

## 120W Outdoor LED Drives LCU-120DXXX Series

### Features

- ◇ Universal voltage input
- ◇ using optimized control IC
- ◇ Perfect protection on SCP, OTP, OVP
- ◇ Dimming control for 0-10V, PWM and external resistor
- ◇ Low power loss (less than 0.75W in no-load condition)
- ◇ UL Type HL and Type TL certification
- ◇ Unique circuit design to increase reliability (2 patents pending)
- ◇ Waterproof (IP67) for damp or wet location



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



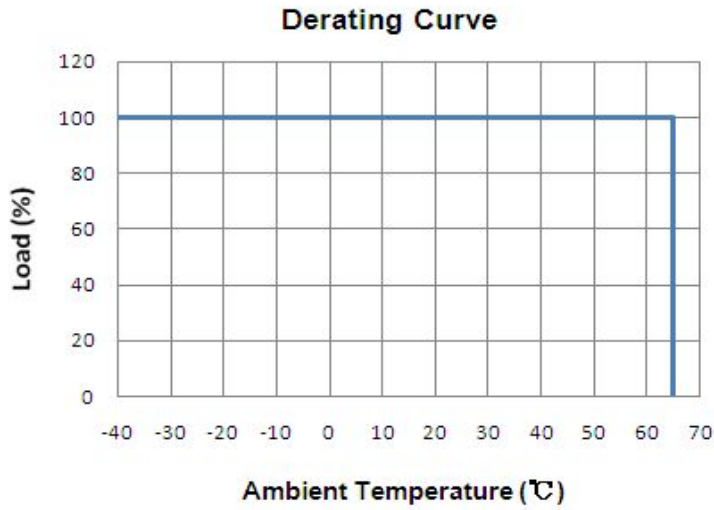
### LCU-120D035

1.LCU: Product line    2.120:Output power 120w    3.035:Output Current 350ma

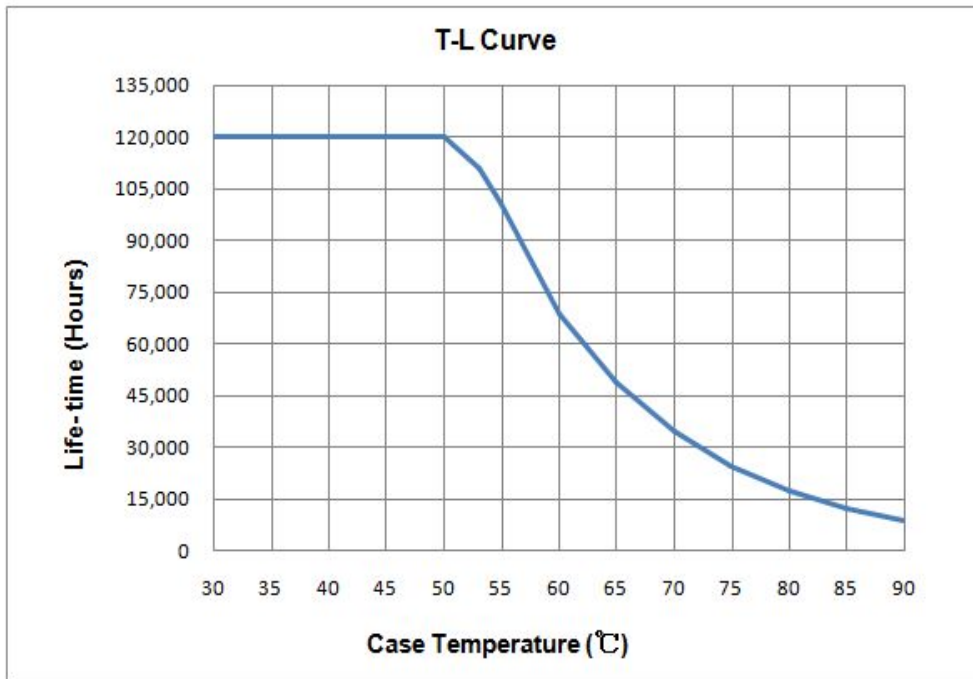
	Items	Models												
		LCU-120D035	LCU-120D045	LCU-120D070	LCU-120D105	LCU-120D140	LCU-120D175	LCU-120D210	LCU-120D245	LCU-120D280	LCU-120D315	LCU-120D350	LCU-120D420	LCU-120D490
Output	Max. Output Power	120W	120W	120W	120W	120W	120W	120W	120W	120W	120W	120W	120W	120W
	Output Current	350mA	450mA	700mA	1050mA	1400mA	1750mA	2100mA	2450mA	2800mA	3150mA	3500mA	4200mA	4900mA
	Output Current Tolerance	±5%												
	Output Voltage Range	206~343	160~266	103~171	68~114	52~86	41~68	34~57	29~49	26~43	23~38	20~34	17~28	14~24
	Output Current Ripple	<10% I <sub>o</sub> ; pk - pk, at full load condition												
	Max. Output Noise	500 mVp-p	400 mVp-p	400 mVp-p	350 mVp-p	350 mVp-p	300 mVp-p	300 mVp-p	300 mVp-p	300 mVp-p	300 mVp-p	300 mVp-p	300 mVp-p	300 mVp-p
Input	Input Voltage Range	90Vac ~ 305Vac												
	Input Frequency Range	47 ~ 63Hz												
	Power Factor (Typical)	0.99 at 120Vac ; 0.93 at 277Vac												
	THD	≤10%												
	Efficiency	93.5%			93.0%			92.0%			91.5%			

	Inrush Current	Max. 75A at 220Vac input, duration 1.7ms, 10% Ipk to 10% Ipk.
	Inrush Current (I <sup>2</sup> t)	Max. 3.5A <sup>2</sup> s at 220Vac input, duration 1.7ms, 10% Ipk to 11% Ipk.
	Leakage Current	Max. 1mA
Protection	Short Circuit Protection	Yes
	Over Temperature Protection	Yes
	Over Voltage Protection	110% Vout
Environment	Operation Ambient Temperature	- 40°C ~ 65°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°C/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
Other	Max. Case Temperature	90°C
	No Load Power Dissipation	1W
	Dimensions (L x W x H)	224*67.5*38 mm
Notes	<p>1. Efficiency is measured at 277Vac input , rated load and 25°C of ambient temperature.</p> <p>2. Ripple and Noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf ceramic capacitor and a 47uf elec.capacitor in parallel.</p> <p>3. 5 Years Warranty</p>	

Derating Curve



Case Temperature vs. Life time

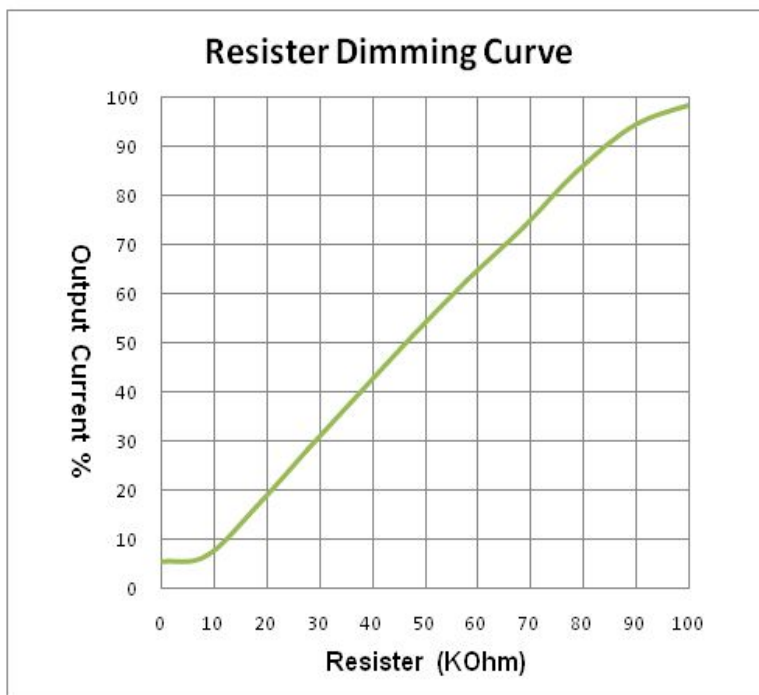
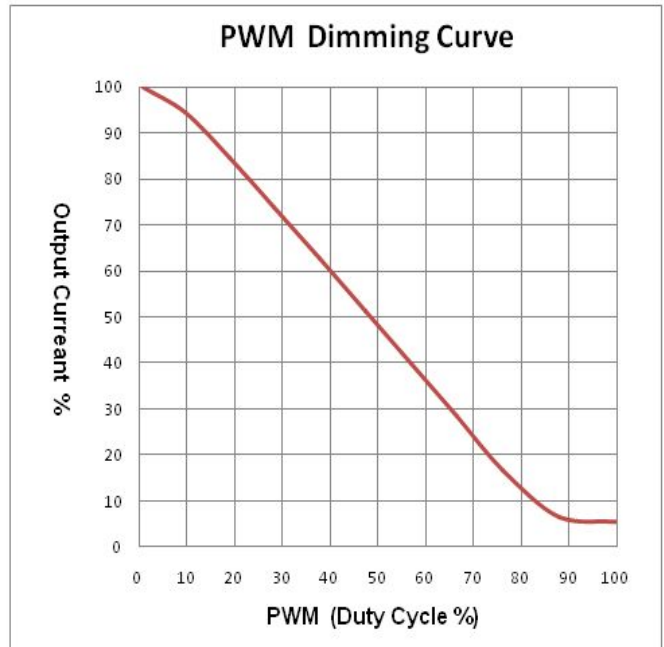
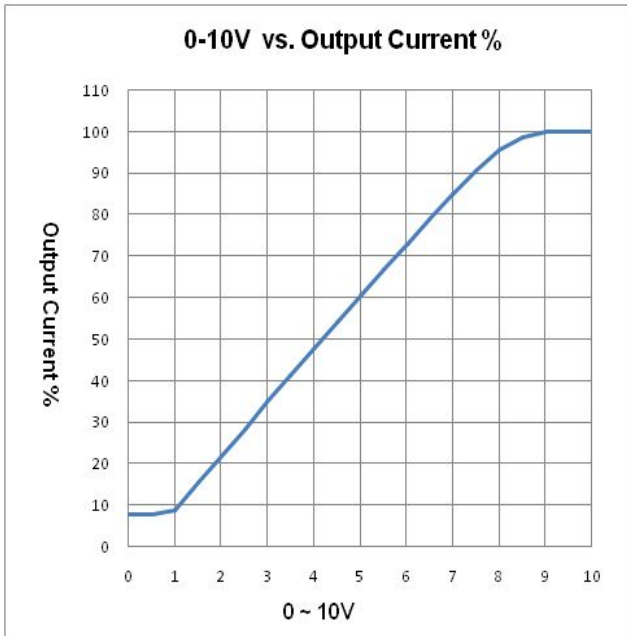


**Dimming operation**

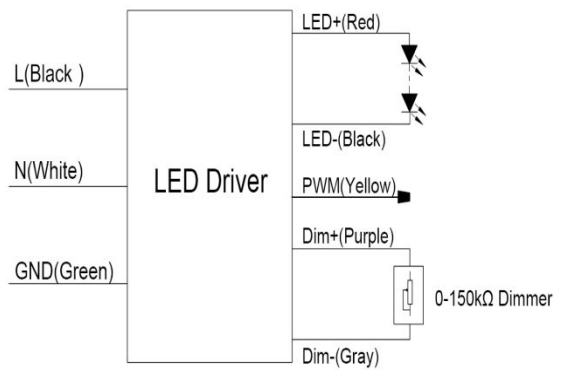
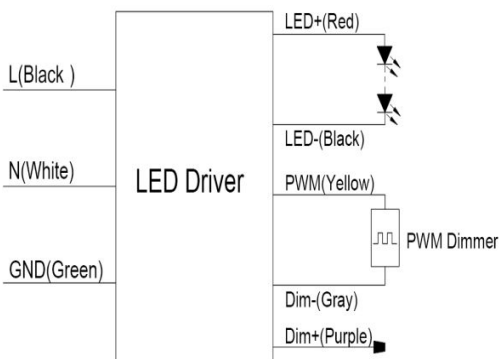
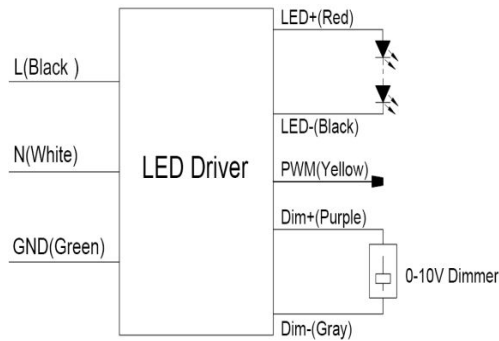
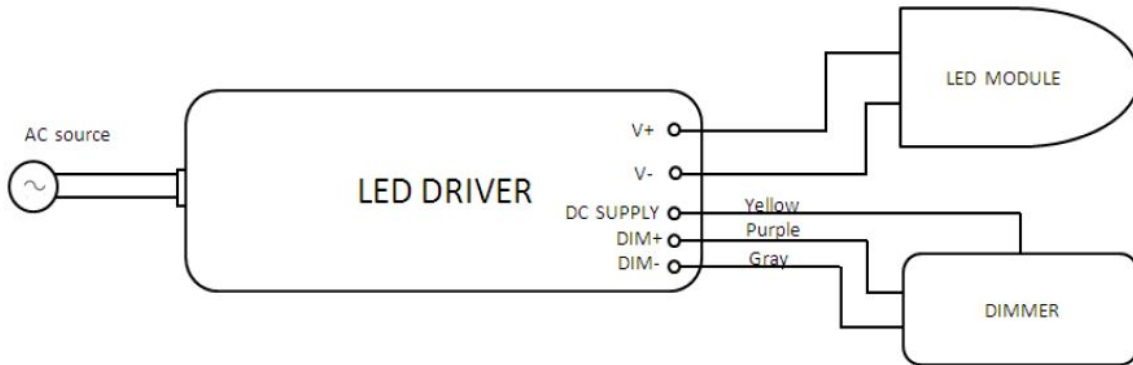
※Built-in 3 in 1 dimming function, IP67 rated. Output constant current level can be adjusted through output cable by connecting a resistance or 1 ~ 10Vdc or 10V PWM signal between DIM+ and DIM-.

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

**Dimming Curve**



**Wiring Diagram**



**Mechanical Specification:**

