# POWER SOURCE



# TRIAC Dimmable LED Driver with PWM Output

# Features of the PDV-100 Series:

- Constant
  Voltage PWM
  Output
- AC Input Range: 200-240VAC
- Class I Power Supply

- IP66 Design For Outdoor Installation
- Cooling by Free Air Convection
- Factory Fitted Flex and Plug
- Compatible with Most Leading and Trailing Edge Dimmers



C€ ⊕ ⊕ ≊ IP66 SELV

### Specification



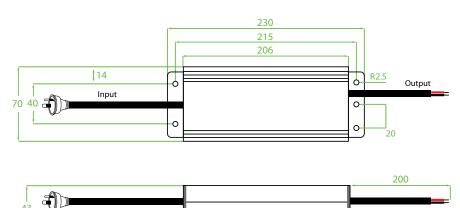
Model		PDV-100-12	PDV-100-24
Output	DC voltage	12V	24V
	Voltage tolerance	±0.5V (see Note 2.)	
	Rated current	8.33A	4.16A
	Rated power	100W	
	Voltage range	200-240VAC	
Input	Frequency range	47~63HZ	
	Power factor	PF ≥ 0.97/200VAC PF ≥ 0.97/230VAC PF ≥ 0.97/240VAC (Full loading)	
	Full load efficiency (Typ.)	83%	84%
	AC current (Max.)	0.8A	0.8A
	Leakage current	<0.50mA	
	Inrush current	Cold Start 49.5A (twidth = 490us measured at 50% Ipeak) at 230 VAC	Cold Start 30A (twidth = 200us measured at 50% Ipeak) at 230 VAC
	MAX. No. of drivers on 16A Circuit breaker	3 units (circuit breaker of type B) / 5 units (circuit breaker of type C) at 230VAC	
Protection	Short circuit	Shut down o/p voltage, re-power on to recover after fault condition is removed	
	Over loading (Note 4.)	≦120% constant current limiting, auto-recovery	
	Over temperature	≦100°C± 10°C shut down o/p voltage, re-power on to recover	
Environment	Working TEMP.	-40-+70°C (refer to de-rating curve)	
	Working humidity	20~95%RH, non-condensing	
	Storage TEMP., humidity	-40~+80°C,10-95%RH	
	TEMP. coefficient	±0.03%/°C (0~40°C)	
	Vibration	10-500Hz, 2G 10min./1 cycle, period for 72min, each along X, Y, Z axes	
Safety & EMC	Safety standards	EN61347-1 EN61347-2-13	
	Withstand voltage	I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC	
	Isolation resistance	I/P-O/P I/P-FG O/P-FG:100MΩ/500VDC/25°C/70%RH	
	EMC emissions (Note 3.)	EN55015, EN61000-3-2,3 (≧60%loading)	
	EMC immunity	EN61000-4-2,3,4,5,6 ,11, EN61547	
Others	Net. weight	1.1kg	
	Size	230*70*43mm(L*W*H)	
	Packing	245*75*65mm inner box, 340*275*170mm outside ca	rton 10PCS /CTN
Notes	<ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Tolerance: Includes set up tolerance, line regulation and load regulation.</li> <li>The LED driver is considered as a component that is operated in conjunction with final equipment. EMC performance could be affected by the complete installation. Original equipment manufacturers may need to conduct additional EMC testing and certification on the final equipment.</li> <li>Loading range from 10% to 100%.</li> <li>Specifications are subject to change without prior notice. Contact your supplier to confirm any critical parameters.</li> </ol>		

#### **Dimming Operation**

- Dimming is with installing a leading edge, or trailing edge TRIAC (AC phase cut) dimmer across the AC input.
- Compatible with most leading edge and trailing edge TRIAC (AC phase cut) dimmers. Australian compatibility table available on request.
- It is recommended that a dimmer, with a power rating three times higher than that of the rated output of the LED driver is used.

#### **Mechanical Specification**

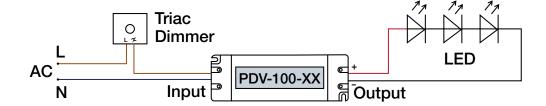
- Output cable type: Rubber H05RN-F 2\*1.0mm<sup>2</sup>.
- Connect LED to LED driver via the output cable: Red output(V+) Positive, Black output (V-) negative.
- Incorrect wiring could result in damage to the LED driver, which is not covered by the warranty.
- Contact your supplier with specific input, or output configuration requests.

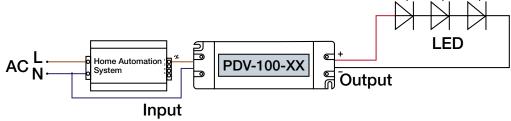


### **Connection Diagram**

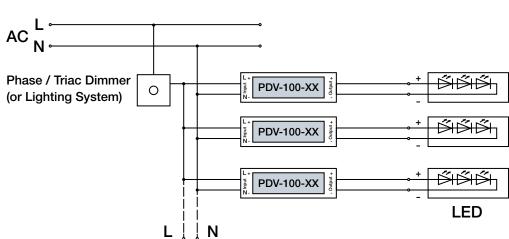


Single Driver Connection Diagram

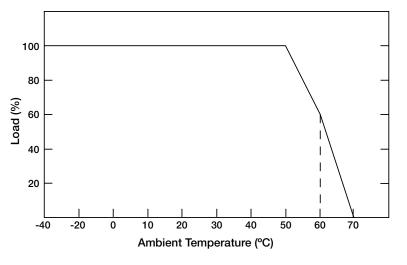




Multiple Drivers Connection Diagram



#### **De-rating Curve**



 If being used in higher ambient temperatures, ensure the load on the LED driver is de-rated in accordance with this chart. Failure to do so could lead to a premature failure, which is not covered by the warranty.

#### **Important**

- 1) This LED driver should be installed by a qualified electrician.
- 2) Please make sure the LED driver is installed with adequate ventilation around it to allow for heat dissipation.
- 3) Ensure that all wiring is correct before testing in order to avoid damage to the LED driver, or the LEDs.