



#### Features:

- Universal AC input / Full range (up to 295VAC)
- · Built-in active PFC function
- High efficiency up to 88.5%
- Protections: Short circuit / Over current / Over voltage / Over temperature
- · Cooling by free air convection
- · IP67 design for indoor or outdoor installations
- · Class 2 power unit
- Pass LPS
- 100% full load burn-in test
- · High reliability
- · Suitable for LED lighting and moving sign applications
- · Compliance to worldwide safety regulations for lighting
- Suitable for dry / damp / wet locations
- 3 years warranty (Note.6)

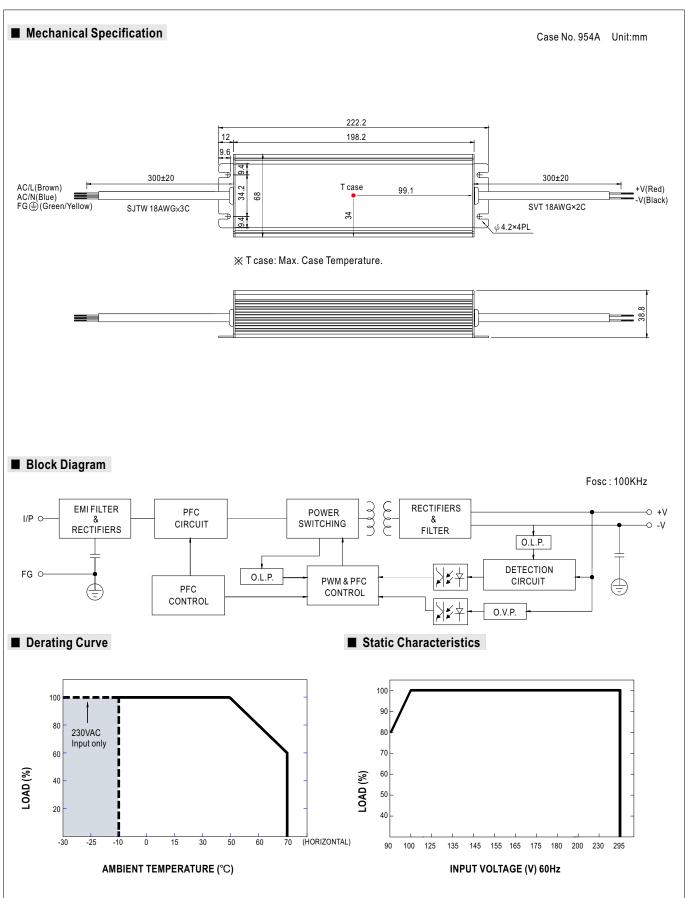
### **SPECIFICATION**



	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	
CONSTANT CURRENT REGION Note.	9 ~ 12V	11.25 ~ 15V	15 ~ 20V	18 ~ 24V	20.25 ~ 27V	27 ~ 36V	36 ~ 48V	
RATED CURRENT Note.	5A	5A	4.8A	4A	3.55A	2.65A	2A	
RATED POWER Note.5	60W	75W	96W	96W	95.85W	95.4W	96W	
RIPPLE & NOISE (max.) Note.	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	500ms, 80ms / 230VAC 1200ms, 80ms / 115VAC at full load							
HOLD UP TIME (Typ.)	60ms / 230VAC 30ms / 115VAC at full load							
VOLTAGE RANGE Note.4	90 ~ 295VAC 127 ~ 417VDC							
FREQUENCY RANGE	47 ~ 63Hz							
POWER FACTOR (Typ.)	PF>0.95/115VAC,	PF>0.95/230VAC,	PF>0.92/277VAC	at full load (Please	refer to "Power Fa	ctor Characteristic	c" curve)	
EFFICIENCY (Typ.)	83%	85%	88.5%	88.5%	88%	88%	88.5%	
AC CURRENT (Typ.)	12V:0.8A/115VAC							
	20V ~ 48V:1.1A/115VAC 0.55A/230VAC 0.45A/277VAC							
INRUSH CURRENT(Typ.)	COLD START 40A(twidth=1030µs measured at 50% lpeak) at 230VAC							
LEAKAGE CURRENT	<0.75mA / 240VAC							
OVER CURRENT (Typ.)	95 ~ 102%							
	Protection type: Constant current limiting, recovers automatically after fault condition is removed							
SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed							
OVER VOLTAGE	13 ~ 16V	16.5 ~ 20V	22 ~ 27V	27 ~ 34V	30 ~ 36V	39 ~ 48V	52 ~ 64V	
	Protection type : Shut down and latch off o/p voltage, re-power on to recover							
OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover							
WORKING TEMP.	-30 ~ +70°C (Refer to "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 STANDARDS Note.8	UL879, UL8750, UL1310, TUV EN61347-1, EN61347-2-13 independent, CAN/CSA C22.2 No. 223-M91(except for 48V),							
	CSA C22.2 No. 250.0-08(except for 48V), CSA C22.2 No. 207-M89(except for 48V), TUV EN60950-1, IP67, J61347-1, J61347-2-13 approved							
WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC							
ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH							
EMC EMISSION	Compliance to EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (≧75% load) ; EN61000-3-3							
EMC IMMUNITY								
MTBF	<u> </u>							
DIMENSION		222.2*68*38.8mm (L*W*H)						
	222.2 06 36.6Hilli (L W H)  1.0Kg; 12pcs/13Kg/0.58CUFT							
	CONSTANT CURRENT REGION Note.7 RATED CURRENT Note.5 RATED POWER Note.5 RIPPLE & NOISE (max.) Note.2 VOLTAGE ADJ. RANGE CURRENT ADJ. RANGE VOLTAGE TOLERANCE Note.3 LINE REGULATION LOAD REGULATION SETUP, RISE TIME HOLD UP TIME (Typ.) VOLTAGE RANGE Note.4 FREQUENCY RANGE POWER FACTOR (Typ.) EFFICIENCY (Typ.) AC CURRENT (Typ.) LEAKAGE CURRENT OVER CURRENT (Typ.) SHORT CIRCUIT OVER VOLTAGE OVER TEMPERATURE WORKING TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS Note.8 WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC IMMUNITY MTBF	DC VOLTAGE         12V           CONSTANT CURRENT REGION Note.7         9 ~ 12V           RATED CURRENT         Note.5         5A           RATED POWER         Note.5         60W           RIPPLE & NOISE (max.)         Note.2         150mVp-p           VOLTAGE ADJ. RANGE         Fixed. Can be mo           CURRENT ADJ. RANGE         Fixed. Can be mo           VOLTAGE TOLERANCE Note.3         ±3.0%           LINE REGULATION         ±1.0%           LOAD REGULATION         ±2.0%           SETUP, RISE TIME         500ms, 80ms / 23           HOLD UP TIME (Typ.)         60ms / 230VAC           VOLTAGE RANGE         Note.4         90 ~ 295VAC           FREQUENCY RANGE         47 ~ 63Hz           POWER FACTOR (Typ.)         PF>0.95/115VAC           20V ~ 48V:1.1A/1         20V ~ 28V:1.1A/1           INRUSH CURRENT (Typ.)         COLD START 40           LEAKAGE CURRENT         <0.75mA / 240VA	DC VOLTAGE	DC VOLTAGE	DC VOLTAGE   12V	DC VOLTAGE   12V	DC VOLTAGE   12V	

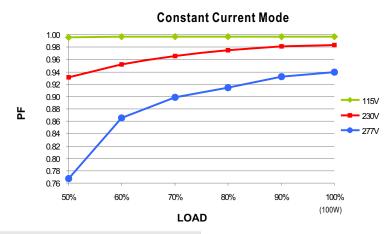
- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 3. Tolerance: includes set up tolerance, line regulation and load regulation.
- 4. Derating may be needed under low input voltages. Please check the static characteristics for more details.
- 5. 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.
- 6. 3 years warranty is guaranteed for operating ambient temperature no higher than 68°C.
- 7. Please refer to "DRIVING METHODS OF LED MODULE".
- 8. Safety and EMC design refer to EN60598-1, subject 8750(UL), CNS15233, GB7000.1, FCC part18.
- 9. 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.
- 10. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED power supply can only be used behind a switch without permanently connected to the mains.





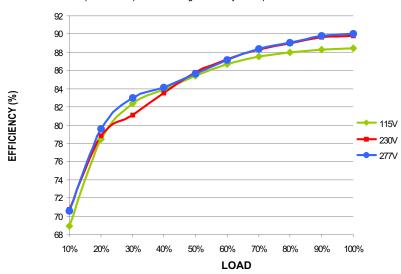


#### ■ Power Factor Characteristic



#### ■ EFFICIENCY vs LOAD (48V Model)

CLG-100 series possess superior working efficiency that up to 88.5% can be reached in field applications.

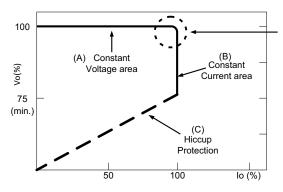


#### ■ DRIVING METHODS OF LED MODULE

There are two major kinds of LED drive method "direct drive" and "with LED driver".

A typical LED power supply may either work in "constant voltage mode (CV) or constant current mode (CC)" to drive the LEDs.

Mean Well's LED power supply with CV+ CC characteristic can be operated at both CV mode [with LED driver, at area (A)] and CC mode [direct drive, at area (B)].



Typical LED power supply I-V curve

In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

Should there be any compatibility issues, please contact MEAN WELL.

# **Mouser Electronics**

**Authorized Distributor** 

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## Mean Well:

CLG-100-36 CLG-100-48 CLG-100-20 CLG-100-24 CLG-100-15 CLG-100-12 CLG-100-27