

SPECIFICATION

## 60W Single Output LED Power Supply

## CLG-60 series



Features :

- Universal AC input / Full range
- High efficiency 89%
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in active PFC function
- IP67 design for indoor or outdoor installations
- UL1310 Class 2 power unit
- Cooling by free air convection
- 100% full load burn-in test
- High reliability
- Suitable for LED lighting and moving sign applications (Note.2)
- Compliance to worldwide safety regulations for lighting
- Damp / wet location outdoor application

## F 110 M M SELV LPS A (for 48 V only) c UIS (except for 48 V) IP67 ( C C C

MODEL		CLG-60-12	CLG-60-15	CLG-60-20	CLG-60-24	CLG-60-27	CLG-60-36	CLG-60-48
	DC VOLTAGE	12V	15V	20V	24V	27V	36V	48V
OUTPUT	CONSTANT CURRENT REGION Note.6	8.4 ~ 12V	10.5 ~ 15V	14 ~ 20V	16.8 ~ 24V	18.9 ~ 27V	25.2 ~ 36V	33.6 ~ 48V
	RATED CURRENT	5A	4A	3A	2.5A	2.3A	1.7A	1.3A
	CURRENT RANGE	0~5A	0~4A	0~3A	0~2.5A	0~2.3A	0~1.7A	0~1.3A
	RATED POWER	60W	60W	60W	60W	62.1W	61W	62.5W
	RIPPLE & NOISE (max.) Note.2		2.4Vp-p	1.8Vp-p	2.7Vp-p	2.7Vp-p	3.6Vp-p	4.6Vp-p
	VOLTAGE ADJ. RANGE	11.5 ~ 13V	14.5 ~ 16.2V	19.5 ~ 22V	24 ~ 26V	25 ~ 30V	32.5 ~ 39V	43.6 ~ 51.8V
		Fixed can be modified between the range above						
	CURRENT ADJ. RANGE	Fixed can be modified between 3% ~ -25% rated output voltage						
		±3.0%						
	LOAD REGULATION	±5.0%						
	SETUP TIME	3000ms / 230VAC 5000ms / 115VAC at full load						
		90 ~ 264VAC 127 ~ 370VDC						
	FREQUENCY RANGE	47 ~ 63Hz PF≥0.9 at 75 ~ 100% load, 115VAC / 230VAC						
	POWER FACTOR		,	1	070/	000/	000/	0001
	EFFICIENCY(Typ.)	85%	86%	87.5%	87%	88%	89%	89%
	AC CURRENT		0.4A/230VAC					
	INRUSH CURRENT(max.)	40A/230VAC						
	LEAKAGE CURRENT	<0.75mA/240V/	1					
PROTECTION	OVER CURRENT	95 ~ 110% (max)						
		Protection type : Constant current limiting, recovers automatically after fault condition is removed						
	SHORT CIRCUIT Note.4	Hiccup mode, recovers automatically after fault condition is removed						
	OVER VOLTAGE	13.8 ~ 16V	17.5 ~ 21V	23 ~ 26V	28 ~ 32V	31 ~ 35V	41 ~ 46V	54 ~ 60V
	OVER VOLIAGE	Protection type : Shut down o/p voltage, re-power on to recover						
	OVER TEMPERATURE	$12V:90^\circ\!\mathrm{C}\pm10^\circ\!\mathrm{C}$ (TSW1) detect on heatsink of power transistor						
		$15V \sim 48V: 85^{\circ}C \pm 10^{\circ}C$ (TSW1) detect on heatsink of power transistor						
		Protection type : Shut down o/p voltage, recovers automatically after temperature goes down						
ENVIRONMENT	WORKING TEMP.	-30 ~ +70 $^\circ\mathrm{C}$ (Refer to output load derating curve)						
	WORKING HUMIDITY	20 ~ 95% RH non-condensing						
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH						
	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)						
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes						
SAFETY & EMC	SAFETY STANDARDS	UL1310 Class 2, TUV EN61347-1, EN61347-2-13, CAN/CSA C22.2 No. 223-M91(except for 48V), IP67 approved						
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC						
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH						
	EMI CONDUCTION & RADIATION							
	HARMONIC CURRENT	Compliance to EN61000-3-2 Class C (≥75% load) ; EN61000-3-3						
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, EN61547, light industry level (surge 4KV), criteria A						
OTHERS	MTBF	495.7Khrs min. MIL-HDBK-217F (25°C)						
	DIMENSION	195.6*61.5*38.8mm (L*W*H)						
	PACKING	0.86Kg; 16pcs/1	. ,					
IOTE	<ol> <li>All parameters NOT special</li> <li>Ripple &amp; noise are measure Direct connecting to LEDs is</li> <li>Tolerance : includes set up</li> <li>Please refer to OLP charac</li> <li>Derating may be needed ur</li> <li>Constant current operation n reconfirm special electrical</li> <li>The power supply is considi</li> </ol>	ally mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. red at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. is not suggested for models with "RIPPLE & NOISE" >±10% and using additional drivers is highly recommended. to tolerance, line regulation and load regulation.						



## CLG-60 series

