

### DUD200IP65 | 200W

#### Constant Voltage Dimmable LED Driver

#### 5-IN-1 Dimming | Triac/0-10V/1-10V/10V PWM/Potentiometer

#### Features

- 5-way universal dimming
- Smooth flicker-free dimming, down to 0.1%
- PF>0.95, dimming range: 0.1-100%, flicker-free
- PWM Output: 4000Hz constant frequency  
(Different frequencies can be customized: 250-20000Hz)
- Short-circuit, over-temperature, over-load protection
- Super low loading request, works perfect at 10-100% load
- High-quality aluminum housing for dry, damp, wet location
- Build in active PFC, typical power factor >0.95,  
THD<10%@120V Max. Load.
- Dimming curve can be customized
- 5-year warranty



**NEMA 4X**

**Type HL**

**Class P**

**12V, 24V OR 48VDC**

**110-277V**

**Description:** Constant voltage dimmable LED driver

**Driver Type:** LED Driver without junction box

**Dimming:** 5-way dimming: forward phase (MLV), reverse phase (ELV), 0-10V, PWM, and potentiometer

**Dimming Range:** 0.1-100%, flicker-free, ultra deep amplitude

**Output Dimming Method:** PWM, 4000Hz Constant frequency

**Flicker:** Meets California Title 24 / JA8

**Input Voltage:** 110-277VAC, 50/60Hz

**Output Voltage:** DC12V, 24V or 48V

**Wattage:** 200W

**Application:** Suitable for dry, damp and wet location

**Certifications:** UL, FCC

**Warranty:** 5-Year

| Model          | Max Power | Output |
|----------------|-----------|--------|
| DUD200IP65-12V | 200W      | 12V    |
| DUD200IP65-24V | 200W      | 24V    |
| DUD200IP65-48V | 200W      | 48V    |

# DUD200IP65 I 200W

## Constant Voltage Dimmable LED Driver

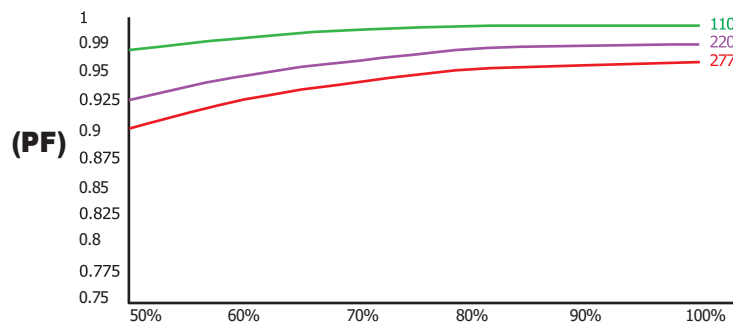
### 5-IN-1 Dimming | Triac/0-10V/1-10V/10V PWM/Potentiometer

| Model Number |                        | DUD200IP65-12V   | DUD200IP65-24V | DUD200IP65-48V |
|--------------|------------------------|--|----------------|----------------|
| Output       | Rated Power            | 200W   |                |                |
|              | Rated Voltage          | DC12V  | DC24V          | DC48V          |
|              | Rated Current          | 16.66A   | 8.33A          | 4.16A          |
|              | Voltage Tolerance      | ±0.5V  |                |                |
|              | Voltage Regulation     | ±0.5%  |                |                |
|              | Load Regulation        | ±1%  |                |                |
| Input        | Voltage Range          | 110-277V   |                |                |
|              | Frequency Range        | 47-63Hz  |                |                |
|              | Efficiency (Typ.)      | 90% @ 120VAC 91% @ 277VAC  |                |                |
|              | THD                    | THD<15% (@100% load)   |                |                |
|              | Power Factor (Typ.)    | 0.99@120VAC 0.98@277VAC  |                |                |
|              | AC Current (Typ.)      | 2.06A  |                |                |
|              | Inrush Current (Typ.)  | 30A  |                |                |
|              | Leakage Current        | <0.5mA   |                |                |
| Protection   | Short Circuit          | Hiccup mode, recovers automatically after fault condition is removed.                |                |                |
|              | Overload               | Intelligently reduce the output voltage, auto-recovery or re-power on to recovery    |                |                |
|              | Over Temperature       | 100°C±10°C shut down o/p voltage, automatically recover after cooling.               |                |                |
| Environment  | Working Temp.          | Tcase = -40~+140°F (-40~+60°C) (Please refer to "OUTPUTLOAD vs TEMPERATURE" section) |                |                |
|              | Working Humidity       | 20 ~ 95% RH non-condensing   |                |                |
|              | Storage Temp. Humidity | -40~+194°F (-40~+90°C), 10~95% RH  |                |                |
|              | Temp. Coefficient      | ±0.03%/°C (0~50°C)   |                |                |
|              | Vibration              | 10~500 Hz, 5G 10min./1 cycle, period for 60min. each along X,Y,Z axes                |                |                |
| Safety & EMC | Safety Standards       | UL8750, Class P  |                |                |
|              | Withstand Voltage      | I/P-O/P:1.88KVAC   |                |                |
|              | Isolation Resistance   | I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH   |                |                |
|              | EMC Emission           | Compliance to FCC part 15 Subpart B  |                |                |

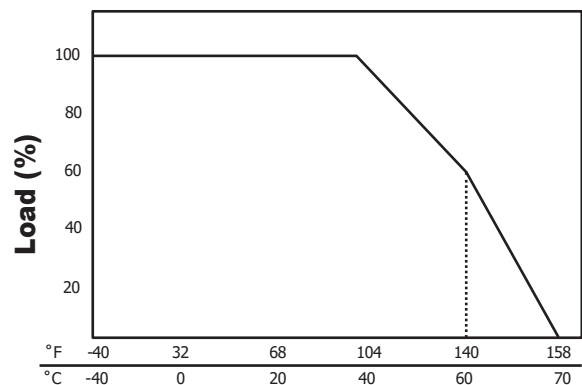
# DUD200IP65 I 200W

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## PFC Load Graph

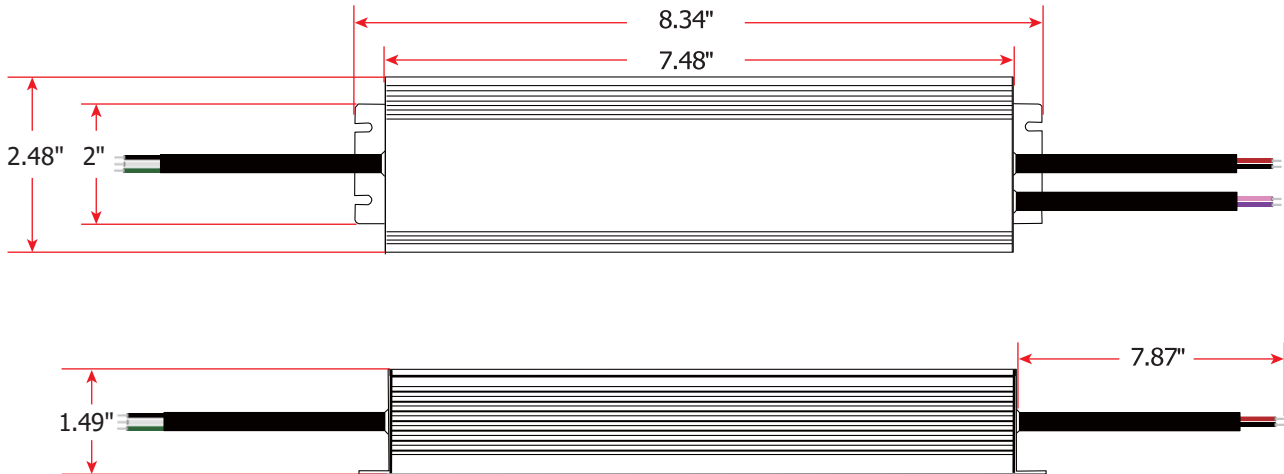


## Load vs Ambient Temperature



## MECHANICAL DIAGRAMS

Dimension: 212x63x38mm (L\*W\*H)  
 8.34"x2.48"x1.49" (L\*W\*H)



## Wire Specification

| PMA-A | Input    |       |       | Output   |       |                                     | 0/1-10V Dimming |        |       |
|-------|----------|-------|-------|----------|-------|-------------------------------------|-----------------|--------|-------|
| Power | Function | Color | Spec. | Function | Color | Spec.                               | Function        | Color  | Spec. |
| 200W  | AC L     | Black | 18AWG | DC+      | Red   | 12V/14AWG<br>24V/18AWG<br>48V/18AWG | Dim+            | Purple | 18AWG |
|       | AC N     | White | 18AWG | DC-      | Black |                                     | Dim-            | Pink   | 18AWG |
|       | Ground   | Green | 18AWG | /        | /     | /                                   | /               | /      | /     |

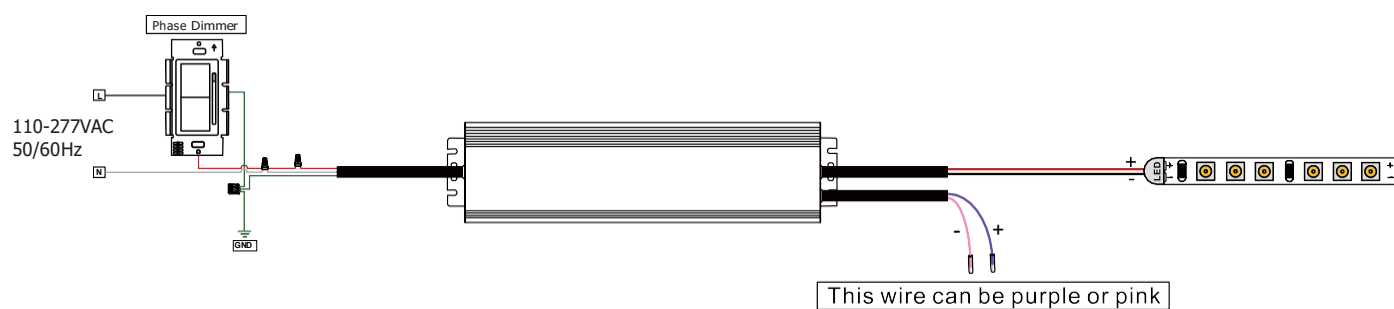
### DUD200IP65 I 200W

#### Constant Voltage Dimmable LED Driver

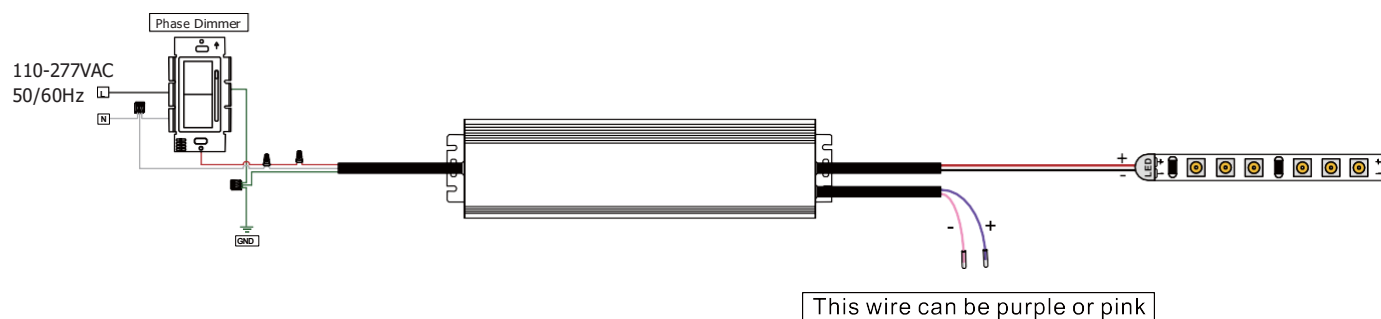
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### Wiring Diagram

#### A. TRIAC/MLV (Leading Edge) Dimmer Wiring Diagram

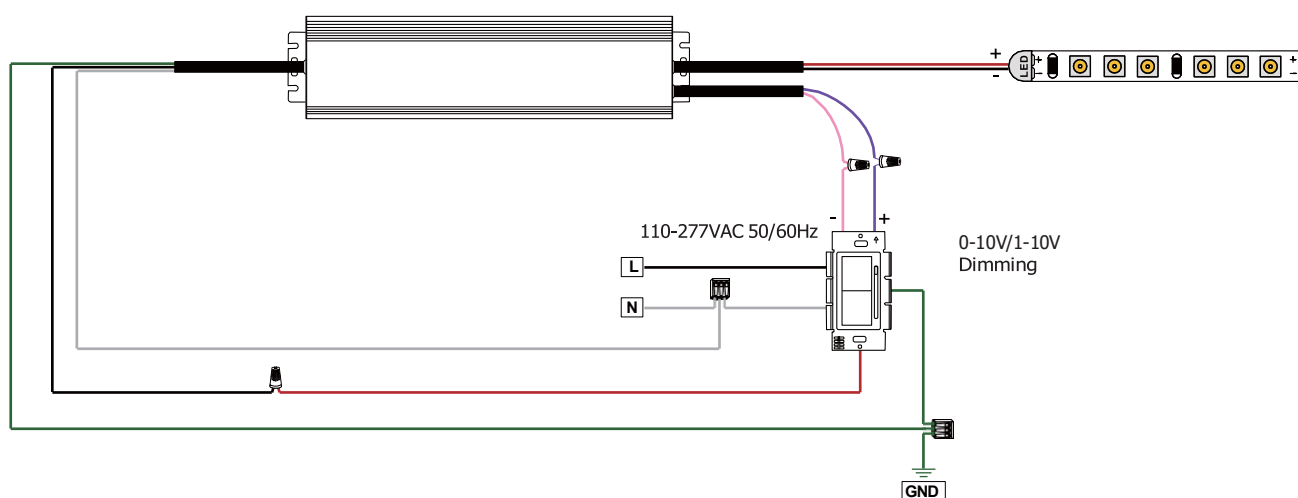


#### B. Electronic Low Voltage (ELV) Dimmer Wiring Diagram



**DUD200IP65 | 200W****Constant Voltage Dimmable LED Driver****5-IN-1 Dimming | Triac/0-10V/1-10V/10V PWM/Potentiometer****Wiring Diagram****C.0-10V/1-10V Dimmer Wiring Diagram**

(The driver input is connected to the dimmer.)

**D.0-10V/1-10V Dimmer Wiring Diagram**

(The driver is independently connected to the input.)

