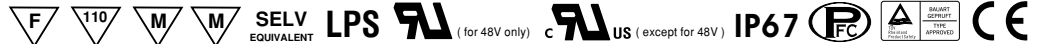




### ■ Features :

- 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
- 3 years warranty

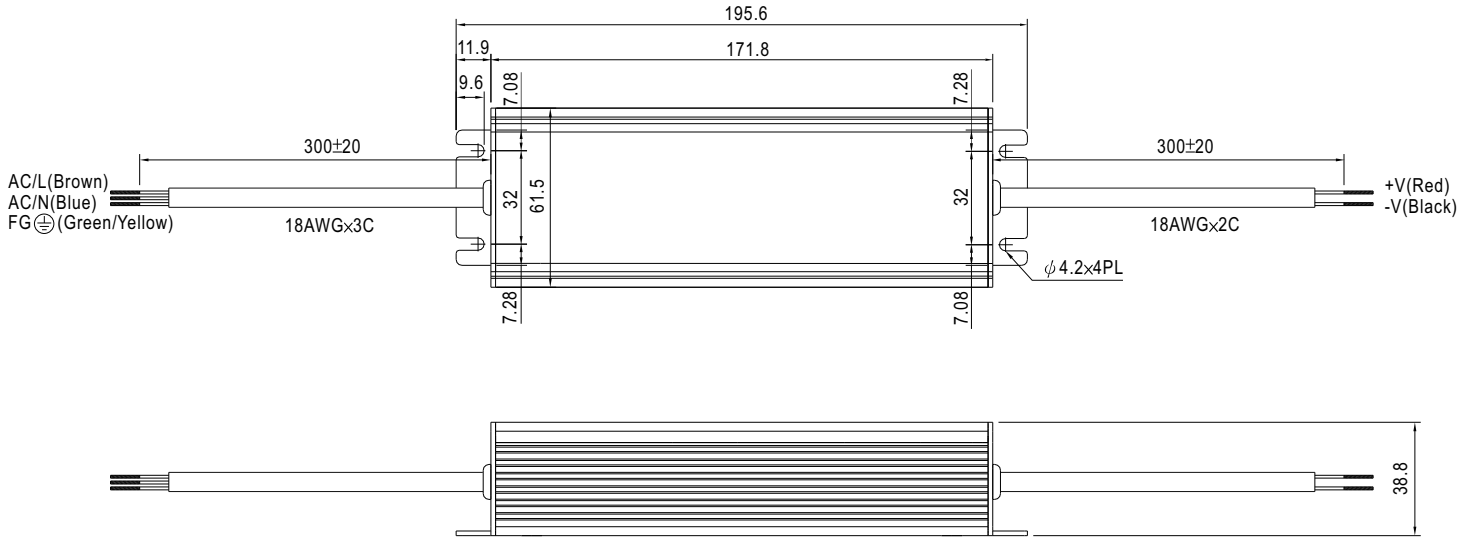


### SPECIFICATION

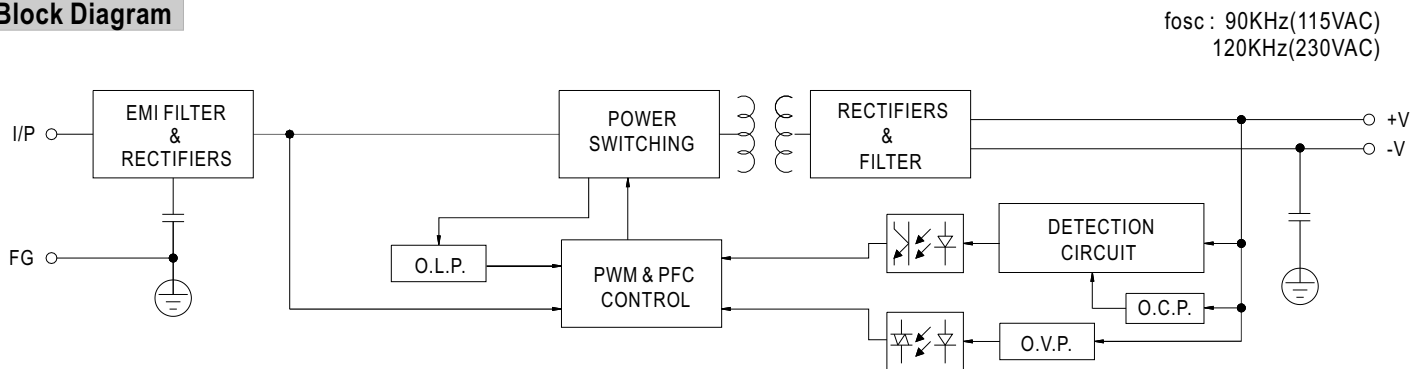
MODEL	CLG-60-12	CLG-60-15	CLG-60-20	CLG-60-24	CLG-60-27	CLG-60-36	CLG-60-48	
OUTPUT	DC VOLTAGE	12V	15V	20V	24V	27V	36V	48V
	CONSTANT CURRENT REGION Note.6	8.4 ~ 12V	10.5 ~ 15V	14 ~ 20V	16.8 ~ 24V	18.9 ~ 27V	25.2 ~ 36V	33.6 ~ 48V
	RATED CURRENT	5A	4A	3A	2.5A	2.3A	1.7A	1.3A
	CURRENT RANGE	0 ~ 5A	0 ~ 4A	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	11.5 ~ 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						
	VOLTAGE TOLERANCE Note.3	±10%						
LINE REGULATION	±3.0%							
LOAD REGULATION	±5.0%							
SETUP TIME	3000ms / 230VAC 5000ms / 115VAC at full load							
INPUT	VOLTAGE RANGE Note.5	90 ~ 264VAC 127 ~ 370VDC						
	FREQUENCY RANGE	47 ~ 63Hz						
	POWER FACTOR	PF ≥ 0.9 at 75 ~ 100% load, 115VAC / 230VAC						
	EFFICIENCY(Typ.)	85%	86%	87.5%	87%	88%	89%	89%
	AC CURRENT	0.8A/115VAC 0.4A/230VAC						
	INRUSH CURRENT(max.)	40A/230VAC						
LEAKAGE CURRENT	<0.75mA / 240VAC							
PROTECTION	OVER CURRENT	95 ~ 110%	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
	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 ~ 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	Compliance to EN55015, EN55022 (CISPR22) Class B						
	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/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. Direct connecting to LEDs is not suggested for models with "RIPPLE &amp; NOISE" ≥±10% and using additional drivers is highly recommended.</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> <li>7. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.</li> </ol>							

**Mechanical Specification**

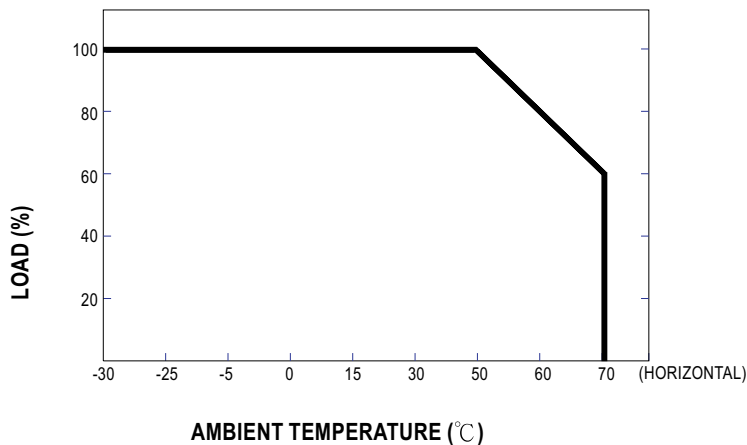
Case No. 957A Unit:mm



**Block Diagram**



**Derating Curve**



**Static Characteristics**

