

25 Watt — LLD25W Series

CONSTANT VOLTAGE OR CONSTANT CURRENT LED DRIVER



LLD25W Series
25W

Model: LLD25W Series

- Drive Mode: Constant Current or Constant Voltage
- Technology: PFC Off-Line Switch Mode
- Output Power: 25W Max.
- Input Voltage: 100 to 277VAC, 47~ 63Hz
- Number of Outputs: One
- Output Voltages: 8VDC - 72VDC
- Output Currents: 350mA - 2080mA

Environmental

1. Operating temperature: -30 to +60°C
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: 482,000 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, for Dry & Damp 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
8. Transient protection built in.

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: <15A at 25C, 230V, cold start, Max. Load
- Input current: 0.4A at 120Vac, 60Hz, Maximum Load
- Efficiency: 85% typical @ 230Vac input, Full load.
- Maximum output power: 25W
- Constant Current regulation: +/-1% Over Input Line Variation
- Load regulation accuracy: +/-3%
- Leakage current: 300uA typical; Hold up time: half cycle

Constant Current Versions



IP66



| Part Number | Output Voltage Range | Output Constant Current | Current Accuracy | Output Power Maximum | Typical Efficiency ⁽¹⁾ |
|--------------------------------|----------------------|-------------------------|------------------|----------------------|-----------------------------------|
| LLD25W-72-C0350 ⁽²⁾ | 36 ~ 72 VDC | 350 mA | +/-3% | 25W | 88% |
| LLD25W-62-C0400 ⁽²⁾ | 31 ~ 62 VDC | 400 mA | +/-3% | 25W | 87% |
| LLD25W-56-C0450 ⁽²⁾ | 28 ~ 56 VDC | 450 mA | +/-3% | 25W | 87% |
| LLD25W-36-C0700 ⁽³⁾ | 18 ~ 36 VDC | 700 mA | +/-3% | 25W | 87% |
| LLD25W-28-C0850 ⁽³⁾ | 14 ~ 28 VDC | 850 mA | +/-3% | 25W | 87% |
| LLD25W-24-C1040 ⁽³⁾ | 12 ~ 24 VDC | 1040 mA | +/-3% | 25W | 86% |
| LLD25W-20-C1250 ⁽³⁾ | 10 ~ 20 VDC | 1250 mA | +/-3% | 25W | 85% |
| LLD25W-16-C1560 ⁽³⁾ | 8 ~ 16 VDC | 1560 mA | +/-3% | 25W | 85% |
| LLD25W-12-C2080 ⁽³⁾ | 8 ~ 12 VDC | 2080 mA | +/-3% | 25W | 85% |

Constant Voltage Versions

| Part Number | Output Constant Voltage | Output Current Maximum | Voltage Accuracy | Output Power Maximum | Typical Efficiency ⁽¹⁾ |
|--------------------------|-------------------------|------------------------|------------------|----------------------|-----------------------------------|
| LLD25W-72 ⁽²⁾ | 72 VDC | 350 mA | +/-5% | 25W | 88% |
| LLD25W-62 ⁽²⁾ | 62 VDC | 400 mA | +/-5% | 25W | 87% |
| LLD25W-56 ⁽²⁾ | 56 VDC | 450 mA | +/-5% | 25W | 87% |
| LLD25W-36 ⁽³⁾ | 36 VDC | 700 mA | +/-5% | 25W | 87% |
| LLD25W-28 ⁽³⁾ | 28 VDC | 850 mA | +/-5% | 25W | 87% |
| LLD25W-24 ⁽³⁾ | 24 VDC | 1040 mA | +/-5% | 25W | 86% |
| LLD25W-20 ⁽³⁾ | 20 VDC | 1250 mA | +/-5% | 25W | 85% |
| LLD25W-16 ⁽³⁾ | 16 VDC | 1560 mA | +/-5% | 25W | 85% |
| LLD25W-12 ⁽³⁾ | 12 VDC | 2080 mA | +/-5% | 25W | 85% |

Notes

1. Typical efficiency measured at 230VAC input, full load
2. UL & cUL Non-Class 2 Output
3. UL & cUL Class 2 Output

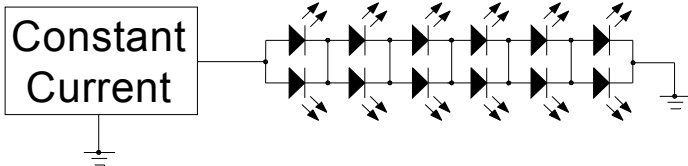
Custom designs available. Please consult the factory.

Specifications subject to change without notice

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CONSTANT VOLTAGE OR CONSTANT CURRENT LED DRIVER

Typical Constant Current Application Schematic

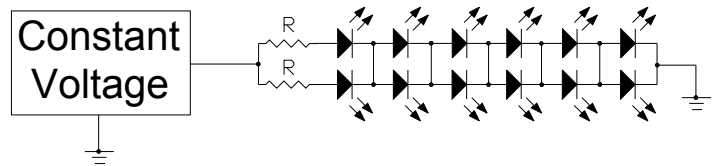


Model Number

Model: LLD25W-24-C1040, 1040mA 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: 500mA - 520mA

Typical Constant Voltage Application Schematic



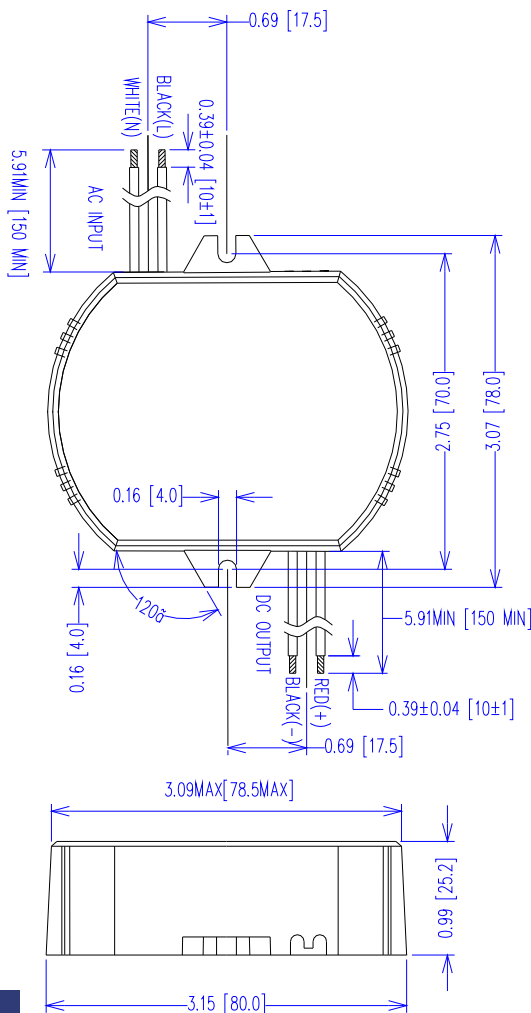
Model Number

Model: LLD25W-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: 500mA - 520mA
Recommended value for R is 6.8 Ohms, 3W

Mechanical Dimensions: Inches [mm]

Material: Black PC ABS Plastic Case
Fully Encapsulated
Weight: 182 grams (6.5 oz) Typical



Labeling Example

LED Optimized Driver
EPtronics, Inc.
www.EPtronics.com
800.643.0688 / 626.0702

Part Number: LLD25W-36-C0700
Input Voltage: 100-277 VAC 47-63 Hz
Input Current: 0.50 Amp Max
Output Voltage: 18-36 VDC
Output Current: 700 mA Constant Current
Maximum Output Power: 25Watts
UL & cUL Class 2 Output

UL **IP66** **FC** **CE**

REV D
Date Code: 1129
Made in China

DC OUTPUT
+ = RED
- = BLACK