

12 Watt - LD12W Series

CONSTANT VOLTAGE OR CONSTANT CURRENT LED DRIVER



LD12W Series
12W

Model: LD12W Series

- Drive Mode: Constant Current or Constant Voltage
- Technology: PFC Off-Line Switch Mode
- Output Power: 12W Max.
- Input Voltage: 100 to 277VAC, 47- 63Hz
- Number of Outputs: One
- Output Voltages: 6VDC - 48VDC
- Output Currents: 250mA - 1000mA

Environmental

1. Operating temperature: Tc 80C Maximum. Reference -30 to +60°C ambient
2. Storage temperature range: -40 to +85°C
3. Humidity (non-condensing): 5% - 95%RH
4. Cooling: Convection
5. Vibration Frequency: 5-55Hz/2g, 30 minutes
6. Impact resistance: 1g/s
7. MTBF@ 40°C: 550,000 hours @ Full Load per MIL-217F Notice 2.

Safety and Compliance

1. UL8750, EN61347, CSA 22.2 safety compliant
2. FCC, 47CFR Part 15 Class B compliant
3. Water resistant and Dust Proof Design: IP66, NEMA4, for Dry, Damp, Wet Locations.
4. Compact, Lightweight Design.
5. Safety Isolation between Primary and Secondary
6. Meets EN61000-3-2 & EN61000-3-3 Class C
7. Protection: output over-voltage, output over-current, output short circuit, auto-recovery

Electrical Specifications at 25°C

- Input voltage range: 100 to 277VAC
- Frequency: 47- 63HZ
- Power Factor: > .94 at full load 120Vac/230Vac 50/60Hz
- Inrush current: <10A at 25C, 230V, cold start, Max. Load
- Input current: 0.15A at 120Vac, 60Hz, Maximum Load
- Efficiency: 80% typical at 120Vac 60Hz, 230Vac 50Hz
- Maximum output power: 12W
- Line regulation accuracy: ± 2%
- Load regulation accuracy: ± 3%
- Leakage current: 300uA typical; Hold up time: half cycle



IP66



Constant Current Versions

Part Number	US Class 2	CN Class 2	Output Voltage Range	Output Constant Current	Current Accuracy	Output Power Maximum	Typical Efficiency ⁽¹⁾
LD12W-48-C0250	YES	NO	24 - 48 VDC	250 mA	± 3%	12W	80%
LD12W-36-C0350	YES	YES	18 - 36 VDC	350 mA	± 3%	12.6W	80%
LD12W-36-C0250	YES	YES	18 - 36 VDC	250 mA	± 3%	9W	77%
LD12W-24-C0500	YES	YES	12 - 24 VDC	500 mA	± 3%	12W	78%
LD12W-16-C0800	YES	YES	8 - 16 VDC	800 mA	± 3%	12.8W	78%
LD12W-16-C0700	YES	YES	8 - 16 VDC	700 mA	± 3%	11.2W	78%
LD12W-12-C1000	YES	YES	6 - 12 VDC	1000 mA	± 3%	12W	77%

Constant Voltage Versions

Part Number	US Class 2	CN Class 2	Output Voltage	Output Current Range	Voltage Accuracy	Output Power Maximum	Typical Efficiency ⁽¹⁾
LD12W-48	YES	NO	48 VDC	250 mA	± 5%	12W	80%
LD12W-36	YES	YES	36 VDC	350 mA	± 5%	12.6W	80%
LD12W-24	YES	YES	24 VDC	500 mA	± 5%	12W	78%
LD12W-16	YES	YES	16 VDC	800 mA	± 5%	12.8W	78%
LD12W-12	YES	YES	12 VDC	1000 mA	± 5%	12W	77%

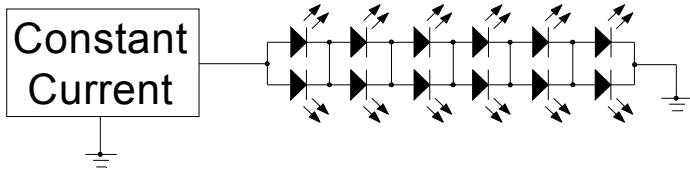
Notes

1. Typical efficiency measured at 230VAC input, full load.

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Typical Constant Current Application Schematic

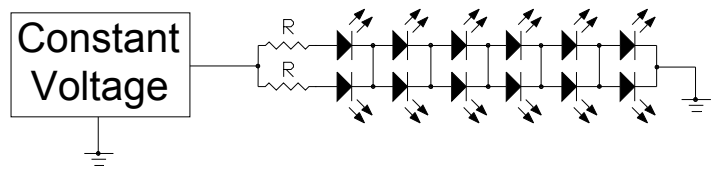


Model Number

Model: LD12W-24-C0500, 500mA Constant Current mode at 12~24Vdc.

Configuration is based on LED's with the following parameters: Parallel Strands of 6ea.
Vf: 3.0V - 3.5V If: 250mA

Typical Constant Voltage Application Schematic



Model Number

Model: LD12W-24, 24VDC Constant Voltage mode, requires current limiting resistors.

Configuration is based on LED's with the following parameters: Parallel Strands of 6ea.
Vf: 3.0V - 3.5V If: 250mA
Recommended value for R is 12 Ohms, 3W

Mechanical Dimensions: Inches [mm]

Material: Black PC ABS Plastic Case
Fully Encapsulated
Weight: 128 grams (4.5 oz) Typical

Labeling Example

