



- 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 CLG-150-15 CLG-150-20 CLG-150-24 CLG-150-30 CLG-150-36 CLG-150-48







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
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
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 16ms / 115VAC at full load						
VOLTAGE RANGE Note.5	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						
OVER CURRENT	LED-Load : CC-mode may 105% > CV-mode may 110% Flectronic-Load : CC-mode may 110% > CV-mode may 105%						
OVER CURRENT Note.4							
SHORT CIRCUIT Note.8	7						
ROTECTION OVER VOLTAGE	13.5 ~ 16V	18 ~ 20V	23 ~ 27V	28 ~ 34V	33 ~ 36V	42 ~ 48V	57 ~ 65V
	Protection type :	Shut down and latcl	h off o/p voltage, re	-power on to recov	er		•
	100°C ±10°C (RTH2)						
OVER TEMPERATURE	Protection type: Shut down o/p voltage, re-power on to recover						
WORKING TEMP. Note.7	-30 ~ +55°C @ full load; +70°C @ 60% load						
WORKING HUMIDITY	<u> </u>						
STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH						
TEMP. COEFFICIENT							
VIBRATION							
SAFETY STANDARDS							
WITHSTAND VOLTAGE							
ISOLATION RESISTANCE							
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			,,,		1 light industry leve	al (surge 4K\/) crit	eria Δ
MTBF	·			_140 10+1, L140302	+, ngiit iiidusti y ieve	or (surge +rev), trit	οιια Λ
DIMENSION	222*68*39mm (L*W*H)						
	1.0Kg; 12pcs/13Kg/0.49CUFT(CLG-150-A/B) 1Kg; 12pcs/13Kg/0.96CUFT(CLG-150-C)						
	CONSTANT CURRENT REGION Note.4 RATED CURRENT RATED POWER RIPPLE & NOISE (max.) Note.2 VOLTAGE ADJ. RANGE VOLTAGE TOLERANCE Note.3 LINE REGULATION LOAD REGULATION SETUP, RISE TIME HOLD UP TIME (Typ.) VOLTAGE RANGE Note.5 FREQUENCY RANGE POWER FACTOR EFFICIENCY (Typ.) AC CURRENT INRUSH CURRENT Note.4 SHORT CIRCUIT Note.8 OVER CURRENT OVER CURRENT OVER CURRENT WORKING TEMP. Note.7 WORKING TEMP. Note.7 WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMI CONDUCTION & RADIATION HARMONIC CURRENT EMS IMMUNITY MTBF	DC VOLTAGE CONSTANT CURRENT REGION Note.4 RATED CURRENT RATED POWER RIPPLE & NOISE (max.) Note.2 VOLTAGE ADJ. RANGE Note.6  CURRENT ADJ. RANGE CURRENT ADJ. RANGE  VOLTAGE TOLERANCE Note.3 LINE REGULATION LOAD REGULATION SETUP, RISE TIME HOLD UP TIME (Typ.) VOLTAGE RANGE FREQUENCY RANGE FREQUENCY RANGE FREQUENCY RANGE FREQUENCY RANGE POWER FACTOR PF≥ 0.95/230VAC  VOLTAGE RANGE POWER FACTOR PF≥ 0.95/230VAC  LED-Load: CC-n Protection type: WORKING TEMP. Note.7 WORKING TEMP. WORKING TEMP. WORKING HUMIDITY STORAGE TEMP, HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE INCOMPLIANCE INCOMPLIA	12V	DC VOLTAGE   12V	DC VOLTAGE	DC VOLTAGE   12V	DC VOLTAGE   12V   15V   20V   24V   30V   36V

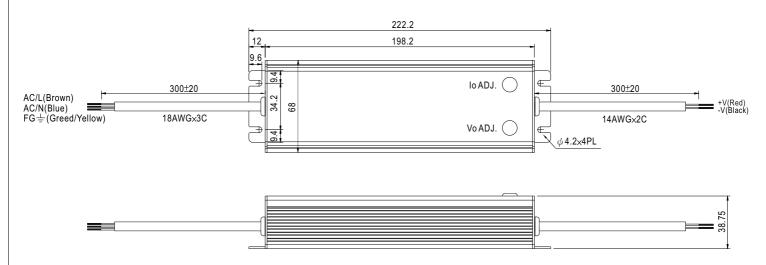
- 3. Tolerance: includes set up tolerance, line regulation and load regulation.
- $4. \ \ Constant \ current \ operation \ region \ is \ within \ 50\% \ \sim 100\% \ rated \ output \ voltage. \ This is the suitable \ operation \ region for \ LED \ related \ applications, but \ please$ reconfirm special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



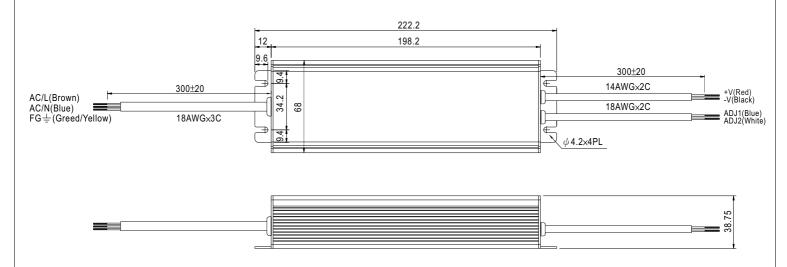
# **■** Mechanical Specification

Case No. 954A Unit:mm

A Type:(CLG-150-\_A)



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

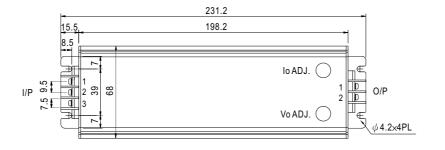


- 💥 IP67 rated. Output constant current level can be adjusted through output cable by connecting a resistor between ADJ1 and ADJ2.
- Reference resistance value for output current adjustment (Typical)

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







# DC Outp Assignm Pin No. 1

# AC Input Terminal Pin No. Assignment

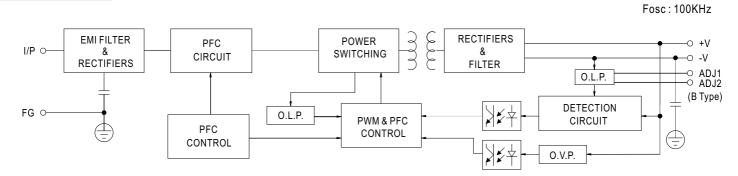
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Pin No.	Assignment
1	FG ±
2	AC/N
3	AC/L

# 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 | 100VAC | 100

# -30 -25 -10 0 15 30 50 55 **AMBIENT TEMPERATURE** ( $^{\circ}$ C) $^{\circ}$ -30 $^{\circ}$ C start up possible for 230VAC input

# 100 -90 -80 70 -70 -(%) 60 --40 -

Static Characteristics

100 125

135

**INPUT VOLTAGE (V) 60Hz** 

145 155 165 175 180

200 230

fosc: 100KHz