



120W Constant Voltage + Constant Current LED Driver

**HLG-120H** series



IS 15885 (Part 2/Sec13)  
R-41027766  
(for 12B, 24B, 36A, 54A only)



## Features

- Constant Voltage + Constant Current mode output
- Metal housing with class I design
- Built-in active PFC function
- IP67 / IP65 rating for indoor or outdoor installations
- Function options: output adjustable via potentiometer; 3 in 1 dimming; Timer dimming
- Typical lifetime > 62000 hours
- 7 years warranty

## Applications

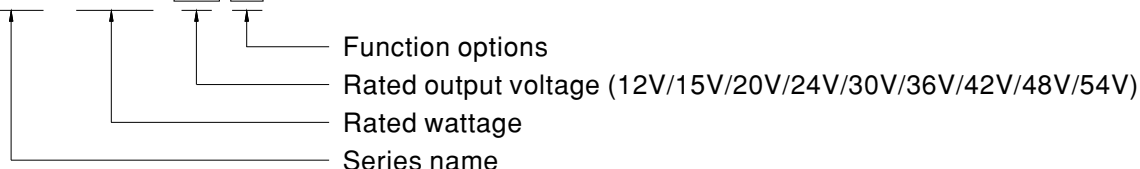
- LED street lighting
- LED high-bay lighting
- Parking space lighting
- LED fishing lamp
- LED greenhouse lighting
- Type "HL" for use in Class I , Division 2 hazardous (Classified) location.

## Description

HLG-120H series is a 120W AC/DC LED driver featuring the dual mode constant voltage and constant current output. HLG-120H operates from 90 ~ 305VAC and offers models with different rated voltage ranging between 12V and 54V. Thanks to the high efficiency up to 93.5%, with the fanless design, the entire series is able to operate for -40°C ~ +80°C case temperature under free air convection. The design of metal housing and IP67/IP65 ingress protection level allows this series to fit both indoor and outdoor applications. HLG-120H is equipped with various function options, such as dimming methodologies, so as to provide the optimal design flexibility for LED lighting system.

## Model Encoding

**HLG - 120H - 48 A**



| Type  | IP Level | Function                                                                                                               | Note       |
|-------|----------|------------------------------------------------------------------------------------------------------------------------|------------|
| Blank | IP67     | Io and Vo fixed                                                                                                        | In Stock   |
| A     | IP65     | Io and Vo adjustable through built-in potentiometer                                                                    | In Stock   |
| B     | IP67     | 3 in 1 dimming function (1~10VDC, 10V PWM signal and resistance)                                                       | In Stock   |
| AB    | IP65     | Io and Vo adjustable through built-in potentiometer & 3 in 1 dimming function (1~10Vdc, 10V PWM signal and resistance) | In Stock   |
| D     | IP67     | Timer dimming function, contact MEAN WELL for details(safety pending).                                                 | By request |



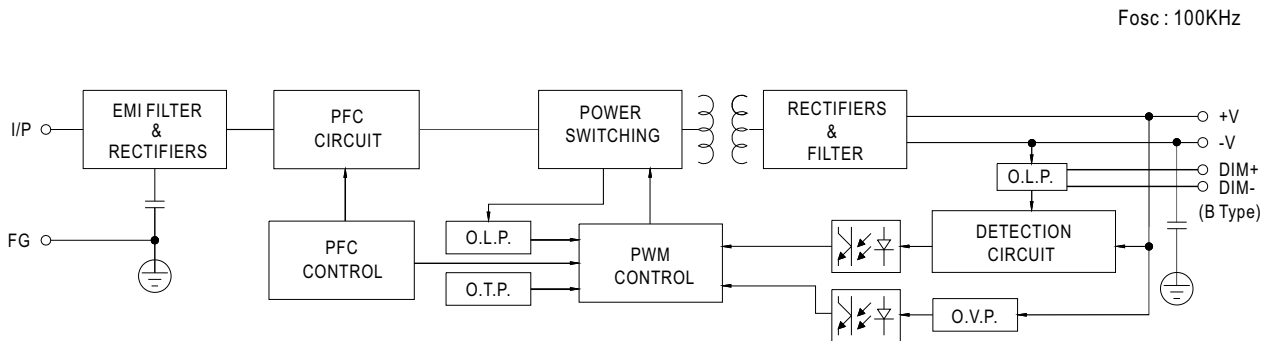
## 120W Constant Voltage + Constant Current LED Driver

## HLG-120H series

## SPECIFICATION

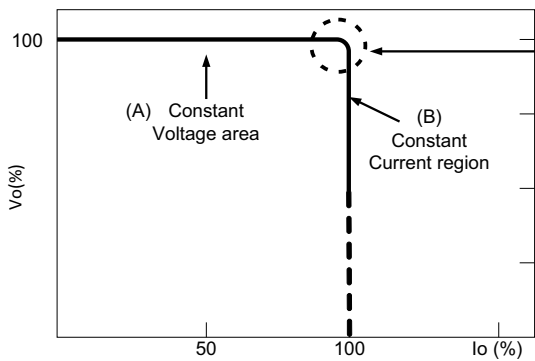
| MODEL                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | HLG-120H-12                                                                                                                                                                                                                                                                                                     | HLG-120H-15   | HLG-120H-20    | HLG-120H-24 | HLG-120H-30 | HLG-120H-36 | HLG-120H-42 | HLG-120H-48 | HLG-120H-54 |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OUTPUT                                 | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 12V                                                                                                                                                                                                                                                                                                             | 15V           | 20V            | 24V         | 30V         | 36V         | 42V         | 48V         | 54V         |
|                                        | CONSTANT CURRENT REGION <small>Note.4</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 6 ~ 12V                                                                                                                                                                                                                                                                                                         | 7.5 ~ 15V     | 10 ~ 20V       | 12 ~ 24V    | 15 ~ 30V    | 18 ~ 36V    | 21 ~ 42V    | 24 ~ 48V    | 27 ~ 54V    |
|                                        | RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 10A                                                                                                                                                                                                                                                                                                             | 8A            | 6A             | 5A          | 4A          | 3.4A        | 2.9A        | 2.5A        | 2.3A        |
|                                        | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 120W                                                                                                                                                                                                                                                                                                            | 120W          | 120W           | 120W        | 120W        | 122.4W      | 121.8W      | 120W        | 124.2W      |
|                                        | RIPPLE & NOISE (max.) <small>Note.2</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 150mVp-p                                                                                                                                                                                                                                                                                                        | 150mVp-p      | 150mVp-p       | 150mVp-p    | 200mVp-p    | 200mVp-p    | 200mVp-p    | 200mVp-p    | 200mVp-p    |
|                                        | VOLTAGE ADJ. RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Adjustable for A/AB-Type only (via built-in potentiometer)                                                                                                                                                                                                                                                      |               |                |             |             |             |             |             |             |
|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 10.8 ~ 13.5V                                                                                                                                                                                                                                                                                                    | 13.5 ~ 17V    | 17 ~ 22V       | 22 ~ 27V    | 27 ~ 33V    | 33 ~ 40V    | 38 ~ 46V    | 43 ~ 53V    | 49 ~ 58V    |
|                                        | CURRENT ADJ. RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Adjustable for A/AB-Type only (via built-in potentiometer)                                                                                                                                                                                                                                                      |               |                |             |             |             |             |             |             |
|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 5 ~ 10A                                                                                                                                                                                                                                                                                                         | 4 ~ 8A        | 3 ~ 6A         | 2.5 ~ 5A    | 2 ~ 4A      | 1.7 ~ 3.4A  | 1.4 ~ 2.9A  | 1.2 ~ 2.5A  | 1.1 ~ 2.3A  |
|                                        | VOLTAGE TOLERANCE <small>Note.3</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ±2.5%                                                                                                                                                                                                                                                                                                           | ±2.0%         | ±1.0%          | ±1.0%       | ±1.0%       | ±1.0%       | ±1.0%       | ±1.0%       | ±1.0%       |
| LINE REGULATION                        | ±0.5%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ±0.5%                                                                                                                                                                                                                                                                                                           | ±0.5%         | ±0.5%          | ±0.5%       | ±0.5%       | ±0.5%       | ±0.5%       | ±0.5%       |             |
| LOAD REGULATION                        | ±2.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ±1.5%                                                                                                                                                                                                                                                                                                           | ±0.5%         | ±0.5%          | ±0.5%       | ±0.5%       | ±0.5%       | ±0.5%       | ±0.5%       |             |
| SETUP, RISE TIME <small>Note.6</small> | 1200ms,50ms/115VAC    500ms,50ms/230VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                 |               |                |             |             |             |             |             |             |
| HOLD UP TIME (Typ.)                    | 12ms / 115VAC, 230VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                 |               |                |             |             |             |             |             |             |
| INPUT                                  | VOLTAGE RANGE <small>Note.5</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 90 ~ 305VAC    127 ~ 431VDC<br>(Please refer to "STATIC CHARACTERISTIC" section)                                                                                                                                                                                                                                |               |                |             |             |             |             |             |             |
|                                        | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 47 ~ 63Hz                                                                                                                                                                                                                                                                                                       |               |                |             |             |             |             |             |             |
|                                        | POWER FACTOR (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | PF≥0.98/115VAC, PF≥0.95/230VAC, PF≥0.93/277VAC @ full load<br>(Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)                                                                                                                                                                                      |               |                |             |             |             |             |             |             |
|                                        | TOTAL HARMONIC DISTORTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | THD< 20% (@ load≥50% / 115VAC,230VAC; @ load≥75% / 277VAC)<br>(Please refer to "TOTAL HARMONIC DISTORTION (THD)" section)                                                                                                                                                                                       |               |                |             |             |             |             |             |             |
|                                        | EFFICIENCY (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 92%                                                                                                                                                                                                                                                                                                             | 92%           | 93%            | 93%         | 93%         | 93%         | 93%         | 93.5%       | 93.5%       |
|                                        | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1.4A / 115VAC                                                                                                                                                                                                                                                                                                   | 0.6A / 230VAC | 0.55A / 277VAC |             |             |             |             |             |             |
|                                        | INRUSH CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | COLD START 60A(t <sub>width</sub> =375μs measured at 50% I <sub>peak</sub> ) at 230VAC; Per NEMA 410                                                                                                                                                                                                            |               |                |             |             |             |             |             |             |
|                                        | MAX. No. of PSUs on 16A CIRCUIT BREAKER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 5 units (circuit breaker of type B) / 9 units (circuit breaker of type C) at 230VAC                                                                                                                                                                                                                             |               |                |             |             |             |             |             |             |
| LEAKAGE CURRENT                        | <0.75mA / 277VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                 |               |                |             |             |             |             |             |             |
| PROTECTION                             | OVER CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 95 ~ 108%<br>Constant current limiting, recovers automatically after fault condition is removed                                                                                                                                                                                                                 |               |                |             |             |             |             |             |             |
|                                        | SHORT CIRCUIT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Constant current limiting, recovers automatically after fault condition is removed                                                                                                                                                                                                                              |               |                |             |             |             |             |             |             |
|                                        | OVER VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 14 ~ 17V                                                                                                                                                                                                                                                                                                        | 18 ~ 21V      | 23 ~ 27V       | 28 ~ 34V    | 34 ~ 38V    | 41 ~ 46V    | 47 ~ 53V    | 54 ~ 63V    | 59 ~ 65V    |
|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Shut down o/p voltage with auto-recovery or re-power on to recovery                                                                                                                                                                                                                                             |               |                |             |             |             |             |             |             |
|                                        | OVER TEMPERATURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Shut down o/p voltage, recovers automatically after temperature goes down                                                                                                                                                                                                                                       |               |                |             |             |             |             |             |             |
| ENVIRONMENT                            | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | T <sub>case</sub> = -40 ~ +80℃ (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)                                                                                                                                                                                                                           |               |                |             |             |             |             |             |             |
|                                        | MAX. CASE TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | T <sub>case</sub> = +80℃                                                                                                                                                                                                                                                                                        |               |                |             |             |             |             |             |             |
|                                        | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 20 ~ 95% RH non-condensing                                                                                                                                                                                                                                                                                      |               |                |             |             |             |             |             |             |
|                                        | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | -40 ~ +80℃, 10 ~ 95% RH                                                                                                                                                                                                                                                                                         |               |                |             |             |             |             |             |             |
|                                        | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ±0.03%/℃ (0 ~ 60℃)                                                                                                                                                                                                                                                                                              |               |                |             |             |             |             |             |             |
|                                        | VIBRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes                                                                                                                                                                                                                                         |               |                |             |             |             |             |             |             |
| SAFETY & EMC                           | SAFETY STANDARDS <small>Note.8</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | UL8750(type"HL"), CSA C22.2 No. 250.0-08, EN/AS/NZS 61347-1, EN/AS/NZS 61347-2-13 independent;GB19510.1, GB19510.14,IP65 or IP67, J61347-1, J61347-2-13,BIS IS15885( for 12B,24B,36A,54A only), EAC TP TC 004, KC61347-1,KC61347-2-13(except for AB,D-type) approved ; Design refer to UL60950-1, TUV EN60950-1 |               |                |             |             |             |             |             |             |
|                                        | WITHSTAND VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | I/P-O/P:3.75KVAC    I/P-FG:2KVAC    O/P-FG:1.5KVAC                                                                                                                                                                                                                                                              |               |                |             |             |             |             |             |             |
|                                        | ISOLATION RESISTANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH                                                                                                                                                                                                                                                       |               |                |             |             |             |             |             |             |
|                                        | EMC EMISSION <small>Note.8</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Compliance to EN55015, EN55032 Class B, EN61000-3-2 Class C (@ load≥50%) ; EN61000-3-3,GB17743 and GB17625.1, EAC TP TC 020                                                                                                                                                                                     |               |                |             |             |             |             |             |             |
| OTHERS                                 | EMC IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, EN55024, light industry level (surge immunity Line-Earth 4KV, Line-Line 2KV),EAC TP TC 020                                                                                                                                                                     |               |                |             |             |             |             |             |             |
|                                        | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 559.5K hrs min. Telcordia SR-332 (Bellcore); 167.1Khrs min.    MIL-HDBK-217F (25℃)                                                                                                                                                                                                                              |               |                |             |             |             |             |             |             |
|                                        | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 220*68*38.8mm (L*W*H)                                                                                                                                                                                                                                                                                           |               |                |             |             |             |             |             |             |
|                                        | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1.12Kg; 12pcs/14.4Kg/0.8CUFT                                                                                                                                                                                                                                                                                    |               |                |             |             |             |             |             |             |
| NOTE                                   | <div>1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25℃ of ambient temperature.</div> <div>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.</div> <div>3. Tolerance : includes set up tolerance, line regulation and load regulation.</div> <div>4. Please refer to "DRIVING METHODS OF LED MODULE".</div> <div>5. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.</div> <div>6. Length of set up time is measured at first cold start. Turning ON/OFF the driver may lead to increase of the set up time.</div> <div>7. The driver 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.</div> <div>8. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED driver can only be used behind a switch without permanently connected to the mains.</div> <div>9. This series meets the typical life expectancy of &gt;62,000 hours of operation when T<sub>case</sub>, particularly (T<sub>c</sub>) point (or T<sub>MP</sub>, per DLC), is about 75℃ or less.</div> <div>10. Please refer to the warranty statement on MEAN WELL's website at <a href="http://www.meanwell.com">http://www.meanwell.com</a></div> <div>11. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).</div> <div>12. For any application note and IP water proof function installation caution, please refer our user manual before using.</div> <div><a href="https://www.meanwell.com/Upload/PDF/LED_EN.pdf">https://www.meanwell.com/Upload/PDF/LED_EN.pdf</a></div> |                                                                                                                                                                                                                                                                                                                 |               |                |             |             |             |             |             |             |

## ■ BLOCK DIAGRAM



## ■ DRIVING METHODS OF LED MODULE

- ※ This series is able to work in either Constant Current mode (a direct drive way) or Constant Voltage mode (usually through additional DC/DC driver) to drive the LEDs.

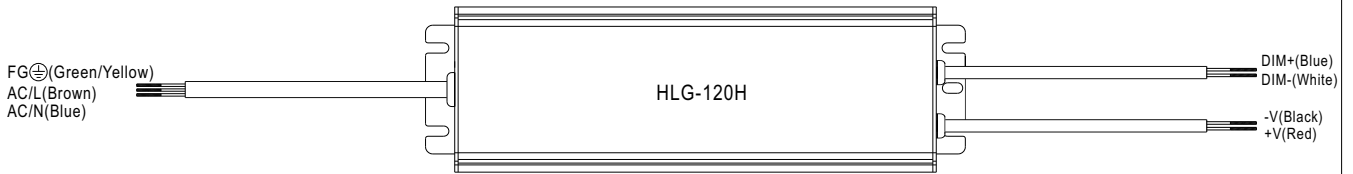


Typical output current normalized by rated current (%)

In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

Should there be any compatibility issues, please contact MEAN WELL.

## DIMMING OPERATION



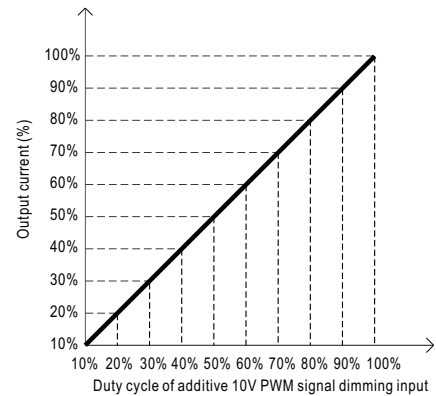
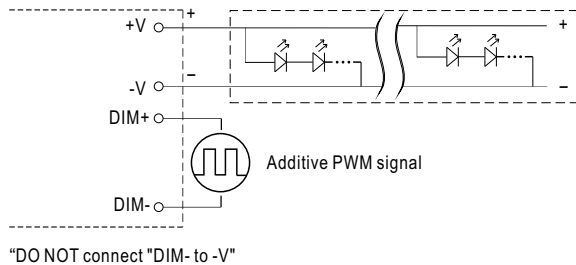
### ※ 3 in 1 dimming function (for B/AB-Type)

- Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-: 1 ~ 10VDC, or 10V PWM signal or resistance.
- Direct connecting to LEDs is suggested. It is not suitable to be used with additional drivers.
- Dimming source current from power supply: 100 $\mu$ A (typ.)

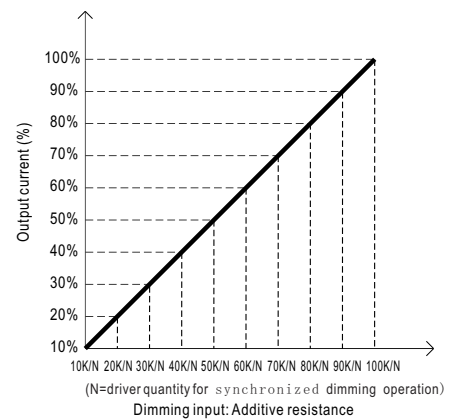
#### ◎ Applying additive 1 ~ 10VDC



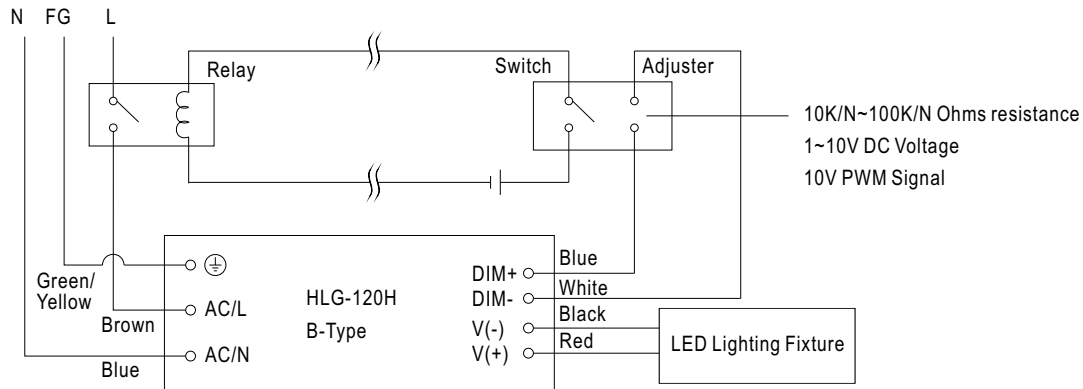
#### ◎ Applying additive 10V PWM signal (frequency range 100Hz ~ 3KHz):



#### ◎ Applying additive resistance:

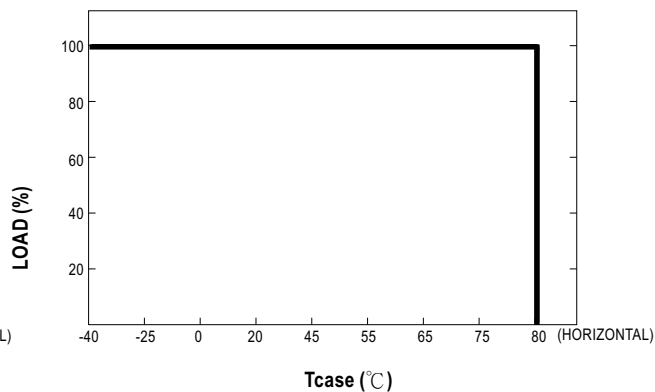
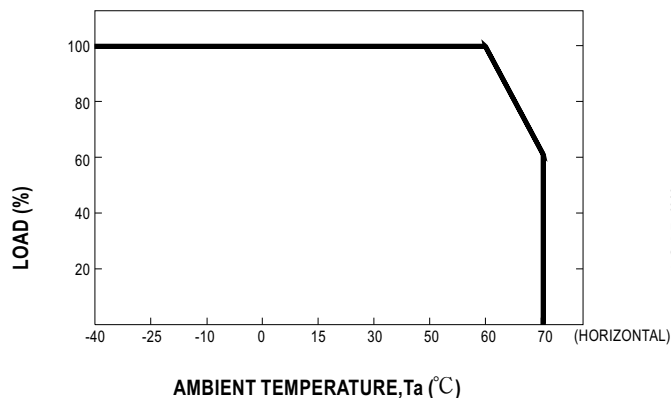


Note: In the case of turning the lighting fixture down to 0% brightness, please refer to the configuration as follow, or please contact MEAN WELL for other options.

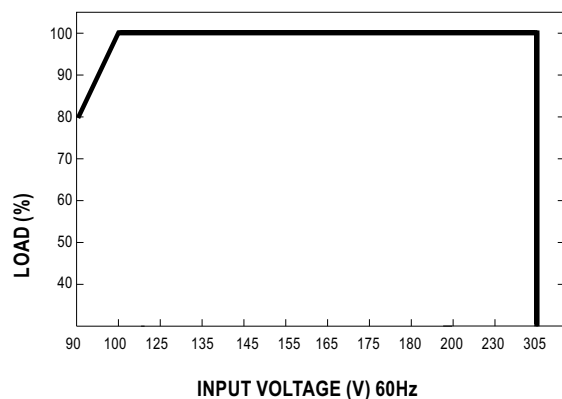


Using a switch and relay can turn ON/OFF the lighting fixture.

# **OUTPUT LOAD vs TEMPERATURE(No.10)**



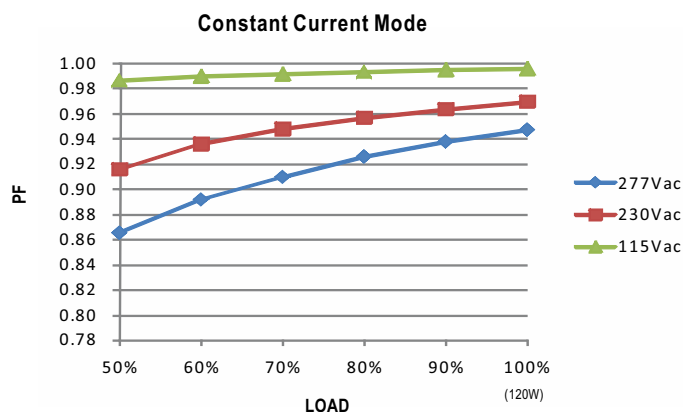
# **STATIC CHARACTERISTICS**



※ De-rating is needed under low input voltage.

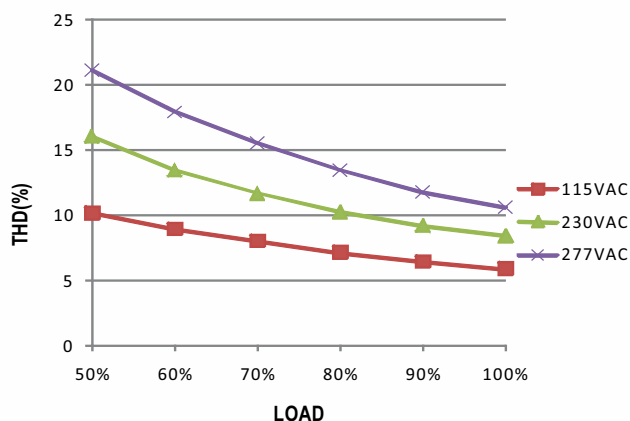
# **POWER FACTOR(PF) CHARACTERISTIC**

※  $T_{case}$  at 70°C



# **TOTAL HARMONIC DISTORTION (THD)**

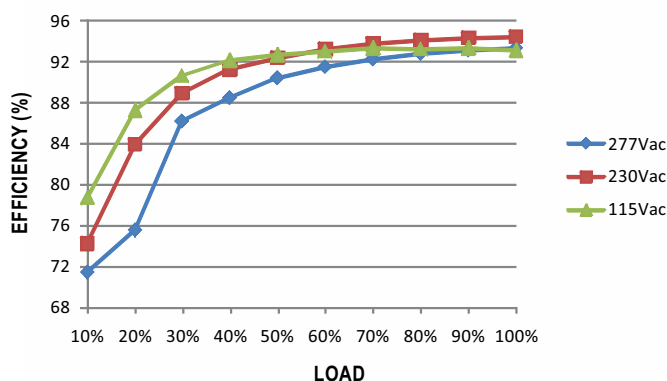
※ 48V Model,  $T_{case}$  at 70°C



# **EFFICIENCY vs LOAD**

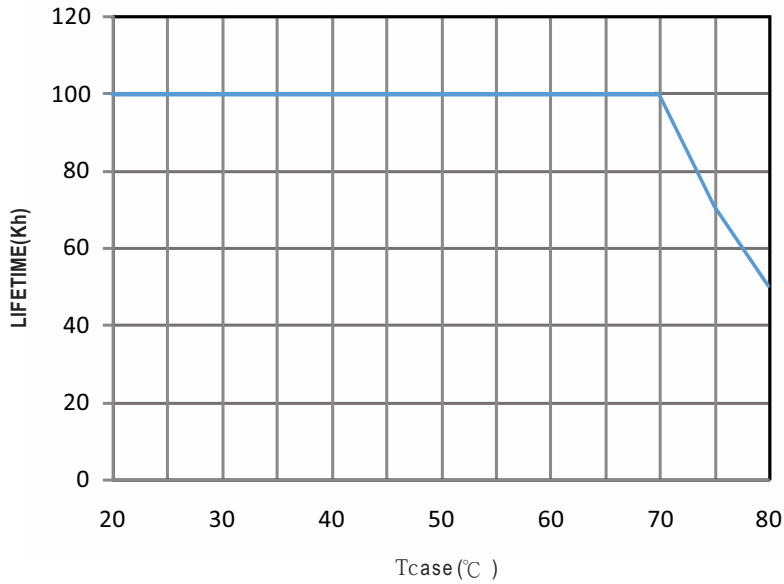
HLG-120H series possess superior working efficiency that up to 93.5% can be reached in field applications.

※ 48V Model,  $T_{case}$  at 70°C

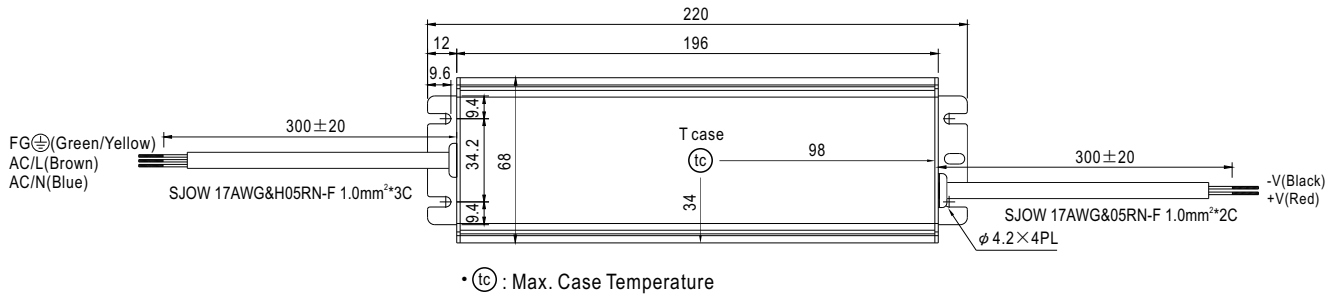
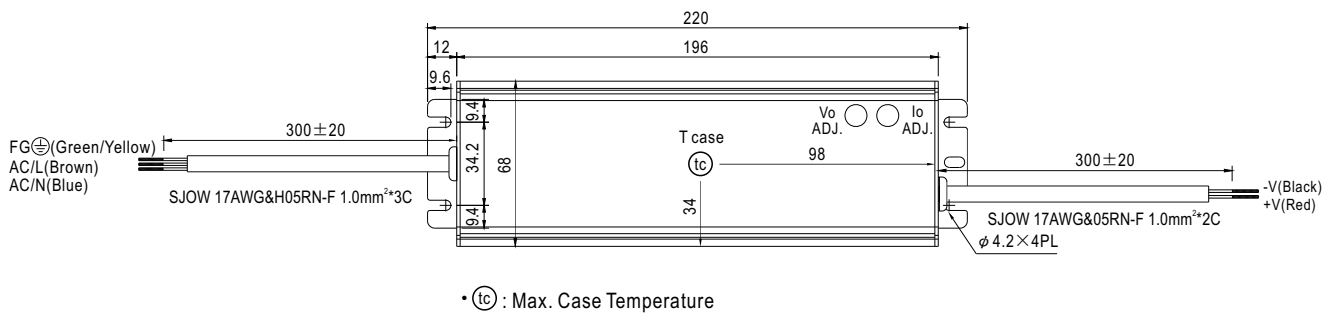


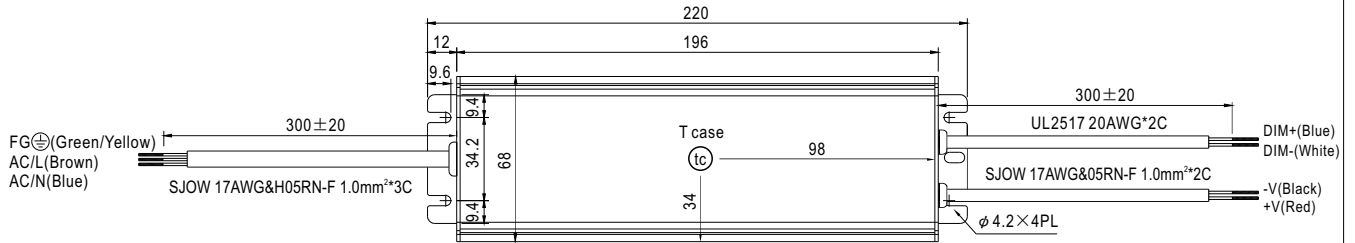


■ LIFE TIME

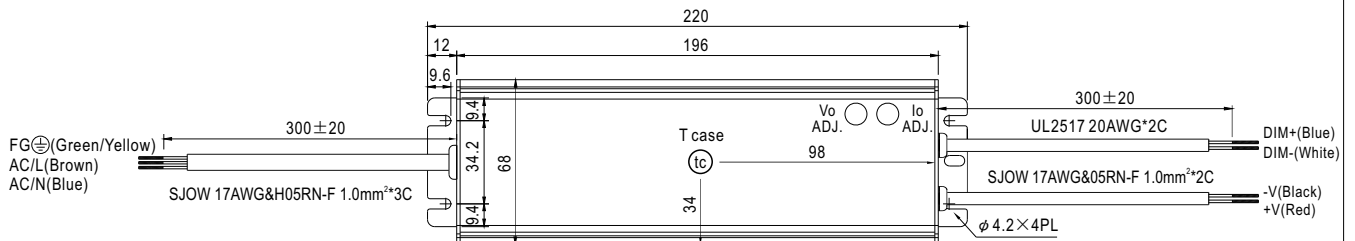


Case No.994A Unit:mm

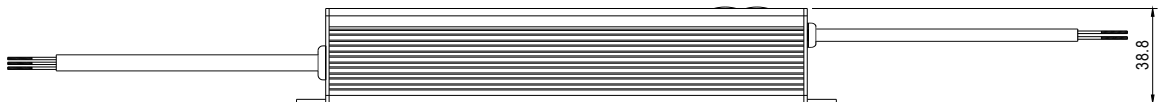
**MECHANICAL SPECIFICATION**
**※Blank/D-Type**

**※A-Type**


**※B-Type**


•  $t_c$  : Max. Case Temperature


**※AB-Type**


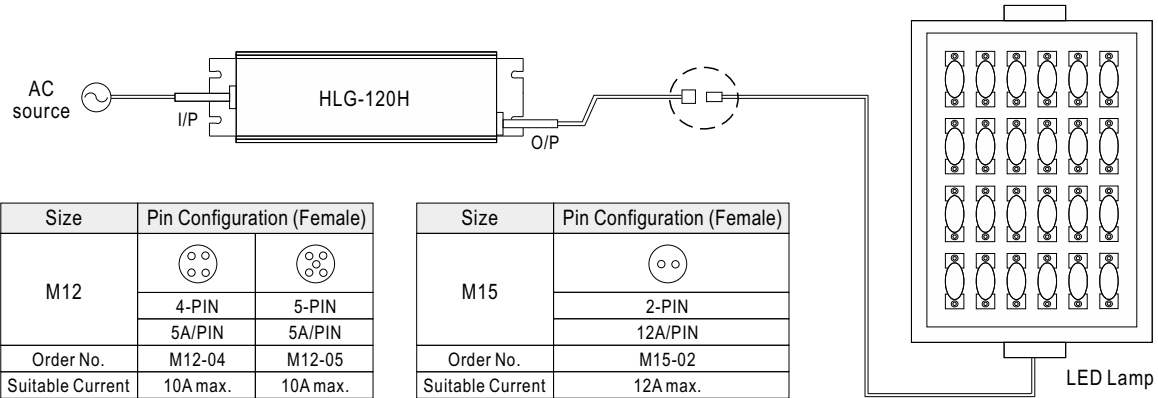
•  $t_c$  : Max. Case Temperature



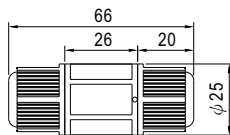
## ■ WATERPROOF CONNECTION

### ※ Waterproof connector

Waterproof connector can be assembled on the output cable of HLG-120H to operate in dry/wet/damp or outdoor environment.



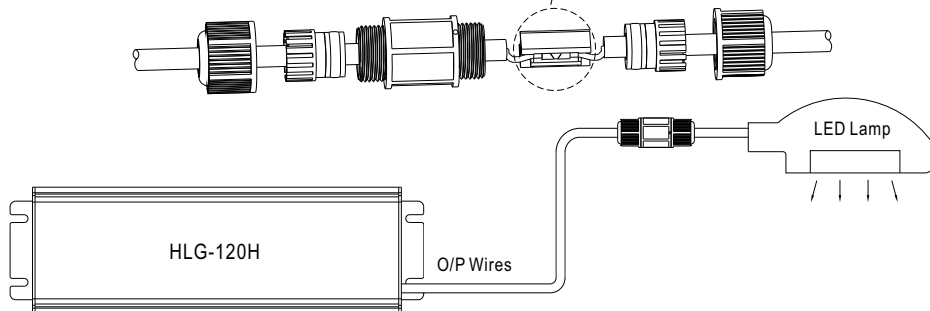
### ※ Cable Joiner



CJ04-1 suitable for 14AWG~16AWG  
CJ04-2 suitable for 18AWG~22AWG

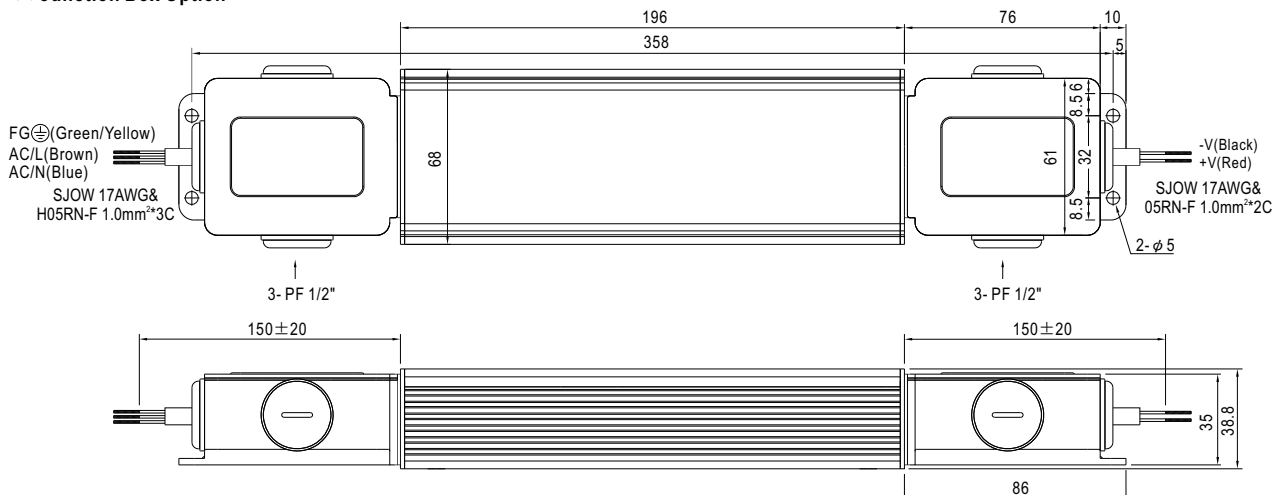


Up to four wires can be connected through this cable joiner by soldering or clamping by tools.



◎ CJ04 cable joiner can be purchased independently for user's own assembly.  
MEAN WELL order No. : CJ04-1, CJ04-2.

### ※ Junction Box Option



◎ Junction box option is available for A / Blank - Type. Please contact MEAN WELL for details.

## ■ INSTALLATION MANUAL

Please refer to : <http://www.meanwell.com/manual.html>