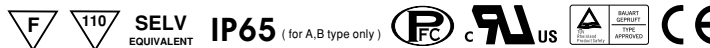




### ■ Features :

- Universal AC input / Full range (up to 280VAC)
- 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 design for indoor or outdoor installations
- 3 years warranty



CLG-150-12 [A] A : IP65 rated. Output voltage and constant current level can be adjusted through internal potential meter.  
 B : IP65 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)

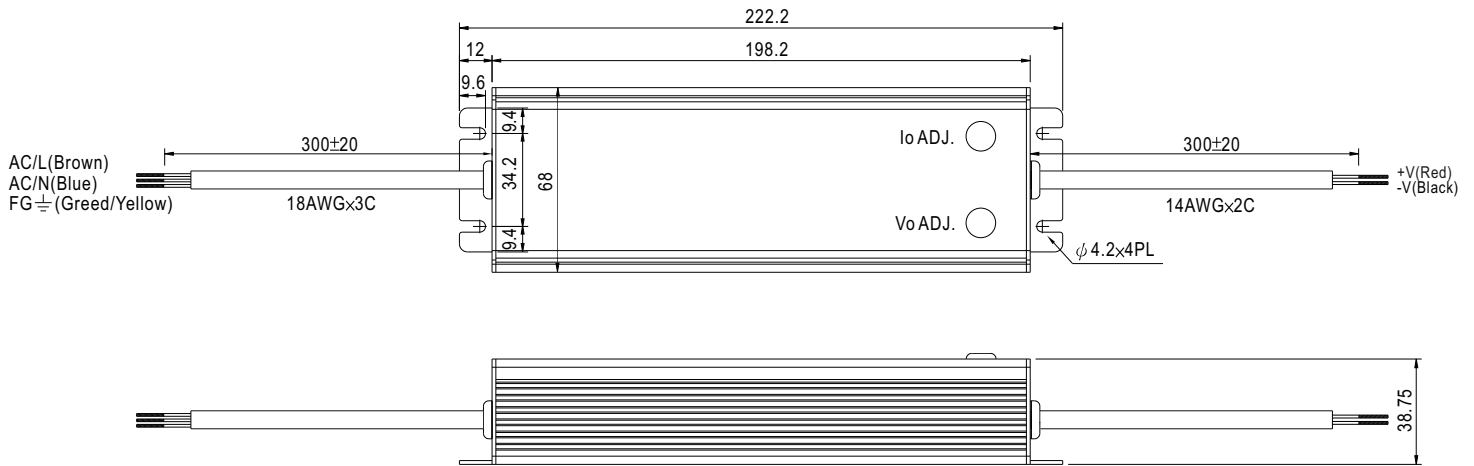
### SPECIFICATION

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 <small>Note.4</small>	6 ~ 12V	7.5 ~ 15V	10 ~ 20V	12 ~ 24V	15 ~ 30V	18 ~ 36V	24 ~ 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	153.6W
	RIPPLE & NOISE (max.) <small>Note.2</small>	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE <small>Note.6</small>	9 ~ 13V	13 ~ 17V	17 ~ 22V	22 ~ 27V	26 ~ 32V	31 ~ 41V	40 ~ 56V
	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	3.15 ~ 6.3A	2.5 ~ 5A	2.1 ~ 4.2A	1.6 ~ 3.2A
	VOLTAGE TOLERANCE <small>Note.3</small>	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
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 / 115VAC							
HOLD UP TIME (Typ.)	50ms / 230VAC 16ms / 115VAC at full load							
INPUT	VOLTAGE RANGE <small>Note.5</small>	90 ~ 280VAC 127 ~ 396VDC						
	FREQUENCY RANGE	47 ~ 63Hz						
	POWER FACTOR	PF ≥ 0.95/230VAC PF ≥ 0.98/115VAC at full load and rated output voltage						
	EFFICIENCY (Typ.)	88%	88%	90%	90%	90%	89%	90%
	AC CURRENT	2A / 115VAC 1A / 230VAC						
	INRUSH CURRENT(max.)	COLD START 65A/230VAC						
LEAKAGE CURRENT	<2mA / 240VAC							
PROTECTION	OVER CURRENT <small>Note.4</small>	LED-Load : CC-mode max. 105% · CV-mode max. 110% Electronic-Load : CC-mode max. 110% · CV-mode max. 105%						
	SHORT CIRCUIT <small>Note.8</small>	Hiccup mode, recovers automatically after fault condition is removed						
	OVER VOLTAGE	13.5 ~ 16V	18 ~ 20V	23 ~ 27V	28 ~ 34V	33 ~ 36V	42 ~ 48V	57 ~ 65V
	OVER TEMPERATURE	100°C ±10°C (RTH2) Protection type : Shut down o/p voltage, re-power on to recover						
ENVIRONMENT	WORKING TEMP. <small>Note.7</small>	-30 ~ +55°C @ full load ; +70°C @ 60% load						
	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	UL60950-1, TUV EN60950-1, EN61347-1, EN61347-2-13 approved, IP65 approved (for A,B type only)						
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:1.5KVAC						
	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						
	HARMONIC CURRENT	Compliance to EN61000-3-2 Class C (>50% load) ; EN61000-3-3						
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61547, EN55024, light industry level (surge 4KV), criteria A						
	MTBF	303.7Khrs min. MIL-HDBK-217F (25°C)						
	PACKING	1.0Kg; 12pcs/13Kg/0.49CUFT(CLG-150-A/B) 1Kg; 12pcs/13Kg/0.96CUFT(CLG-150-C)						
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.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. 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.</li> <li>5. Derating may be needed under low input voltages. Please check the derating curve for more details.</li> <li>6. Type A and type C only.</li> <li>7. Please refer to derating curve.</li> <li>8. Please refer to OLP characteristics.</li> </ol>							

**Mechanical Specification**

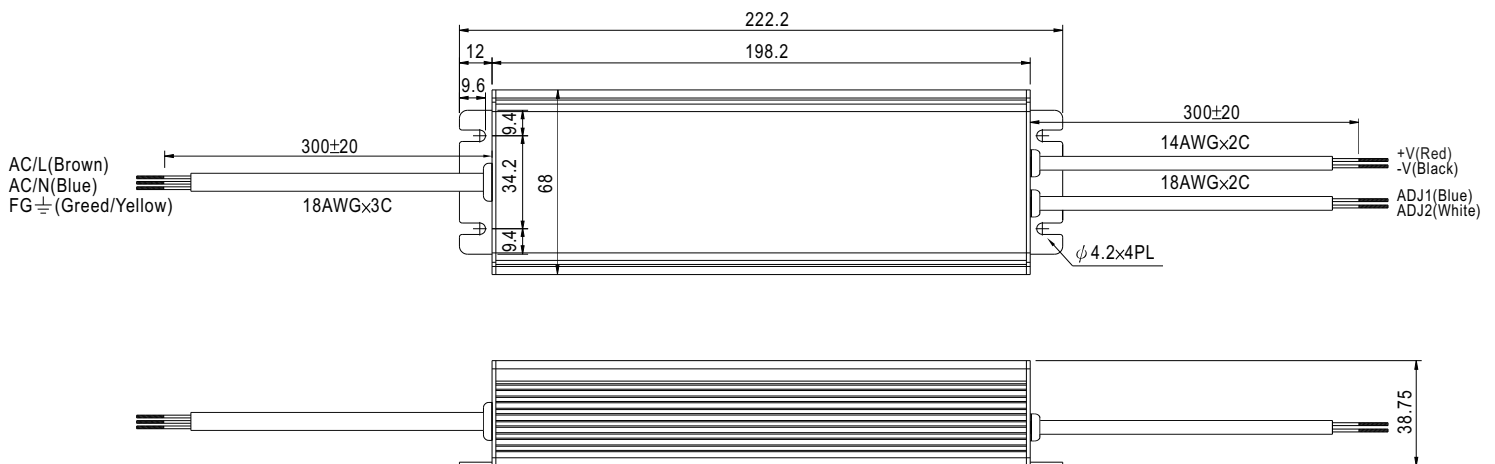
Case No. 954A Unit:mm

**A Type:(CLG-150-\_A)**



※ IP65 rated. Output voltage and constant current level can be adjusted through internal potential meter.  
(Can access by removing the rubber stopper on the case.)

**B Type:(CLG-150-\_B)**

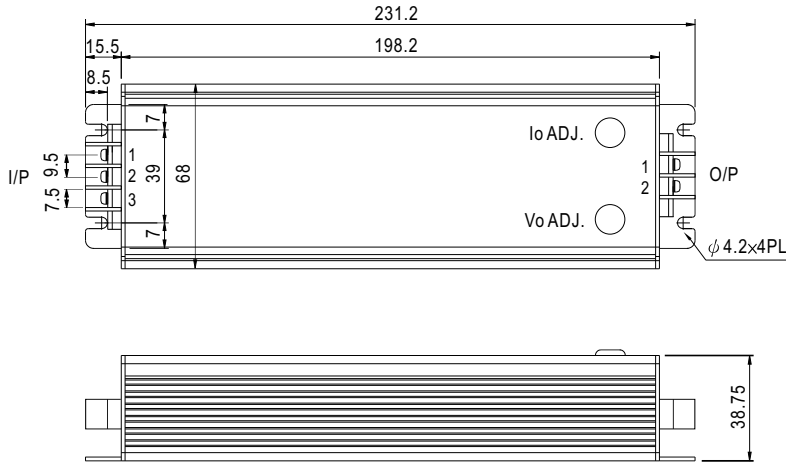


※ IP67 rated. Output constant current level can be adjusted through output cable by connecting a resistor between ADJ1 and ADJ2.

※ Reference resistance value for output current adjustment (Typical)

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

C Type:(CLG-150-C)



AC Input Terminal Pin No. Assignment

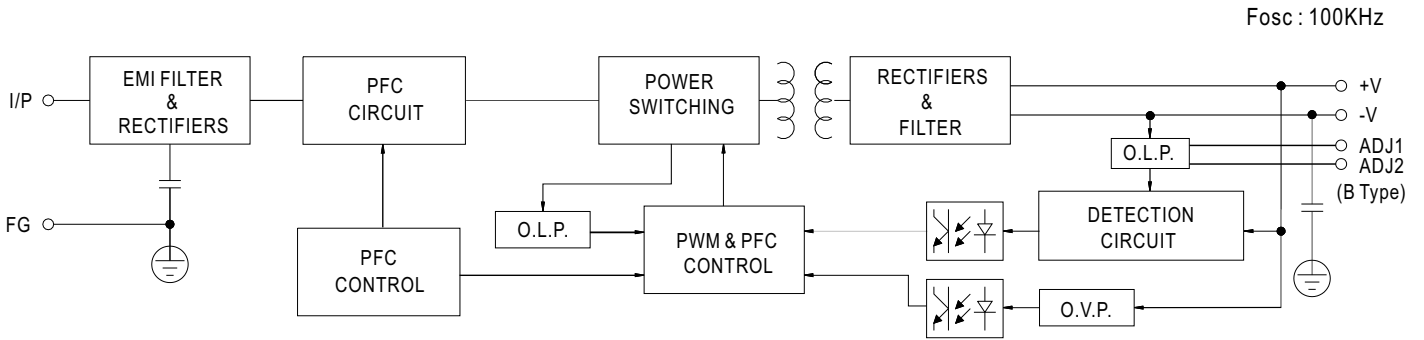
Pin No.	Assignment
1	FG $\perp$
2	AC/N
3	AC/L

DC Output Terminal Pin No. Assignment

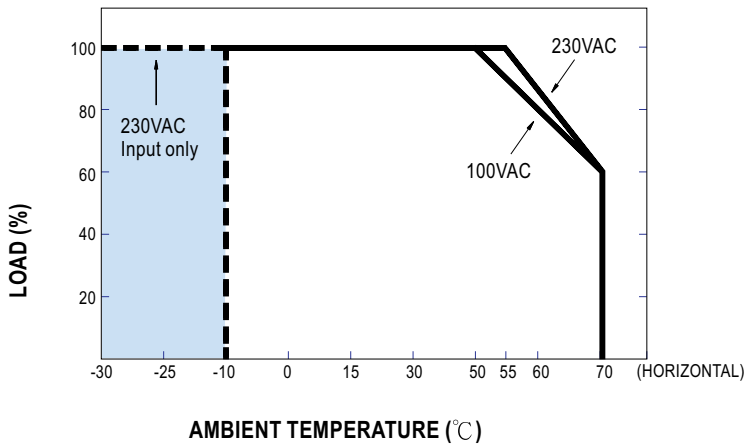
Pin No.	Assignment
1	+V
2	-V

※ 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

