



# LED Optimized Drivers Triac & ELV Dimmable

## 40 WATT LD40WXXX -TL

CONSTANT CURRENT TRIAC & ELV DIMMABLE LED DRIVERS



PHASE DIMMING  
LD40WXXX -TL  
**40W**

### Model: LD40WXXX -TL Series

- Designed for use with Triac and ELV Dimmers 120Vac or 230Vac/240Vac/277Vac.
- Drive Mode: Constant Current with CCR Dimming
- Output Power: 40W Max.
- Input Voltage: 120Vac 50/60Hz or 230Vac 50/60Hz
- Number of Outputs: One
- Output Voltages: 15VDC - 114VDC
- Output Currents: 350mA - 1670mA

### Environmental

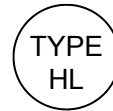
1. Operating temperature: Tc 85C Maximum. Reference -30 to +50°C ambient
2. Storage temperature range: -40 to +85°C
3. Humidity (non-condensing): 5% - 95%RH
4. Cooling: Convection
5. Vibration Frequency: 5-55Hz/2g, 30 minutes
6. Impact resistance: 1g/s
7. MTBF@ 40°C: 375,000 hours @ Full Load per MIL-217F Notice 2.

### Safety and Compliance

1. UL8750, EN61347, CSA 22.2 safety recognized, UL Type HL
2. FCC, 47CFR Part 15 Class B certified
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
8. EN61000-4-5: 2kV surge protection.

### Electrical Specifications at 25°C

- Input Voltage: 120Vac Version 100-135Vac, 230Vac Version 190-300Vac
- Frequency: 50/60HZ
- Power Factor: > 0.90 at 120Vac, Full Load (No dimmer)
- Inrush current: <30A at 25C, 120Vac, cold start, Max. Load
- Input current: 0.39A at 120Vac, 60Hz, Maximum Load
- Efficiency: 84% typical at 120Vac 60Hz
- Maximum output power: 40W
- Line regulation accuracy: ± 3%
- Load regulation accuracy: ± 5%
- Dimming Range: CCR Mode See Graph page 2.



IP66



### 120Vac Input Versions

Part Number	US Class 2	CN Class 2	Output Voltage Range	Output Constant Current	Current Accuracy	Output Power Maximum	Typical Efficiency (1)	DIMMER <sup>(3)</sup>
LD40W120-114-C0350-TL	NO	NO	72 - 114 VDC	350 mA	± 5%	40W	85%	Incan & ELV
LD40W120-54-C0700-TL	YES	YES	34 - 54 VDC	700 mA	± 5%	40W	85%	Incan & ELV
LD40W120-40-C1000-TL	YES	YES	25 - 40 VDC	1000 mA	± 5%	40W	84%	Incan & ELV
LD40W120-36-C1100-TL	YES	YES	22 - 36 VDC	1100 mA	± 5%	40W	84%	Incan & ELV
LD40W120-30-C1300-TL	YES	YES	19 - 30 VDC	1300 mA	± 5%	40W	83%	Incan & ELV
LD40W120-24-C1670-TL	YES	YES	15 - 24 VDC	1670 mA	± 5%	40W	82%	Incan & ELV

### 230Vac Input Versions

Part Number	US Class 2	CN Class 2	Output Voltage Range	Output Constant Current	Current Accuracy	Output Power Maximum	Typical Efficiency (1)	DIMMER <sup>(4)</sup>
LD40W230-114-C0350-TL	NO	NO	72 - 114 VDC	350 mA	± 5%	40W	86%	Incan & ELV
LD40W230-54-C0700-TL	YES	YES	34 - 54 VDC	700 mA	± 5%	40W	86%	Incan & ELV
LD40W230-40-C1000-TL	YES	YES	25 - 40 VDC	1000 mA	± 5%	40W	85%	Incan & ELV
LD40W230-36-C1100-TL	YES	YES	22 - 36 VDC	1100 mA	± 5%	40W	85%	Incan & ELV
LD40W230-30-C1300-TL	YES	YES	19 - 30 VDC	1300 mA	± 5%	40W	84%	Incan & ELV
LD40W230-24-C1670-TL	YES	YES	15 - 24 VDC	1670 mA	± 5%	40W	83%	Incan & ELV

### Notes

1. Typical efficiency measured at 120Vac or 230Vac input, full load, no dimmer.
2. All versions are ≤10% to ~100% CCR Dimmable with any good quality proper power phase dimmer.
3. Use any good quality 120VAC ≤600W Incandescent (Triac) or ELV (Electronic Low Voltage) dimmer. Refer to page 2.
4. Use any good quality 230/240VAC ≤500W Incandescent (Triac) or ELV (Electronic Low Voltage) dimmer. Refer to page 2.

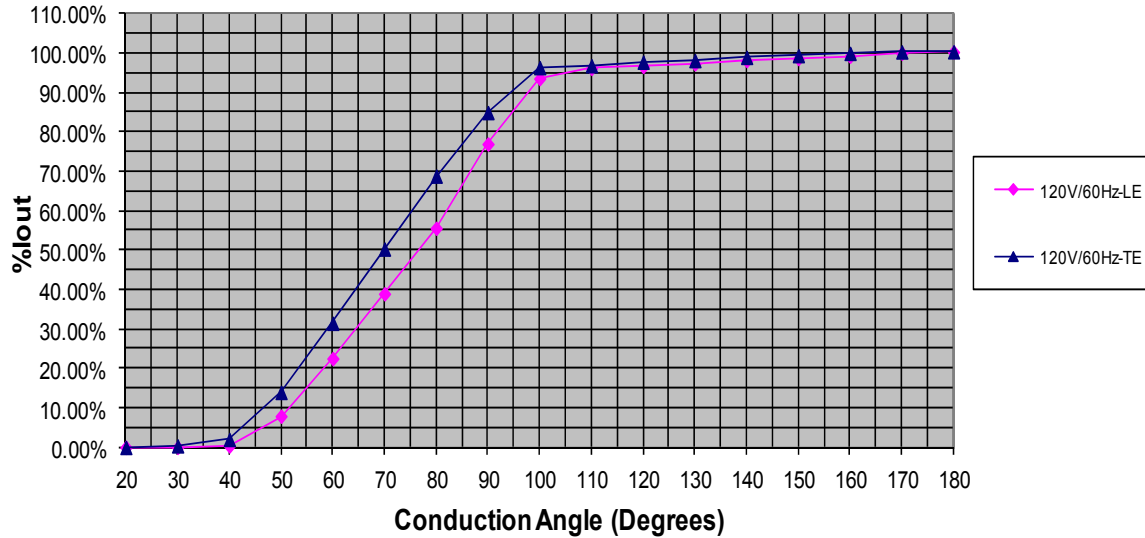
Custom designs available. Please consult the factory.

Specifications subject to change without notice

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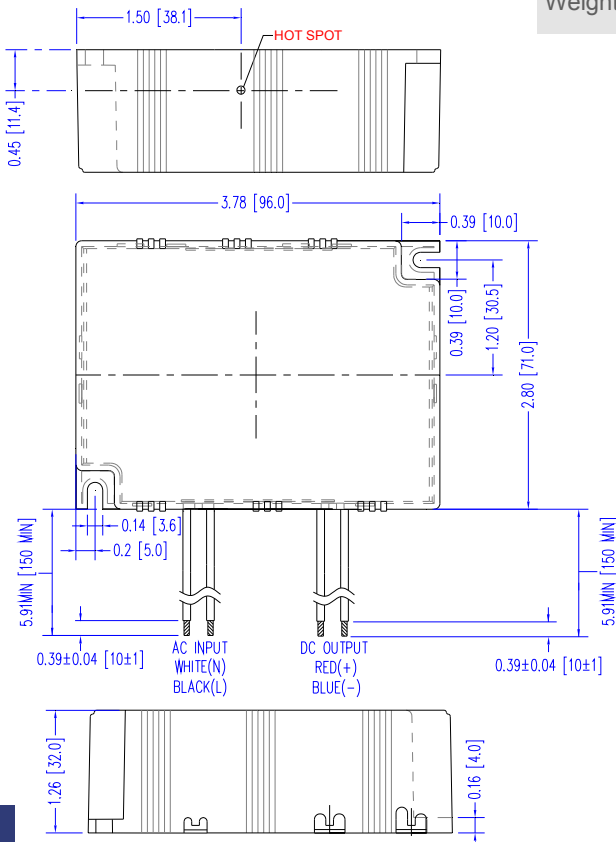
**Typical Dimming Curve:**

**%Output Current vs. Conduction Angle in Degrees**



**Mechanical Dimensions: Inches [mm]**

Material: Black PC ABS Plastic Case  
Fully Encapsulated  
Weight: 311 grams (11.0 oz) Typical



**Labeling Example**

DC Output + = RED - = BLUE		LED Optimized Driver EPtronics, Inc. www.EPtronics.com 800 643-0688/310 536-0700	AC Input L = BLACK N = WHITE
Part Number: LD40W120-54-C0700-TL Input Voltage: 120 VAC 50/60 Hz Input Current: 0.39 Amp Max Output Voltage: 34-54 VDC Output Current: 700 mA CCR Dimmable Output Power: 40Watts Maximum UL & cUL Class 2 Output, UL Type TL Triac (Incandescent) & ELV Dimmable			
IP66			
Made in China	E325626	REV B	HG