PLED200W Series– Fixed Output & Dimmable

Flicker-Free LED Drivers
Constant Current & Constant Voltage with Isolation
Black Magic Thermal Advantage™ Aluminum Housing

Electrical Specifications

Input Voltage Range:	**100-277 Vac Nom. (90-305 V Min/Max)**
Input Over-Voltage:	**Can endure 320Vac for 48 Hrs, 350Vac for 2 Hrs**
Frequency:	**50/60 Hz Nom. (47-63 Hz Min/Max)**
Power Factor:	**>0.90 @ > 70% load, 120-277V**
Inrush Current:	**<60.0 Amps max @ 277Vac, cold start, full load**
Input Current:	**0.96 Amps max @ 230Vac, 1.82 A max @ 120Vac**
Maximum Power:	**200W**
Current Accuracy:	**± 3% Over input line variation**
Load Regulation:	**± 4%**
THD:	**≤ 20% @ > 70% load, 120-277V**
Ripple & Noise: (Vpk-pk)	**5% Vo max @ 20 MHz BW, Full load output in parallel with 0.1 µF ceramic & 10 µF Electrolytic**
Ripple: (Ipk-pk)	**5% Io max @ 20 MHz BW, Full load output in parallel with 0.1 µF ceramic & 10 µFElectrolytic. 120 Hz component (Flicker Free)**
Start-up Time:	**150mS typical @ Full Load, 120Vac/60Hz (1000mS max)**
Leakage Current:	**0.68 mA max @ 120Vac, 0.75 mA max @ 277Vac**
Hold Up Time:	**30mS typical @ Full Load, 277Vac**
Protection:	**Over-Voltage, Over-Current, and Short Circuit (auto-recovery)**

Environmental Specifications

Minimum Starting Temp:	**-30ºC**
Maximum Case Temp.	**90°C**
UL Type TL Rating:	**Non-Class 2: 90/84°C**
Storage Temperature:	**-40ºC to +85ºC**
Humidity:	**5% to 95%**
Cooling:	**Convection**
Vibration Frequency:	**5 to 55 Hz/2g, 30 minutes**
Sound Rating:	**Class A**
MTBF:	**280,000 Hours at full load and 40ºC ambient conditions per MIL-217F Notice 2**
EMC:	**FCC 47CFR Part 15 Class B compliant**
Impact Resistance:	**1g/s**
Weight:	**33.2 oz (940 grams)**

Ordering Options:

-D: 0-10V & Resistance dimmable models dim 100-10%. Two extra wires on the output side (+Purple/-Gray). Compatible with most quality 0-10V wall dimmers. See page 3.

-D3: 3-wire dimmable models dim 100-10%. Three extra wires on the output side (Yellow/Purple/Gray). Compatible with potentiometer dimming. See page 3.

c UL us E332160 CE

IP66 TYPE TL

- Total Power: 200 Watts
- Input Voltage: 100-277 Vac Nom.
- UL Dry & Damp Location Rated
- IP66 & NEMA6
- UL Type HL Rated for Hazardous Locations
- UL Sign Components Manual (S.A.M. Models)

Constant Current Versions - Product Specifications

Model Number	Output Current *(mA ±5%)*	Output Voltage Range *(Vdc)*	Max Output Power *(W)*	Typical Efficiency
PLED200W-445-C0450-XX	450	149-445	200W	92%
PLED200W-285-C0700-XX	700	95-285	200W	92%
PLED200W-190-C1050-XX	1050	64-190	200W	91%
PLED200W-142-C1400-XX	1400	48-142	200W	91%
PLED200W-114-C1750-XX	1750	38-114	200W	91%
PLED200W-095-C2100-XX	2100	32-95	200W	91%
PLED200W-081-C2450-XX	2450	27-81	200W	90%
PLED200W-071-C2800-XX	2800	24-71	200W	90%
PLED200W-063-C3150-XX	3150	21-63	200W	90%
PLED200W-057-C3500-XX	3500	19-57	200W	90%
PLED200W-047-C4200-XX	4200	16-47	200W	89%
PLED200W-040-C4900-XX	4900	14-40	200W	89%
PLED200W-035-C5600-XX	5600	12-35	200W	89%
PLED200W-032-C6300-XX	6300	11-32	200W	88%
PLED200W-024-C8330-XX	8330	8-24	200W	88%

-XX indicates dimming options are available. See options at left. Blank = fixed current output

Constant Voltage Versions - Product Specifications

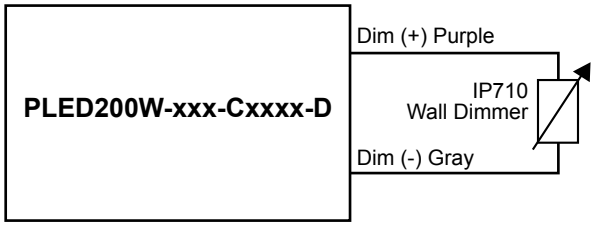
Model Number	Output Voltage *(Vdc ±5%)*	Output Current Range *(mA)*	Max Output Power *(W)*	Typical Efficiency
PLED200W-024 •	24	2083-8330	200W	88%
PLED200W-032	32	1575-6300	200W	88%
PLED200W-035	35	1400-5600	200W	89%
PLED200W-040	40	1225-4900	200W	89%
PLED200W-047	47	1050-4200	200W	89%
PLED200W-057	57	875-3500	200W	90%
PLED200W-063	63	788-3150	200W	90%
PLED200W-071	71	700-2800	200W	90%
PLED200W-081	81	613-2450	200W	90%
PLED200W-095	95	525-2100	200W	91%
PLED200W-114	114	438-1750	200W	91%
PLED200W-142	142	350-1400	200W	91%
PLED200W-190	190	163-1050	200W	91%
PLED200W-285	285	175-700	200W	92%
PLED200W-445	445	113-450	200W	92%

• Indicates S.A.M.

"-D" and "-D3" Options: 0-10VDC and Resistance Dimming

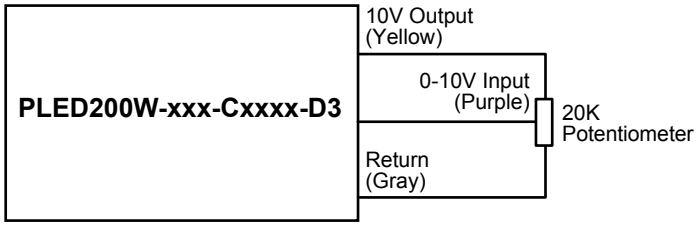
Parameters	Minimum	Typical	Maximum
10V Output, Yellow Wire	9.2V	10.0V	10.8V
Source Current out of Aux Yellow Wire	—-	—-	10mA
Absolute Voltage Range on 0-10V (+) Purple Wire	-2.0V	—	+15V
Source Current out of 0-10V Purple Wire	0mA	—	2mA

Typical Dimming Circuit

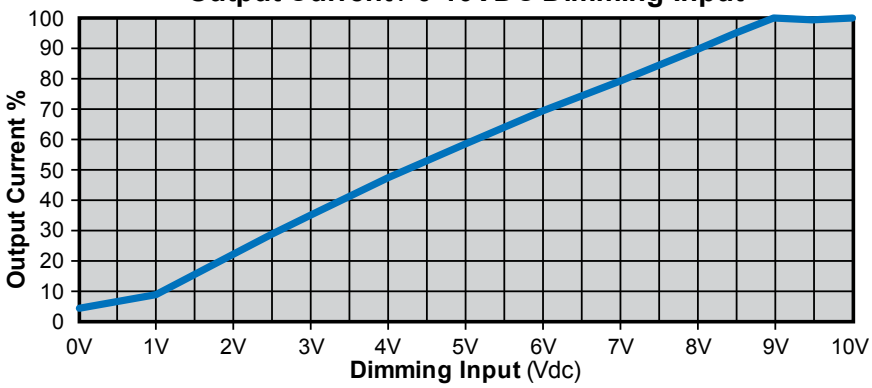


(Dimmer must be current-sink type control)

3-Wire Dimming Typical Circuit



Output Current / 0-10VDC Dimming Input



Notes:

1. 0-10V dimmable version comes with an extra two wires +Purple/-Gray on the output side.
2. Compatible with most 0-10V Wall Slide dimmers and direct 0-10V analog signal. Recommended dimmer is Leviton IP710 or equivalent
3. 0-10V dimmable version is not intended to dim to zero (off). Will be Iout <10% @ Vdim <1.0V
4. 0-10V dimmable version output will be 100% with Purple/Gray open and minimum with Purple/Gray Shorted.