



■ 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 **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)

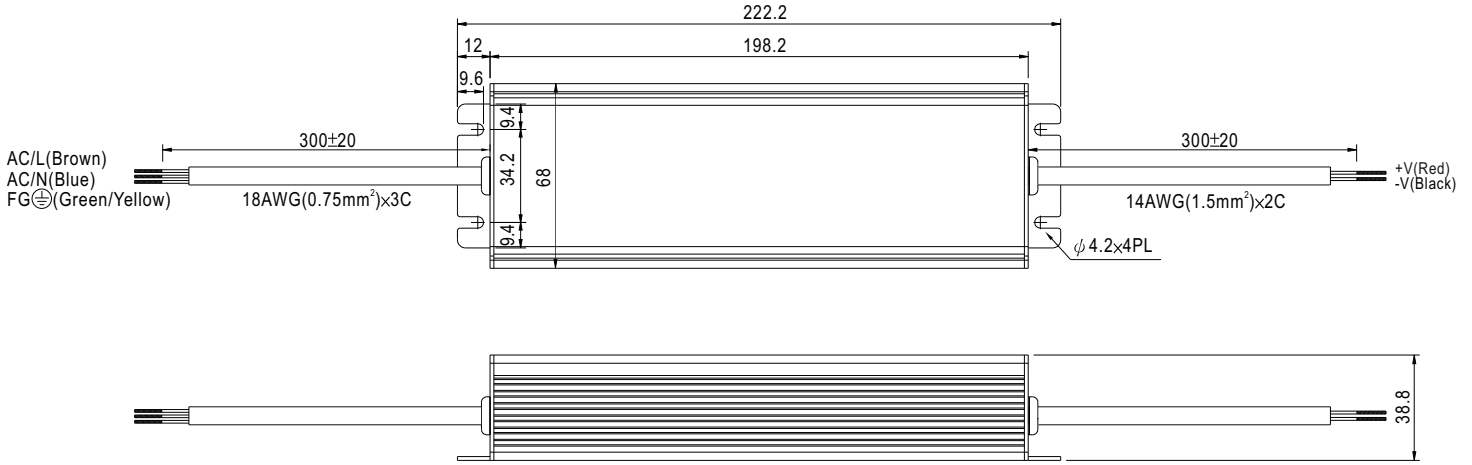
SPECIFICATION

| 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 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 | 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 | | | | | | | |
| INPUT | VOLTAGE RANGE Note.5 | 90 ~ 295VAC 127 ~ 417VDC | | | | | | |
| | 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% | 91% | 91% | 92% |
| | AC CURRENT | 2A / 115VAC 1A / 230VAC | | | | | | |
| | INRUSH CURRENT(max.) | COLD START 65A/230VAC | | | | | | |
| | LEAKAGE CURRENT | <1mA / 240VAC | | | | | | |
| PROTECTION | OVER CURRENT (Typ.) Note.4 | 95 ~ 108% 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 | | | | | | |
| | 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. Note.7 | -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 Note.9 | UL1012 ; EN61347-1, EN61347-2-13 independent (except for CLG-150 C type) ; 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 | <ol style="list-style-type: none"> 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor. 3. Tolerance : 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

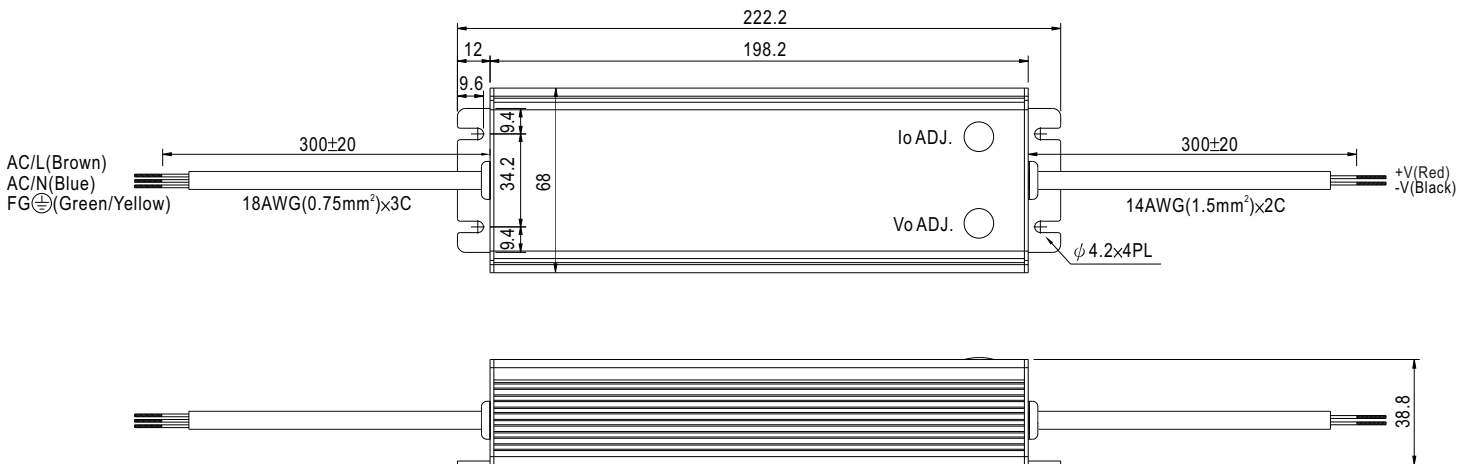
Case No. 954A Unit:mm

Blank:(CLG-150)



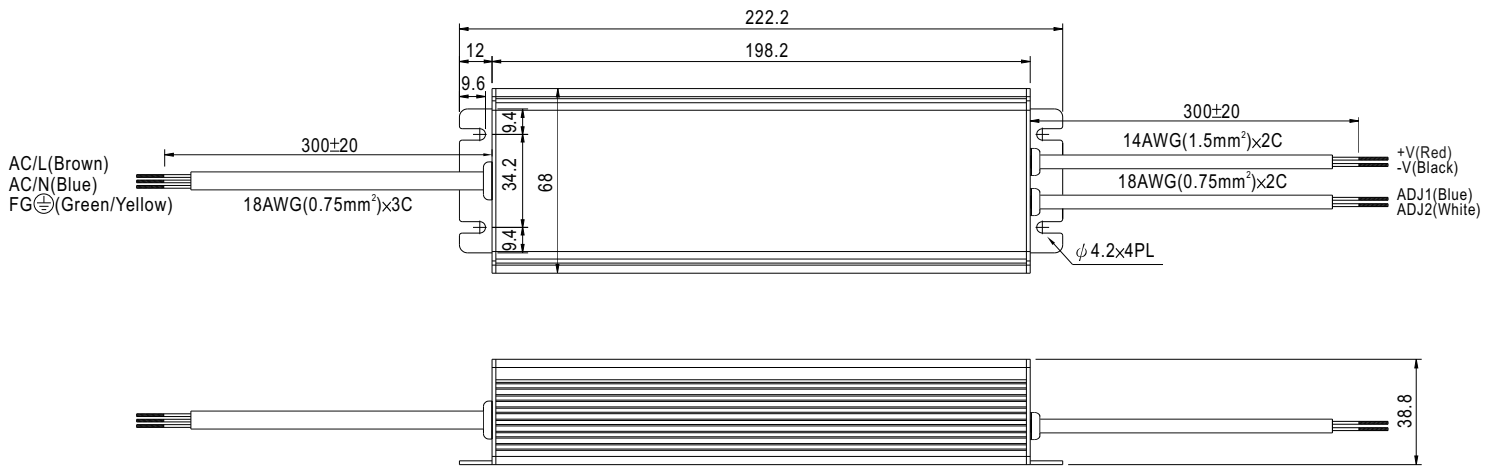
※IP67 rated. Cable for I/O connection.

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.)

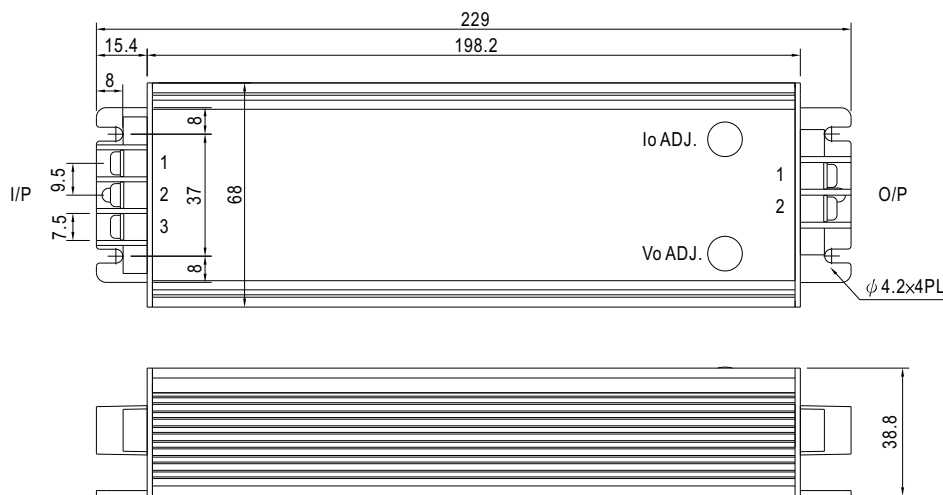
B Type:(CLG-150-B)



- ※ 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

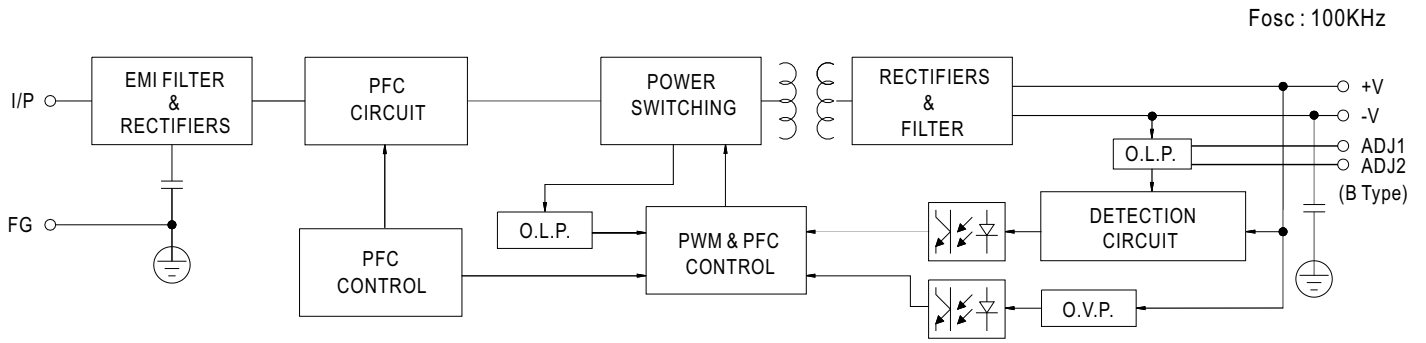
| Pin No. | Assignment |
|---------|------------|
| 1 | FG \perp |
| 2 | AC/N |
| 3 | AC/L |

DC Output Terminal Pin No. Assignment

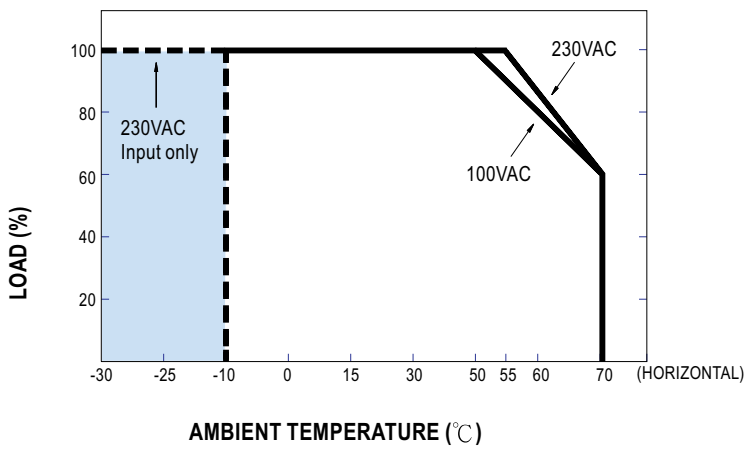
| Pin No. | Assignment |
|---------|------------|
| 1 | +V |
| 2 | -V |

- ※ 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

