# **Specification Sheet**



# DUD036IP65 | 36W

#### **Ultra-Thin Constant Voltage Dimmable LED Driver**

5-IN-1 Dimming I Triac/0-10V/1-10V/10V PWM/Potentiometer dimming

# **Key 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
- Short-circuit, over-temperature, over-load protection
- Super low loading request, works perfect at 10-100%

IP65 24

5 YEAR

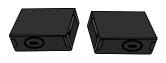
- +

- Ultra-Thin aluminum housing for excellent heat dissipation
- Suitable for dry, damp, wet location, IP65
- Dimming curves can be customized
- 5-year Warranty





Optional accessory Junction Box



Model Number		DUD036IP65-12V	DUD036IP65-24V			
Output	Rated Power	36W				
	Rated Voltage	DC12V	DC24V			
	Rated Current	3A	1.5A			
	Voltage Tolerance	±0.5V				
	Voltage Regulation	±0.5%				
	Load Regulation	±1%				
Input	Voltage Range	110-277V				
	Frequency Range	47-63Hz				
	Efficiency (Typ.)	84% @120VAC				
	THD	THD<10% (@100% load)				
	Power Factor (Typ.)	0.99 @ 120VAC (full loading)				
	AC Current (Typ.)	0.35A				
	Inrush Current (Typ.)	<15A				
	Leakage Current	<0.5mA				
Protection	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.				
	Overload	≤120% Hiccup mode, recovers automatically after fault condition is removed.				
	Over Temperature	$100^\circ\!\mathrm{C}\pm10^\circ\!\mathrm{C}$ shut down o/p voltage, automatically recover after cooling.				
Environment	Working Temp.	Tcase = -40 $^\circ\!\mathrm{C}$ ~ +60 $^\circ\!\mathrm{C}$ (Please refer to "OUTPUTLOAD vs TEMPERATURE" sector				
	Working Humidity	20 ~ 95% RH non-condensing				
	Storage Temp. Humidity	/ −40 ~ +90, 10 ~ 95% RH				
	Temp. Coefficient	±0.03%/°C (0~50°C)				
	Vibration	10-500Hz,2G 12 minutes/cycle, Period 72 minutes each along X,Y,Z axes				
Safety & EMC	Safety Standards	UL8750				
	Withstand Voltage	I/P-shell:1.88KVAC				
	Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH				

TYPE HL Class P Class 2

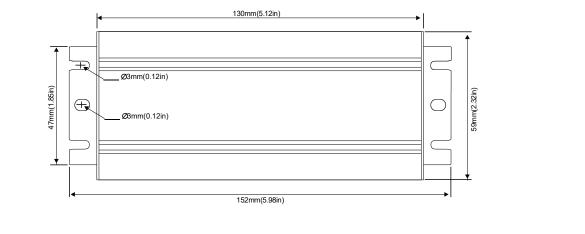
12V or 24VDC 110-277V

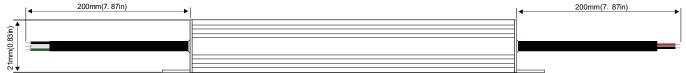


# Ultra-Thin Constant Voltage Dimmable LED Driver 5-IN-1 Dimming I Triac/0-10V/1-10V/10V PWM/Potentiometer dimming

#### **Mechanical Diagrams**

Dimension: 5.98"L x 2.32"W x 0.83"H





# **Wire Specification**

LPM-A	Input			Output			0/1-10V Dimming		
Power	Function	Color	Spec.	Function	Color	Spec.	Function	Color	Spec.
36W	AC L	Black	18AWG	DC+	Red	18AWG	Dim+	Purple	18AWG
	AC N	White	18AWG	DC-	Black	18AWG	Dim-	Pink	18AWG
	Ground	Green	18AWG	/	/	/	/	/	/

# BEULUX

# DUD036IP65 | 36W

**Ultra-Thin Constant Voltage Dimmable LED Driver** 

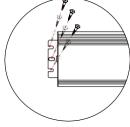
5-IN-1 Dimming I Triac/0-10V/1-10V/10V PWM/Potentiometer dimming

### Installation

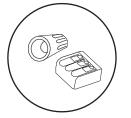
#### Mounting

- 1. This driver must be installed in a well-ventilated area free from explosive gages and vapors. Air circulation is essential for heat dissipation.
- 2. Recommended spacing between LED drivers should be a minimum of 4" (100mm).
- 3. Do not mount driver close to or above objects that can radiate heat. Vertical mounting is highly recommended.
- 4. Select an appropriate location that is able to support the weight of the product.
- 5. Use the mounting tabs on the left and right side of the driver to mount the product.

#### **Connection Preparation**



Vertical mounting



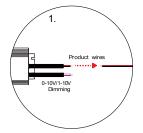
Only use certified components in accordance with national and local electric codes.

#### **Input Connections & Grounding**

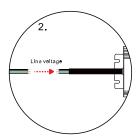


Ensure power is disconnected at the source

#### **Output Connections**



Route low voltage product wires through strain relief and knockout.



Route line voltage input wires and ground wire through strain relief and knockout.

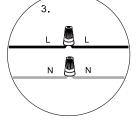
Securely connect driver's

to low voltage product,

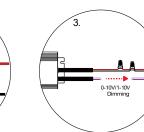
matching polarity.

black wire(-) and red wire(+)

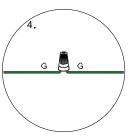
2.



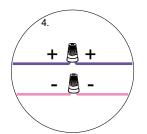
Connect black input wire (L) and input wire (N) to line voltage.



If available, route 0-10V/ 1-10V dimming wires through strain relief and knockout.



Connect green wire (ground) to input ground wire.



Connect pink wire (-) and purple wire (+) to dimmer, matching polarity. Secure wire compartment cover when completed.



#### **Ultra-Thin Constant Voltage Dimmable LED Driver**

5-IN-1 Dimming I Triac/0-10V/1-10V/10V PWM/Potentiometer dimming

### **Connecting Diagram**

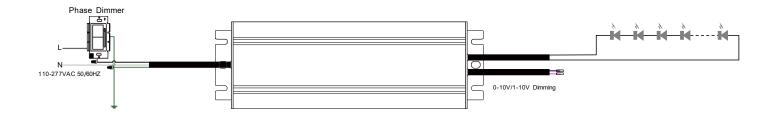
Using TRIAC/Phase cut dimming

1. Through a phase-dimmer or lighting system, control the input AC phase line (L) and adjust the output PWM 2. Triac dim mode: Forward phase & reverse phase, MLV, ELV dim

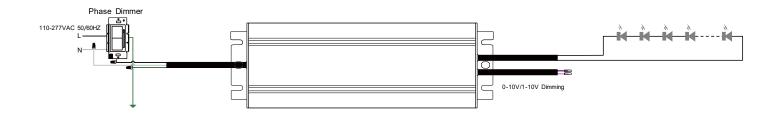
3. Please try to use dimmers with power at least 1.5 times as the output power of the driver.

### Wiring Diagram

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



B. Electronic Low Voltage (ELV) Dimmer Wiring Diagram



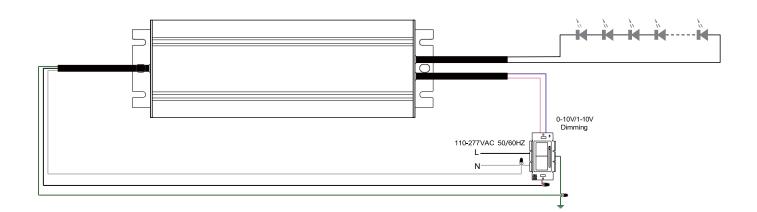


**Ultra-Thin Constant Voltage Dimmable LED Driver** 

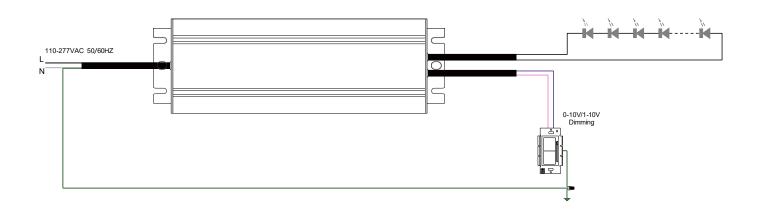
5-IN-1 Dimming I Triac/0-10V/1-10V/10V PWM/Potentiometer dimming

# 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.)





**Ultra-Thin Constant Voltage Dimmable LED Driver** 

5-IN-1 Dimming I Triac/0-10V/1-10V/10V PWM/Potentiometer dimming

### **PFC Load Graph**

### **Load vs Ambient Temperature**

