

100W Single Output Switching Power Supply

CLG-100 series



Features :

- Universal AC input / Full range (up to 280VAC)
- High efficiency 90%
- 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 (Note.7)

IODEL		CLG-100-12	CLG-100-15	CLG-100-20	CLG-100-24	CLG-100-27	CLG-100-36	CLG-100-48
	DC VOLTAGE	12V	15V	20V	24V	27V	36V	48V
OUTPUT	CONSTANT CURRENT REGION Note.8		11.25 ~ 15V	15~20V	18~24V	22.5 ~ 27V	27 ~ 36V	36~48V
	RATED CURRENT Note.6		5A	4.8A	4A	3.55A	2.65A	2A
	RATED POWER Note.6		75W	96W	96W	95.85W	95.4W	96W
	RIPPLE & NOISE (max.) Note.2		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%	±2.0%	±2.0%
	LINE REGULATION	±1.0%	_0.070	_0.070	_0.070	-0.070	-2.070	-2.070
	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						
		90 ~ 295VAC 127 ~ 417VDC 47 ~ 63Hz						
	FREQUENCY RANGE					1000/ 1		
	POWER FACTOR	PF>0.95/230VA0		15VAC at full load	PF≧0.9 at 75		0.00/	0.001/
	EFFICIENCY (Typ.)	84.5%	86.5%	90%	90%	90%	90%	89%
	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	<0.75mA/240VAC						
PROTECTION	OVER CURRENT (Typ.) Note.4	95 ~ 102%						
	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 ~ 16V	16.5 ~ 20V	22 ~ 27V	27 ~ 34V	29 ~ 36V	39 ~ 48V	52 ~ 64V
		Protection type : Shut down and latch off o/p voltage, re-power on to recover						
	OVER TEMPERATURE	90°C ±10°C (RTH2)						
	OVER TEMPERATURE	Protection type : Shut down o/p voltage, re-power on to recover						
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 OTHERS	SAFETY STANDARDS Note.9	UL879. UL1310 Class 2. UL60950-1. TUV EN60950-1. EN61347-1. EN61347-2-13 independent						
		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, EN61547, EN55024, light industry level (surge 4KV), criteria A						
	MTBF	301Khrs min. MIL-HDBK-217F (25°C)						
	DIMENSION	222.2*68*38.8mm (L*W*H)						
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	PACKING	1.0Kg; 12pcs/13Kg/0.49CUFT						
OTE	 All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance : includes set up tolerance, line regulation and load regulation. Please refer to OLP characteristics. Derating may be needed under low input voltages. Please check the derating curve for more details. 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. 3 years warranty is guaranteed for operating ambient temperature no higher than 68°C. Constant current operation region is within 75% ~100% rated output voltage. This is the istable operation region for LED related applications, but pleas reconfirm special electrical requirements for some specific system design. Safety and EMC design refer to EN60598-1, subject 8750(UL), CNS15233, GB7000.1, FCC part18. 							



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