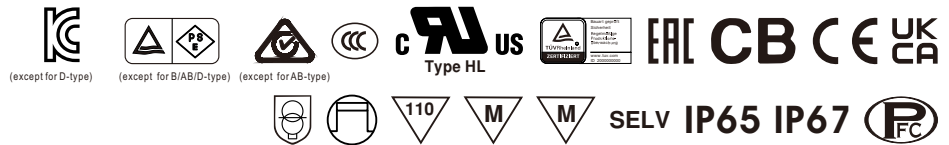




185W Constant Voltage + Constant Current LED Driver

**HLG-185H** series

User's Manual



## Features

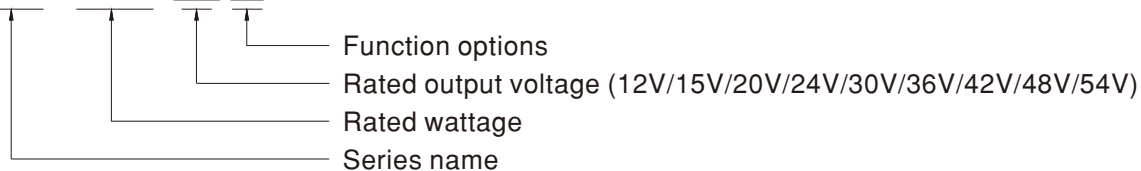
- Constant Voltage + Constant Current mode output
- Metal housing with class I design
- IP67 / IP65 rating for indoor or outdoor installations
- Function options: output adjustable via potentiometer; 3 in 1 dimming
- Typical lifetime > 62000 hours
- 7 years warranty

## Description

HLG-185H series is a 185W AC/DC LED driver featuring the dual mode constant voltage and constant current output. HLG-185H operates from 90 ~ 305VAC and offers models with different rated voltage ranging between 12V and 54V. Thanks to the high efficiency up to 94%, with the fanless design, the entire series is able to operate for -40°C ~ +90°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-185H 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 - 185H - 24 A**



## 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.

## GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

| 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 |

**SPECIFICATION**

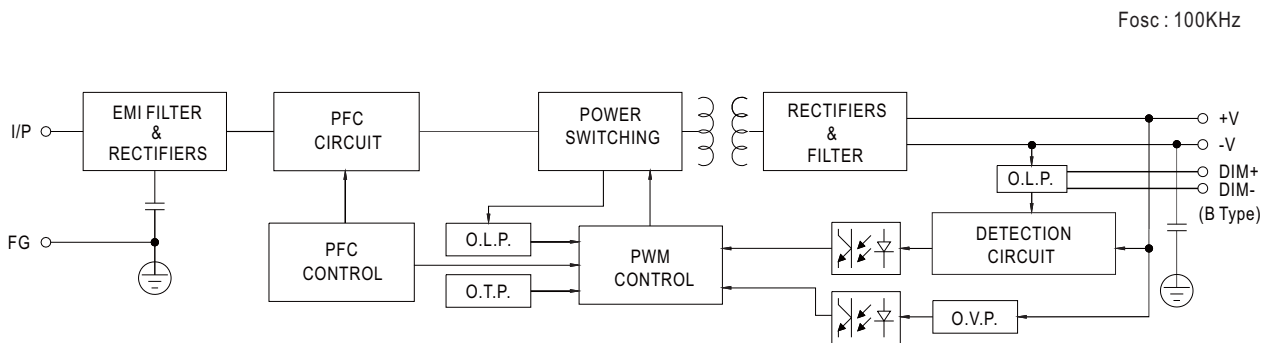
| MODEL           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | HLG-185H-12                                                                                                                                                                                                                                                                                                                    | HLG-185H-15                                   | HLG-185H-20 | HLG-185H-24 | HLG-185H-30 | HLG-185H-36 | HLG-185H-42 | HLG-185H-48 | HLG-185H-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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 13A                                                                                                                                                                                                                                                                                                                            | 11.5A                                         | 9.3A        | 7.8A        | 6.2A        | 5.2A        | 4.4A        | 3.9A        | 3.45A       |  |
|                 | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 156W                                                                                                                                                                                                                                                                                                                           | 172.5W                                        | 186W        | 187.2W      | 186W        | 187.2W      | 184.8W      | 187.2W      | 186.3W      |  |
|                 | 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)<br>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)<br>6.5 ~ 13A   5.75 ~ 11.5A   4.65 ~ 9.3A   3.9 ~ 7.8A   3.1 ~ 6.2A   2.6 ~ 5.2A   2.2 ~ 4.4A   1.95 ~ 3.9A   1.72 ~ 3.45A                                                                                                                                          |                                               |             |             |             |             |             |             |             |  |
|                 | 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%                                        | ± 1.0%      | ± 0.5%      | ± 0.5%      | ± 0.5%      | ± 0.5%      | ± 0.5%      | ± 0.5%      |  |
|                 | SETUP, RISE TIME <small>Note.6</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1000ms,200ms/115VAC   500ms,200ms/230VAC                                                                                                                                                                                                                                                                                       |                                               |             |             |             |             |             |             |             |  |
|                 | HOLD UP TIME (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 16ms / 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≥0.92/277VAC @ 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.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 91.5%                                                                                                                                                                                                                                                                                                                          | 92%                                           | 93%         | 93.5%       | 93.5%       | 93.5%       | 94%         | 94%         | 94%         |  |
|                 | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 12V                                                                                                                                                                                                                                                                                                                            | 1.8A / 115VAC   0.8A / 230VAC   0.7A / 277VAC |             |             |             |             |             |             |             |  |
|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 15V ~ 54V                                                                                                                                                                                                                                                                                                                      | 2.1A / 115VAC   0.9A / 230VAC   0.8A / 277VAC |             |             |             |             |             |             |             |  |
|                 | INRUSH CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | COLD START 65A(twidth=445μs measured at 50% Ipeak) at 230VAC; Per NEMA 410                                                                                                                                                                                                                                                     |                                               |             |             |             |             |             |             |             |  |
|                 | MAX. No. of PSUs on 16A CIRCUIT BREAKER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 4 units (circuit breaker of type B) / 7 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Tcase= -40 ~ +90℃ (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)                                                                                                                                                                                                                                                       |                                               |             |             |             |             |             |             |             |  |
|                 | MAX. CASE TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Tcase= +90℃                                                                                                                                                                                                                                                                                                                    |                                               |             |             |             |             |             |             |             |  |
|                 | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | UL8750(type"HL"),CSA C22.2 No. 250.0-08;BS EN/EN 61347-1,BS EN/EN 61347-2-13, AS/NZS 61347-1(except for AB-type), AS/NZS 61347-2-13(except for AB-type) independent;GB19510.1,GB19510.14 ; IP65 or IP67; J61347-1, J61347-2-13(except for B, AB and D-type), EAC TP TC 004, KC61347-1,KC61347-2-13(except for D-type) approved |                                               |             |             |             |             |             |             |             |  |
|                 | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Compliance to BS EN/EN55015, BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2 Class C (@ load≥50%) ; BS EN/EN61000-3-3,GB17743 and GB17625.1,EAC TP TC 020, KSC 9815(except for D-type)                                                                                                                                      |                                               |             |             |             |             |             |             |             |  |
|                 | EMC IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN61547, BS EN/EN55024, light industry level (surge immunity Line-Earth 4KV, Line-Line 2KV),EAC TP TC 020, KSC 9547(except for D-type)                                                                                                                                     |                                               |             |             |             |             |             |             |             |  |
| OTHERS          | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2184.8K hrs min.   Telcordia SR-332 (Bellcore) ; 197.3K hrs min.   MIL-HDBK-217F (25℃)                                                                                                                                                                                                                                         |                                               |             |             |             |             |             |             |             |  |
|                 | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 228*68*38.8mm (L*W*H)                                                                                                                                                                                                                                                                                                          |                                               |             |             |             |             |             |             |             |  |
|                 | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1.15Kg; 12pcs/14.8Kg/0.8CUFT                                                                                                                                                                                                                                                                                                   |                                               |             |             |             |             |             |             |             |  |
| NOTE            | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25℃ of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation.<br>4. Please refer to "DRIVING METHODS OF LED MODULE".<br>5. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.<br>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.<br>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.<br>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.<br>9. This series meets the typical life expectancy of >62,000 hours of operation when Tcase, particularly (Tc) point (or TMP, per DLC), is about 75℃ or less.<br>10. Please refer to the warranty statement on MEAN WELL's website at <a href="http://www.meanwell.com">http://www.meanwell.com</a> .<br>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).<br>12. For any application note and IP water proof function installation caution, please refer our user manual before using.<br><a href="https://www.meanwell.com/Upload/PDF/LED_EN.pdf">https://www.meanwell.com/Upload/PDF/LED_EN.pdf</a> |                                                                                                                                                                                                                                                                                                                                |                                               |             |             |             |             |             |             |             |  |

Product Liability Disclaimer

For detailed information, please refer to <https://www.meanwell.com/serviceDisclaimer.aspx>

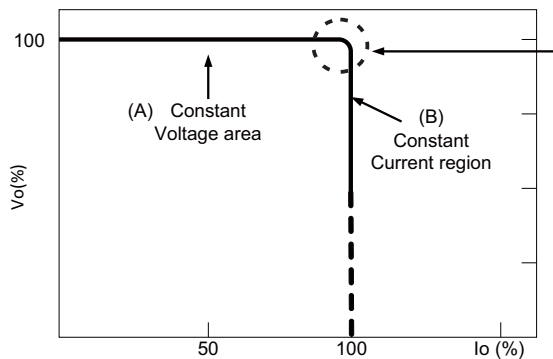
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## ■ BLOCK DIAGRAM



## ■ 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.

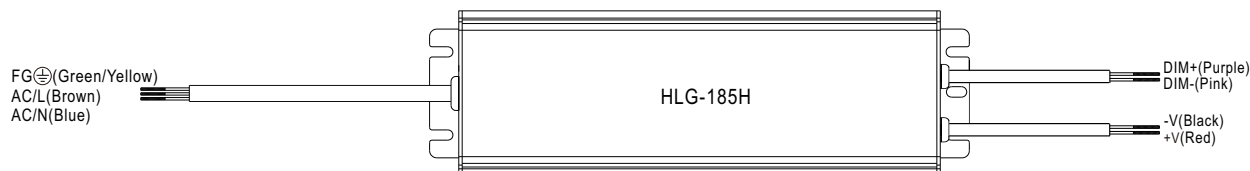


Typical output current normalized by rated current (%)

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.

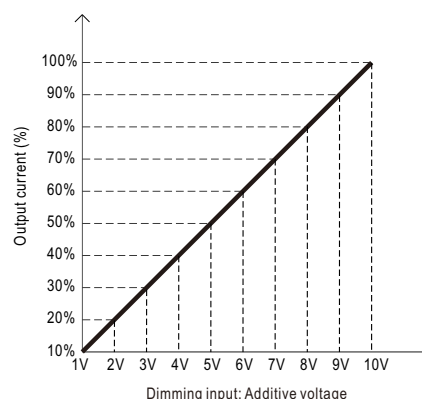
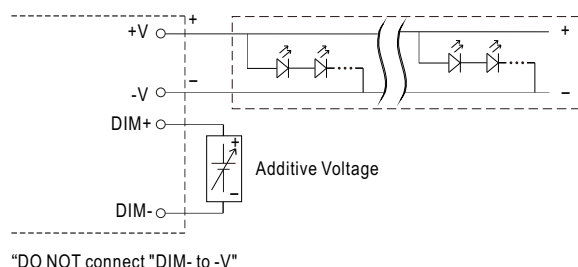
## DIMMING OPERATION



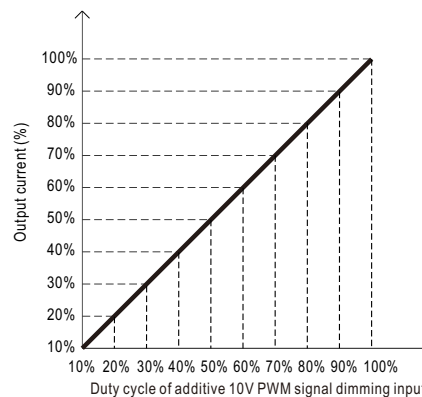
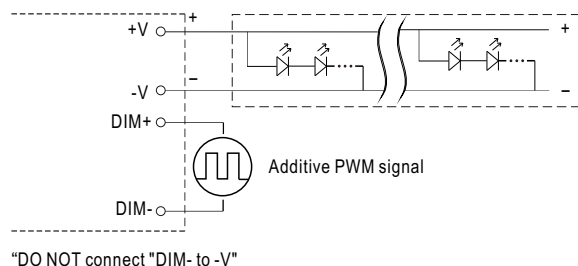
### ※ 3 in 1 dimming function (for B/AB-Type)

- 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.)

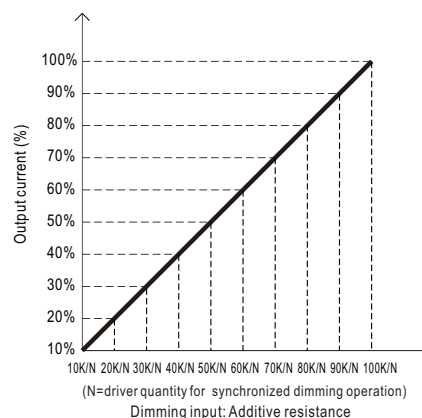
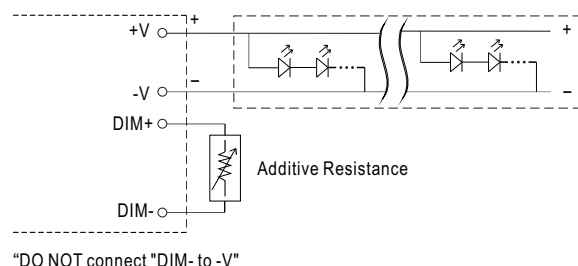
#### ◎ Applying additive 1 ~ 10VDC



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



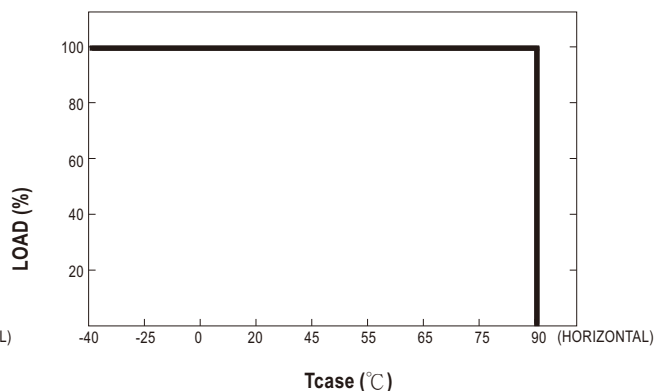
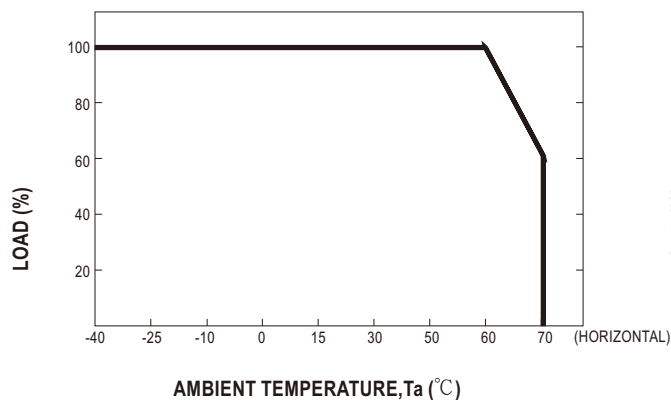
#### ◎ Applying additive resistance:



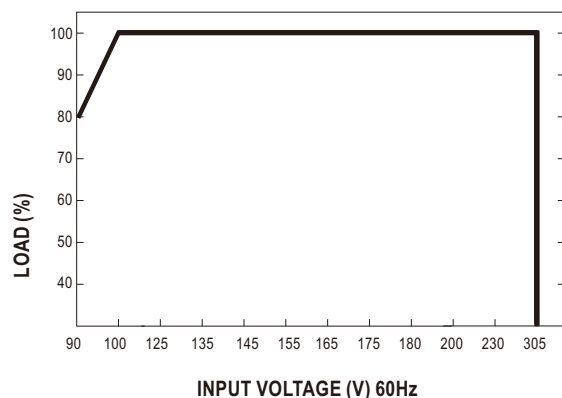
Wiring diagram for the LED lighting fixture. The diagram shows the connection of power lines (N, FG, L) to a relay, switch, and adjuster. The relay is connected to the L line and the switch. The switch is connected to the adjuster. The adjuster is connected to the DIM+ and DIM- lines. The DIM+ and DIM- lines are connected to the LED lighting fixture. The V(-) and V(+) lines are also connected to the LED lighting fixture. The diagram includes labels for the components: Relay, Switch, Adjuster, HLG-185H B-Type, and LED Lighting Fixture. It also includes a list of required components: 10K/N~100K/N Ohms resistance, 1~10V DC Voltage, and 10V PWM Signal.

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

## ■ OUTPUT LOAD vs TEMPERATURE(Note.10)

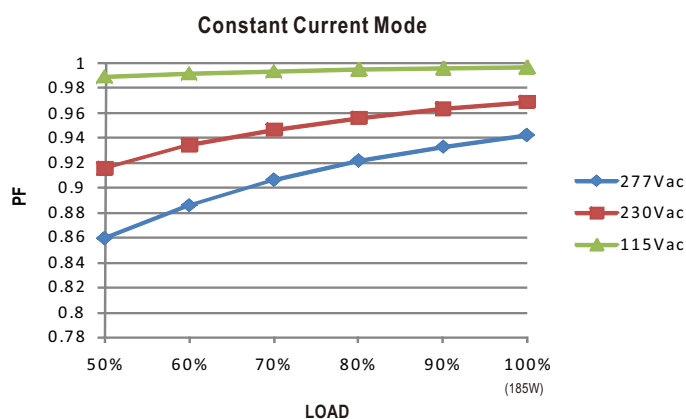


## ■ STATIC CHARACTERISTICS



## ■ POWER FACTOR(PF) CHARACTERISTIC

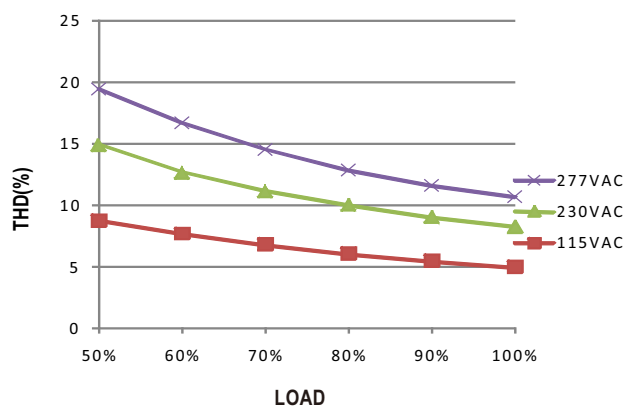
※  $T_{case}$  at 80°C



※ De-rating is needed under low input voltage.

## ■ TOTAL HARMONIC DISTORTION (THD)

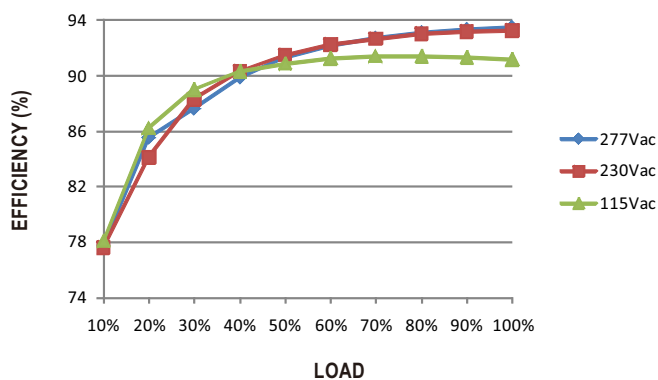
※ 48V Model,  $T_{case}$  at 80°C



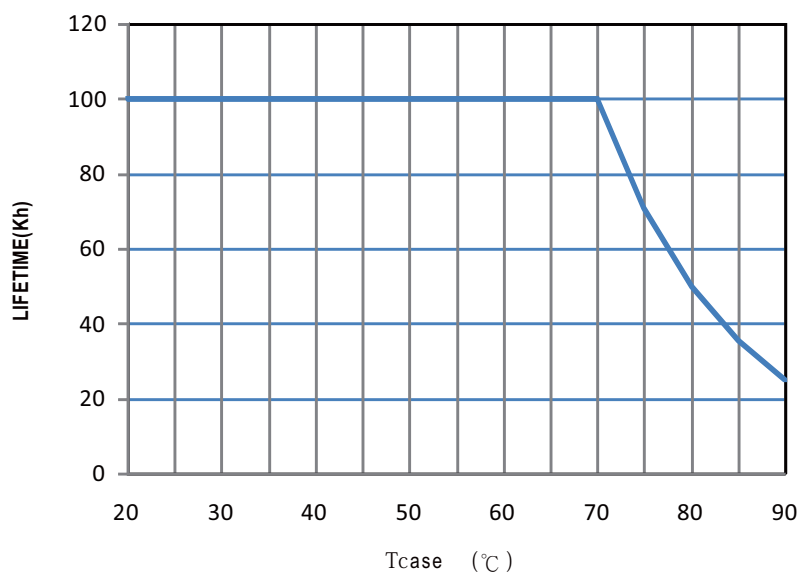
## ■ EFFICIENCY vs LOAD

HLG-185H series possess superior working efficiency that up to 94% can be reached in field applications.

※ 48V Model,  $T_{case}$  at 80°C

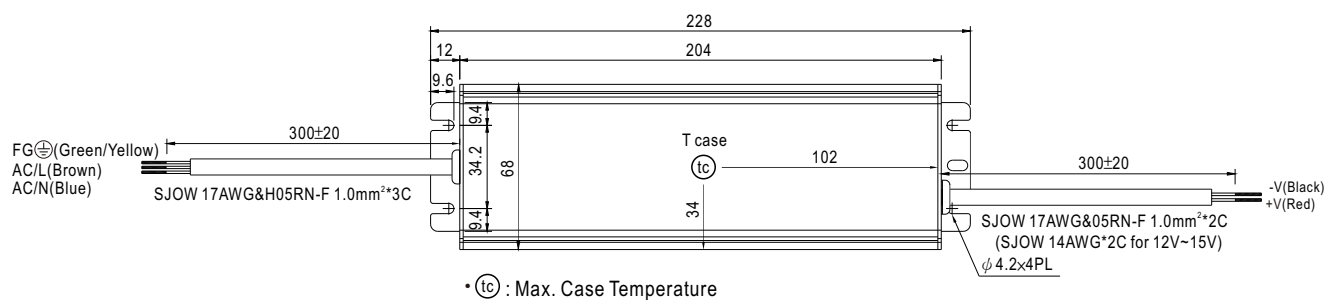
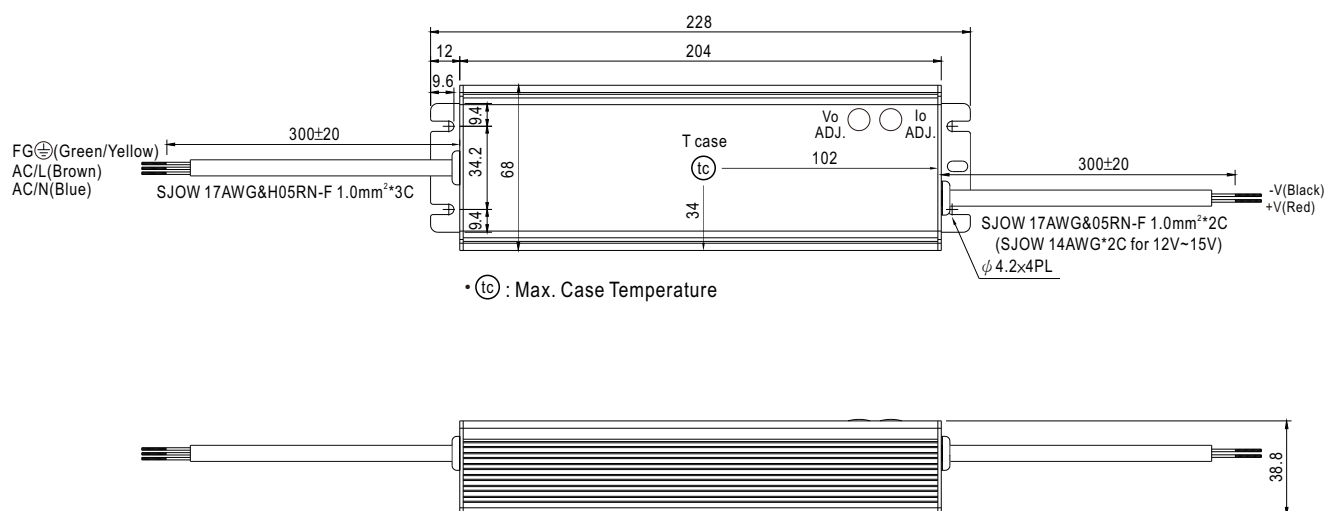


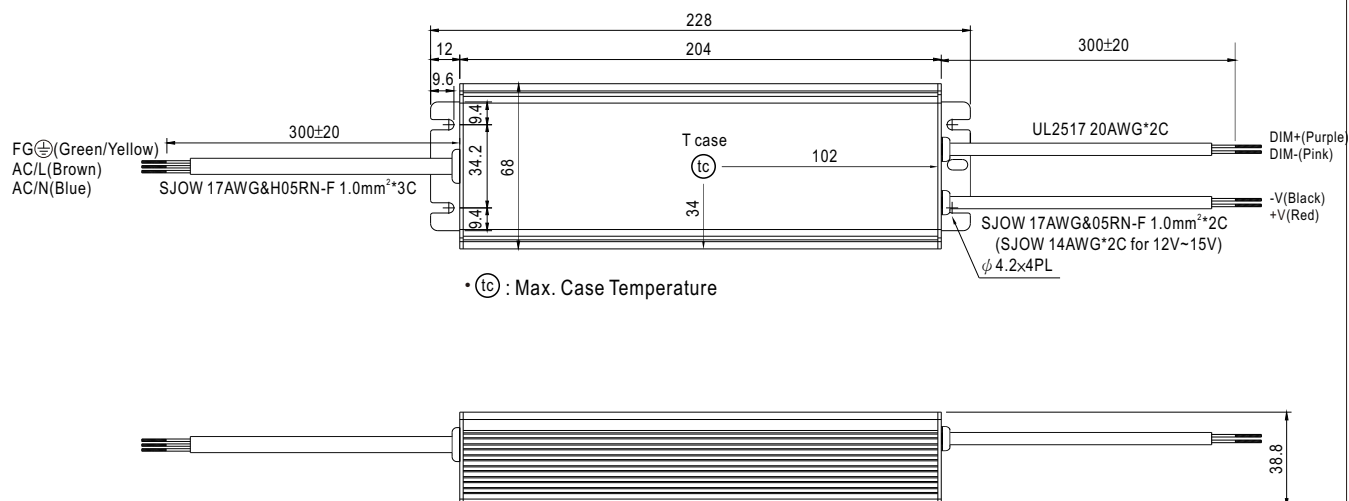
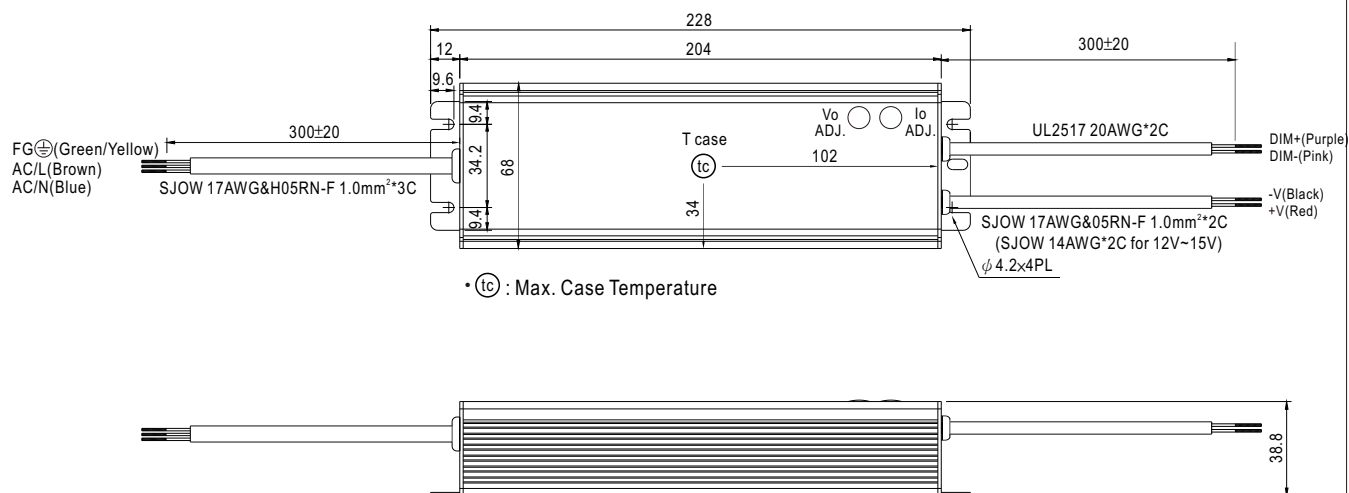
■ LIFE TIME



**MECHANICAL SPECIFICATION**

Case No.954D Unit:mm

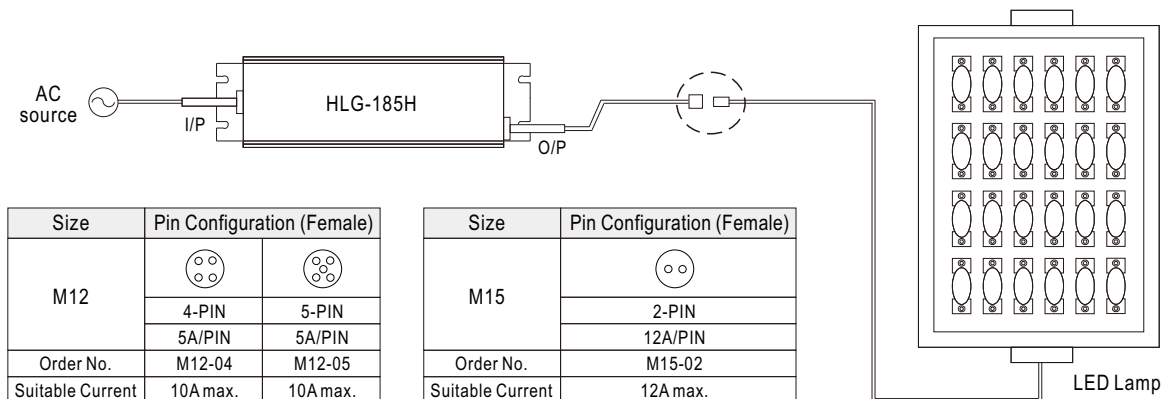
**※Blank/D-Type**

**※A-Type**


**※B-Type**

**※AB-Type**


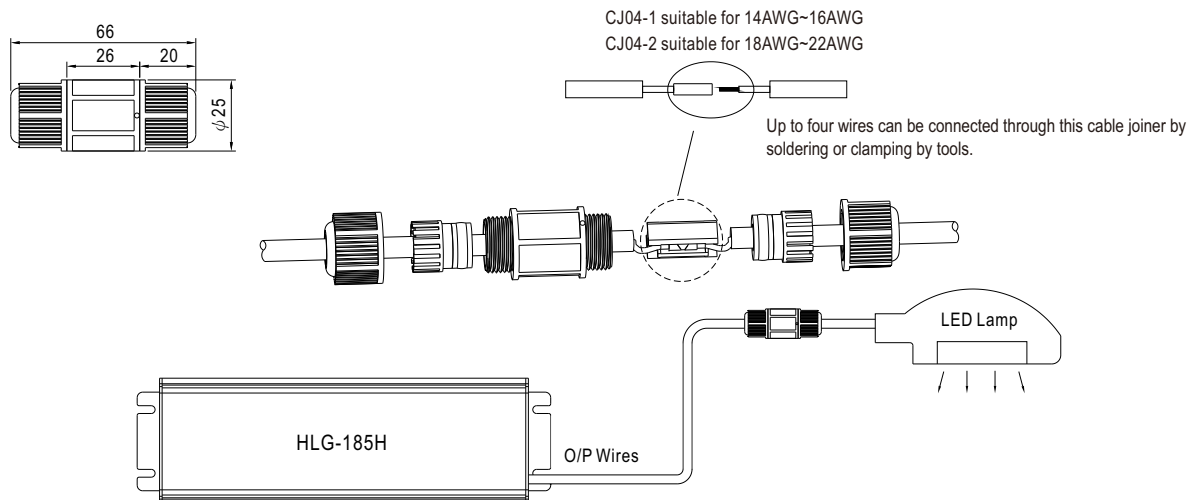
## WATERPROOF CONNECTION

### Waterproof connector

Waterproof connector can be assembled on the output cable of HLG-185H to operate in dry/wet/damp or outdoor environment.



### Cable Joiner



◎ 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>