



## Features

- Constant Current mode output
- Metal housing design with functional Ground
- Built-in active PFC function
- No load / Standby power consumption <0.5W
- IP67 / IP65 rating for indoor or outdoor installations
- Function options: output adjustable via potentiometer; 3 in 1 dimming (dim-to-off); Smart timer dimming; DALI; Auxiliary DC output
- Typical lifetime>50000 hours
- 5 years warranty

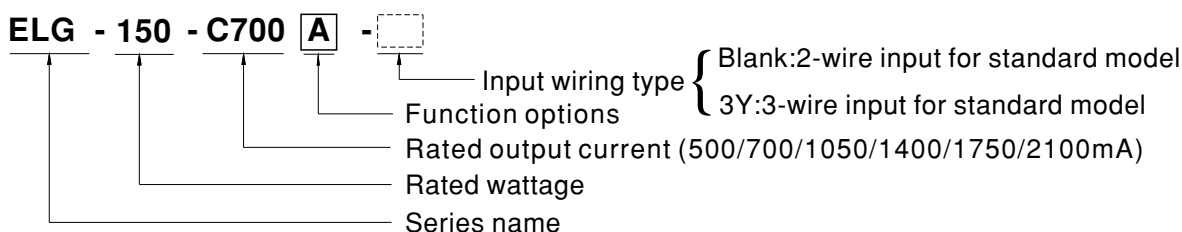
## Applications

- LED street lighting
- LED harbor lighting
- LED bay lighting
- LED greenhouse lighting
- LED flood lighting
- Type "HL" for use in Class I, Division 2 hazardous (Classified) location.

## Description

ELG-150-C series is a 150W LED AC/DC driver featuring the constant current mode and high voltage output. ELG-150-C operates from 100~360VAC and offers models with different rated current ranging between 500mA and 2100mA. Thanks to the high efficiency up to 92%, with the fanless design, the entire series is able to operate for -40°C~+85°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. ELG-150-C is equipped with various function options, such as dimming methodologies, so as to provide the optimal design flexibility for LED lighting system.

## Model Encoding

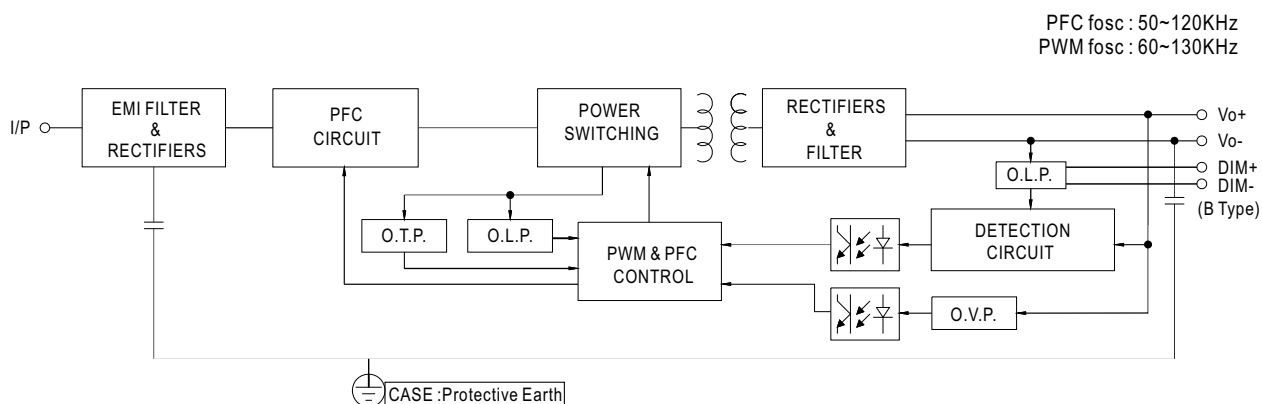


| Type  | IP Level | Function                                                                                                        | Note       |
|-------|----------|-----------------------------------------------------------------------------------------------------------------|------------|
| Blank | IP67     | Io fixed.                                                                                                       | In Stock   |
| A     | IP65     | Io adjustable through built-in potentiometer.                                                                   | In Stock   |
| B     | IP67     | 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)                                                | In Stock   |
| AB    | IP65     | Io adjustable through built-in potentiometer & 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance) | In Stock   |
| DA    | IP67     | DALI control technology.                                                                                        | In Stock   |
| Dx    | IP67     | Built-in Smart timer dimming function by user request.                                                          | By request |
| D2    | IP67     | Built-in Smart timer dimming and programmable function.                                                         | In Stock   |
| BE    | IP67     | 3 in 1 dimming function and Auxiliary DC output                                                                 | In Stock   |

## SPECIFICATION

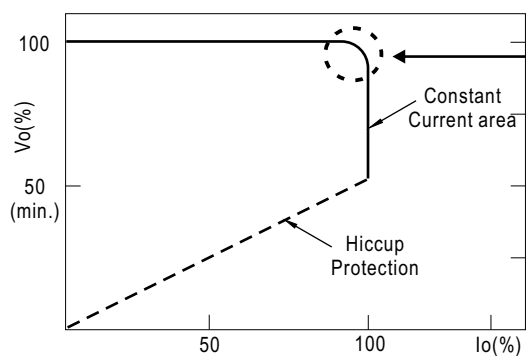
| MODEL                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ELG-150-C500 <input type="checkbox"/>                                                                                                                 | ELG-150-C700 <input type="checkbox"/>                                                                                                                                                                                                              | ELG-150-C1050 <input type="checkbox"/> | ELG-150-C1400 <input type="checkbox"/> | ELG-150-C1750 <input type="checkbox"/> | ELG-150-C2100 <input type="checkbox"/> |        |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|--------|
| OUTPUT                            | RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                       | 500mA                                                                                                                                                                                                                                              | 700mA                                  | 1050mA                                 | 1400mA                                 | 1750mA                                 | 2100mA |
|                                   | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                       | 100VAC ~ 180VAC                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | (For All the Types)                                                                                                                                   | 105W                                                                                                                                                                                                                                               | 105W                                   | 105W                                   | 105W                                   | 105W                                   | 105W   |
|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                       | 200VAC ~ 305VAC                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | (Except for BE Type)                                                                                                                                  | 150W                                                                                                                                                                                                                                               | 149.8W                                 | 150.15W                                | 149.8W                                 | 150.5W                                 | 151.2W |
|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | (For BE Type only)                                                                                                                                    | 135W                                                                                                                                                                                                                                               | 134.4W                                 | 134.4W                                 | 133W                                   | 133W                                   | 134.4W |
|                                   | CONSTANT CURRENT REGION <small>Note.2</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 150 ~ 300V                                                                                                                                            | 107 ~ 214V                                                                                                                                                                                                                                         | 72 ~ 143V                              | 54 ~ 107V                              | 43 ~ 86V                               | 36 ~ 72V                               |        |
|                                   | CONSTANT CURRENT REGION <small>Note.2</small><br>(For BE Type only)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 150 ~ 270V                                                                                                                                            | 107 ~ 192V                                                                                                                                                                                                                                         | 72 ~ 128V                              | 54 ~ 95V                               | 43 ~ 76V                               | 36 ~ 64V                               |        |
|                                   | OPEN CIRCUIT VOLTAGE <sub>(max.)</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 315V                                                                                                                                                  | 225V                                                                                                                                                                                                                                               | 151V                                   | 115V                                   | 94V                                    | 80V                                    |        |
|                                   | CURRENT ADJ. RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Adjustable for A/AB-Type only (via built-in potentiometer)                                                                                            |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 250 ~ 500mA                                                                                                                                           | 350 ~ 700mA                                                                                                                                                                                                                                        | 525 ~ 1050mA                           | 700 ~ 1400mA                           | 875 ~ 1750mA                           | 1050 ~ 2100mA                          |        |
|                                   | CURRENT RIPPLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 5.0% max. @rated current                                                                                                                              |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
|                                   | CURRENT TOLERANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ±5.0%                                                                                                                                                 |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
| AUXILIARY DC OUTPUT               | Nominal 15V(deviation 11.5~15.5V)@0.3A for BE-Type only                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                       |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
| SET UP TIME <small>Note.4</small> | 1600ms/115VAC      500ms/230VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                       |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
| INPUT                             | VOLTAGE RANGE <small>Note.3</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 100 ~ 305VAC      142 ~ 431VDC continue,320VAC for 24Hrs; 360VAC for 1Hr<br>(Please refer to "STATIC CHARACTERISTIC" section)                         |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
|                                   | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 47 ~ 63Hz                                                                                                                                             |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
|                                   | POWER FACTOR (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | PF ≥ 0.97/115VAC, 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; @load≥60%/230VAC; @load≥75%/277VAC)<br>(Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)                         |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
|                                   | EFFICIENCY (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 92%                                                                                                                                                   | 92%                                                                                                                                                                                                                                                | 92%                                    | 91%                                    | 91%                                    | 91%                                    |        |
|                                   | EFFICIENCY (Typ.)(for BE Type only)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 90%                                                                                                                                                   | 90%                                                                                                                                                                                                                                                | 90%                                    | 89%                                    | 89%                                    | 89%                                    |        |
|                                   | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1.7A / 115VAC                                                                                                                                         | 0.9A / 230VAC                                                                                                                                                                                                                                      | 0.7A/277VAC                            |                                        |                                        |                                        |        |
|                                   | INRUSH CURRENT(Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | COLD START 65A(twidth=485μs measured at 50% Ipeak)/230VAC; Per NEMA 410                                                                               |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
|                                   | MAX. No. of PSUs on 16A CIRCUIT BREAKER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3 units (circuit breaker of type B) / 6 units (circuit breaker of type C) at 230VAC                                                                   |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
|                                   | LEAKAGE CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <0.75mA / 277VAC                                                                                                                                      |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
|                                   | NO LOAD / STANDBY POWER CONSUMPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No load power consumption <0.5W for Blank / A / Dx / D2-Type<br>Standby power consumption <0.5W for B / AB / DA-Type                                  |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
| PROTECTION                        | SHORT CIRCUIT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Hiccup mode, recovers automatically after fault condition is removed                                                                                  |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
|                                   | OVER VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 320 ~ 360V                                                                                                                                            | 230 ~ 265V                                                                                                                                                                                                                                         | 155 ~ 180V                             | 128 ~ 150V                             | 96 ~ 106V                              | 82 ~ 92V                               |        |
|                                   | OVER TEMPERATURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Shut down o/p voltage, re-power on to recover                                                                                                         |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
| 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")(except for BE-type), CSA C22.2 No. 250.13-12;EN/AS/NZS 61347-1,EN/AS/NZS 61347-2-13 independent, EN62384; GB19510.1,GB19510.14,EAC TP TC 004,BIS IS15885(for 700A,1050A,700DA only),IP65 or IP67; KC61347-1,KC61347-2-13 approved |                                        |                                        |                                        |                                        |        |
| DALI STANDARDS                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Compliance to IEC62386-101,102,207 for DA-Type only                                                                                                   |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
| WITHSTAND VOLTAGE                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | I/P-O/P:3.75KVAC    I/P-FG:2.0KVAC    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 EN55015,EN61000-3-2 Class C (@load ≥ 60%) ; EN61000-3-3; GB17743 ,GB17625.1; EAC TP TC 020; KC KN15 ,KN61547                            |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
| EMC IMMUNITY                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, light industry level (surge immunity Line-Earth 6KV, Line-Line 4KV), EAC TP TC 020; KC KN15 ,KN61547 |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
| OTHERS                            | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1098.95K hrs min. Telcordia SR-332 (Bellcore)      308.5Khrs min.      MIL-HDBK-217F (25℃)                                                            |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
|                                   | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 219*63*35.5 mm (L*W*H)                                                                                                                                |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
|                                   | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.95Kg; 16pcs / 16.0kg / 0.77CUFT                                                                                                                     |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |
| NOTE                              | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25℃ of ambient temperature.<br>2. Please refer to "DRIVING METHODS OF LED MODULE". For DA-Type, Constant Current region is 60%~100% of maximum voltage under rated power delivery.<br>3. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.<br>4. 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>5. 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>6. This series meets the typical life expectancy of >50,000 hours of operation when Tcase, particularly (Tc) point (or TMP, per DLC), is about 75℃ or less.<br>7. Please refer to the warranty statement on MEAN WELL's website at <a href="http://www.meanwell.com">http://www.meanwell.com</a> .<br>8. 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>9. 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> |                                                                                                                                                       |                                                                                                                                                                                                                                                    |                                        |                                        |                                        |                                        |        |

### ■ BLOCK DIAGRAM



## ■ DRIVING METHODS OF LED MODULE

✕ This series works in constant current mode to directly drive the LEDs.



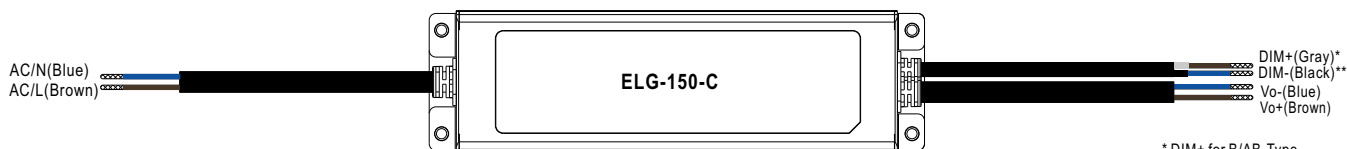
Typical output current normalized by rated current (%)

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.

◎ This characteristic applies to Blank/A/B/AB/DX/D2/BE-Type,  
For DA-Type, the Constant Current area is 60%~100% Vo.

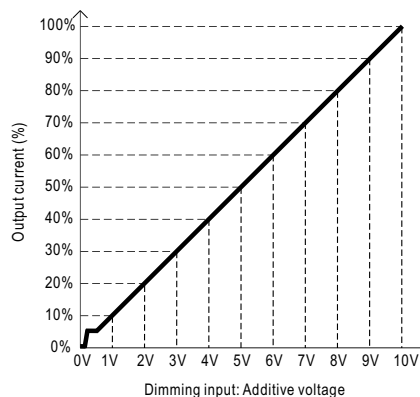
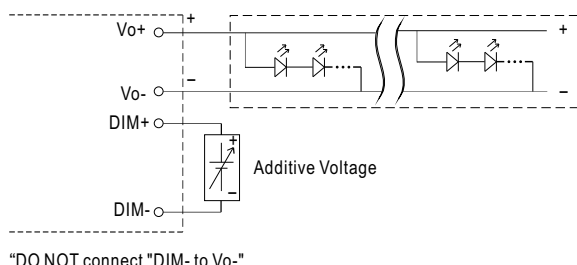
## DIMMING OPERATION



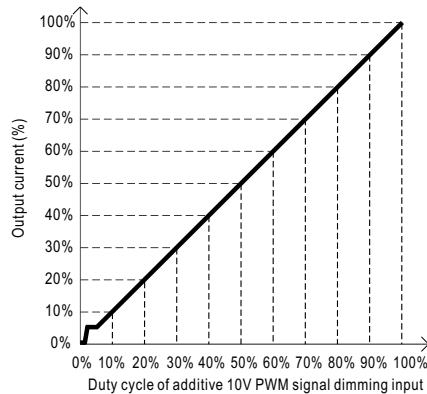
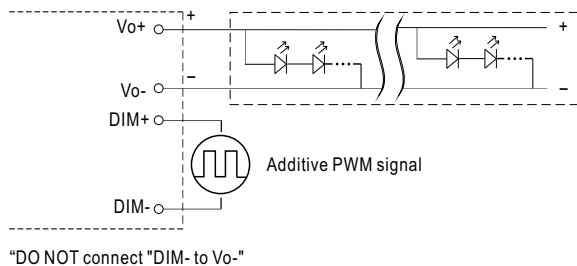
### ※ 3 in 1 dimming function (for B/AB-Type)

- Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-: 0 ~ 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.)

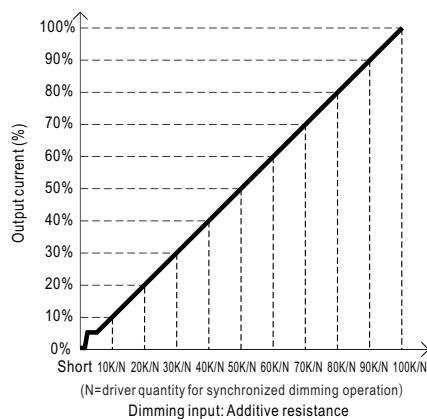
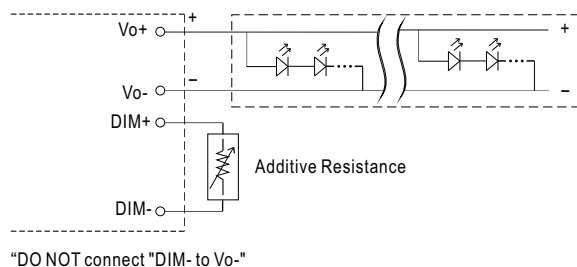
#### ◎ Applying additive 0 ~ 10VDC



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



#### ◎ Applying additive resistance:



Note : 1. Min. dimming level is about 8% and the output current is not defined when 0% < I<sub>out</sub> < 8%.

2. The output current could drop down to 0% when dimming input is about 0k $\Omega$  or 0Vdc, or 10V PWM signal with 0% duty cycle.

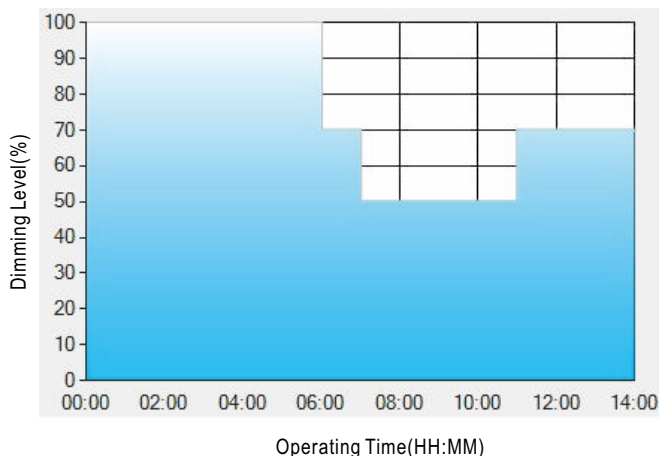
**※ DALI Interface (primary side; for DA-Type)**

- Apply DALI signal between DA+ and DA-.
- DALI protocol comprises 16 groups and 64 addresses.
- First step is fixed at 8% of output.

**※ Smart timer dimming function (for Dxx-Type by User definition)**

MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level to perform up to 14 consecutive hours. 3 dimming profiles hereunder are defined accounting for the most frequently seen applications. If other options may be needed, please contact MEAN WELL for details.

Ex: ☉ D01-Type: the profile recommended for residential lighting



Set up for D01-Type in Smart timer dimming software program:

|         | T1    | T2    | T3    | T4  |
|---------|-------|-------|-------|-----|
| TIME**  | 06:00 | 07:00 | 11:00 | --- |
| LEVEL** | 100%  | 70%   | 50%   | 70% |

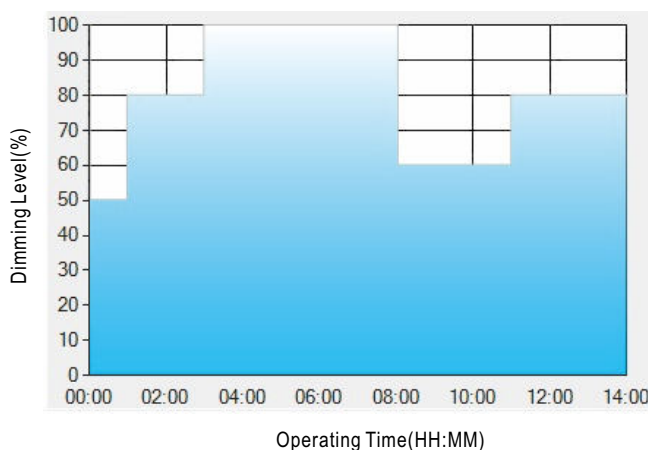
\*\* : TIME matches Operating Time in the diagram whereas LEVEL matches Dimming Level.

Example: If a residential lighting application adopts D01-Type, when turning on the power supply at 6:00pm, for instance:

- [1] The power supply will switch to the constant current level at 100% starting from 6:00pm.
- [2] The power supply will switch to the constant current level at 70% in turn, starting from 0:00am, which is 06:00 after the power supply turns on.
- [3] The power supply will switch to the constant current level at 50% in turn, starting from 1:00am, which is 07:00 after the power supply turns on.
- [4] The power supply will switch to the constant current level at 70% in turn, starting from 5:00am, which is 11:00 after the power supply turns on.

The constant current level remains till 8:00am, which is 14:00 after the power supply turns on.

Ex: ☉ D02-Type: the profile recommended for street lighting



Set up for D02-Type in Smart timer dimming software program:

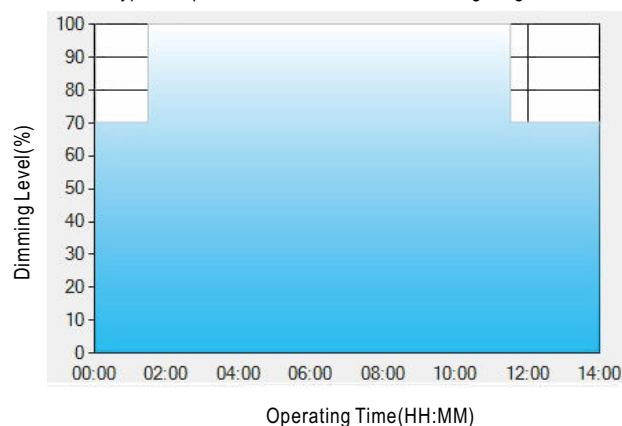
|         | T1    | T2    | T3   | T4    | T5  |
|---------|-------|-------|------|-------|-----|
| TIME**  | 01:00 | 03:00 | 8:00 | 11:00 | --- |
| LEVEL** | 50%   | 80%   | 100% | 60%   | 80% |

\*\* : TIME matches Operating Time in the diagram whereas LEVEL matches Dimming Level.

Example: If a street lighting application adopts D02-Type, when turning on the power supply at 5:00pm, for instance:

- [1] The power supply will switch to the constant current level at 50% starting from 5:00pm.
- [2] The power supply will switch to the constant current level at 80% in turn, starting from 6:00pm, which is 01:00 after the power supply turns on.
- [3] The power supply will switch to the constant current level at 100% in turn, starting from 8:00pm, which is 03:00 after the power supply turns on.
- [4] The power supply will switch to the constant current level at 60% in turn, starting from 1:00am, which is 08:00 after the power supply turns on.
- [5] The power supply will switch to the constant current level at 80% in turn, starting from 4:00am, which is 11:00 after the power supply turns on. The constant current level remains till 6:30am, which is 14:00 after the power supply turns on.

Ex: ☉ D03-Type: the profile recommended for tunnel lighting



Set up for D03-Type in Smart timer dimming software program:

|         | T1    | T2    | T3  |
|---------|-------|-------|-----|
| TIME**  | 01:30 | 11:00 | --- |
| LEVEL** | 70%   | 100%  | 70% |

\*\* : TIME matches Operating Time in the diagram whereas LEVEL matches Dimming Level.

Example: If a tunnel lighting application adopts D03-Type, when turning on the power supply at 4:30pm, for instance:

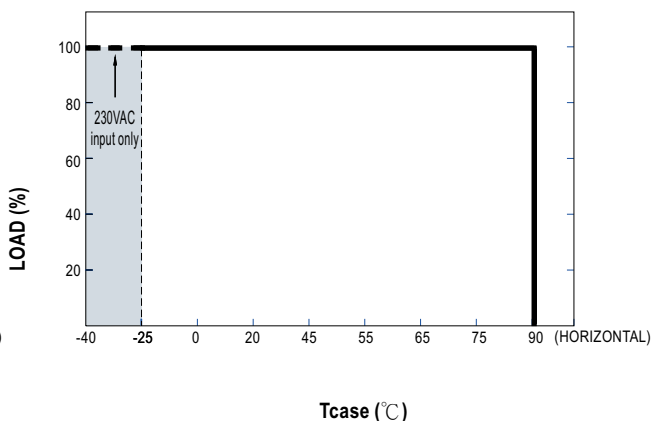
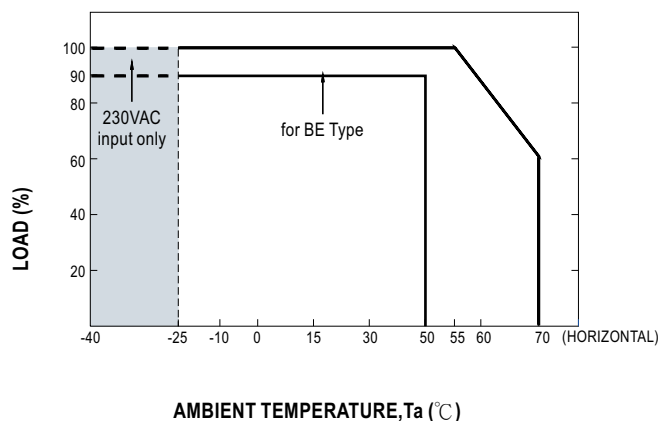
[1] The power supply will switch to the constant current level at 70% starting from 4:30pm.

[2] The power supply will switch to the constant current level at 100% in turn, starting from 6:00pm, which is 01:30 after the power supply turns on.

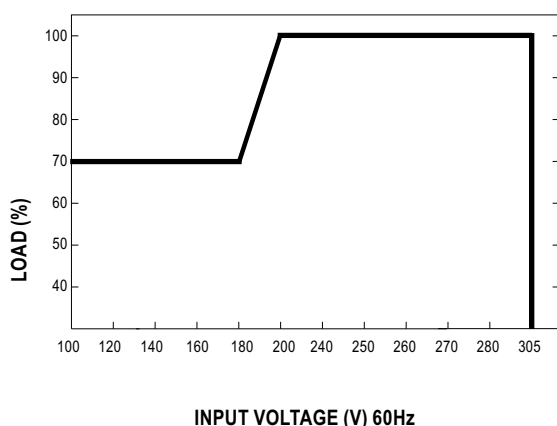
[3] The power supply will switch to the constant current level at 70% in turn, starting from 5:00am, which is 11:00 after the power supply turns on.

The constant current level remains till 6:30am, which is 14:00 after the power supply turns on.

# **OUTPUT LOAD vs TEMPERATURE(Note.7)**



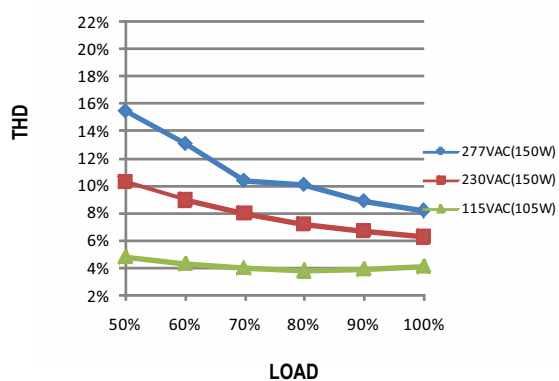
# **STATIC CHARACTERISTIC**



※ De-rating is needed under low input voltage.

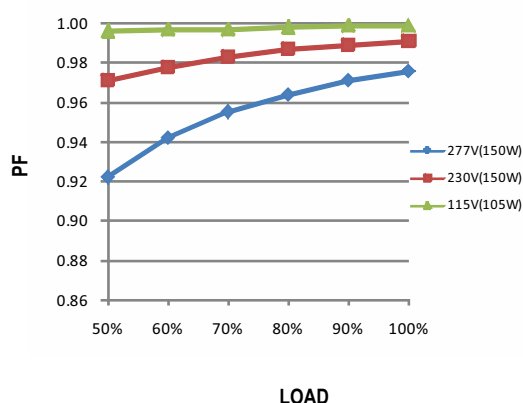
# **TOTAL HARMONIC DISTORTION (THD)**

※ 500mA Model, Tcase at 75°C



# **POWER FACTOR (PF) CHARACTERISTIC**

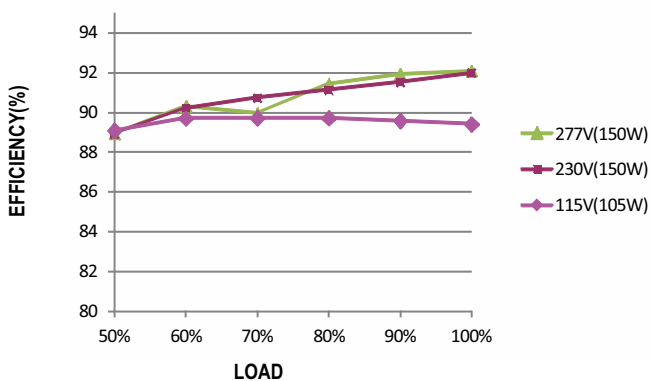
※ Tcase at 75°C



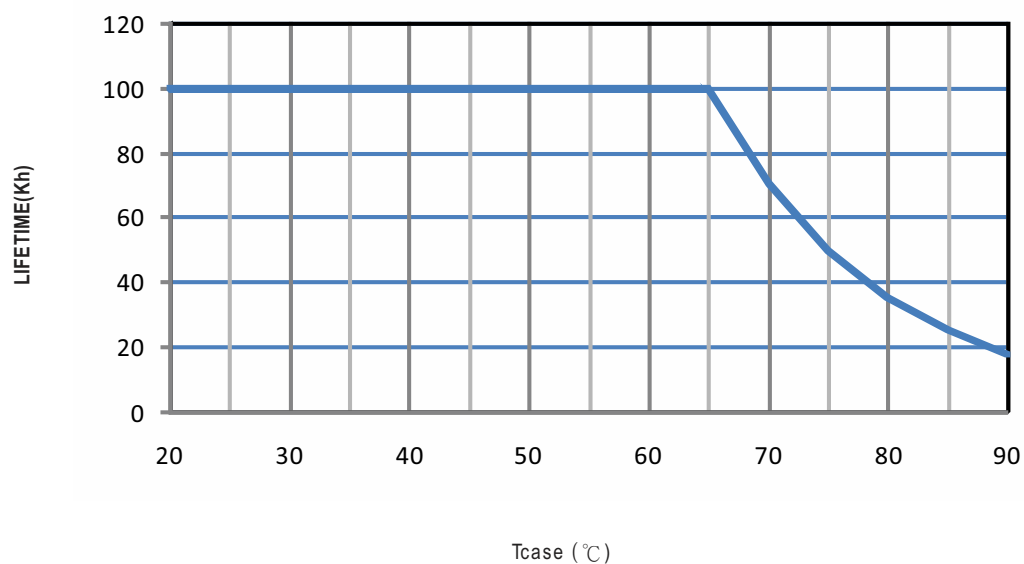
# **EFFICIENCY vs LOAD**

ELG-150-C series possess superior working efficiency that up to 92% can be reached in field applications.

※ 500mA Model, Tcase at 75°C



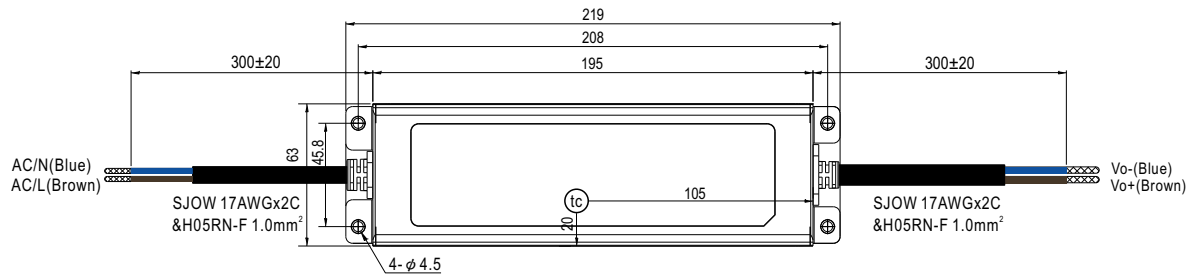
■ LIFE TIME



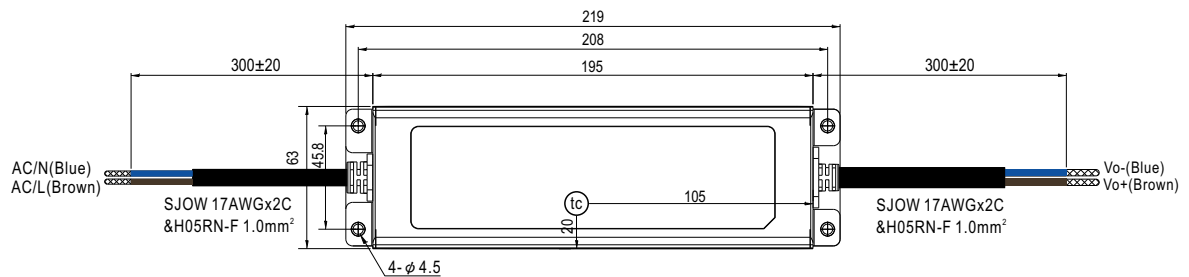
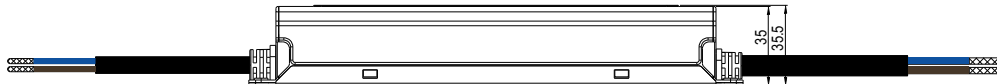
**MECHANICAL SPECIFICATION**

※ Blank-Type

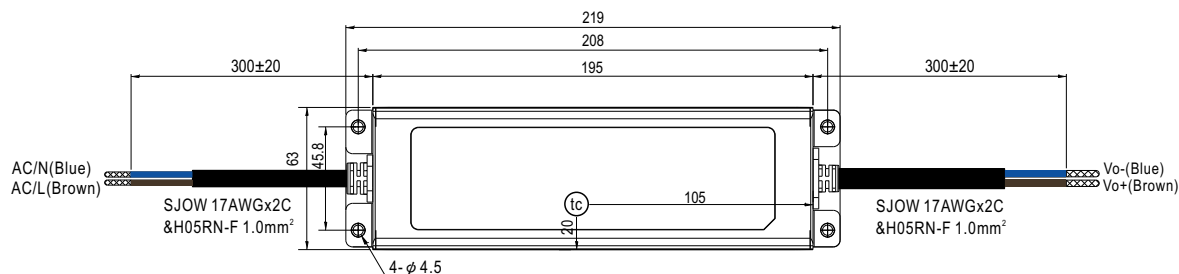
CASE NO.: 237A Unit:mm


•  $t_c$  : Max. Case Temperature

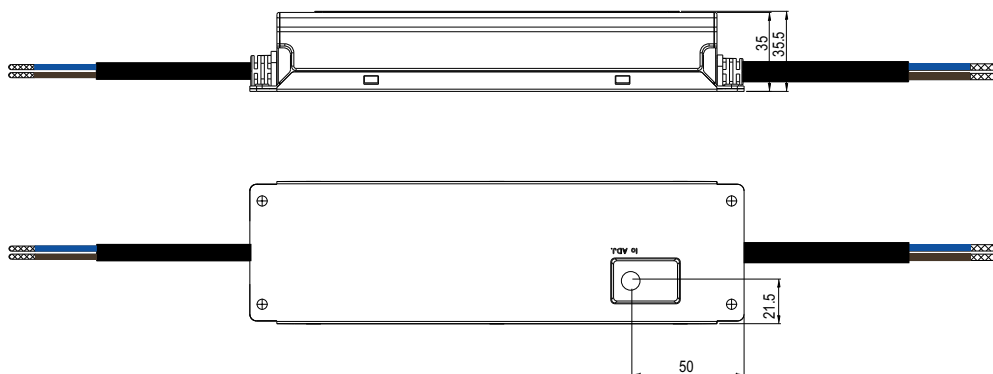

※ A-Type(except for 1750mA, 2100mA models)


•  $t_c$  : Max. Case Temperature


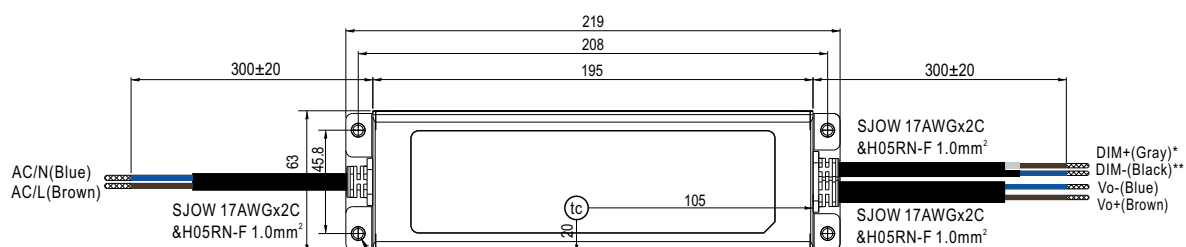
## ※ A-Type(for 1750mA, 2100mA models)



• (tc) : Max. Case Temperature

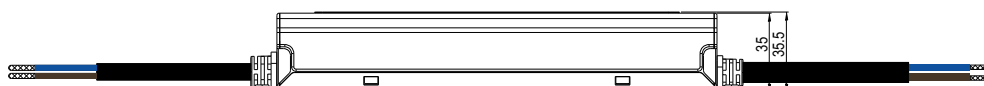


## ※ B/DA/D2-Type

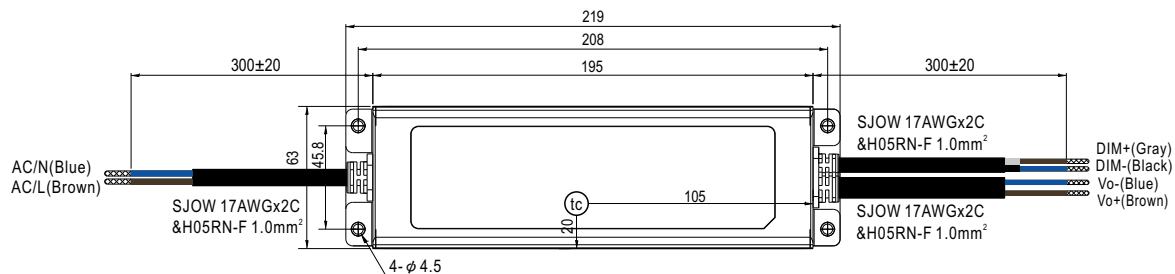


• (tc) : Max. Case Temperature

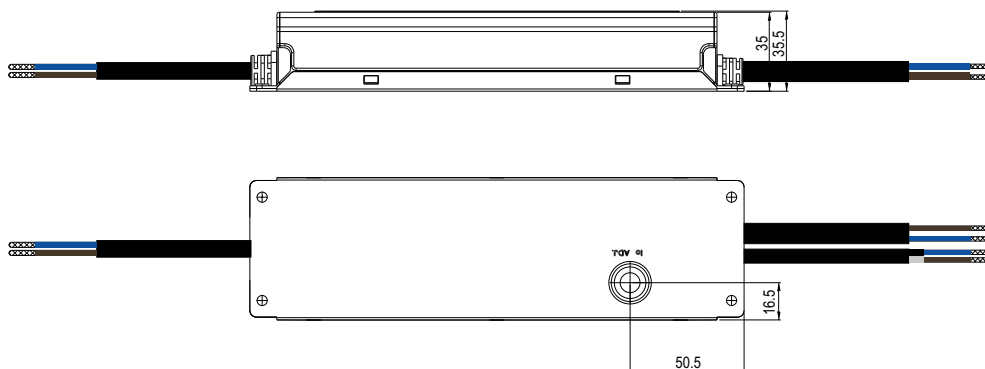
\* DIM+ for B-Type  
DA+ for DA-Type  
PROG+ for D2-Type  
\*\* DIM- for B-Type  
DA- for DA-Type  
PROG- for D2-Type



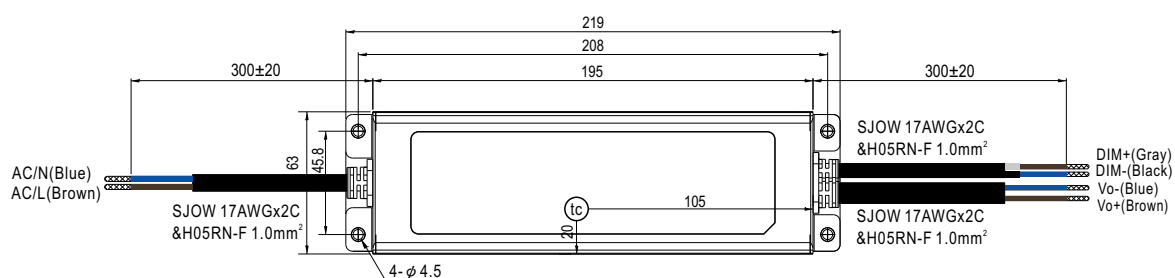
※ AB-Type(except for 1750mA, 2100mA models)



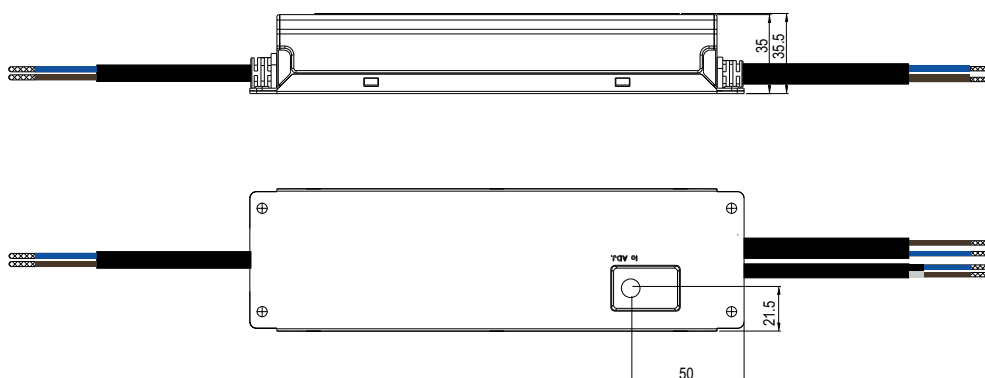
• (tc) : Max. Case Temperature



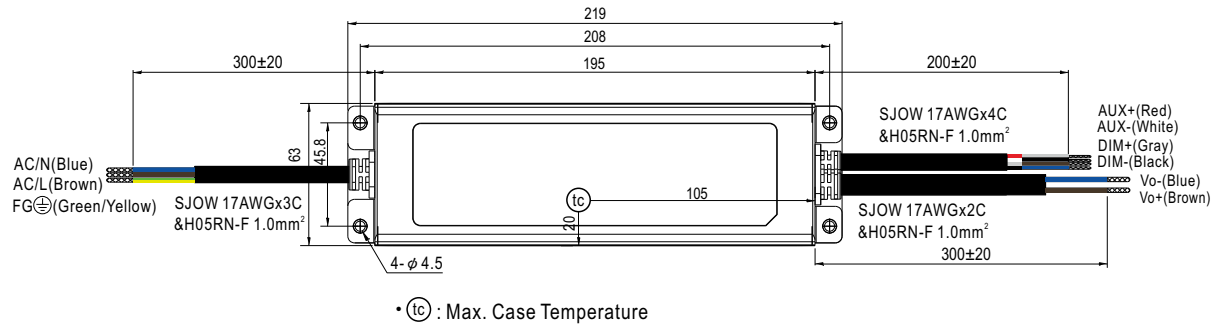
※ AB-Type(for 1750mA, 2100mA models)



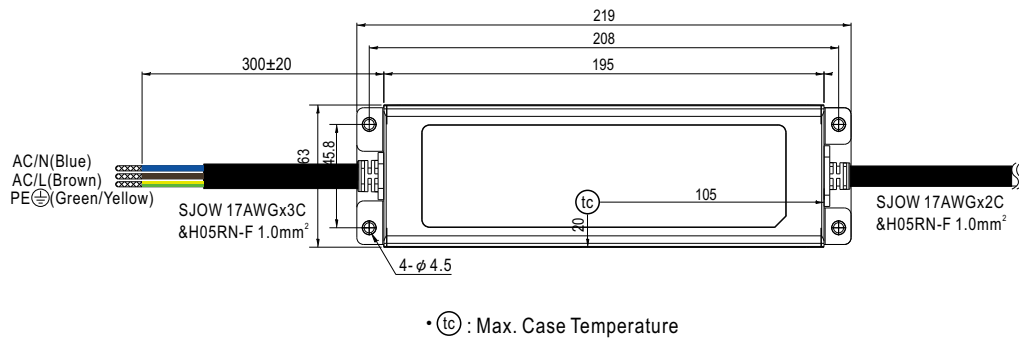
• (tc) : Max. Case Temperature



### ※ BE-Type



### ※ 3Y Model (3-wire input)



◎ Note1: Please connect the case to PE for the complete EMC deliverance and safety use.

◎ Note2: Please contact MEAN WELL for input wiring option with PE.

### ■ INSTALLATION MANUAL

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