

# 50W Outdoor LED Drives LCU-05DXXX Series

### Features

- ♦ Universal voltage input
- ♦ Using optimized control IC
- $\diamond$  Perfect protection on SCP, OTP, OVP
- $\diamond$  Dimming control for 0-10V, PWM and external resistor
- $\diamond$  Low power loss ((less than 0.75W in noload condition )
- $\diamond$  UL Type HL and Type TL certification
- $\diamond$  Unique circuit design to increase reliability (2 patents pendir
- $\diamond$  Waterproof (IP67) for damp or wet location

\*Application: LED Outdoor lighting LED Flood lamp LED High Bay

LED Street lamp



LCU-050D035								
1.LCU	: Product line	2.085:Output	5:Output power 50w		3.035:Output Current 350ma			
	Items	LCU-050D035	LCU- 050D045	LCU-050D070	LCU-050D105	LCU-050D140	LCU- 050D210	
Output	Max. Output Power	50W	50W	50W	50W	50W	50W	
	Output Current	350mA	450mA	700mA	1050mA	1400mA	2100mA	
	Output Current Tolerance	±5%						
	Output Voltage Range	75~149	58~116	38~75	25~50	19~37	13~25	
	Output Current Ripple	<50% lo; pk - pk, at full load condition						
	Input Voltage Range	90Vac ~ 305Vac						
	Input Frequency Range	47 ~ 63Hz						

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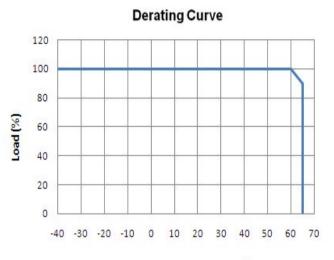
## Huafeng Specification sheet 50Watt LED Power Supply

	Power Factor (Typical)	0.99 at 120Vac; 0.95 at 277Vac						
Input	THD	≤10%						
	Efficiency	90%	89%	87%				
	Inrush Current	Max. 75A at 220Vac input, durat	ax. 75A at 220Vac input, duration 1.7ms, 10% lpk to 10% lpk.					
	Inrush Current (I <sup>2</sup> t)	Max. 3.5A <sup>2</sup> s at 220Vac input, duration 1.7ms, 10% lpk to 11% lpk.						
	Leakage Current	Max. 1mA						
Protec tion	Short Circuit Protection	Yes						
	Over Temperature Protection	Yes						
	Over Voltage Protection	110% Vout						
	Operation Ambient Temperature	$-40^{\circ}$ C ~70 $^{\circ}$ C According to the Derating Curve						
	Working Humidity	10% RH to 100%RH						
	Storage Temp,Humidity	-40°C-+85°C, 5% RH to 100% RH						
Safety & EMC	Withstand voltage	I/P-O/P:3.75KVac I/P-FG:1.88KVac O/P-FG:0.5KVac						
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: 100MΩ/500Vdc/25℃/70%RH						
	Surge Immunity	AC power: line to line 4kV, line to earth 6kV						
	EMI	Comply with FCC Part 18 class B, EN55015, EN61000-3-2, EN61000-3-3						
	Max. Case Temperature	<b>90</b> ℃						
Other	No Load Power Dissipation	≪0.65W						
	Dimensions (L x W x H)	196*42.5*34 mm						
	1. Efficiency is n	1. Efficiency is measured at 277Vac input , rated load and 25 $^\circ \!\! \mathbb{C}$ of ambient temperature.						



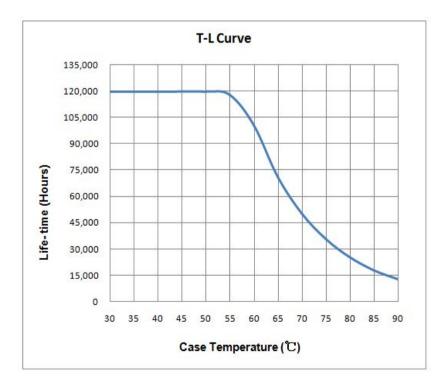
2. Ripple and Noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated
Notes with a 0.1uf ceramic capacitor and a 47uf elec.capacitor in parallel.
3. 5 Years Warranty

#### **Derating Curve**





## Case Temperature vs. Life time



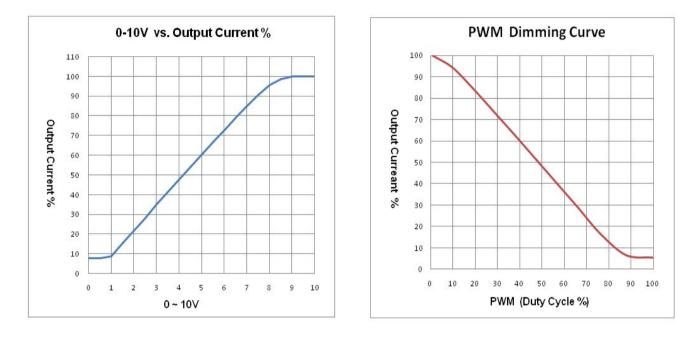


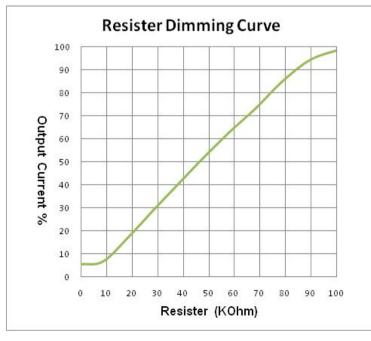
#### **Dimming operation**

※Built-in 3 in 1 dimming function, IP67 rated. Output constant current level can be adjusted through output cable by connecting a resistance or 1 ~ 10Vdc or 10V PWM signal between DIM+ and DIM-.

% Please DO NOT connect "DIM-" to "-V".

## Dimming Curve

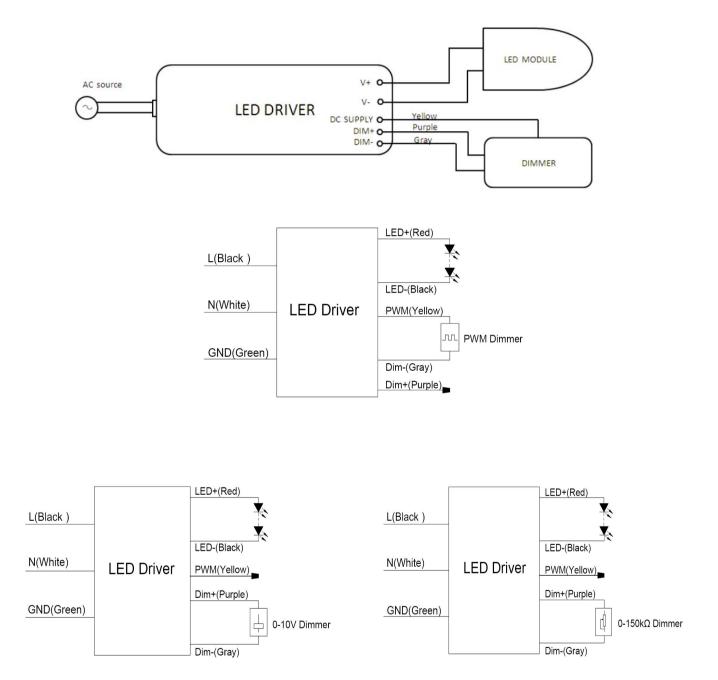




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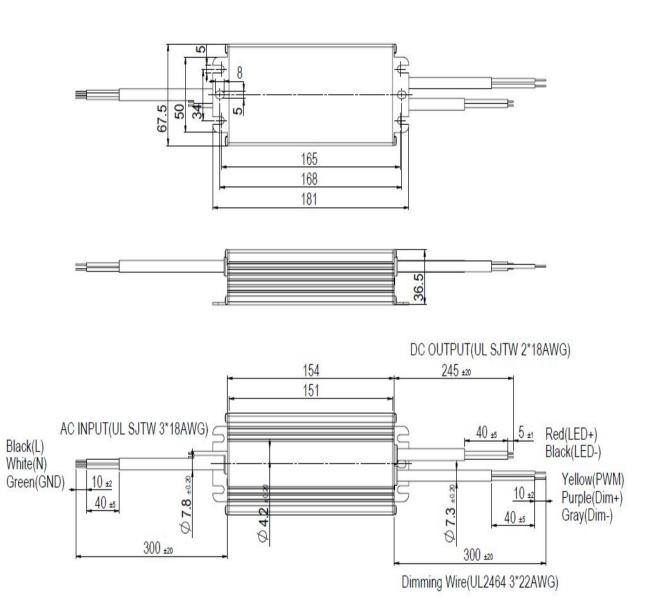


Wiring Diagram





Mechanical Specification:





Huafeng Specification sheet 50Watt LED Power Supply