

LD45GL Series

45W Constant Current/Voltage with Optional Dimming

Features:

- * Universal AC Input 90~305Vac
- * Class II/2 Power
- * Constant Current / Constant Voltage Operation
- * Active PFC
- * OVP / OCP / SCP / OTP Protections
- * Fully Insulated IP67 Compliant Case
- * Convection Cooling
- * Built-in 3 in 1 Dimming for CC Mode
- * Two-stage Design



171.1 * 45.3 * 32.5mm (L*W*H)
6.73" * 1.78" * 1.28"

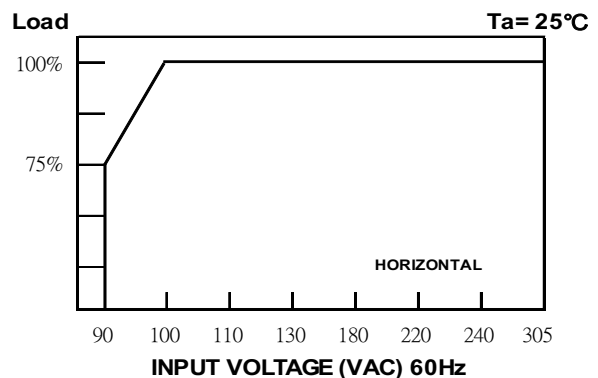
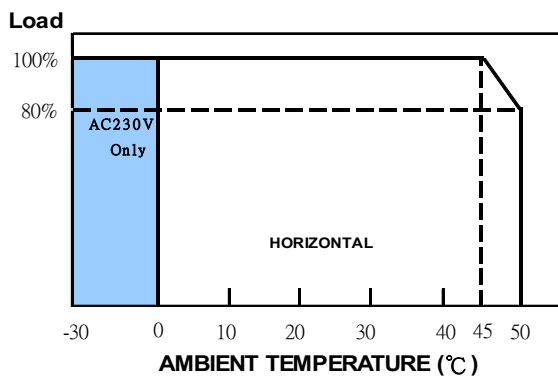
Specifications:

IP67 LPS FC cRU[®]us CE 

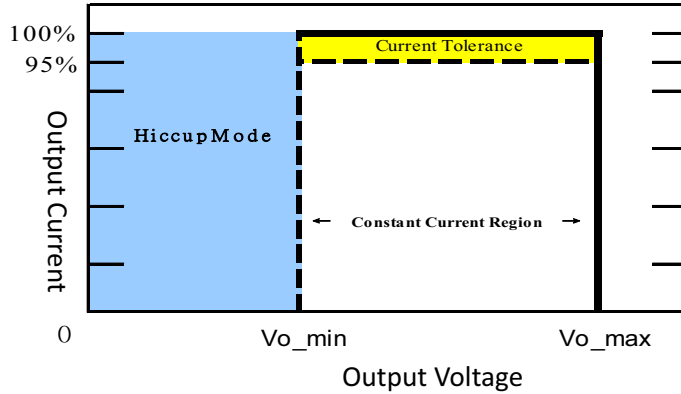
Part No.		LD45GL-24(D)	LD45GL-36(D)	LD45GL-42(D)	LD45GL-48(D)	LD45GL-57(D)
Output	DC Voltage	24V	36V	42V	48V	57V
	Constant Current Region Note.3	15 ~ 24V	24 ~ 36V	33 ~ 42V	33 ~ 48V	40 ~ 57V
	Rated Current	1.8A	1.25A	1050mA	1A	0.7A
	Current Tolerance	-5% ~ +5%				
	Rated Power	45W	45W	44.1W	48W	40W
	Ripple & Noise (Max.) Note.2	200mV	250mV	250mV	250mV	250mV
	Efficiency at 240V AC (Typ.)	85%	86%	86%	87%	87%
	Voltage Tolerance Note.4	-1%~5%				
	DC Dimming (Optional)	DC 1 - 10V or Electronic Potentiometer 1 - 10V				
	PWM Dimming (Optional)	Pluse: Hi = 10V Low = 0V, Duty:10% - 100%, Fsw 0.5 - 3KHz				
Resistance Dimming (Optional)	10K - 100KΩ					
Set up time (Max.)	< 2000ms at full load					
Input	Voltage Range	90 ~ 305V AC				
	Rated Volatge	100 ~ 240V AC / 277V AC for North American Only				
	Frequency Range	47 ~ 63 Hz				
	AC Current (Max.)	0.6A@100 ~ 240V AC / 0.25A@277V AC for North American Only				
	Power Factor	≥ 0.98 at 120V AC / ≥ 0.93 at 240V AC / ≥ 0.9 at 277V AC, at full load				
	Inrush Current (Max.)	COLD START 70A at 240V AC				
	Leakage Current	< 0.5mA / 240V AC				

Protections	Short Circuit	Type: Hiccup mode & recovers after fault condition disappeared.				
	Over Voltage	26.4~31.2V	39.6~46.8V	46.2~54.6V	52.8~62.4V	62.7~70V
		Type: Latch mode (Re-power on to recover).				
Over Temperature	RT2: 105 ± 10°C					
	Type: Latch mode (Re-power on to recover).					
Environment	Operation Temp. Note.5	-30°C ~ 50°C, refer derating curve.				
	Operation Humidity	20% ~ 90% RH non-condensing.				
	Storage Temp.	-40 ~ + 60°C				
	Storage Humidity	10% ~ 90% RH				
	Vibration	10~500 Hz, 2G 10 min./1 cycle, period for 60 min. each along X, Y, Z axes.				
Safety & EMC	Safety Standards	UL8750, EN61347-1, EN61347-2-13, IP67 Approved.				
	Withstand Voltage	I/P-O/P: 3750VAC				
	Isolation Resistance	I/P-O/P :100M ohms / 500V DC at 25°C				
	EMI Conduction & Radiation	Compliance to EN55015, FCC part 15				
	Harmonic Current	Compliance to EN61000-3-2 Class C, EN61000-3-3				
	EMS Immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 11; EN61547				
Others	MTBF	200K hours min. MIL-HDBK-217F(25°C)				
	Dimension (L*W*H)	171.1 * 45.3 * 32.5 mm				
	Packing (L*W*H)/ Carton	410*260*230mm				
	Weight	450g				
Note	<p>1. All specifications not specially mentioned are measured at 240V AC and 25°C ambient temperature.</p> <p>2. Ripple & Noise are measured at 20MHz bandwidth by using a 12" twisted pair-wire terminated with 0.1uf & 47uf parallel capacitor.</p> <p>3. Constant current operation region is suitable for LED related applications, but please reconfirm special electrical requirements for some specific system design.</p> <p>4. Voltage Tolerance: includes line regulation, load regulation and set-up tolerance.</p> <p>5. Please refer to derating curve.</p>					

Derating Curve



Constant Voltage / Constant Current Curve



3 in 1 Dimming Control (DC/ PWM/ Resistance)

(1) 10K-100K Resistor Dimmable (Typical):

Resistor	Single-driver	10K	20K	30K	40K	50K	60K	70K	80K	90K	100K
	Multi-driver	10K/N	20K/N	30K/N	40K/N	50K/N	60K/N	70K/N	80K/N	90K/N	100K/N
Lout(100%)		10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

※ The length of extended wire for DIM +/- shall not exceed 20 meters. (Wire \leq 20m)

※ N = The number of dimmer drivers should not exceed 15. (N \leq 15)

(2) DC : 1-10V Dimmable (Typical):

DIM (Voltage)	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V
Lout(100%)	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

(3) 10V/PWM Dimmable (Typical):

DIM (10V/PWM)	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Lout(100%)	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

Mechanical Specification

