



- 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**

		CLG-150-12	CLG-150-15	CLG-150-20	CLG-150-24	CLG-150-30	CLG-150-36	CLG-150-48		
	DC VOLTAGE	12V	15V	20V	24V	30V	36V	48V		
	CONSTANT CURRENT REGION Note.4	6 ~12V	7.5 ~ 15V	10 ~ 20V	12 ~ 24V	15 ~ 30V	18 ~ 36V	24 ~ 48V		
ОИТРИТ	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.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p		
	VOLTAGE ADJ. RANGE Note.6	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 Note.3	±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	·							
	VOLTAGE RANGE Note.5	90 ~ 280VAC 127 ~ 396VDC								
	FREQUENCY RANGE	47 ~ 63Hz								
	POWER FACTOR	PF ≥ 0.95/230VA	C PF≧0.98/1	15VAC at full load a	and rated output vo	Itage				
INPUT	EFFICIENCY (Typ.)	88%	88%	90%	90%	90%	89%	90%		
	AC CURRENT	2A / 115VAC								
	INRUSH CURRENT(max.)	COLD START 65A/230VAC								
	LEAKAGE CURRENT	<2mA / 240VAC								
	OVER CURRENT Note.4	LED-Load : CC-mode may 105% > CV-mode may 110% Flectronic-Load : CC-mode may 110% > CV-mode may 105%								
		Protection type: Constant current limiting, recovers automatically after fault condition is removed								
	SHORT CIRCUIT Note.8	Hiccup mode, recovers automatically after fault condition is removed								
ROTECTION	OTTOTAL ORIGINAL MODELS	13.5 ~ 16V	18 ~ 20V	23 ~ 27V	28 ~ 34V	33 ~ 36V	42 ~ 48V	57 ~ 65V		
	OVER VOLTAGE	Protection type: Shut down and latch off o/p voltage, re-power on to recover								
	OVER TEMPERATURE	100°C ±10°C (RT		1 0,	•					
		'		age, re-power on f	to recover					
	WORKING TEMP. Note.7	Protection type: Shut down o/p voltage, re-power on to recover  -30 ~ +55°C @ full load; +70°C @ 60% load								
ENVIRONMENT	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
		-40 ~ +80°C, 10 ~ 95% RH								
MAINOMINEM	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)								
	TEMIT. COLITICIENT	±0.03%/ C (0 ~ 50 C)  10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes								
	VIRRATION	10 ~ 500Hz 2G 1	Omin /1 cycle perio	d for 60min each	along Y V 7 avec					
	VIBRATION SAFETY STANDARDS					approved (for A D t	type only)			
	SAFETY STANDARDS	UL60950-1, TUV	EN60950-1, EN613	347-1, EN61347-2-	13 approved, IP65	approved (for A,B t	type only)			
AFFTV &	SAFETY STANDARDS WITHSTAND VOLTAGE	UL60950-1, TUV I/P-O/P:3.75KVA	EN60950-1, EN613 C I/P-FG:1.88K	347-1, EN61347-2- VAC O/P-FG:1.	13 approved, IP65 5KVAC	approved (for A,B t	type only)			
-	SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	UL60950-1, TUV I/P-O/P:3.75KVA I/P-O/P, I/P-FG,	EN60950-1, EN613 C I/P-FG:1.88K O/P-FG:100M Ohr	847-1, EN61347-2- VAC O/P-FG:1. ns / 500VDC / 25°C	13 approved, IP65 5KVAC	approved (for A,B t	type only)			
-	SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMI CONDUCTION & RADIATION	UL60950-1, TUV I/P-O/P:3.75KVA I/P-O/P, I/P-FG, Compliance to EN	EN60950-1, EN613 C I/P-FG:1.88K O/P-FG:100M Ohr I55015, EN55022 (	347-1, EN61347-2- VAC O/P-FG:1. ns / 500VDC / 25°C CISPR22) Class B	13 approved, IP65 5KVAC C/70% RH	approved (for A,B f	type only)			
-	SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMI CONDUCTION & RADIATION HARMONIC CURRENT	UL60950-1, TUV I/P-O/P:3.75KVA I/P-O/P, I/P-FG, Compliance to EN	EN60950-1, EN613 C I/P-FG:1.88K D/P-FG:100M Ohr I55015, EN55022 ( I61000-3-2 Class C	847-1, EN61347-2- VAC O/P-FG:1. ns / 500VDC / 25°C CISPR22) Class B C (>50% load) ; EN6	13 approved, IP65 5KVAC C/70% RH					
	SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMI CONDUCTION & RADIATION HARMONIC CURRENT EMS IMMUNITY	UL60950-1, TUV I/P-O/P:3.75KVA I/P-O/P, I/P-FG, Compliance to EN Compliance to EN	EN60950-1, EN613 C I/P-FG:1.88K D/P-FG:100M Ohr I55015, EN55022 ( I61000-3-2 Class C I61000-4-2,3,4,5,6	847-1, EN61347-2- VAC O/P-FG:1. ns / 500VDC / 25°C CISPR22) Class B C (>50% load); EN6 ,8,11; ENV50204, [	13 approved, IP65 5KVAC C/70% RH			eria A		
SAFETY &	SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMI CONDUCTION & RADIATION HARMONIC CURRENT EMS IMMUNITY MTBF	UL60950-1, TUV I/P-O/P:3.75KVA I/P-O/P, I/P-FG, Compliance to EN Compliance to EN Compliance to EN 303.7Khrs min.	EN60950-1, EN613 C I/P-FG:1.88K D/P-FG:100M Ohr I55015, EN55022 ( I61000-3-2 Class C I61000-4-2,3,4,5,6 MIL-HDBK-217F	847-1, EN61347-2- VAC O/P-FG:1. ns / 500VDC / 25°C CISPR22) Class B C (>50% load); EN6 ,8,11; ENV50204, [	13 approved, IP65 5KVAC C/70% RH			eria A		
	SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMI CONDUCTION & RADIATION HARMONIC CURRENT EMS IMMUNITY	UL60950-1, TUV I/P-O/P:3.75KVA I/P-O/P, I/P-FG, Compliance to EN Compliance to EN Compliance to EN 303.7Khrs min. 222*68*39mm (L*	EN60950-1, EN613 C I/P-FG:1.88K D/P-FG:100M Ohr I55015, EN55022 ( I61000-3-2 Class C I61000-4-2,3,4,5,6 MIL-HDBK-217F	347-1, EN61347-2- VAC O/P-FG:1. ns / 500VDC / 25°C CISPR22) Class B C (>50% load) ; EN6 ,8,11; ENV50204, I (25°C)	13 approved, IP65 5KVAC C/70% RH	i, light industry leve	el (surge 4KV), crit	eria A		

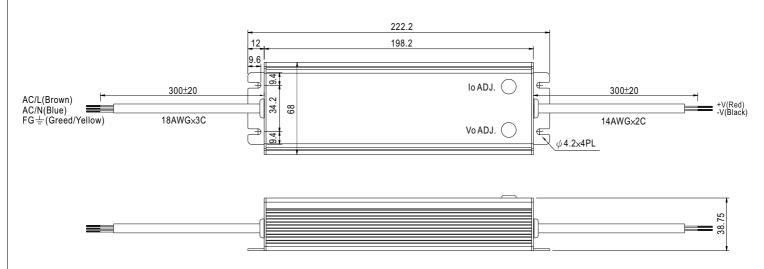
- Tolerance: includes set up tolerance, line regulation and load regulation.
- $4. \ \ Constant \ current \ operation \ region \ is \ within \ 50\% \ \sim 100\% \ rated \ output \ voltage. \ This \ is \ the \ suitable \ operation \ region \ for \ LED \ related \ applications, but \ please$ reconfirm 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.



# **■** Mechanical Specification

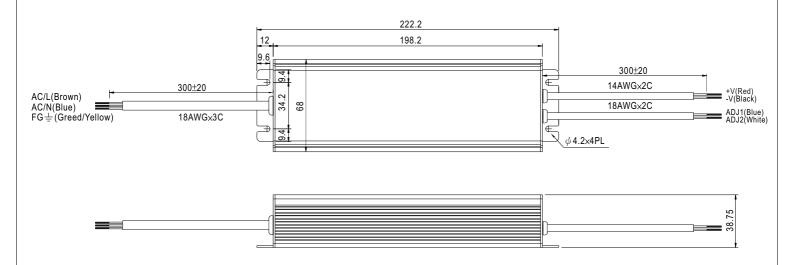
Case No. 954A Unit:mm

## 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)

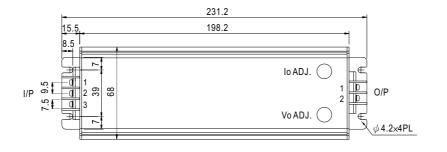


- 💥 IP67 rated. Output constant current level can be adjusted through output cable by connecting a resistor between ADJ1 and ADJ2.
- Reference resistance value for output current adjustment (Typical)

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







# 38.75

# AC Input Terminal Pin No. Assignment

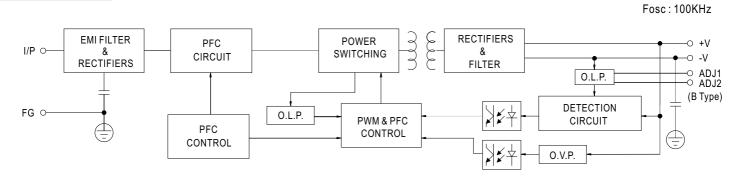
Pin No.	Assignment
1	FG ±
2	AC/N
3	AC/L

# 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

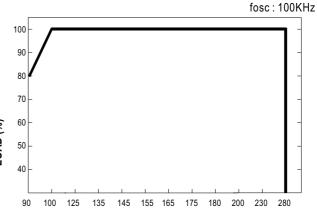


## ■ Derating Curve

# 230VAC - 230VAC | 100VAC | 100VAC | 230VAC | 230

# AMBIENT TEMPERATURE (°C) %-30°C start up possible for 230VAC input

# ■ Static Characteristics



**INPUT VOLTAGE (V) 60Hz**