



■ 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 / 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 **A** 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

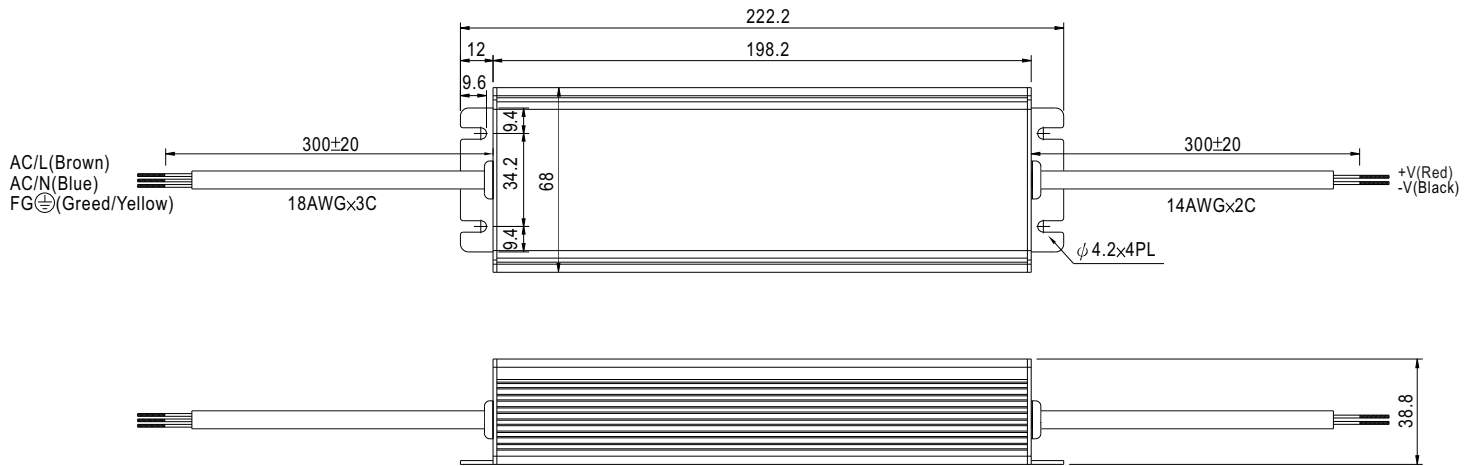
MODEL		CLG-150-12	CLG-150-15	CLG-150-20	CLG-150-24	CLG-150-30	CLG-150-36	CLG-150-48
OUTPUT	DC VOLTAGE	12V	15V	20V	24V	30V	36V	48V
	CONSTANT CURRENT REGION <small>Note.4</small>	9 ~ 12V	11.25 ~ 15V	15 ~ 20V	18 ~ 24V	22.5 ~ 30V	27 ~ 36V	36 ~ 48V
	RATED CURRENT	11A	9.5A	7.5A	6.3A	5A	4.2A	3.2A
	RATED POWER	132W	142.5W	150W	151.2W	150W	151.2W	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 PF ≥ 0.9 at 75 ~ 100% load						
	EFFICIENCY (Typ.)	88%	88%	90%	90%	90%	89%	90%
	AC CURRENT	2A / 115VAC 1A / 230VAC						
	INRUSH CURRENT(max.)	COLD START 65A/230VAC						
	LEAKAGE CURRENT	<1mA / 240VAC						
PROTECTION	OVER CURRENT (Typ.) <small>Note.4</small>	95 ~ 108% Protection type : Constant current limiting, recovers automatically after fault condition is removed						
	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
		Protection type : Shut down and latch off o/p voltage, re-power on to recover						
	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 ~ 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	SAFETY STANDARDS <small>Note.9</small>	UL1012 ; EN61347-1, EN61347-2-13 independent ; UL60950-1, TUV EN60950-1 (TBD)						
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC 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						
	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						
OTHERS	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	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>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.</p> <p>5. Derating may be needed under low input voltages. Please check the derating curve for more details.</p> <p>6. Type A and type C only.</p> <p>7. Please refer to derating curve.</p> <p>8. Please refer to OLP characteristics.</p> <p>9. Safety and EMC design refer to EN60598-1, subject 8750(UL), CNS15233, GB7000.1, FCC part18.</p>							

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Mechanical Specification

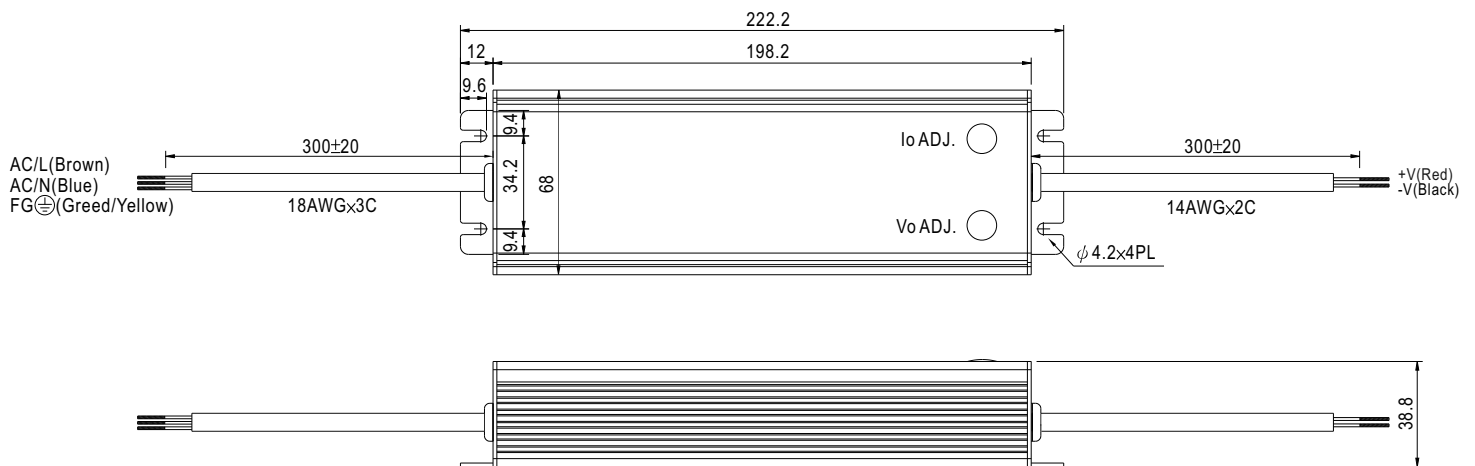
Case No. 954A Unit:mm

Blank:(CLG-150)

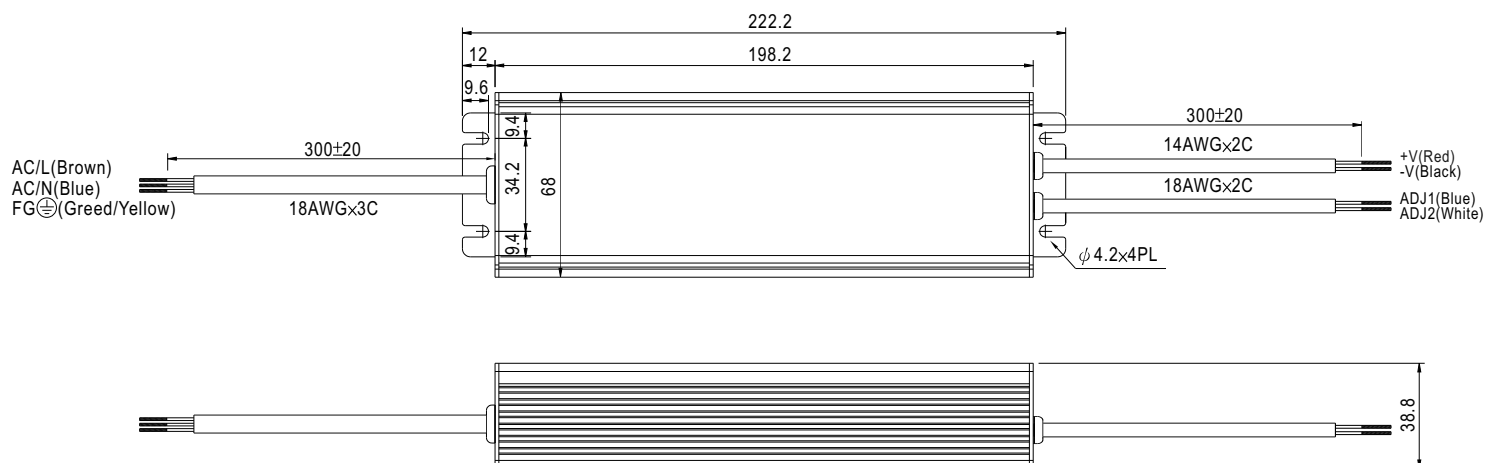


※IP67 rated. Cable for I/O connection.

A Type:(CLG-150- _A)



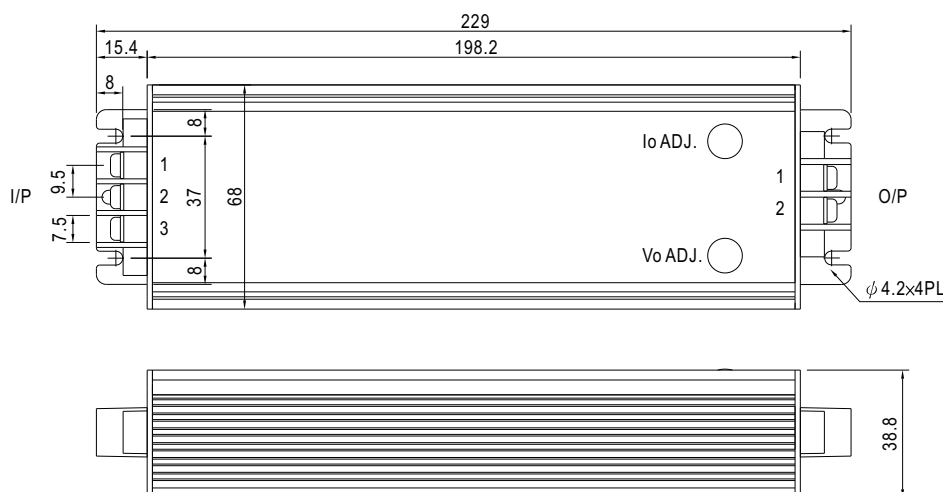
※ IP65 rated. Output voltage and constant current level can be adjusted through internal potential meter.
(Can access by removing the rubber stopper on the case.)

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%
4.7K Ω	100%
620 Ω	75%
82 Ω	50%
Short	Slightly < 50%

C Type:(CLG-150- _C)

AC Input Terminal Pin No. Assignment

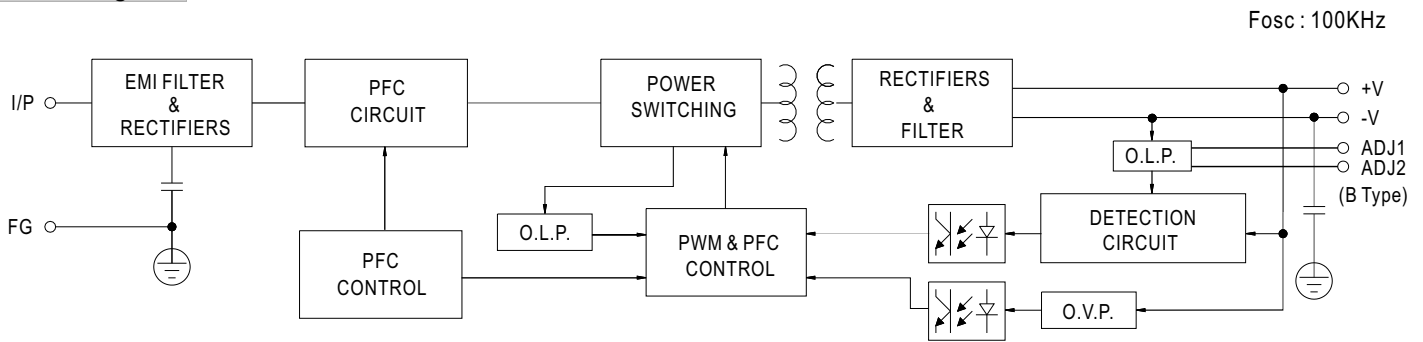
Pin No.	Assignment
1	FG \perp
2	AC/N
3	AC/L

DC Output Terminal Pin No. Assignment

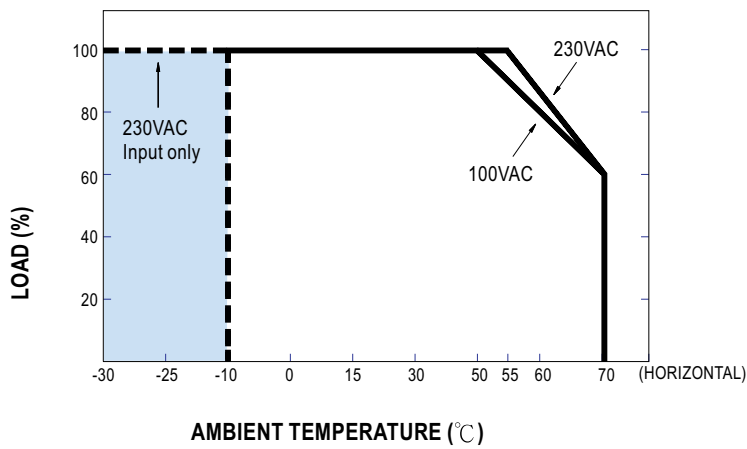
Pin No.	Assignment
1	+V
2	-V

※ 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

