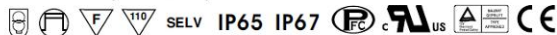




Features :

- Universal AC input / Full range (up to 280VAC)
- High efficiency 92%
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in active PFC function
- Cooling by free air convection
- OCP point adjustable through output cable or internal potential meter
- Suitable for LED lighting and moving sign applications
- IP65 / IP67 design for indoor or outdoor installations
- Damp / wet location outdoor application
- Compliance to worldwide safety regulations for lighting
- 3 years warranty



CLG-150-12 ☐ Blank : IP67 rated. Cable for I/O connection. (Optional)
 A : IP65 rated. Output voltage and constant current level can be adjusted through internal potential meter.
 B : IP67 rated. Constant current level adjustable through output cable. (Optional)
 C : Terminal block for I/O connection. Output voltage and constant current level can be adjusted through internal potential meter. (Optional)

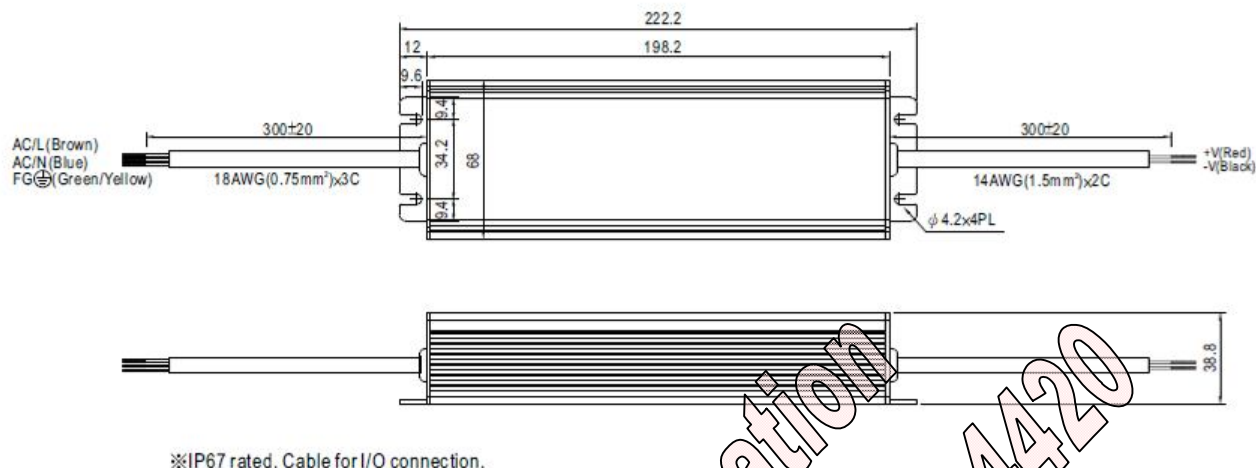
SPECIFICATION

MODEL	CLG-150-12	CLG-150-15	CLG-150-20	CLG-150-24	CLG-150-30	CLG-150-36	CLG-150-48	
OUTPUT	DC VOLTAGE	12V	15V	20V	24V	30V	36V	48V
	CONSTANT CURRENT REGION Note.4	9 ~ 12V	11.25 ~ 15V	15 ~ 20V	18 ~ 24V	22.5 ~ 30V	27 ~ 36V	36 ~ 48V
	RATED CURRENT	11A	9.5A	7.5A	6.3A	5A	4.2A	3.2A
	RATED POWER	132W	142.5W	150W	151.2W	150W	151.2W	150W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE Note.6	9 ~ 13V	13 ~ 17V	17 ~ 22V	22 ~ 28V	28 ~ 32V	31 ~ 41V	41 ~ 55V
	CURRENT ADJ. RANGE	Can be adjusted by internal potential meter or through output cable						
		5.5 ~ 11A	4.75 ~ 9.5A	3.75 ~ 7.5A	3 ~ 6.3A	2.5 ~ 5A	2.1 ~ 4.2A	1.6 ~ 3.2A
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
INPUT	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	3000ms, 80ms at full load	230VAC / 250VAC	230VAC / 250VAC	230VAC / 250VAC	230VAC / 250VAC	230VAC / 250VAC	230VAC / 250VAC
	HOLD UP TIME (Typ.)	50ms / 230VAC	16ms / 250VAC	16ms / 250VAC	16ms / 250VAC	16ms / 250VAC	16ms / 250VAC	16ms / 250VAC
	VOLTAGE RANGE Note.5	90 ~ 295VAC	127 ~ 415VAC	127 ~ 415VAC	127 ~ 415VAC	127 ~ 415VAC	127 ~ 415VAC	127 ~ 415VAC
	FREQUENCY RANGE	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz	47 ~ 63Hz
	POWER FACTOR	PF ≥ 0.95/230VAC, PF ≥ 0.95/250VAC at full load and rated input voltage						
	EFFICIENCY (Typ.)	88%	88%	90%	90%	91%	91%	92%
	AC CURRENT	2A / 115VAC	1A / 230VAC	1A / 230VAC	1A / 230VAC	1A / 230VAC	1A / 230VAC	1A / 230VAC
	INRUSH CURRENT(max.)	COLD START: 85A/230VAC						
	LEAKAGE CURRENT	<1mA (typ.)						
PROTECTION	OVER CURRENT (Typ.) Note.4	11A	9.5A	7.5A	6.3A	5A	4.2A	3.2A
		Protection type: Constant current limiting, recovers automatically after fault condition is removed						
	SHORT CIRCUIT	Protection type: Constant current limiting, recovers automatically after fault condition is removed						
		33 ~ 65V	18 ~ 20V	23 ~ 30V	28 ~ 34V	33 ~ 36V	42 ~ 48V	57 ~ 65V
	OVER VOLTAGE	Protection type: Shut down and auto off output voltage, re-power on to recover						
ENVIRONMENT	OVER TEMPERATURE	Protection type: Shut down and auto off output voltage, re-power on to recover						
	WORKING TEMP. Note.7	-30 ~ +55°C @ full load, +40°C @ 50% load						
	WORKING HUMIDITY	20 ~ 95% RH non-condensing						
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH						
	SHOCK RESISTANCE	±0.03% / 1000Hz (1000g)						
SAFETY & EMC	VIBRATION	10 ~ 500Hz, 0.5mm/s, 10cycle, period for 72min. each along X, Y, Z axes						
	SAFETY STANDARDS Note.9	UL1950, EN60950-1, EN61347-2-13 independent (except for CLG-150 C type); UL60950-1, TUV EN60950-1 (TBD)						
	WITHSTAND VOLTAGE	I/P-O/P: 500VAC I/P-FG: 1.88KVAC O/P-FG: 0.5KVAC						
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC / 25°C / 70% RH						
	EMI CONDUCTION & RADIATION	Compliance to EN55015, EN55022 (CISPR22) Class B						
OTHERS	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; EN50204, EN61547, EN55024, light industry level (surge 4KV), criteria A						
	MTBF	303.7Khrs min. MIL-HDBK-217F (25°C)						
	DIMENSION	222.2*68*38.8mm (L*W*H)(CLG-150-Blank/A/B) 229*68*38.8mm (L*W*H)(CLG-150-C)						
	PACKING	1.0Kg; 12pcs/13Kg/0.49CUFT (CLG-150-Blank/A/B) 1Kg; 12pcs/13Kg/0.96CUFT (CLG-150-C)						
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Efficiency is measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor. 3. Temperature: includes set up tolerance, line regulation and load regulation. 4. Constant current operation region is within 75% ~ 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. 5. Derating may be needed under low input voltages. Please check the derating curve for more details. 6. Type A and type C only. 7. Please refer to derating curve. 8. Please refer to OLP characteristics. 9. Safety and EMC design refer to EN60598-1, subject 8750(UL), CNS15233, GB7000.1, FCC part18. 10. 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.							

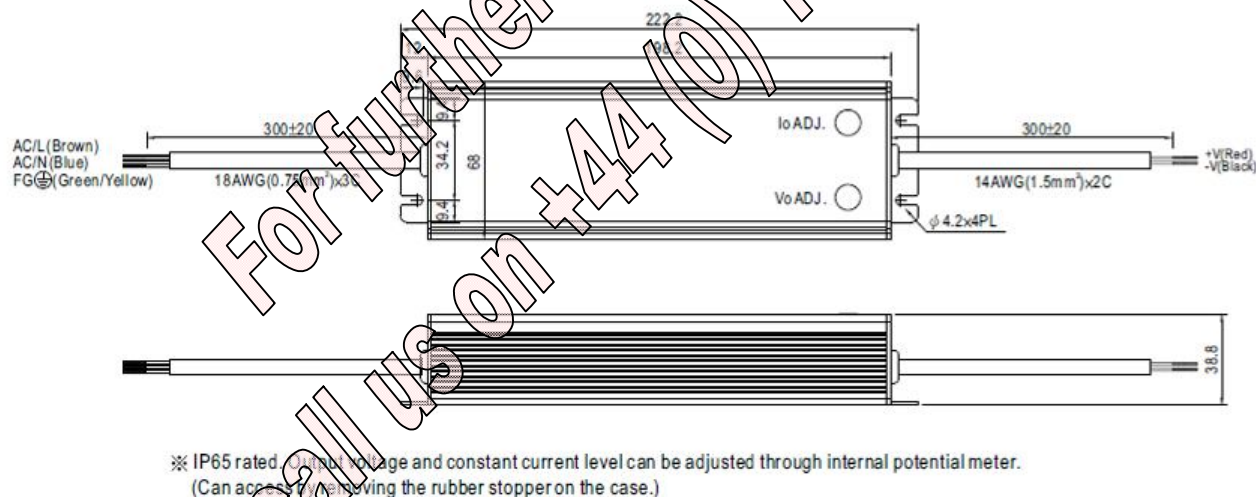
■ Mechanical Specification

Case No. 954A Unit:mm

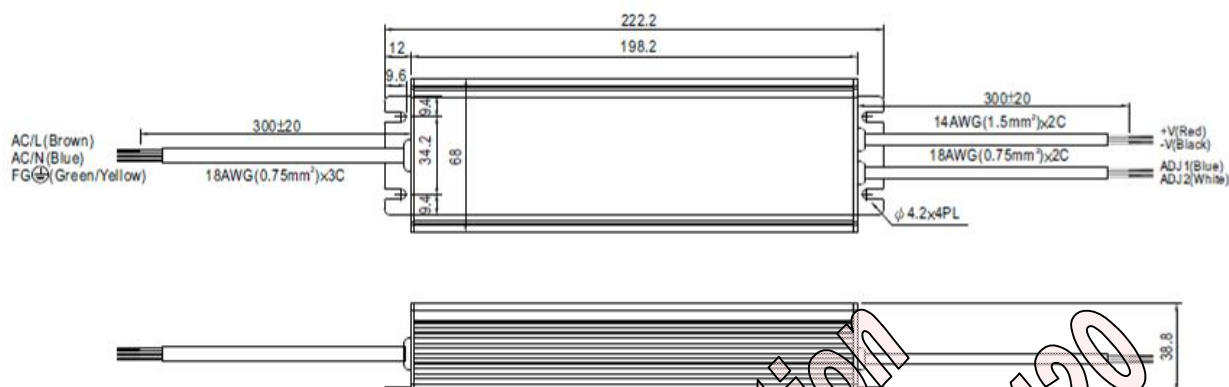
Blank:(CLG-150)



A Type:(CLG-150-A)



B Type:(CLG-150-_B)



- ※ IP67 rated. Output constant current level can be adjusted through output cable by connecting a resistor between ADJ1 and ADJ2.
- ※ Reference resistance value for output current adjustment (Typical)

Resistance	Percentage of rated current
Open	Slightly > 100%
4.7K Ω	100%
620 Ω	75%
82 Ω	50%
Short	Slightly < 50%

C Type:(CLG-150-_C)



AC Input Terminal Pin No. Assignment

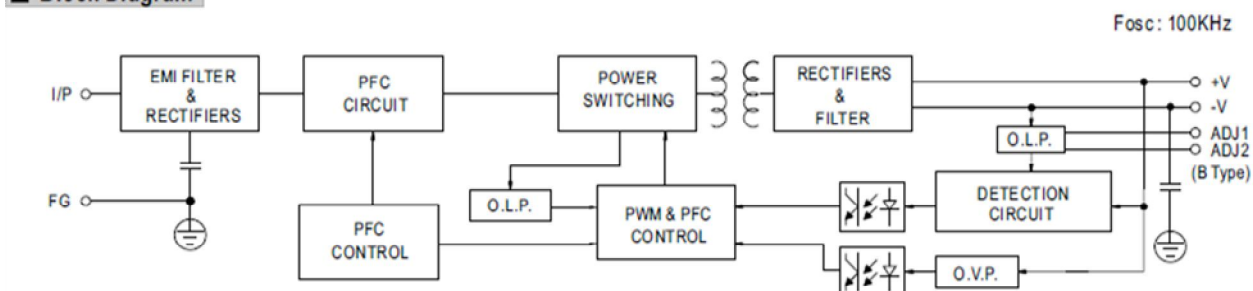
Pin No.	Assignment
1	FG $\perp$
2	AC/N
3	AC/L

DC Output Terminal Pin No. Assignment

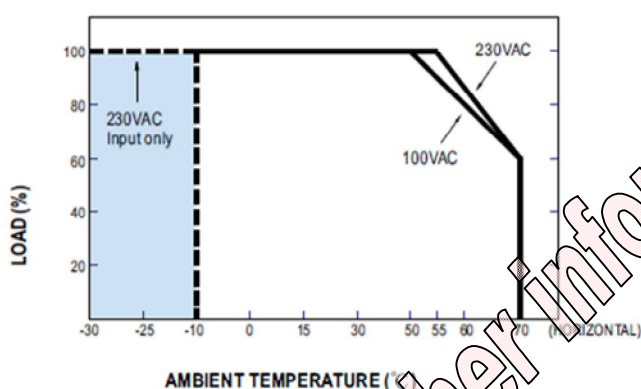
Pin No.	Assignment
1	+V
2	-V

- ※ Output voltage and constant current level can be adjusted through internal potential meter. (Can access by removing the rubber stopper on the case.)

Block Diagram



Derating Curve



※-30°C start up possible for 230VAC input

Static Characteristics

