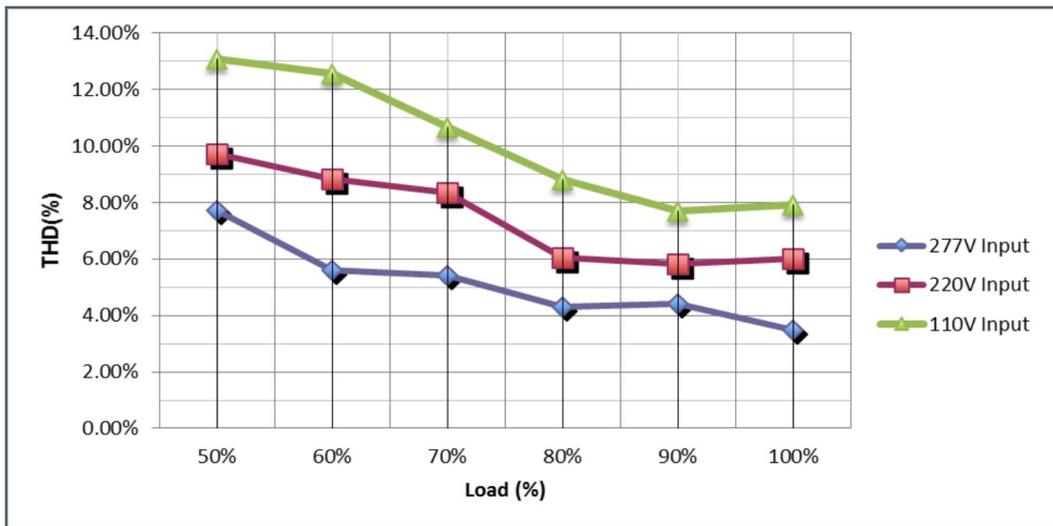
## Efficiency

### MWP250CV36-48F Efficiency vs Output



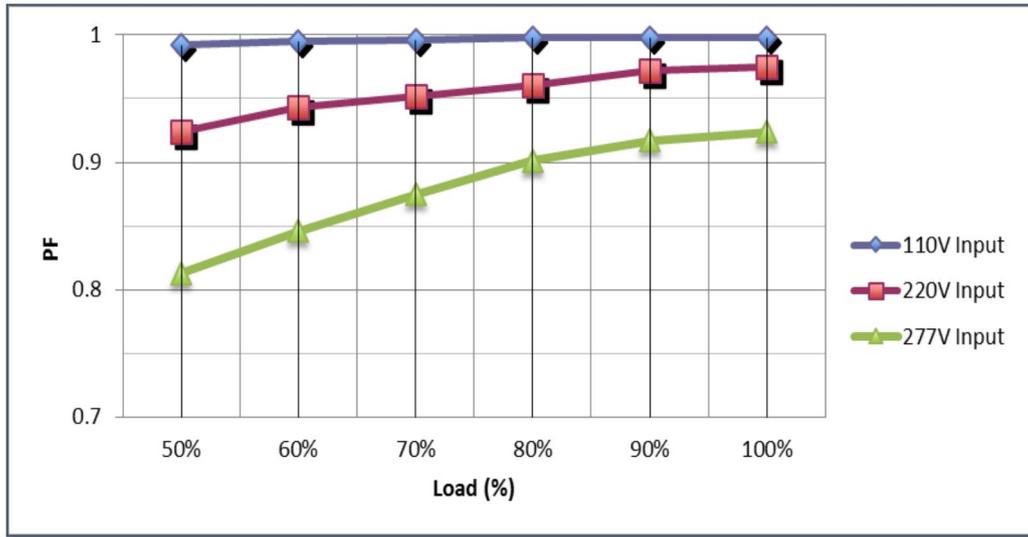
## THD

### MWP250CV36-48F THD vs Output

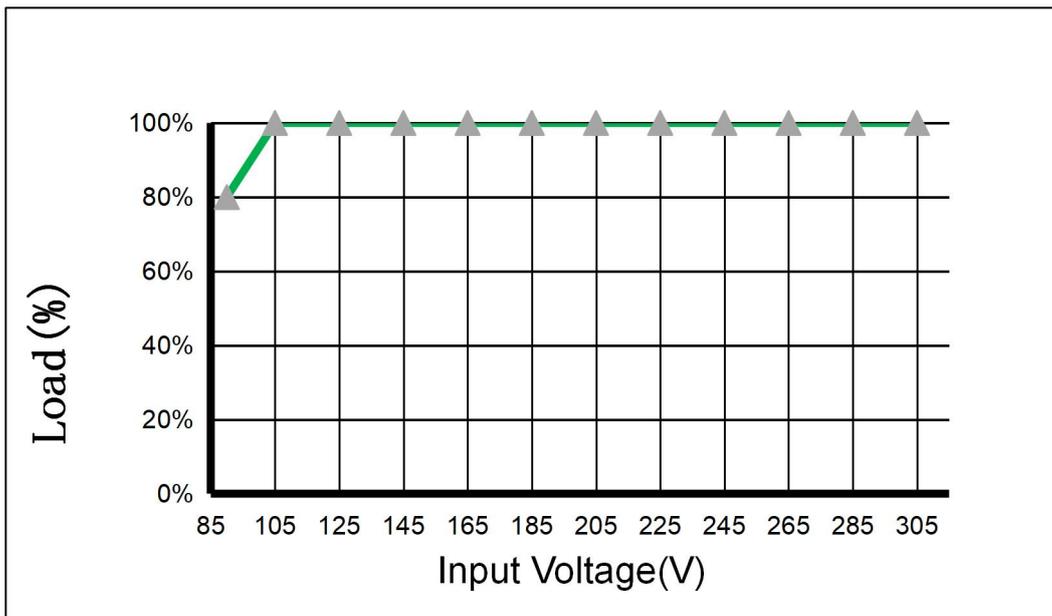


## Power Factor

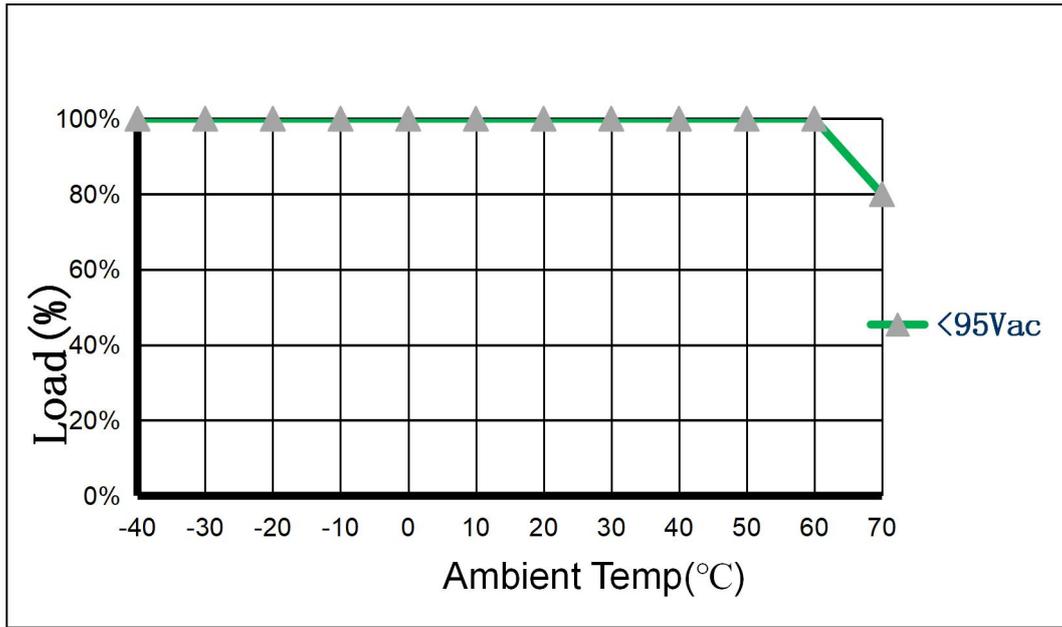
### MWP250CV36-48F PF vs Input Voltage



## Static Characteristics

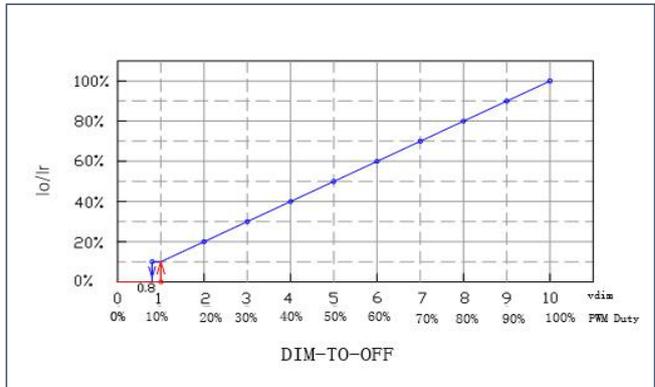
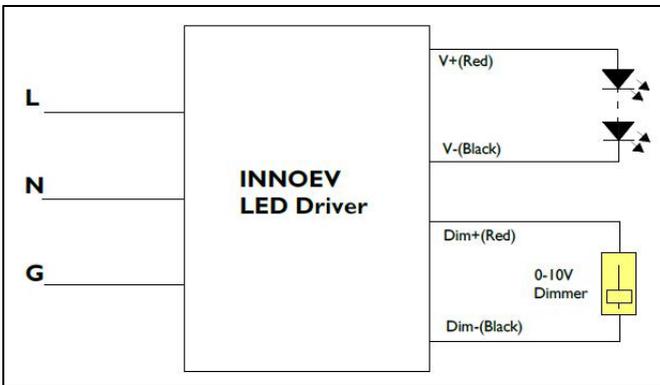


# Output Power Derating



# 0-10V Dimming Application (Optional Function)

## 0-10V Dimming



<b>GND</b>	Grey
<b>Dimming wire 0-10V&amp;PWM</b>	Purple
<b>12V AUX</b>	Yellow
<b>Input Dimming Voltage</b>	0-10V
<b>DIM+ Source Current</b>	0-1mA
<b>12V AUX Source Current</b>	200mA
<b>PWM Frequency Range</b>	0.5 ~ 3 KHZ
<b>PWM high level</b>	10V

### NOTE:

1.  $I_o$  is actual output current and  $I_r$  is rated current without dimming control.
2. For the driver to operate properly, the load voltage must be in the working voltage range.
3. We have DIM-TO-OFF option can be programmed by the programmer.
4. Maximum input voltage at dimming wire is 12V.
5. AUX wire is only for source, can't connect to other voltage source.

# Revision History

