



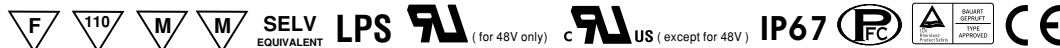
100W Single Output Switching Power Supply

CLG-100 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
- 3 years warranty (Note.7)

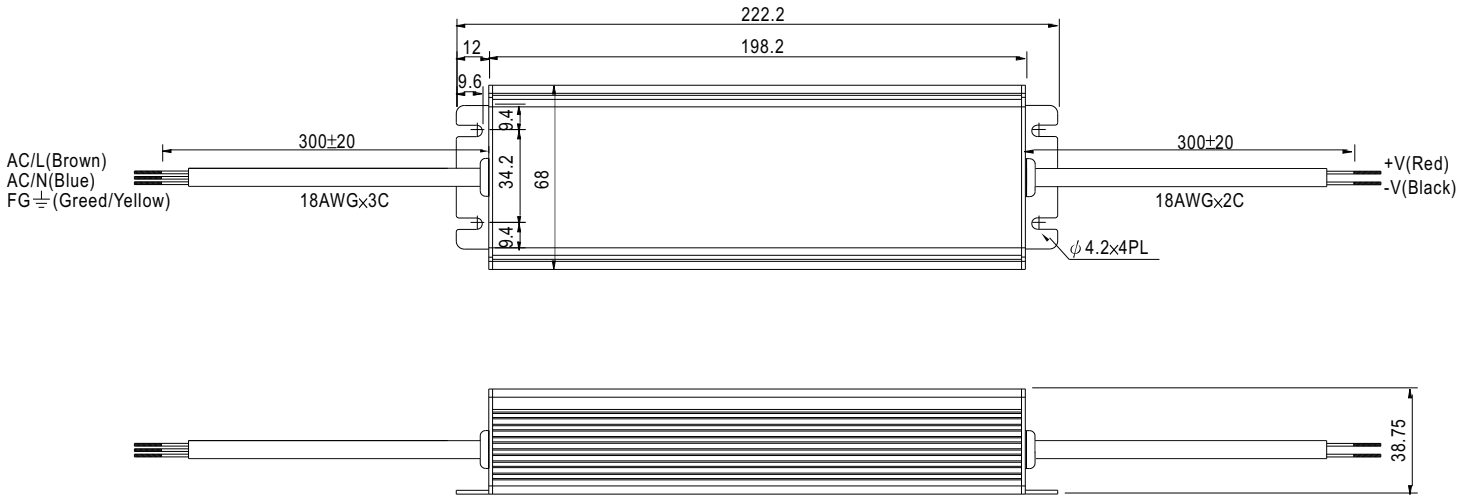


SPECIFICATION

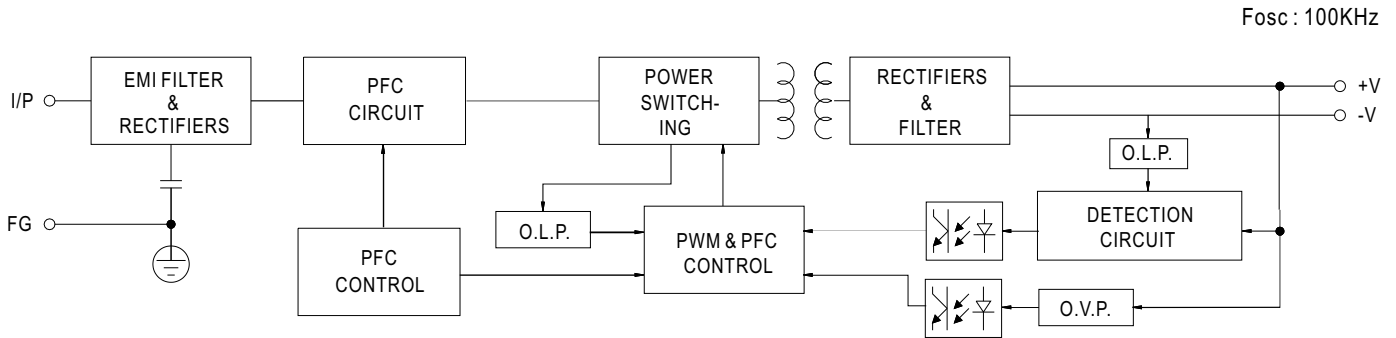
MODEL	CLG-100-12	CLG-100-15	CLG-100-20	CLG-100-24	CLG-100-27	CLG-100-36	CLG-100-48	
OUTPUT	DC VOLTAGE	12V	15V	20V	24V	27V	36V	48V
	CONSTANT CURRENT REGION Note.8	6 ~ 12V	7.5 ~ 15V	10 ~ 20V	12 ~ 24V	13.5 ~ 27V	18 ~ 36V	24 ~ 48V
	RATED CURRENT Note.6	5A	5A	4.8A	4A	3.55A	2.65A	2A
	CURRENT RANGE Note.6	0 ~ 5A	0 ~ 5A	0 ~ 4.8A	0 ~ 4A	0 ~ 3.55A	0 ~ 2.65A	0 ~ 2A
	RATED POWER Note.6	60W	75W	96W	96W	95.85W	95.4W	96W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE	Fixed. Can be modified between 0% ~ -15% rated output voltage						
	CURRENT ADJ. RANGE	Fixed. Can be modified between 3% ~ -25% rated output current						
	VOLTAGE TOLERANCE Note.3	±3.0%	±3.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%
	LINE REGULATION	±1.0%						
	LOAD REGULATION	±2.0%						
SETUP, RISE TIME	1200ms, 80ms / 230VAC		1200ms, 80ms / 115VAC at full load					
HOLD UP TIME (Typ.)	60ms / 230VAC		30ms / 115VAC at full load					
INPUT	VOLTAGE RANGE Note.5	90 ~ 264VAC		127 ~ 370VDC				
	FREQUENCY RANGE	47 ~ 63Hz						
	POWER FACTOR	PF>0.95/230VAC		PF>0.95/115VAC at full load				
	EFFICIENCY (Typ.)	83%	85%	87%	87%	87%	87%	87%
	AC CURRENT	12V:0.8A/115VAC	0.4A/230VAC	15V:0.9A/115VAC	0.45A/230VAC	20V ~ 48V:1.1A/115VAC	0.55A/230VAC	
	INRUSH CURRENT(max.)	COLD START 40A/230VAC						
LEAKAGE CURRENT	0.5mA / 240VAC							
PROTECTION	OVER CURRENT Note.4	95 ~ 100%						
	OVER VOLTAGE	13 ~ 16V	16.5 ~ 20V	22 ~ 27V	27 ~ 34V	29 ~ 36V	39 ~ 48V	52 ~ 64V
	OVER TEMPERATURE	90°C ±10°C (RTH2) Protection type : Shut down o/p voltage, re-power on to recover						
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, UL879 (listed in UL Sign Components Manual (SAM)), TUV EN60950-1, 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						
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61547, EN55024, light industry level, criteria A						
	MTBF	301Khrs min. MIL-HDBK-217F (25°C)						
	DIMENSION	222*68*39mm (L*W*H)						
	PACKING	1.0Kg; 12pcs/13Kg/0.49CUFT						
NOTE	<ol style="list-style-type: none"> 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. Please refer to OLP characteristics. 5. Derating may be needed under low input voltages. Please check the derating curve for more details. 6. This is the maximum possible output current and power, over load protection may be activated slightly below this level to comply with the requirement of UL1310 class 2. 7. 3 years warranty is guaranteed for operating ambient temperature no higher than 68°C. 8. Constant current operation region is within 50% ~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. 							

Mechanical Specification

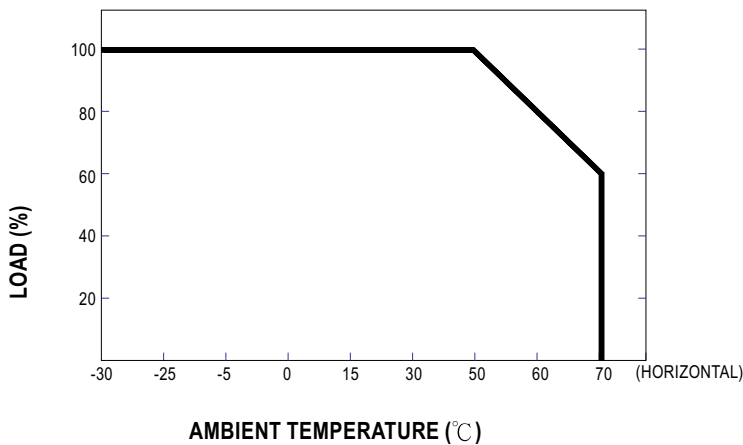
Case No. 954A Unit:mm



Block Diagram



Derating Curve



Static Characteristics

