

# CENTRIC SERIES™ 12V Dimmable LED Power Supply

PN: 3093.120

The CENTRIC SERIES™ dimmable LED power supply units allow LED strip lights to be operated and dimmed from a traditional wall-dimmer with smooth and flicker-free light output. With compatibility across a wide range of legacy and modern phase-dimming products such as those made by Lutron and Leviton, these power supplies are an excellent choice for powering and controlling LED strip lights in residential and commercial lighting projects.

These power supply units perform a dual function of converting AC line voltage (120 volts) to low voltage DC (12 volts), as well as interpreting the wall-dimmer signal and adjusting the power provided to the LED strip to the corresponding brightness level. Our innovative gamma-curve formulation and ultra-high 20 kHz PWM dimming frequency ensures the light output remains smooth and flicker-free across the dimming curve.

Standard LED power supplies and transformers only convert AC line voltage to low voltage DC and are not compatible with wall-dimmers. Pairing these standard LED power supplies with inline PWM dimmers and other accessories typically result in a sub-optimal installation, with performance issues such as noticeable flicker, awkwardly placed dimmer controls or unreliable remote control units, as well as potential electrical code compliance issues.



## PRODUCT AND FEATURES

- 100 - 277 V AC input, compatible with phase-cut wall dimmers, including incandescent (forward phase / TRIAC), electronic low voltage (ELV / reverse phase), and magnetic low voltage dimmers
- 12V DC constant voltage output, with reduced brightness level corresponding to input dimming signal from wall-dimmer
- Compatible with Waveform Lighting's single-color LED strip lights (DC 12 volts) and third-party LED strip light products
- Up to 120 W power output
- Dimmable to 0% for most dimmer models (see dimmer list for complete listing)

## ELECTRICAL SPECIFICATIONS

<b>Input voltage:</b>	100 - 277V AC, 47 - 63 Hz
<b>Output voltage:</b>	12.0V DC $\pm$ 0.5V
<b>Output current (max):</b>	10 A
<b>Power (max):</b>	120 W
<b>Minimum load:</b>	6 W
<b>Overcurrent shutoff:</b>	12.0 A, enters hiccup mode
<b>Power factor:</b>	0.96-0.99
<b>Total Harmonic Distortion:</b>	< 20%
<b>Efficiency:</b>	> 82%
<b>Inrush Current:</b>	20 A, 50%, 1.6 ms

## PART NUMBERS AND ORDERING

<b>12V, w/ Junction Box</b>	3093.120
<b>12V, w/o Junction Box:</b>	3093J

## MECHANICAL SPECIFICATIONS

<b>Length:</b>	9.06 in (230 mm)
<b>Width:</b>	2.76in (70 mm)
<b>Height:</b>	1.69 in (43 mm)
<b>Weight:</b>	2.42 lbs (1.1kg)
<b>AC cable length:</b>	7.87 in (200 mm)
<b>DC cable length:</b>	7.87 in (200 mm)

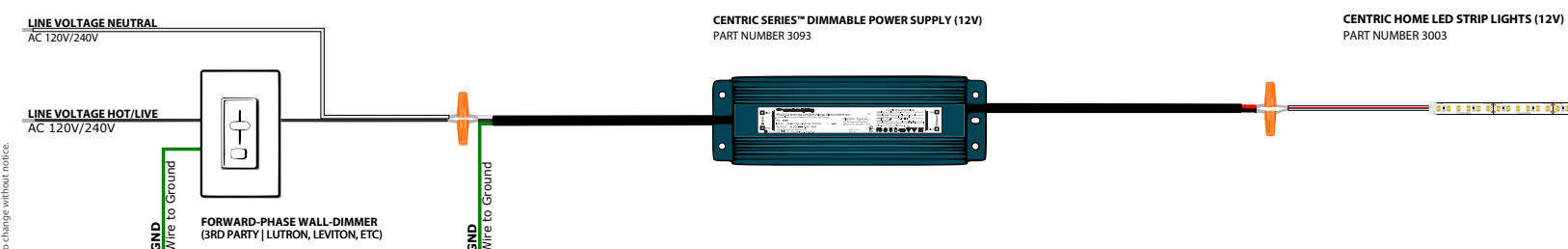
## ENVIRONMENTAL SPECIFICATIONS

<b>Max Ambient Temperature:</b>	140°F (60°C)
<b>Min Ambient Temperature:</b>	-40°F (-40°C)
<b>Max Relative Humidity:</b>	90%, non-condensing
<b>Storage Temperature:</b>	-40°F - 175°F (-40°C - 80°C)
<b>Max Vibration:</b>	2G, 10-500 Hz

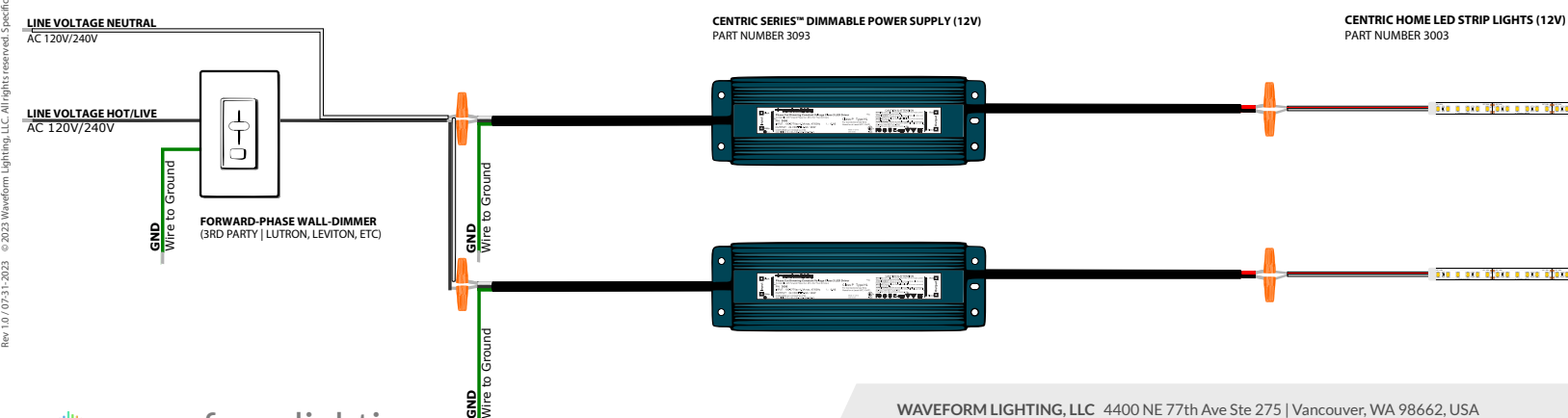
## CERTIFICATIONS



## EXAMPLE CONNECTION DIAGRAM (SINGLE REEL)



## EXAMPLE CONNECTION DIAGRAM (MULTIPLE REELS IN PARALLEL)



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