

PNV12V SERIES

12W Single Output Constant Voltage LED Driver



- Wide Input Voltage 90 to 265VAC, 47 to 63Hz
- Over Voltage / Short Circuit / Over Temperature Protection
- High Efficiency (up to 84%)
- IP65 Waterproof Rating, Fully isolated
- Comply to worldwide safety regulations for lighting
- Cooling by free air convection
- Suitable for LED lighting & moving sign applications, for dry / damp / wet locations

3 Year Warranty

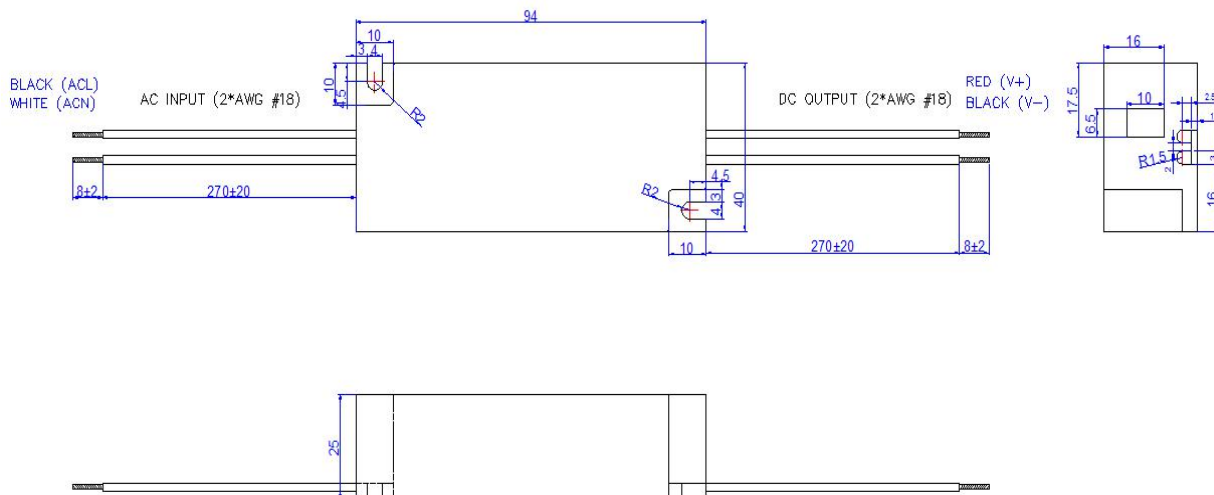
Approvals: **IP65** **RoHS** **CE**

SPECIFICATION

Part Number		PNV12V-012SS	PNV12V-024SS	PNV12V-036SS	PNV12V-048SS
OUTPUT	CONSTANT DC VOLTAGE	12V	24V	36V	48V
	CURRENT REGION Note.4	0.1~1A	0.1~0.5A	0.1~0.34A	0.1-0.25A
	RATED POWER	12W			
	RIPPLE & NOISE(max.) Note.2	1.02V	2.04V	2.98V	3.84V
	VOLTAGE TOLERANCE Note.3	± 5.0%			
	LINE REGULATION	± 1%			
	LOAD REGULATION	± 3.0%	± 3.0%	± 3.0%	± 3.0%
	SETUP, RISE TIME(Typ.) Note.7	400ms/100ms 110VAC 200ms/100ms 220VAC at full load			
INPUT	VOLTAGE RANGE Note.5	90 ~ 265VAC			
	FREQUENCY RANGE	47 ~ 63Hz			
	POWER FACTOR(Typ.)	0.95			
	EFFICIENCY(Typ.)	82%	82%	83%	84%
	AC CURRENT(Typ.)	0.13A/115VAC 0.06A/230VAC			
	INRUSH CURRENT(Typ.)	COLD START 9A (Twidth=270us measured at 50% Ipeak) at 230VAC			
	LEAKAGE CURRENT	<0.75mA/265VAC			
PROTECTION	OVER CURRENT Note.4	95 ~ 108% Protection type: Constant current limiting, recovers automatically after fault condition is removed			
	SHORT CURRENT	Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	12.7V	25.1V	36.8V	49.1V
	OVER TEMP.	Hiccup mode, recovers automatically after fault condition is removed			
	WORKING TEMP.	-35 ~ +70℃ (Refer to "Derating Curve")			
ENVIRONMENT	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH			
	TEMP. COEFFICIENT	± 0.2%℃ (0~50℃)			
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes			
SAFETY & EMC	SATETY STANDARDS Note.6	UL8750, UL935, UL1012, CSA-C22.2 No.107.1, EN61347-1, EN61347-2-13			
	WITHSTAND VOLTAGE	I/P – O/P: 3.75kVAC			
	ISOLTATION RESISTANCE	I/P – O/P: 100M Ohms / 500VDC /25℃ / 70% RH			
	EMC EMISSION	Compliance to EN55015, EN61000-3-2 Class C (≥60% load); EN61000-3-3			
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, EN55024, light industry level (surge 2kV), criteria A			
OTHERS	MTBF	550khrs min. MIL-HDBK-217F (25℃)			
	DIMENSIION	94*40*25MM (L*W*H)			
	PACKING	170±10g			

NOTE	1.	All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
	2.	Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
	3.	Tolerance: includes set up tolerance, line regulation & load regulation.
	4.	Please refer to "DRIVING METHODS OF LED MODULE".
	5.	Derating may be needed under low input voltages. Please check the static characteristics for details.
	6.	Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minutes.
	7.	Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.
	8.	The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufactures must re-qualify EMC DIRECTIVE on the complete installation again.
	9.	Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.
	10.	To fulfill requirements of the latest ERP regulation for lighting fixtures, this LED power supply can only be used behind switch without permanently connected to the mains.

Mechanical Specification



Derating Curve

