

100 Watt — LG100W Series

CONSTANT CURRENT LED DRIVER WITH 0-10V DIMMING OPTION



100W
 LG100W Series
 0-10V DIMMING

Model: LG100W Series

- Drive Mode: Constant Current
- Technology: PFC Corrected Off-Line Switch Mode
- Output Power: 100W Max.
- Input Voltage: 120 to 277VAC, 50/60Hz
- Number of Outputs: One
- Output Voltages: 32VDC - 286VDC
- Output Currents: 350mA - 1050mA
- Optional 0-10V Dimming, 100% ~ 10% CCR

Environmental

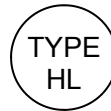
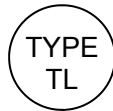
1. Operating temperature: Tc 80C Maximum. Reference -30 to +60°C ambient
2. UL Type TL (Tref Max/Meas. Tref): 61/51°C
2. Storage temperature range: -40 to +85°C
3. Humidity (non-condensing): 5% - 95%RH
4. Cooling: Convection
5. Vibration Frequency: 5-55Hz/2g, 30 minutes
6. Impact resistance: 1g/s
7. MTBF@ 40°C: 395,000 hours @ Full Load per MIL-217F Notice 2.

Compliance

1. UL8750, EN61347, CSA 22.2, UL Type TL & HL recognized.
2. FCC, 47CFR Part 15 Non-Consumer Class A compliant
3. Water resistant and Dust Proof Design: IP66, NEMA13, for Dusty, Dry, Damp Locations.
4. Compact, Lightweight Design.
5. Output & Dimming Circuits are Non-Isolated, Non Class 2
6. Protection: output over-voltage, output over-current, output short circuit, reset by power cycling.
7. EN61000-4-5: 2kV 8/20 µsec surge protection.

Electrical Specifications at 25°C

- Input voltage range: 120 to 277VAC
- Frequency: 50/60HZ
- Power Factor: > .92 at full load 120Vac/230Vac 50/60Hz
- Inrush current: <40A at 25C, 230V, cold start, Max. Load
- Input current: 0.9A @ 120Vac, 0.47A @ 230Vac
- Efficiency: Up to 92% typical at 230Vac Full Load
- Maximum output power: 100W
- Constant Current regulation: +/-2% Over Input Line Variation
- Load regulation accuracy: +/-4%



IP66



NON DIMMING VERSIONS

Part Number ⁽²⁾⁽³⁾	Output Voltage Range	Output Constant Current	Current Accuracy	Output Power Maximum	Typical Efficiency ⁽¹⁾
LG100W-286-C0350	95 - 286 VDC	350 mA	± 3%	100W	92%
LG100W-188-C0530	63 - 188 VDC	530 mA	± 3%	100W	91%
LG100W-143-C0700	48 - 143 VDC	700 mA	± 3%	100W	90%
LG100W-95-C1050	32 - 95 VDC	1050 mA	± 3%	100W	89%

0-10V DIMMING VERSIONS

Part Number ⁽³⁾	Output Voltage Range	Output Constant Current ⁽⁴⁾	Current Accuracy	Output Power Maximum	Typical Efficiency ⁽¹⁾
LG100W-286-C0350-RD	95 - 286 VDC	350 mA	± 3%	100W	92%
LG100W-188-C0530-RD	63 - 188 VDC	530 mA	± 3%	100W	91%
LG100W-143-C0700-RD	48 - 143 VDC	700 mA	± 3%	100W	90%
LG100W-95-C1050-RD	32 - 95 VDC	1050 mA	± 3%	100W	89%

Notes

1. Typical efficiency measured at 230VAC input, full load
2. For 0-10V dimmable version add -RD to the end of the part number: For Example: LG100W-286-C0350-RD is 0-10V dimmable version. -RD 0-10V dimmable version comes with an extra 2 wires +Violet/-Grey on the output side.
3. All models have Non-Isolated UL & cUL Non-Class 2 Outputs. Dimming wires are considered part of the output.
4. -RD models when connected to a dimming device will have a +/-10% output current tolerance. This is due to variation between different 0-10V dimmers
5. Input (White/Black), Output (+Red/-Blue) and Dimming (+Violet/-Grey) leads are 8" (20cm) long 18AWG, 105C/600V solid copper.
6. Case must be Grounded in end use application.

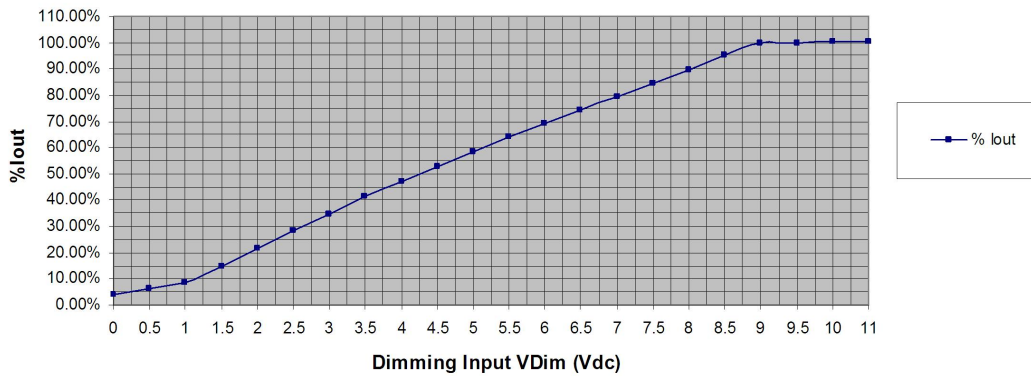
100 Watt — LG100W Series

CONSTANT CURRENT LED DRIVER WITH 0-10V DIMMING OPTION

-RD 2-Wire 0-10V Dimmable

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

% Output Current vs. 0-10VDC Dimming Input



Mechanical Dimensions: Inches [mm]

Material: Black Metal Housing
 Fully Encapsulated
 Weight: 26 oz (738 grams) Typical

Labeling Example

Part Number: LG100W-95-C1050-RD
Input Voltage: 120-277VAC 50/60Hz
Input Current: 0.9 Amp Max
Output Voltage: 32-95 VDC
Output Current: 1050 mA CC, 100W Maximum
UL Type HL & TL 61/51°C

0-10V CCR Dimmable Output

DC OUTPUT
 + = RED
 - = BLUE

0-10V DIMMING
 DIM+ = VIOLET
 DIM- = GRAY

CASE MUST BE GROUNDED

IP66

CE, FC, RoHS, UL, IP66, MADE IN CHINA, REV. A1.2

