

75 Watt - LD75W Series

CONSTANT VOLTAGE OR CONSTANT CURRENT LED DRIVER WITH DIMMING



DIMMING
LD75W Series
75W

Model: LD75W Series

- Drive Mode: Constant Current or Constant Voltage
- Technology: PFC Off-Line Switch Mode
- Output Power: 75W Max.
- Input Voltage: 90 to 305Vac, 47- 63Hz
- Number of Outputs: One
- Output Voltages: 5VDC - 257VDC
- Output Currents: 300mA - 5000mA
- Optional 0-10V or PWM Positive Dimming 10% - 100%

Environmental

1. Operating temperature: Tc 90C Maximum. Reference -30 to +65°C ambient
2. UL Type TL (Tref Max/Meas. Tref): UL Class 2 90/62°C, UL Non Class 2 90/67°C
3. Storage temperature range: -40 to +85°C
4. Humidity (non-condensing): 5% - 95%RH
5. Cooling: Convection
6. Vibration Frequency: 5-55Hz/2g, 30 minutes
7. Impact resistance: 1g/s
8. MTBF@ 40°C: 478,000 hours @ Full Load per MIL-217F Notice 2.

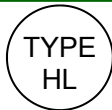
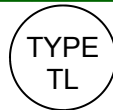
Safety and Compliance

1. UL8750, EN61347, CSA 22.2, UL Type TL & HL recognized.
2. FCC, 47CFR Part 15 Class B certified
3. Water resistant and Dust Proof Design: IP66, NEMA6, for Dry, Damp, Wet Locations.
4. Compact Miniature, 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/4kV 8/20 µsec surge protection.

Electrical Specifications at 25°C

- Input voltage range: 90 to 305VAC
- Frequency: 47- 63HZ
- Power Factor: ≥ 0.90 at > 85% Load, 120Vac/230Vac/277Vac 50/60Hz
- THD%: ≤ 20% at > 85% Load, 120Vac/230Vac/277Vac 50/60Hz
- Inrush current: <30A at 25C, 230Vac, cold start, Max. Load
- Input current: 1.2A Maximum
- Efficiency: 90% typical at 230Vac Full Load
- Constant Current regulation: +/-2% Over Input Line Variation
- Load regulation accuracy: +/-4%
- Leakage current: 400uA typical; Hold up time: half cycle

Constant Current Versions



IP66



Part Number ⁽²⁾	US Class 2	CN Class 2	UL Types	Output Voltage Range	Output Constant Current	Current Accuracy	Output Power Maximum	Typical Efficiency ⁽¹⁾
LD75W-257-C0300	NO	NO	TL & HL	85 - 257 VDC	300 mA	± 3%	75W	90%
LD75W-200-C0350	NO	NO	TL & HL	66 - 200 VDC	350 mA	± 3%	75W	90%
LD75W-128-C0600	NO	NO	TL & HL	42 - 128 VDC	600 mA	± 3%	75W	90%
LD75W-85-C0900	NO	NO	TL & HL	28 - 85 VDC	900 mA	± 3%	75W	89%
LD75W-64-C1200	NO	NO	TL & HL	21 - 64 VDC	1200 mA	± 3%	75W	89%
LD75W-56-C1400	NO	NO	TL & HL	18 - 56 VDC	1400 mA	± 3%	75W	89%
LD75W-48-C1600	YES	YES	TL & HL	16 - 48 VDC	1600 mA	± 3%	75W	89%
LD75W-36-C2100	YES	YES	TL & HL	12 - 36 VDC	2100 mA	± 3%	75W	88%
LD75W-30-C2500	YES	YES	TL & HL	10 - 30 VDC	2500 mA	± 3%	75W	88%
LD75W-27-C2800	YES	YES	TL & HL	9 - 27 VDC	2800 mA	± 3%	75W	87%
LD75W-25-C3000	YES	YES	TL & HL	8 - 25 VDC	3000 mA	± 3%	75W	87%
LD75W-22-C3400	YES	YES	TL & HL	7 - 22 VDC	3400 mA	± 3%	75W	86%
LD75W-20-C3750	YES	YES	TL & HL	7 - 20 VDC	3750 mA	± 3%	75W	86%
LD75W-18-C4200	YES	YES	TL & HL	6 - 18 VDC	4200 mA	± 3%	75W	85%
LD75W-15-C5000	NO	NO	TL & HL	5 - 15 VDC	5000 mA	± 3%	75W	85%

Notes

1. Typical efficiency measured at 230Vac input, full load
2. For dimmable versions add appropriate designator to the end of the part number: For Example: LD75W-18-C4200-RD is 0-10V or resistance dimmable version, LD75W-18-C4200-PD is PWM dimmable version.
-RD 0-10V & Resistance dimmable version comes with an extra two wires +Purple/-Grey on the output side.
-PD PWM Dimmable version comes with an extra two wires +Purple/-Grey on the output side.
3. -RD 0-10V Dimming is compatible with most quality 0-10V wall dimmers and direct 0-10V analog signal. See page 3 for details.
4. -PD PWM version is PWM Dimmable via a positive 10% to 100% Duty Cycle, 500Hz to 1.5kHz, 0-10V Pulse. See page 4 for details.

75 Watt - LD75W Series

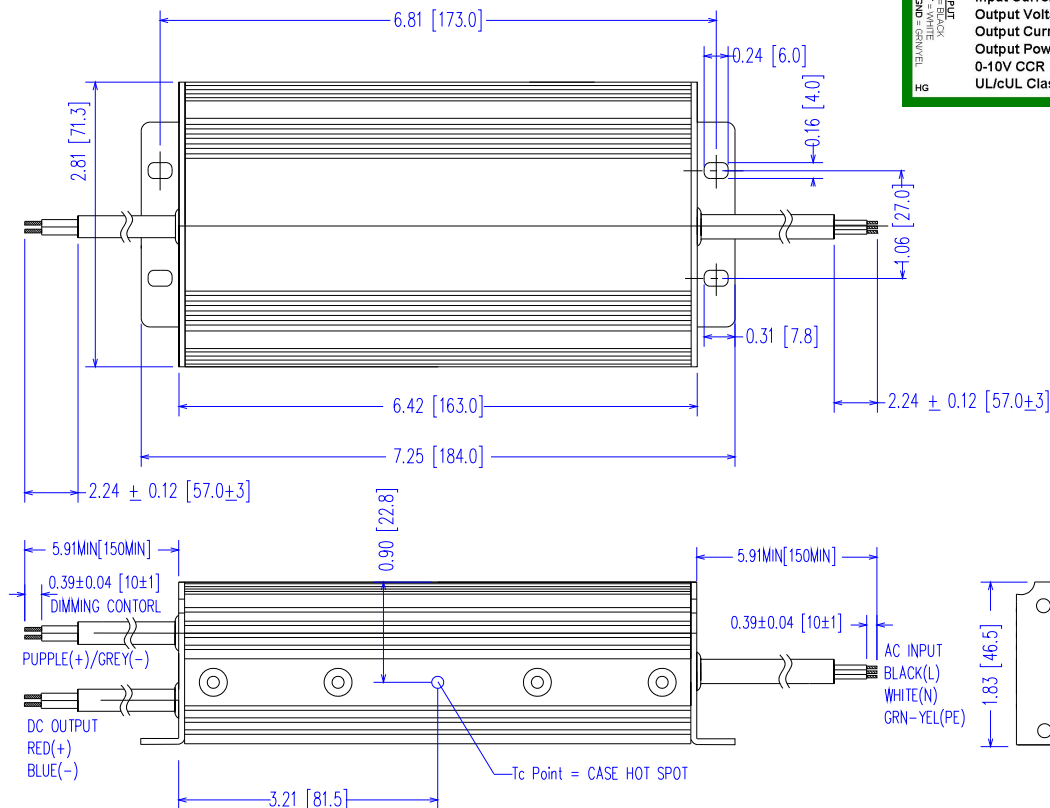
CONSTANT VOLTAGE OR CONSTANT CURRENT LED DRIVER WITH DIMMING

Constant Voltage Versions

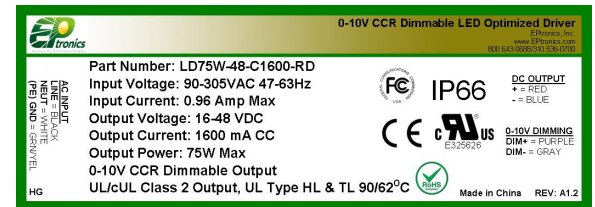
Part Number	US Class 2	CN Class 2	UL Types	Output Constant Voltage	Output Current Range	Voltage Accuracy	Output Power Maximum	Typical Efficiency ⁽¹⁾
LD75W-257	NO	NO	TL & HL	257 VDC	75 - 300 mA	± 5%	75W	90%
LD75W-200	NO	NO	TL & HL	200 VDC	88 - 350 mA	± 5%	75W	90%
LD75W-128	NO	NO	TL & HL	128 VDC	150 - 600 mA	± 5%	75W	90%
LD75W-85	NO	NO	TL & HL	85 VDC	225 - 900 mA	± 5%	75W	89%
LD75W-64	NO	NO	TL & HL	64 VDC	300 - 1200 mA	± 5%	75W	89%
LD75W-56	NO	NO	TL & HL	56 VDC	350 - 1400 mA	± 5%	75W	89%
LD75W-48	YES	YES	TL & HL	48 VDC	400 - 1600 mA	± 5%	75W	89%
LD75W-36	YES	YES	TL & HL	36 VDC	525 - 2100 mA	± 5%	75W	88%
LD75W-30	YES	YES	TL & HL	30 VDC	625 - 2500 mA	± 5%	75W	88%
LD75W-27	YES	YES	TL & HL	27 VDC	700 - 2800 mA	± 5%	75W	87%
LD75W-25	YES	YES	TL & HL	25 VDC	750 - 3000 mA	± 5%	75W	87%
LD75W-22	YES	YES	TL & HL	22 VDC	850 - 3400 mA	± 5%	75W	86%
LD75W-20	YES	YES	TL & HL	20 VDC	938 - 3750 mA	± 5%	75W	86%
LD75W-18	YES	YES	TL & HL	18 VDC	1050 - 4200 mA	± 5%	75W	85%
LD75W-15	NO	NO	TL & HL	15 VDC	1250 - 5000 mA	± 5%	75W	85%

Mechanical Dimensions: Inches [mm]

Material: Black Aluminum Housing



Labeling Example



75 Watt - LD75W Series

CONSTANT VOLTAGE OR CONSTANT CURRENT LED DRIVER WITH DIMMING

75W
 LD75W Series
 DIMMING

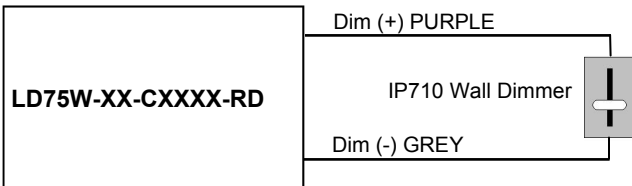
-RD 2-Wire 0-10V CCR Dimming Scheme

Parameters	Minimum	Typical	Maximum
Source Current out of 0-10V Purple Wire	0mA	—	2mA
Absolute Voltage Range on 0-10V (+) Purple Wire	-2.0V	—	+15V
Sink Current into 0-10V Purple Wire	0mA	—	1.2mA

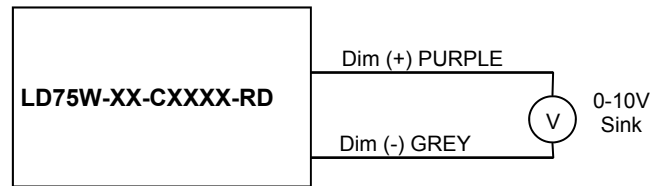
Notes

- RD 0-10V dimmable version comes with an extra two wires +Purple/-Grey on the output side.
- RD version is compatible with most 0-10V Wall Slide dimmers and direct 0-10V analog signal.
Recommended wall slide dimmer is Leviton IP710 or equivalent
- RD 0-10V dimmable version is not intended to dim below about 5% @ 0V or 10% @ 1.0V
- RD 0-10V dimmable version output will be 100% with Purple/Grey open and minimum with Purple/Grey Shorted.

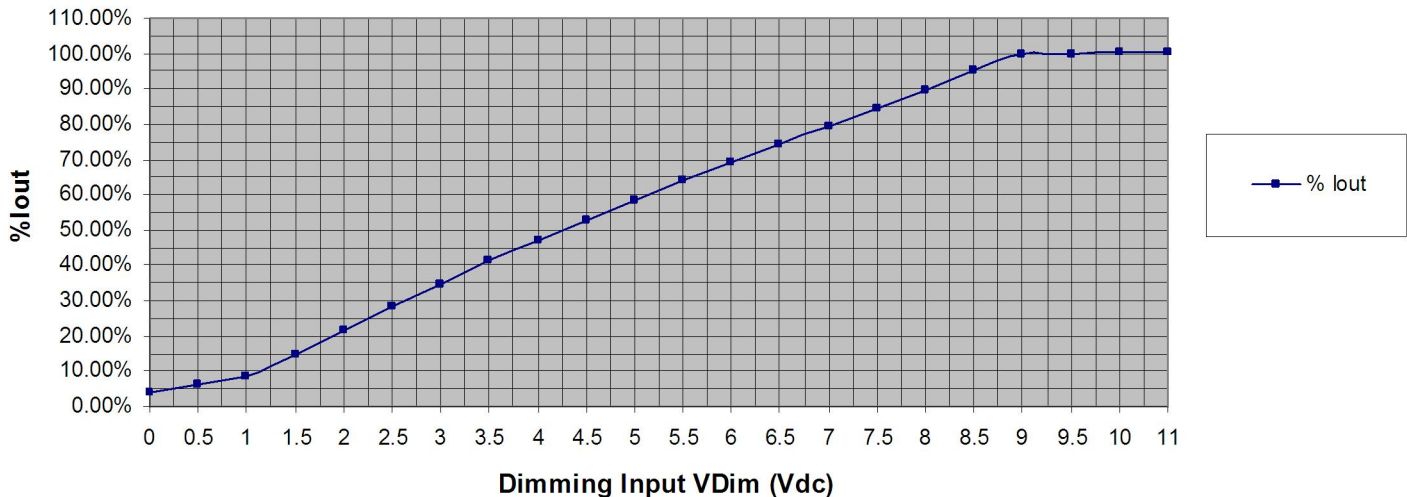
-RD 2-Wire Resistance Dimming Scheme



-RD 2-Wire 0-10V Analog Dimming Scheme



% Output Current vs. 0-10VDC Dimming Input



75 Watt - LD75W Series

CONSTANT VOLTAGE OR CONSTANT CURRENT LED DRIVER WITH DIMMING

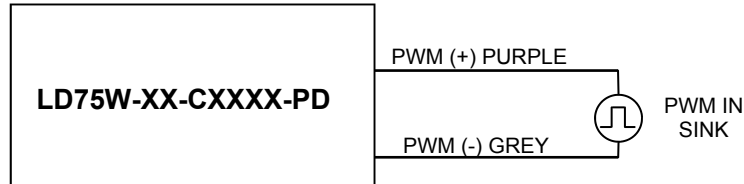
-PD 2-Wire CCR PWM Positive Dimming Scheme

Parameters	Minimum	Typical	Maximum
Absolute Maximum Voltage Range on PWM Input (Purple Wire)	-2.0V	10V	+15V
Input LOW Level Voltage Range (Purple Wire)	-2.0V	0V	+5.5V
Input HIGH Level Voltage Range (Purple Wire)	+9.0V	10V	+15V
Current into PWM Input (Purple Wire)	0mA	—	1.2mA
Source Current out of PWM Input (Purple Wire)	0mA	—	2mA
PWM Input Signal Frequency	500Hz	—	1500Hz
PWM Input Signal Positive Duty Cycle	0%	10-90%	100%

Notes

1. -PD PWM Dimmable version comes with an extra 2 wires +Purple/-Grey on the output side.
2. -PD PWM Dimmable version is not intended to dim below about 5% @ 0% Duty Cycle or 10% @ 10% Duty Cycle
3. -PD PWM dimmable version output will be 100% with Purple/Grey open and minimum with Purple/Grey Shorted.

-PD 2-Wire PWM Positive Dimming Scheme



% Output Current vs. 1.0 kHz, Positive Duty Cycle Dimming Input

