# GRR-LRS-60W-24IP20-DTWRV





#### **■Features**

- ·Output constant voltage
- ·UL, cUL listed, Class 2, Class P, Type HL
- ·Universal AC input: 100-277VAC
- ·With slightly adjustable output voltage
- .Power Factor: up to 0.98
- ·High efficiency: up to 83%
- ·Dimming range: 0-100%
- ·Load: 10-100%
- ·Protection:short circuit/over loading/ Over temperature
- ·PWM output, does not change the color index
- ·IP20
- ·Flicker-free
- ·Compatible with Forward phase, Reverse phase, Triac, MLV, ELV Dimmers
- ·Cooling by free air convection
- ·Suitable for LED lighting and moving sign applications





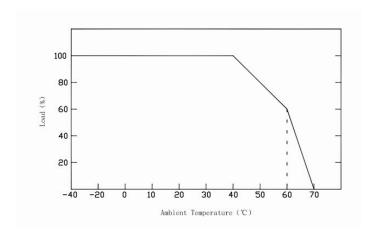
# **■**Specification

Model		LRS-24060-DTWRV
Certificates		FCC UL cUL Class 2
Output	DC Voltage	24V
	Adj. Voltage Range	21.5-25.5V
	Rated Current	2.5A
	Rated Power	60W
	Voltage Tolerance	±0.5V
	Voltage Regulation	±0.5%
	Load Regulation	±1%
Input	Voltage Range	100-277VAC
	Frequency Range	47-63Hz
	Power Factor (Typ.) @ full load	0.98@120VAC 0.95@277VAC
	THD (Typ.) @ full load	<20%
	Efficiency (Typ.) @ full load	83%
	AC Current (Max.)	0.9A@100VAC
	Inrush Current (Typ.)	14A, 50%, 780us
	Leakage current	<0.50mA
Protection	Short Circuit	shut down o/p voltage, re-power on to recover after fault condition removed
	Over Loading	≤120% Hiccup mode,recovers automatically after fault condition is removed
	Over temperature	100℃±10℃ shut down o/p voltage, automatically recover after cooling.
Environment	Working TEMP.	-40∼+60°C (see below derating curve)
	Working Humidity	$20{\sim}90\%$ RH, non-condensing
	Storage TEMP. Humidity	-40~+80℃,10~95%RH
	TEMP .coefficient	±0.03%/℃ (0~50℃)
	Vibration	10∼500Hz, 2G 10min./1 cycle,period for 60min. each along X,Y,Z axes
Safety& EMC	Safety standards	UL8750+UL1310
	Withstand voltage	I/P-O/P:1.88KVac
	Isolation resistance	I/P-O/P:100MΩ/500VDC/25°C/70%RH
	EMC EMISSION	FCC Part 15 B
others	Net. Weight	0.35Kg
	Size	178*61*24mm (L*W*H)
	packing	20PCS/CTN

**Notes** 

- 1. All parameters if NOT specially mentioned are measured at 120VAC input , rated load and 25  $^{\circ}$ C of ambient temperature.
- 2. To extend the driver's using life ,please reduce the loading at lower input voltage.

#### **■Derating Curve**

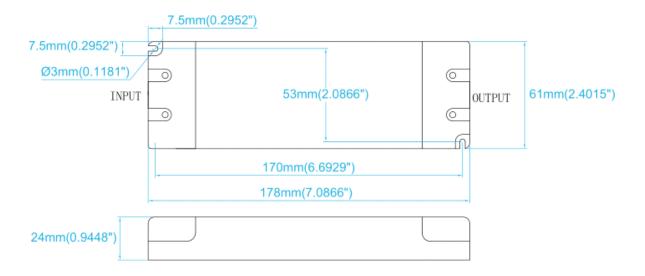


\*\*To extend their life, please refer to the Derating Curve and derate according to the temperature.

#### ■ Mechanical Specification

Unite: mm

Tolerance:P 0.5-2mm



- $\ensuremath{\mathbb{X}}$  Input terminals "Black" and "White" to connect to AC L and N.
- \*\*Output terminals "Red" to LED Positive side (+), "Black" to LED Negative side (-).

### **■Dimming Operation**

- \*\*The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of the AC phase line(L) by connection a phase/triac dimmer.
- \*\*Usually matching with Forward phase , leading edge , Magnetic low voltage, triac dimmers, or Reverse phase, trailing edge ,Electric low voltage Dimmers.
- \*Please try to use dimmers with power at least 1.5 times as the output power of the driver.

## **■** Connecting Diagram

