

Model: GP-LP060P-xxVA Series

▪ Features

- Universal AC Input 90~305VAC.
- Class 2 Power Supply Unit.
- Constant Voltage PWM Style Output.
- Built in 2 Stage PFC Function.
- Protections: OVP / OCP / SCP / OTP
- Fully Insulated Case with IP67 Level
- Cooling by Free Air Convection
- Optional Dimming Type : GP-LP060-xxVA
V : for Constant Voltage / A : for 3 in 1 Dimming Type.

▪ Approvals



▪ Size

163 x 44.2 x 32.5 mm (L x W x H)

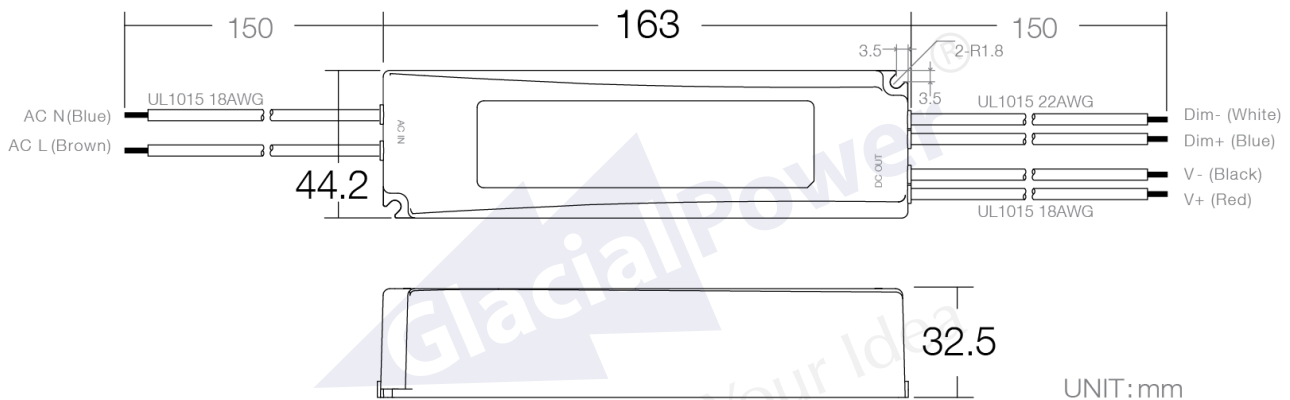


▪ Specifications

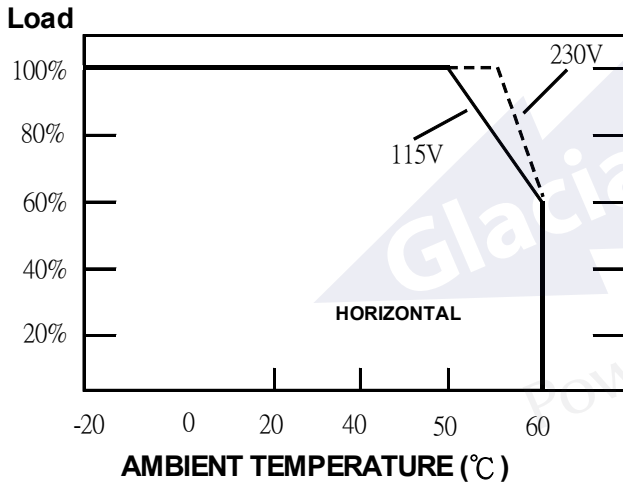
Model No.	GP-LP060P-12VA	GP-LP060P-24VA	
Output	DC Voltage Range	12V	24V
	Rated Current	0- 5A	0- 2.5A
	Max. Power	60W	60W
	Ripple & Noise (Max.) Note.2	1Vp-p at 100% duty output	
	PWM Dimming Frequency	>1700Hz	
	Voltage Tolerance Note.3	± 1V	
	DC Dimming	DC 0-10V or Electronic Potentiometer 0-10V	
	PWM Dimming	Puls:Hi=10V Low=0V, Duty:0%~100%, Fsw 0.5-3KHZ	
	Resistance Dimming	0KΩ~100KΩ	
	Efficiency at 230VAC	85% with full load.	
	Set up time (Max.)	0.5 sec. / 230VAC with full load.	
Input	Voltage Range	90 ~ 305VAC	
	Frequency Range	47 Hz ~ 63 Hz	
	AC Current (Max.)	1A at 115VAC / 0.5A at 230VAC	
	Power Factor	PF >0.98 at 115Vac / PF >0.94 at 230Vac / PF >0.9, THD <20% at 277VAC with full load.	
	Inrush Current (Max.)	60A at 230VAC	
	No Load Consumption	< 0.5W at 230VAC	
	Leakage Current	< 0.5mA / 240VAC	
Protections	Over Current	110% ~ 150% rated current. Type: Shut down and auto recovers after fault condition disappeared.	
	Short Circuit	Type: Shut down and auto recovers after fault condition disappeared.	

	Over Voltage	110%-150% rated output voltage Type: Latch OFF Mode. (Re-power on to recover).
	Over Temperature	Type: Latch OFF Mode. (Re-power on to recover) TC: 95°C ± 10°C
Environment	Operation Temp	-20°C ~50°C ambient operating at full load (Refer to output load derating curve)
	Operation Humidity	20% ~ 90% RH non-condensing.
	Storage Temp	-40°C ~ +80°C
	Storage Humidity	10% ~ 90% RH
	Vibration	10~500 Hz, 2G 10 min./1 cycle, period for 60 min. each along X, Y, Z axes.
Safety & EMC	Safety Standards	EN61347-1, EN61347-2-13 , IP67/UL8750/UL60950 Approved.
	Withstand Voltage	I/P - O/P: 3.75K VAC
	Isolation Resistance	I/P-O/P:100M ohms / 500VDC at 25°C
	EMI Conduction & Radiation	EN55015
	Harmonic Current	EN61000-3-2 Class C,EN61000-3-3
	EMS Immunity	EN61000-4-2,3,4,5,6,8,11 Light industry level, criteria A
Others	MTBF	200k hours min. MIL-HDBK-217F(25°C)
	Dimension(L x W x H)	163 x 44.2 x 32.5 mm; 371g/pcs
Note	<ol style="list-style-type: none"> All specifications not specially mentioned are measured at 230VAC and 25°C ambient temperature. Ripple & Noise are measured at Full load ,20MHz bandwidth with 0.1uf ceramic capacitors in parallel. Voltage Tolerance: includes line regulation, load regulation and set-up tolerance. 	

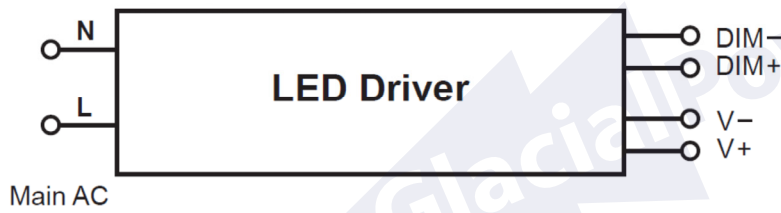
▪ **Mechanical Specification**



▪ **Derating Curve**

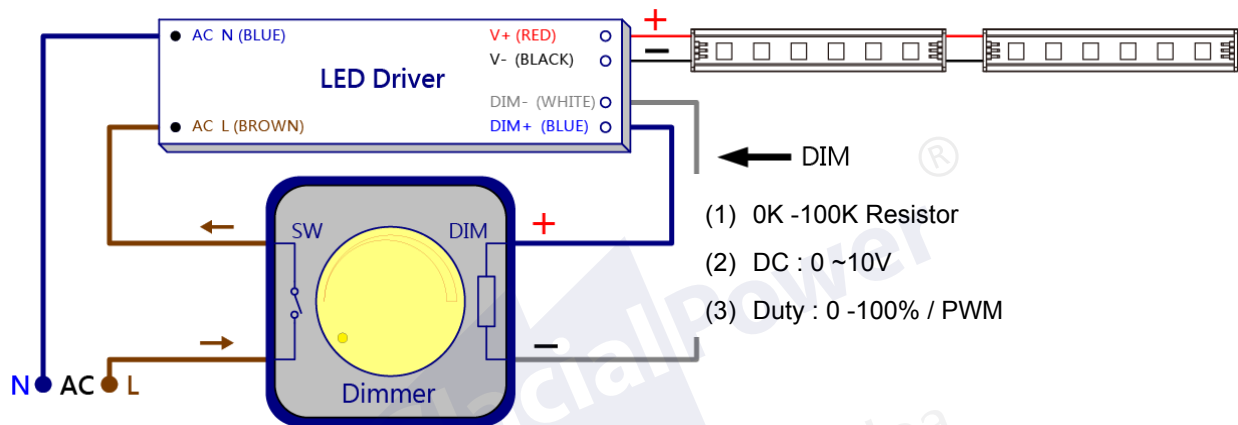


▪ **Block Diagram (Dimming function by optional)**



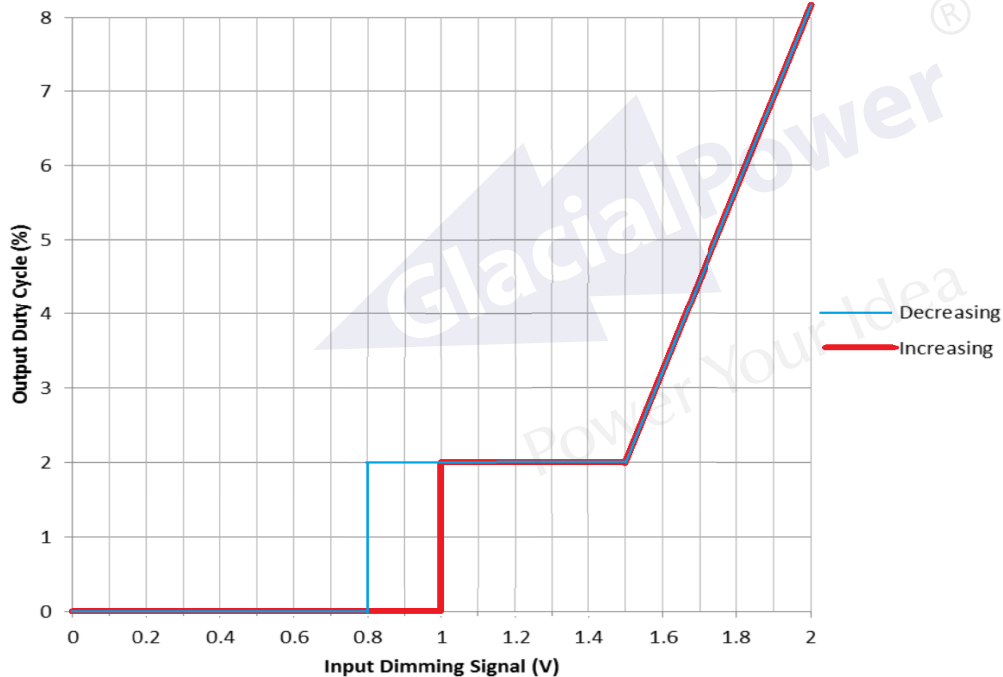
DC Dimming : 0-10V
 PWM Dimming :
 Plus : Hi=10V Low=0V
 Duty : 0-100% Fsw 0.5-2KHz
 VR Dimming : 0-100K ohm
 100% output when no connection

▪ **Applications**



- (1) 0K -100K Resistor
- (2) DC : 0 ~10V
- (3) Duty : 0 -100% / PWM

Dimming Curve
(hysteresis)



Dimming Curve

