



# LED-50W CC Series

## Switch Mode LED Driver

select **SYNC**<sup>™</sup>  
classic

### Electrical Specifications

|                      |  |
|----------------------|--|
| Input Voltage Range: | 120-277 Vac Nom. (100-305 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 @ full load, 100V through 277V          |
| Inrush Current:      | <55.0 Amps max @ 120 Vac, cold start 25°C      |
| Input Current:       | 0.50 Amps max at 120Vac                        |
| Maximum Power:       | 50W  |
| Current Accuracy:    | ±3% Over input line variation                  |
| Load Regulation:     | ± 4%   |
| THD:                 | ≤ 20% at 120/230/277Vac ≥ 50% Load             |
| Leakage Current:     | 400 µA Typical                                 |
| Hold Up Time:        | Half Cycle                                     |

### Protections

|                |   |
|----------------|---|
| Over-voltage:  | No Damage, Auto Recovery after fault is removed |
| Over-current:  | Constant Current Limiting Circuit               |
| Short Circuit: | No Damage, Auto Recovery after fault is removed |

### Environmental Specifications

|                         |   |
|-------------------------|---|
| Max Case Life Temp:     | 65°C<br><i>(5 year warranty)</i>  |
| Maximum Case Temp (UL): | 90°C  |
| Minimum Starting Temp:  | -40°C   |
| Storage Temperature:    | -40°C to +85°C  |
| Humidity:               | 5% to 95%   |
| Cooling:                | Convection  |
| Vibration Frequency:    | 5 to 55 Hz/2g, 30 minutes   |
| Sound Rating:           | Class A   |
| Impact Resistance:      | 1g/s  |
| MTBF:                   | 474,000 Hours @ full load & 40°C ambient conditions per MIL-217F Notice 2 |
| EMC:                    | FCC 47CFR Part 15 Class B @ 120Vac, Class A @ 277Vac                      |

- Total Power: 50 Watts
- Input Voltage: 120-277 Vac Nom.
- UL Dry & Damp Location Rated
- IP66
- High Power Factor
- Constant Current, Dimming with Isolation
- Black Magic Thermal Advantage™ Plastic Housing
- 0-10V Linear Dimming 1% to 100%
- Dims to Zero @ ≤1.0V, Standby Power ≤0.5W

#### Dimming Option:

0-10V & Resistance dimmable models include an extra two wires +Violet/-Pink on the output side. "-D" Compatible with most quality 0-10V wall dimmers. See page 3 for additional specifications.

**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.



### Constant Current Models

| Model               | Output Current (mA ±4%) | Output Voltage Range (Vdc) | Max. Output Power (W) | Typical Efficiency |
|---------------------|-------------------------|----------------------------|-----------------------|--------------------|
| LED50W-142-C0350-XX | 350                     | 71-142                     | 49.7                  | 89%                |
| LED50W-111-C0450-XX | 450                     | 55-111                     | 49.9                  | 89%                |
| LED50W-072-C0530-XX | 530                     | 36-72                      | 38.1                  | 88%                |
| LED50W-072-C0700-XX | 700                     | 36-72                      | 50                    | 88%                |
| LED50W-060-C0830-XX | 830                     | 30-60                      | 49.8                  | 88%                |
| LED50W-048-C1050-XX | 1050                    | 24-48                      | 50                    | 88%                |
| LED50W-042-C1190-XX | 1190                    | 21-42                      | 50                    | 87%                |
| LED50W-040-C1250-XX | 1250                    | 20-40                      | 50                    | 87%                |
| LED50W-036-C1400-XX | 1400                    | 18-36                      | 50                    | 87%                |
| LED50W-029-C1750-XX | 1750                    | 14-29                      | 50                    | 87%                |
| LED50W-024-C2100-XX | 2100                    | 12-24                      | 50                    | 87%                |
| LED50W-100-C0500-D  | 500                     | 50-100                     | 50                    | 89%                |

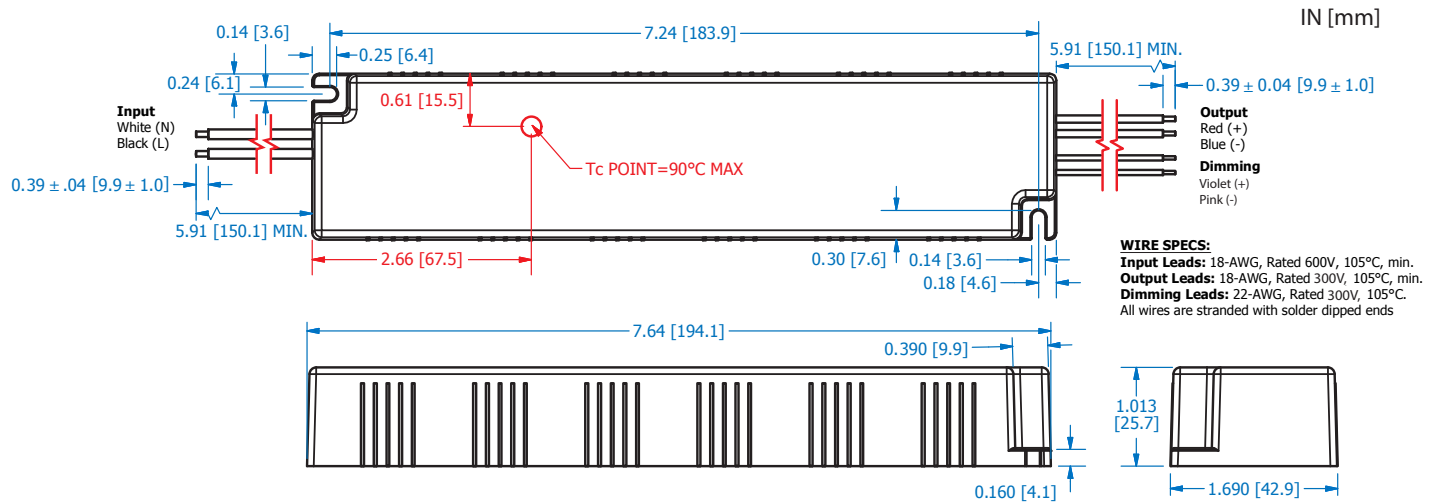
-XX indicates dimming options are available. See options at left. Blank = fixed current output.

| Safety Cert. | Standard |
|--------------|----------|
| UL/CUL       | UL8750   |
| CSA          | 22.2     |
| CE           | EN61347  |

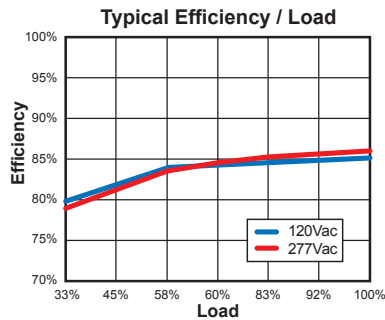
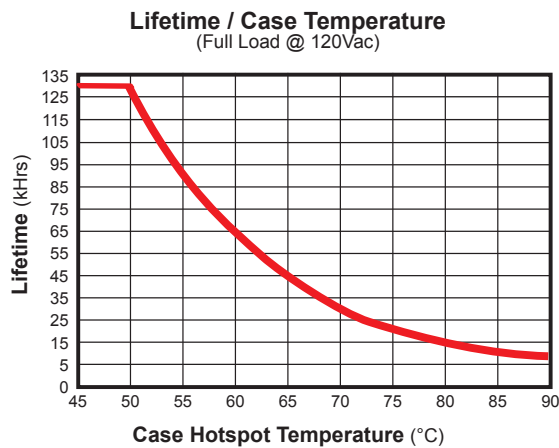
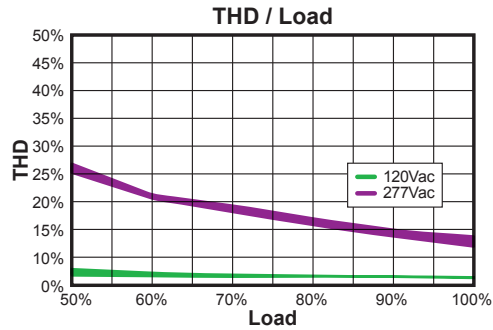
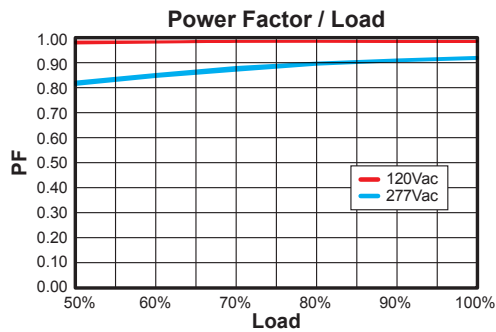
  

| EMC Standard       | Notes                               |
|--------------------|-------------------------------------|
| EN55015            |                                     |
| EN61000-3-2        | > 80% Rated Power                   |
| EN61000-3-3        | Class C                             |
| FCC, 47CFR Part 15 | Class B @ 120Vac, Class A @ 277Vac  |
| EN6100-4-5         | 2KV L-N, 8/20 µsec Surge Protection |

**Dimensions**



**Power Characteristics**



**Note:** The area under the life-temperature curve represents where the driver has highly reliable operation within specification. Driver performance may drift out of published specifications as the hours of operation exceed the curve at a given temperature. Higher operating temperatures increase the chances of a failure to function. Other electrical, mechanical and environmental factors affect driver lifetime but are not represented in this calculation.

**UL Conditions of Acceptability:**  
See website for additional information

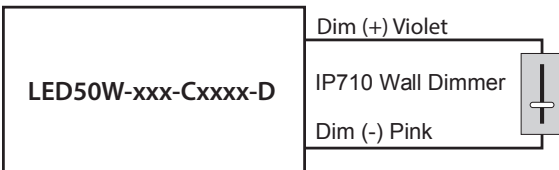
### “-D” Option: 0-10VDC and Resistance Dimming, Dims to Zero at < 1.0V

| Parameters                                      | Minimum | Typical | Maximum |
|---|---------|---------|---------|
| Source Current out of 0-10V Violet Wire         | 0 mA    | —       | 1mA     |
| Absolute Voltage Range on 0-10V (+) Violet Wire | -2.0V   | —       | +15V    |

#### Notes:

- D 0-10V dimmable version comes with an extra two wires +Violet/-Pink on the output side.
- D 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
- D 0-10V dimmable version is Dim to Zero @ ~1.00V and 1 % Min Dim.
- D 0-10V dimmable version output will be 100% with Violet/Pink open and minimum with Violet/Pink Shorted.
- Dimming wires +Violet/-Pink must not touch any other wires or damage to LED Driver can occur.

#### -D 2-Wire Resistance Dimming Scheme



#### -D 2-Wire 0-10V Analog Dimming Scheme

