



### ■ 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
- 3 years warranty

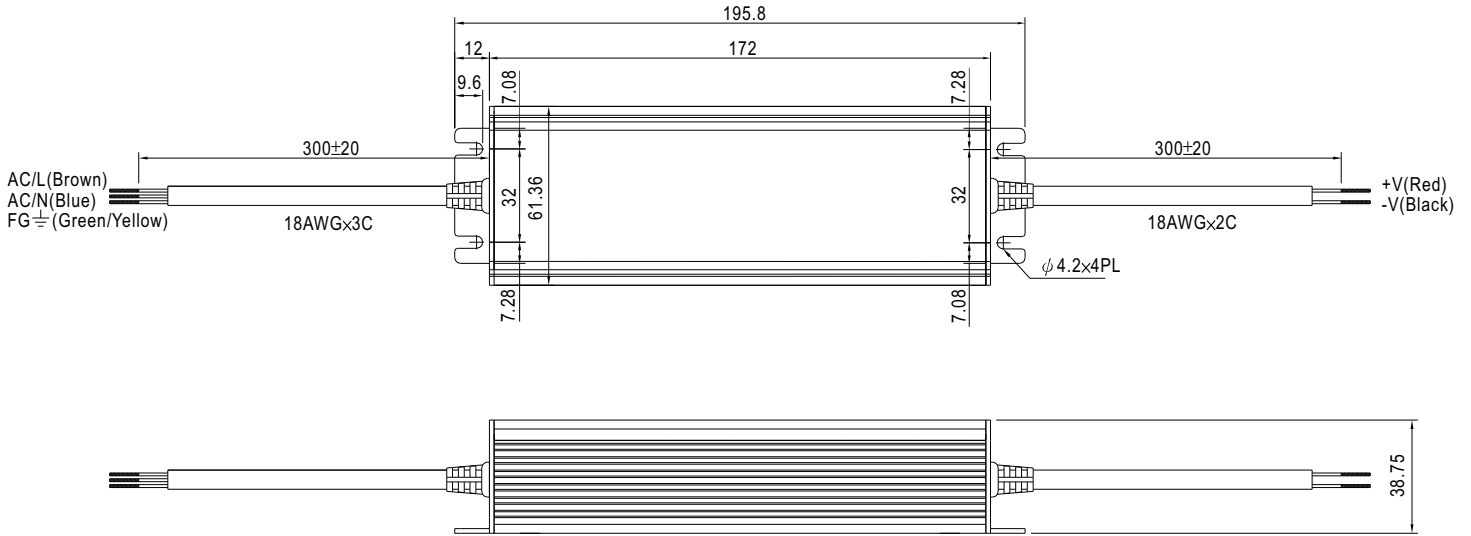


### SPECIFICATION

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 <small>Note.6</small>	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.) <small>Note.2</small>	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 ~ 51.8V	
		Fixed can be modified between the range above							
	CURRENT ADJ. RANGE	Fixed can be modified between 3% ~ 25% rated output current							
	VOLTAGE TOLERANCE <small>Note.3</small>	±10%							
	LINE REGULATION	±4.0%							
LOAD REGULATION	±10%								
SETUP, RISE TIME	1500ms, 100ms / 230VAC 3000ms, 100ms / 115VAC at full load								
INPUT	VOLTAGE RANGE <small>Note.5</small>	90 ~ 264VAC 127 ~ 370VDC							
	FREQUENCY RANGE	47 ~ 63Hz							
	POWER FACTOR	PF>0.9/230VAC		PF>0.98/115VAC at full load					
	EFFICIENCY(Typ.)	83%	84.5%	86.5%	86.5%	87%	87%	88%	
	AC CURRENT	0.8A/115VAC 0.4A/230VAC							
	INRUSH CURRENT(max.)	40A/230VAC							
	LEAKAGE CURRENT	0.5mA / 240VAC							
PROTECTION	OVER CURRENT	95 ~ 110%	130% (max)						
		Protection type : Constant current limiting, recovers automatically after fault condition is removed							
	SHORT CIRCUIT <small>Note.4</small>	Hiccup mode, recovers automatically after fault condition is removed.							
	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								
OVER TEMPERATURE	12V: 90°C ±10°C (TSW1) detect on heatsink of power transistor								
	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°C (Refer to output load derating curve)							
	WORKING HUMIDITY	20 ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. 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:4.25KVDC							
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms/500VDC							
	EMI CONDUCTION & RADIATION	Compliance to EN55015, EN55022 (CISPR22) Class B							
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3							
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, EN61547, light industry level, criteria A							
OTHERS	MTBF	495.7Khrs min. MIL-HDBK-217F (25°C)							
	DIMENSION	172*61.5*39mm (L*W*H)							
	PACKING	0.86Kg; 16pcs/14.8Kg/0.54CUFT							
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. Please refer to OLP characteristics.</li> <li>5. Derating may be needed under low input voltage. Please check the derating curve for more details.</li> <li>6. Constant current operation region is within 70% ~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.</li> </ol>								

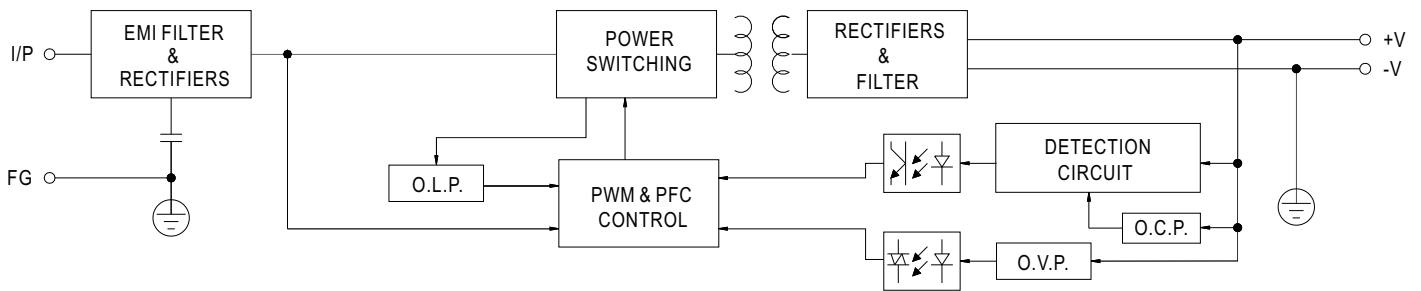
**Mechanical Specification**

Case No. 957A Unit:mm



**Block Diagram**

fosc : 90KHz(115VAC)  
120KHz(230VAC)



**Derating Curve**

**Static Characteristics**

