

### LED-75W Series– Fixed Output and Dimmable Switch Mode 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 @ full load, 100V through 277V  |
| Inrush Current:      | <30.0 Amps max @ 230 Vac, cold start 25°C   |
| Input Current:       | 1.00 Amps max   |
| Maximum Power:       | 75W   |
| Current Accuracy:    | ± 1% Over input line variation  |
| Load Regulation:     | ± 3%  |
| THD:                 | ≤ 20% @ full load   |
| Leakage Current:     | 400 μA Typical  |
| Hold Up Time:        | Half Cycle  |
| Protection:          | Output Over-Voltage, Output Over-Current, and<br>Output Short Circuit Protection reset by power cycling |

### **Environmental Specifications**

| Minimum Starting Temp: | -30°C   |
|------------------------|---|
| Maximum Case Temp.     | 90°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   |
| MTBF:                  | 478,000 Hours at full load and 40°C ambient conditions<br>per MIL-217F Notice 2 |
| EMC:                   | FCC 47CFR Part 15 Class B compliant   |

-D: 0-10V & Resistance dimmable version comes with an extra two wires +Purple/-Gray on the output side. -D 0-10V Dimming is compatible with most quality 0-10V wall dimmers.

-PD: PWM Dimmable version comes with an extra two wires +Purple/-Gray on the output side. PD PWM version is PWM Dimmable via a positive 10% to 100% Duty Cycle, 200Hz to 1KHz, 0-10V Pulse. See page 4 for additional specifications.

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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.

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- Total Power: 75 Watts
- Input Voltage: 100-277 Vac Nom.
- UL Dry & Damp Location Rated
- IP66
- High Power Factor
- UL8750, CSA 22.2, EN61347,
- EN61000-3-2, EN61000-3-3 Class C

| Constant Current - Product Specifications |                            |                               |                          |                       |
|---|----------------------------|-------------------------------|--------------------------|-----------------------|
| Model Number                              | Output Current<br>(mA ±3%) | Output Voltage<br>Range (Vdc) | Max. Output<br>Power (W) | Typical<br>Efficiency |
| LED75W-257-C0300-XX                       | 300                        | 85-257                        | 75                       | 91%                   |
| LED75W-200-C0350-XX                       | 350                        | 66-200                        | 70                       | 91%                   |
| LED75W-128-C0600-XX                       | 600                        | 42-128                        | 75                       | 91%                   |
| LED75W-085-C0900-XX                       | 900                        | 28-85                         | 75                       | 90%                   |
| LED75W-064-C1200-XX                       | 1200                       | 21-64                         | 75                       | 90%                   |
| LED75W-056-C1400-XX                       | 1400                       | 18-56                         | 75                       | 90%                   |
| LED75W-048-C1600-XX                       | 1600                       | 16-48                         | 75                       | 90%                   |
| LED75W-036-C2100-XX                       | 2100                       | 12-36                         | 75                       | 89%                   |
| LED75W-030-C2500-XX                       | 2500                       | 10-30                         | 75                       | 89%                   |
| LED75W-027-C2800-XX                       | 2800                       | 9-27                          | 75                       | 88%                   |
| LED75W-025-C3000-XX                       | 3000                       | 8-25                          | 75                       | 88%                   |
| LED75W-022-C3400-XX                       | 3400                       | 7-22                          | 74.8                     | 88%                   |
| LED75W-020-C3750-XX                       | 3750                       | 7-20                          | 75                       | 87%                   |
| LED75W-018-C4200-XX                       | 4200                       | 6-18                          | 75                       | 86%                   |
| LED75W-015-C5000-XX                       | 5000                       | 5-15                          | 75                       | 86%                   |

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

| Constant Voltage - Product Specifications |                             |                              |                          |                       |
|---|-----------------------------|------------------------------|--------------------------|-----------------------|
| Model Number                              | Output Voltage<br>(Vdc ±5%) | Output Current<br>Range (mA) | Max. Output<br>Power (W) | Typical<br>Efficiency |
| LED75W-015                                | 15                          | 1250-5000                    | 75                       | 86%                   |
| LED75W-018                                | 18                          | 1050-4200                    | 75                       | 86%                   |
| LED75W-020                                | 20                          | 938-3750                     | 75                       | 87%                   |
| LED75W-022                                | 22                          | 850-3400                     | 74.8                     | 88%                   |
| LED75W-025                                | 25                          | 750-3000                     | 75                       | 88%                   |
| LED75W-027                                | 27                          | 700-2800                     | 75                       | 88%                   |
| LED75W-030                                | 30                          | 625-2500                     | 75                       | 89%                   |
| LED75W-036                                | 36                          | 525-2100                     | 75                       | 89%                   |
| LED75W-048                                | 48                          | 400-1600                     | 75                       | 90%                   |
| LED75W-056                                | 56                          | 350-1400                     | 75                       | 90%                   |
| LED75W-064                                | 64                          | 300-1200                     | 75                       | 90%                   |
| LED75W-085                                | 85                          | 225-900                      | 75                       | 90%                   |
| LED75W-128                                | 128                         | 150-600                      | 75                       | 91%                   |
| LED75W-200                                | 200                         | 88-350                       | 70                       | 91%                   |
| LED75W-257                                | 257                         | 75-300                       | 75                       | 91%                   |

Class 2: US/Canada US Only

Rev 8-31-15

Specifications subject to change without notice.

See page 3 for additional specifications.

**Ordering Options:** 

Note:

# If you desire to use our LED drivers to operate non-LED loads please contact us to discuss compatibility.

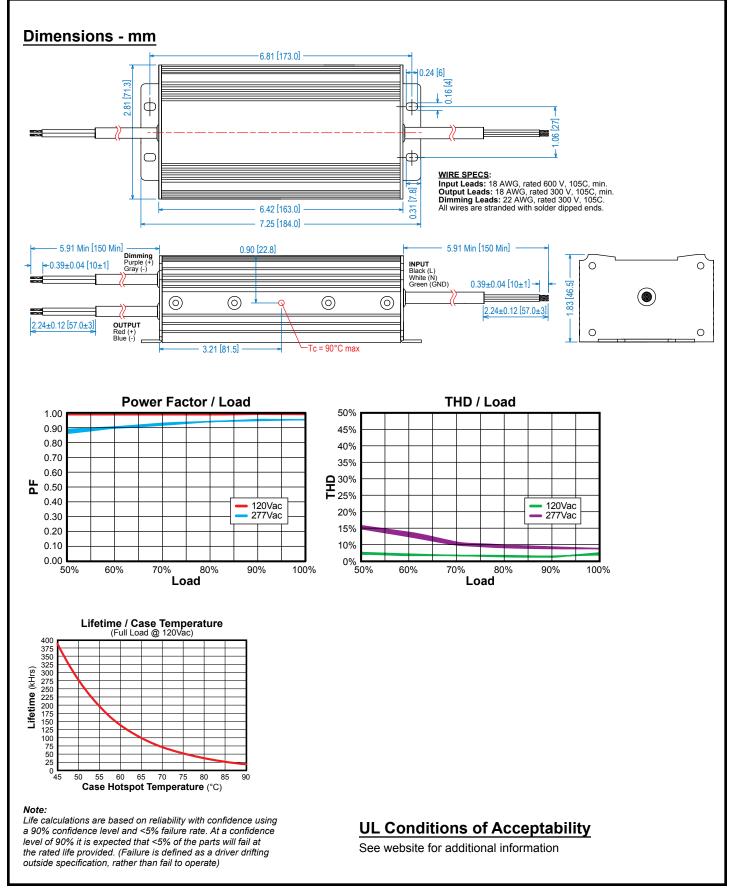
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### **LED75W Series**



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# **LED75W Series**

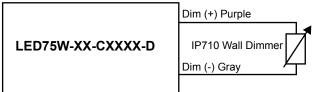
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# "-D" Option: 0-10VDC and Resistance Dimming

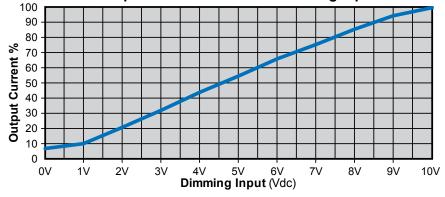
| Parameters                                      | Minimum | Typical | Maximum |
|---|---------|---------|---------|
| Source Current out of 0-10V Purple Wire         | 0 mA    | —       | 2 mA    |
| Absolute Voltage Range on 0-10V (+) Purple Wire | -2.0 V  | —       | +15 V   |

### **Typical Dimming Circuit**



(Dimmer must be current-sink type control)

**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 below about 5% @ 0V or 10% @ 1.0V
- 4. 0-10V dimmable version output will be 100% with Purple/Gray open and minimum with Purple/Gray Shorted.

# LED75W Series



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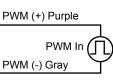
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## "-PD" Option: PWM Dimming

| Parameters  | Minimum | Typical | Maximum |
|---|---------|---------|---------|
| Absolute Maximum Voltage Range on PWM Input (Purple Wire) | -2.0V   | 10V     | +28V    |
| Input LOW Level Voltage Range (Purple Wire)               | -2.0    | 0V      | +7.5V   |
| Input HIGH Level Voltage Range (Purple Wire)              | +9.0    | 10V     | 28V     |
| Sink Current into PWM Input (Purple Wire)                 | 0mA     | —       | 1.2mA   |
| PWM Input Signal Frequency                                | 200Hz   | _       | 1000Hz  |
| PWM Input Signal Positive Duty Cycle                      | 0%      | 10-90%  | 100%    |

**PWM Positive Dimming Typical Circuit** 

LED75W-XX-CXXXX-PD



**Output Current / Positive Duty Cycle** 



### Notes:

- 1. PWM Dimmable version comes with an extra 2 wires +Purple/-Gray on the output side.
- Below 10% Duty cycle proper dimming operation is not assured. Unit is not intended to turn off at <10% Duty Cycle.</li>
  PWM dimmable version output will be 100% with Purple/Gray open and minimum with Purple/Gray Shorted.