

## Model: GP-RS60P Series

### Features

- Universal AC Input 90 ~ 305VAC.
- Constant Current Operation.
- Double Insulation Cable Wire.
- Suitable For High Brightness LED Products.
- Built-in PFC Function.
- Protections: OVP / OCP / SCP / OTP .
- Built-in 3-in-1 Dimming for CA Type.
- Class II/2 Power .
- IP67 Class.

### Approvals

CEFC cULus IP67

SELV 

### Size

171.1 \* 45.3 \* 32.5 mm (L\*W\*H)



CA Type

A : for 3-in-1 Dimming

### Specifications

Model No.		GP-RS60P-12C(A)	GP-RS60P -24C(A)	GP-RS60P -36C(A)	GP-RS60P -42C(A)	GP-RS60P -48C(A)	GP-RS60P -57C(A)
Output	DC Voltage	12V	24V	36V	42V	48V	57V
	Constant Current Region Note.3	9 ~ 12V	16 ~ 24V	24 ~ 36V	33 ~ 42V	33~48V	40 ~ 57V
	Rated Current	4.2A	2.5A	1.65A	1.4A	1.2A	1.05A
	Current Tolerance	± 5%					
	Rated Power	50.4W	60W	59.4W	58.8W	57.6W	59.8W
	Ripple & Noise (Max.) Note.2	200mV	200mV	250mV	250mV	250 mV	250mV
	Efficiency at 240VAC(Typ.)	86%	86%	87%	87%	88%	88%
	Voltage Tolerance Note.4	-1% ~ +5%					
	DC Dimming (Optional)	DC 1 - 10V or Electronic Potentiometer 1 - 10V					
	PWM Dimming (Optional)	Puls: Hi = 10V Low = 0V, Duty:10% - 100%, Fsw :0.5 - 3KHz					
	Resistance Dimming (Optional)	10K - 100KΩ					
	Set up time (Max.)	< 2000ms at full load					
Input	Voltage Range	90 ~ 305VAC					
	Rated Voltage	100 ~ 240VAC / 277VAC (for North America Only)					
	Frequency Range	47 ~ 63 Hz					
	AC Current (Max.)	0.8A at 100 ~ 240VAC/ 0.4A at 277VAC for North American Only					
	Power Factor	≥ 0.98 at 120VAC / ≥ 0.94 at 240VAC / ≥ 0.92 at 277VAC, at full load					
	Inrush Current (Max.)	COLD START 70A at 240VAC					
	Leakage Current	< 0.5mA / 240VAC					
Protections	Short Circuit	Type: Hiccup mode & recovers after fault condition disappeared.					
	Over Current	95 ~ 105% rated current. Type: Auto-recovery after fault condition disappeared.					

	Over Voltage	13.2~ 15.6V	26.4 ~ 31.2V	39.6 ~ 46.8V	46.2 ~ 54.6V	52.8 ~ 62.4V	62.7 ~ 70V
		Type: Latch mode (Re-power on to recover).					
	Over Temperature	RT2: 105 ± 10°C					
		Type: Latch mode (Re-power on to recover).					
Environment	Operation Temp. Note.4	-30°C ~ 50°C, refer derating curve.					
	Operation Humidity	20% ~ 90% RH non-condensing.					
	Storage Temp.	-40 ~ + 60°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	UL8750, EN61347-1, EN61347-2-13 , IP67 Approved.					
	Withstand Voltage	I/P-O/P: 3750VAC					
	Isolation Resistance	I/P-O/P :100M ohms / 500V DC at 25°C					
	EMI Conduction & Radiation	Compliance to EN55015,FCC part 15					
	Harmonic Current	Compliance to EN61000-3-2 Class C, EN61000-3-3					
	EMS Immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 11; EN61547					
Others	MTBF	200K hours min. MIL-HDBK-217F(25°C)					
	Dimension (L x W x H)	171.1 x 45.3 x 32.5mm; 425.7g/pcs					
Note	<p>1. All specifications not specially mentioned are measured at 240VAC and 25°C ambient temperature.</p> <p>2. Ripple &amp; Noise are measured at 20MHz bandwidth by using a 12" twisted pair-wire terminated with 0.1uf &amp; 47uf parallel capacitor.</p> <p>3. Constant current operation region is suitable for LED related applications, but please reconfirms special electrical requirements for some specific system design.</p> <p>4. Voltage Tolerance: includes line regulation, load regulation and set-up tolerance.</p> <p>4. Please refer to derating curve.</p>						

### **3-in-1 Dimming Control (DC/ PWM/ Resistance)**

#### **3-in-1 Dimmable Function Description**

##### **(1) 10-100KΩ Resistance Dimmable (Typical):**

Resistor	Single-driver	10K	20K	30K	40K	50K	60K	70K	80K	90K	100K
	Multi-driver	10K/N	20K/N	30K/N	40K/N	50K/N	60K/N	70K/N	80K/N	90K/N	100K/N
Iout (%)		10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

※ The length of extended wire for DIM+/- shall not exceed 20 meters. (Wire ≤ 20m)

※ N=The number of dimmer drivers should not exceed 15.(N ≤ 15)

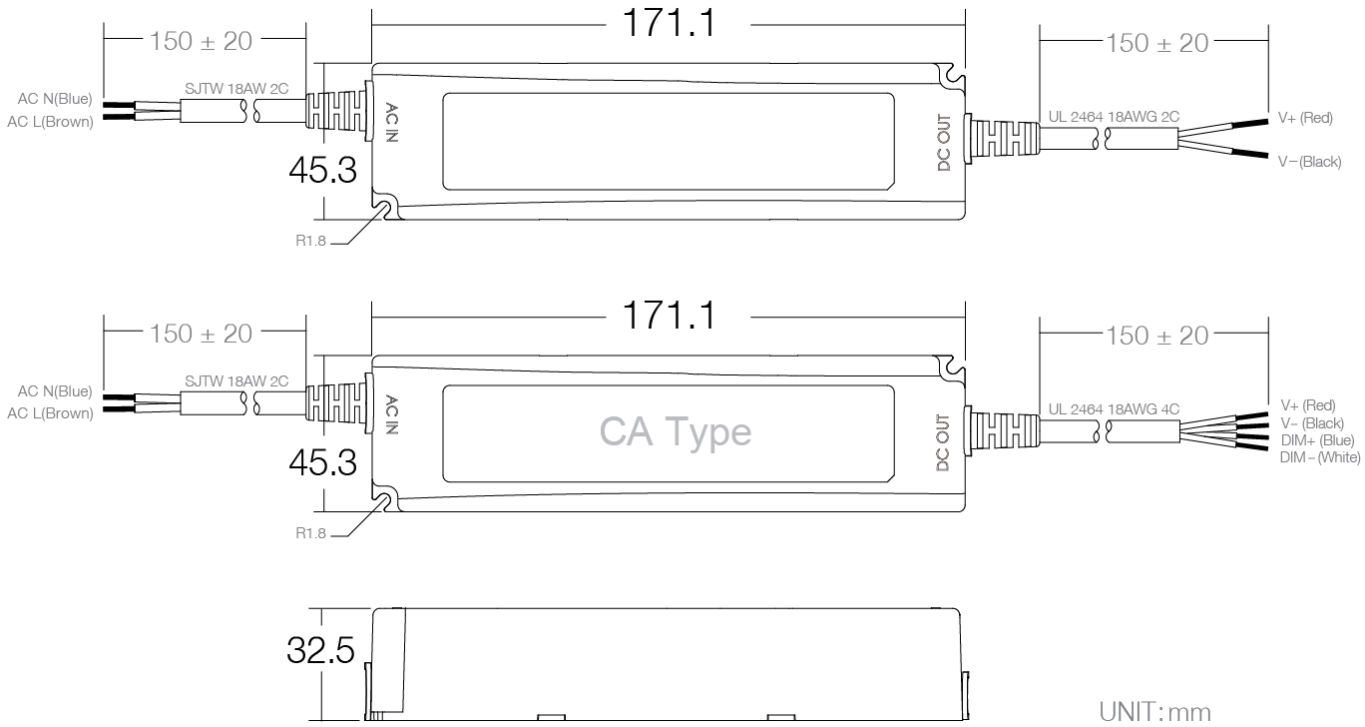
##### **(2)DC: 1-10V Dimmable (Typical):**

DIM(Voltage)	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V
Iout (%)	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

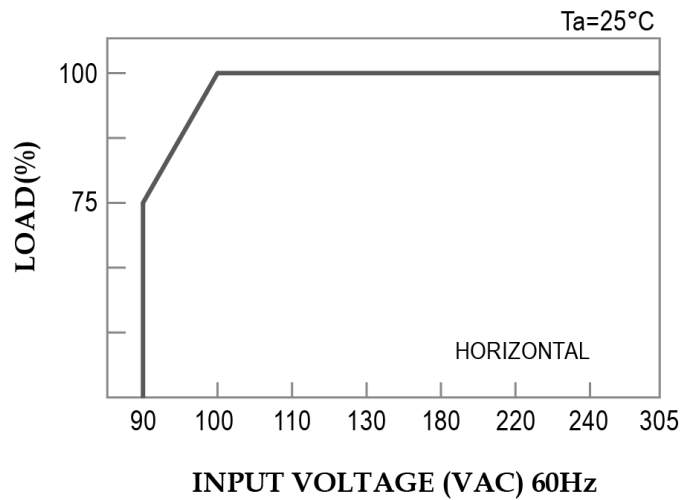
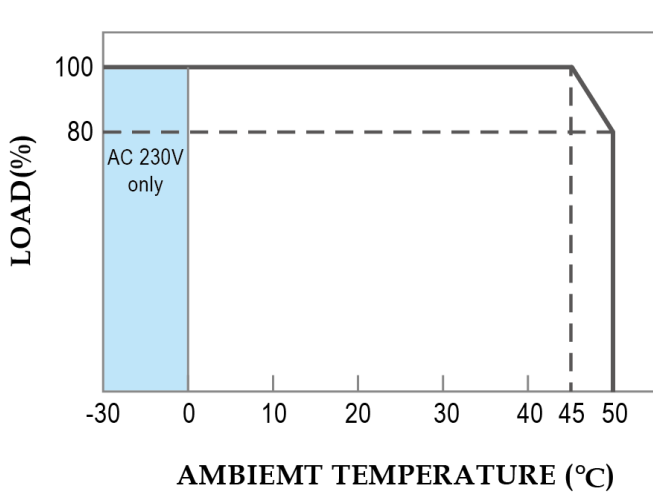
##### **(3)10V / PWM Dimmable (Typical):**

DIM(10V/PWM Duty)	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Iout (%)	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

**Mechanical Specification**



**Derating Curve**



### Constant Voltage / Constant Current Curve

