LED50WPR2T5 Series – Programmable LED Driver

Dimmable Constant Current Driver
Set maximum current by USB cable connection, no computer needed--just USB +5V
Narrow cross-section fits T5-style ballast channels

Electrical Specifications

Input Voltage Range:	**120-277 Vac Nom. (108-305 V Min/Max)**
Frequency:	**50/60 Hz Nom. (47-63 Hz Min/Max)**
Power Factor:	**≥ 0.90 @ Full Load, 120Vac-277Vac**
Inrush Current:	**< 20.0 Amps @ Full Output**
Input Current (Max):	**0.59 Amps @ 120 Vac, 60Hz (Max) 0.26 Amps @ 277 Vac, 60Hz**
Maximum Power:	**50W**
Load Regulation:	**±5% @max rated current**
THD:	**≤ 20% @ ≥ 60% full load**
Output Ripple Current:	**35% max**
Start-up Time:	**1 sec. typical**
Output Protection:	**Over-Voltage and Short Circuit Protection with Auto Recovery**

Environmental Specifications

Maximum Case Temp.	**89ºC**
UL Type TL Rating:	**89ºC/75ºC**
Minimum Starting Temp:	**-20ºC**
Storage Temperature:	**-25ºC to +80 ºC**
Humidity:	**Up to 90% RH**
Cooling:	**Convection**
Vibration Frequency:	**5 to 55 Hz/2g, 30 minutes**
Sound Rating:	**Class A**
Lifetime:	**50,000 Hours, 75ºC @ Tc point (see graph for details)**
MTBF:	**>100,000 Hours**
EMC:	**FCC 47CFR Part 15 Class B compliant**
Weight:	**9.6 oz. (272 grams)**

- Simple programming with USB cable
- Linear dimming curve
- Adjustable Output Current: 500-1400mA
- UL Dry & Damp Location Rated, Class 2, Type TL
- Dim to 10% with 0-10V dimming
- Metal housing

Constant Current - Product Specifications

Model Number	Output Current *(mA)*	Output Voltage *(Vdc)*	Max Output Power *(W)*	Type TL Rating	Typical Efficiency
LED50WPR2T5-050-C1400-D	500-1400	20-50	50	89/75ºC	83%

Class 2: US/Canada

Programming cable is a 1m USB cable with 3-pin connector and programming button. Resistance and current is marked on the label. Other output currents and cables available upon request.

Programming Key

TRP Catalog #	Nominal Output Current (Amps)*	Actual Output Current (Amps)
PR2-C0500-C3	0.500	0.507
PR2-C0530-C3	0.530	0.522
PR2-C0700-C3	0.700	0.691
PR2-C0830-C3	0.830	0.827
PR2-C1000-C3	1.000	1.000
PR2-C1050-C3	1.050	1.043
PR2-C1190-C3	1.190	1.175
PR2-C1250-C3	1.250	1.248
PR2-C1400-C3	1.400	1.404

**When referencing other driver nominal output currents above, select nearest actual current (right hand column).*

Default current value is 1400mA

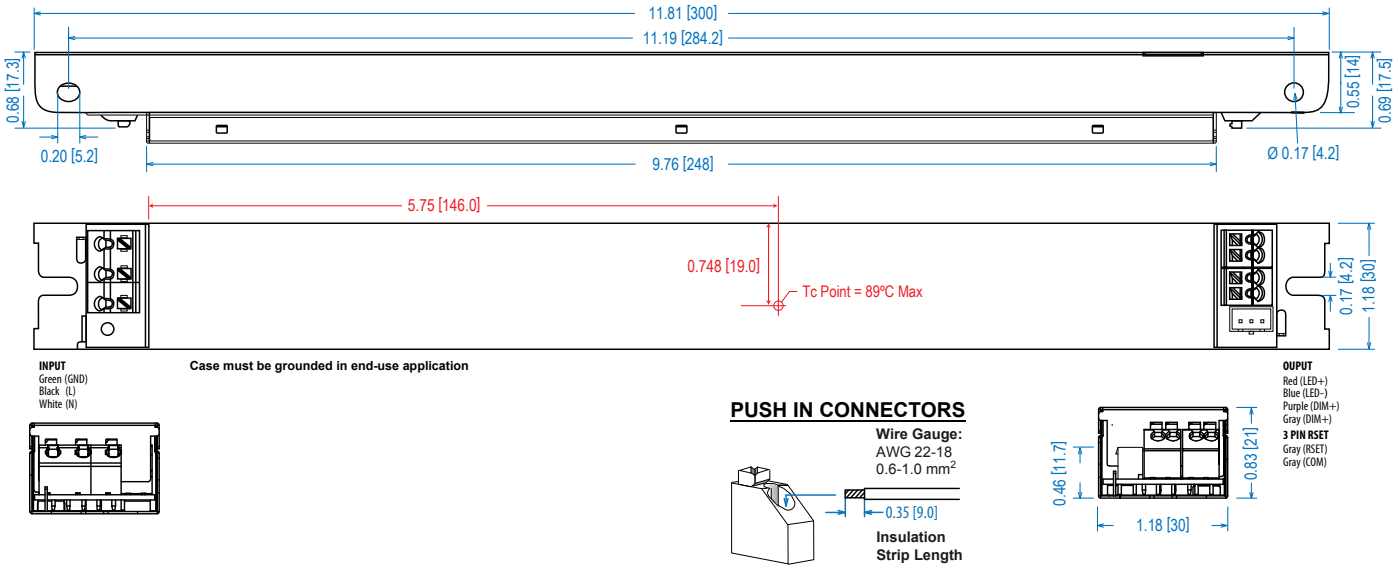
c UL us E332160 FC RoHS TYPE TL

Note:
LED drivers are designed and intended to operate LED loads only. Non-LED loading may be outside the specified design limits of our LED drivers, and therefore cannot be covered by any warranty. If you desire to use our LED drivers to operate non-LED loads please contact us to discuss compatibility.

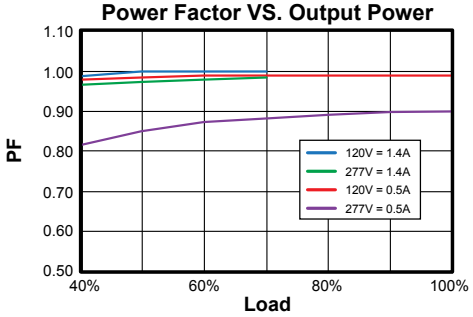
Specifications subject to change without notice.

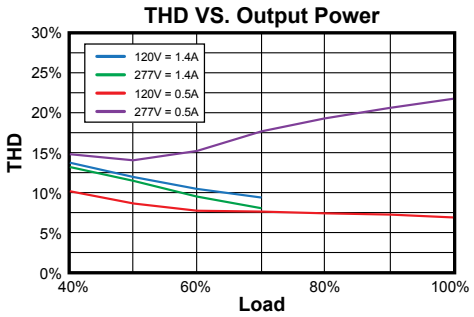
Rev 10-25-16

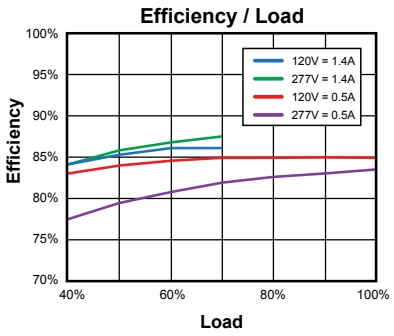
Dimensions - Inches (mm)

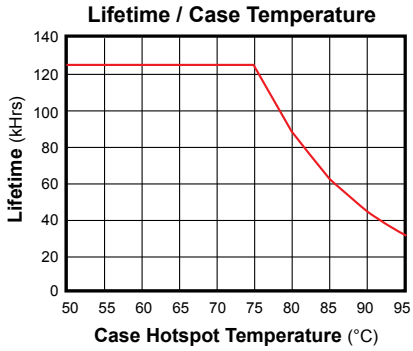


PUSH IN CONNECTORS

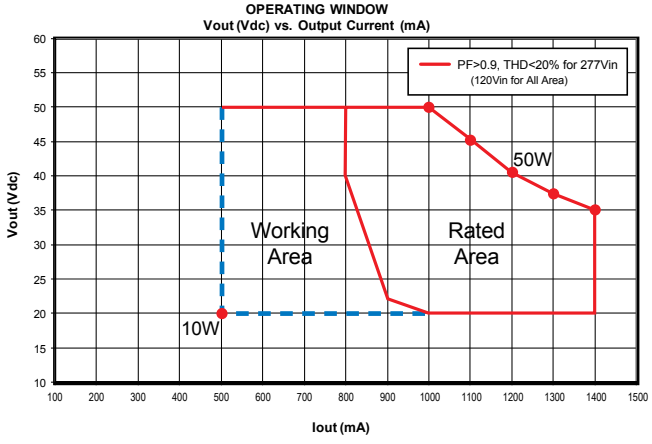






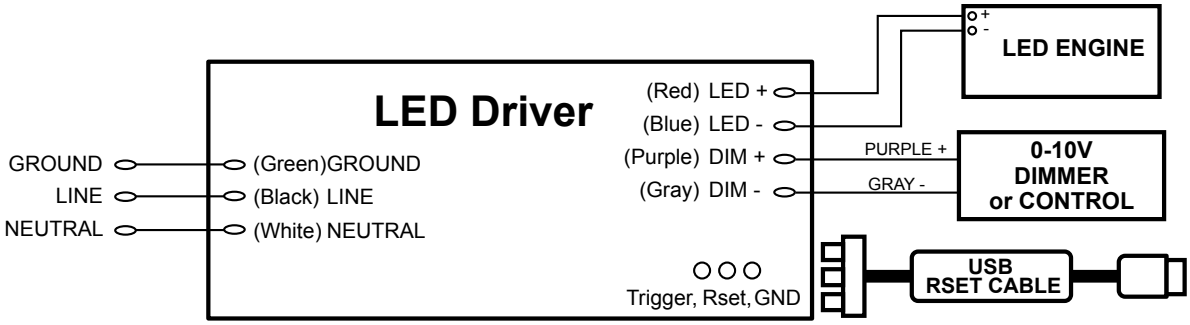


Power Operating Window



Safety Cert.	Standard
UL/CUL	UL8750, UL1310 for UL Class 2 & CAN/CSA C22.2 No. 250.13, UL Type TL 90/68°C
EMC Standard	**Notes**
FCC, 47CFR Part 15	Class B
EN 55015	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment.
EN 61000-3-2	Part 3-2: Limits for harmonic current emissions Class C, ≥80% Rated Power
EN 61000-3-3	Part 3-3: Limitation of voltage changes, voltage fluctuations and flicker
EN 61000-4-5	Part 4-5: Surge Immunity test, 2 kV L-N, 4 kV L-FG & N-FG

Wiring



Programming Guide

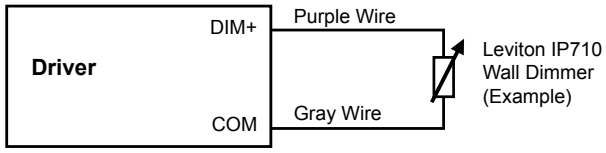
Note that the driver does NOT need to be connected to AC power to be programmed. The cable assembly should have the output current and resistance on the label. Note that each setup cable corresponds to a specific output current value.

1) Plug the 3-pin cable connector into the 3-pin connector on the driver.
2) Plug the USB connector of the cable into an active USB port. The USB port only has to provide +5V to the driver.
3) Push and hold the button on the USB cable for approximately 0.5 to 1 second to program the driver current.
   To keep the programmed value, go to step 5. If the driver needs to be reset to the default current value, go to step 4.
4) Push and hold the button on the USB cable for >6 seconds to reset teh driver current to the default value of 1.4A.
5) Remove the setup cable when done programming. The driver is ready for use.

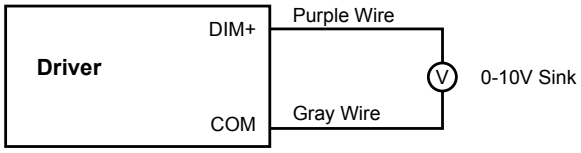
0-10VDC Dimming

Parameters	Minimum	Typical	Maximum
Source Current out of 0-10V Purple Wire	0 mA	—-	1.5 mA
Absolute Voltage Range on 0-10V (+) Purple Wire	-2.0 V	—-	+15 V

Typical Dimming Circuit: 2-Wire Resistance



Typical Dimming Circuit: 2-Wire 0-10V Analog



0-10V Dimming Notes:

1. Part comes with two dimming input connectors +Purple/-Gray on the output side.
2. Part is compatible with most 0-10V Wall Slide dimmers and 0-10V dimming.
3. Output current will be 10% when Vdim ≤0.60V.
4. Output will be 100% with Purple/Gray open and 10% with Purple/Gray Shorted.

Labeling Programmable Drivers:
It is highly recommended that the drivers be labeled with information traceable to the programmed current. ***This information is critical to answering any field questions from the contractor or end user.***

Operating Current Behavior by AD Voltage