

### 60W Single Output LED Power Supply

## CLG-60 series



### Features :

- Universal AC input / Full range
- · 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
- Compliance to worldwide safety regulations for lighting
- Damp / wet location outdoor application
- 3 years warranty

#### **F** 110/ M/

MODEL		CLG-60-12	CLG-60-15	CLG-60-20	CLG-60-24	CLG-60-27	CLG-60-36	CLG-60-48
OUTPUT	DC VOLTAGE	12V	15V	20V	24V	27V	36V	48V
	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	2Vp-p	2.4Vp-p	1.8Vp-p	2.7Vp-p	2.7Vp-p	3.6Vp-p	4.6Vp-p
	VOLTAGE ADJ. RANGE	11 ~ 13V	13.8 ~ 16.2V	18~22V	22~26V	25~30V	32.5 ~ 39V	43.6 ~ 51.8
		Fixed can be mo	dified between th	ne range above				
	CURRENT ADJ. RANGE	Fixed. Can be modified between 3% ~ -25% rated output voltage						
	VOLTAGE TOLERANCE Note.3							
	LINE REGULATION	±3.0%						
	LOAD REGULATION	±5.0%						
	SETUP TIME	1500ms / 230VAC 3000ms / 115VAC at full load						
INPUT		90 ~ 264VAC 127 ~ 370VDC						
	FREQUENCY RANGE	47 ~ 63Hz						
	POWER FACTOR		100% load, 115					
	EFFICIENCY(Typ.)	83%	84.5%	86.5%	86.5%	87%	87%	88%
	AC CURRENT		0.4A/230VAC	00.5 %	00.5 %	07 /0	07 /0	00 /0
	INRUSH CURRENT(max.)		0.4A/230VAC					
	. ,	40A/230VAC						
PROTECTION	LEAKAGE CURRENT	<0.75mA / 240VAC						
	OVER CURRENT	95 ~ 110%   130% (max)						
		Protection type : Constant current limiting, recovers automatically after fault condition is removed Hiccup mode, recovers automatically after fault condition is removed						
	SHORT CIRCUIT Note.4							
	OVER VOLTAGE	13.8 ~ 16V	17.5 ~ 21V	22.8 ~ 25V	28 ~ 32V	31 ~ 35V	41~46V	54 ~ 60V
		Protection type : Shut down o/p voltage, re-power on to recover						
		12V: 90°C ±10°C (TSW1) detect on heatsink of power transistor						
	OVER TEMPERATURE	15V ~ 48V: 85°C ±10°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	172*61.5*39mm		( 0)				
	PACKING	0.86Kg; 16pcs/14.8Kg/0.54CUFT						
NOTE	<ol> <li>All parameters NOT special</li> <li>Ripple &amp; noise are measure Direct connecting to LEDs i</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</li> </ol>	Ily mentioned are measured at 230VAC input, rated load and $25^{\circ}$ C of ambient temperature. ed 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. tolerance, line regulation and load regulation.						



# CLG-60 series

