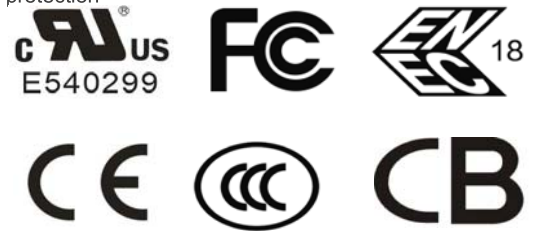


## Features

- Class I Metal housing structure, protection grade: IP67
- Input voltage: 100-277Vac ~ 50/60Hz
- Constant voltage output of 12/24/36/48 Vdc
- PF $\geq$ 0.96
- Lightning protection level: differential mode 4KV, common mode 6KV
- Feature selection:
  - Normal: Conventional constant voltage output
  - S version: 3-in-1 dimming function (Optional S version)
  - D version: DALI-2.0 Communication Protocol (Optional D version)
- All-round protection: output temperature, output over-voltage, output over-current, short circuit protection
- 5 years warranty



## Product introduction

Road lighting, industrial lighting, venue lighting, flood lighting, landscape lighting, building lighting

## Model list

| Model NO.       | Input voltage         | Output power | Output voltage | The default current | Eff. (Typ.) | T.H.D | PF          |
|-----------------|-----------------------|--------------|----------------|---------------------|-------------|-------|-------------|
| DL-150W-V12-RXG | 100-277Vac<br>50/60Hz | 150W         | 12Vdc          | 0-12.5A             | $\geq$ 91%  | < 10% | $\geq$ 0.96 |
| DL-150W-V24-RXG | 100-277Vac<br>50/60Hz | 150W         | 24Vdc          | 0-6.25A             | $\geq$ 92%  | < 10% | $\geq$ 0.96 |
| DL-150W-V36-RXG | 100-277Vac<br>50/60Hz | 150W         | 36Vdc          | 0-4.17A             | $\geq$ 92%  | < 10% | $\geq$ 0.96 |
| DL-150W-V48-RXG | 100-277Vac<br>50/60Hz | 150W         | 48Vdc          | 0-3.13A             | $\geq$ 93%  | < 10% | $\geq$ 0.96 |

Note:

1. Test conditions of the above parameters: Ta=25°C, 230Vac input, full load operation for 30 minutes;
2. Including setting error, linear adjustment rate and load adjustment rate;
3. Power supply is used as a component with terminal equipment. EMC is affected by the whole set of devices. Terminal equipment manufacturers need to re-confirm the EMC for the whole set of devices.

Optional:

- Normal: Conventional constant voltage output
- D version (e.g. DL-150W-V24D-RXG)
- S version (e.g. DL-150W-V24S-RXG)

## Input characteristics

| Parameter  | Min              | Typ.    | Max              | Note   |
|--|------------------|---------|------------------|--|
| Rated input voltage  | 100Vac<br>140Vdc | 230Vac  | 277Vac<br>400Vdc | If the input voltage is lower than 108Vac, the output power should be derated to 80% |
| Input voltage range  | 90Vac            | -       | 305Vac           | NA   |
| Rated frequency  | 47Hz             | 50/60Hz | 63Hz             | NA   |
| Power factor   | -                | 0.96    | -                | 100% load, 230Vac input  |
|  | -                | 0.90    | -                | 75%load, 230Vac input  |
| T.H.D.   | -                | -       | 10%              | 100% load, 230Vac input  |
|  | -                | -       | 20%              | 75%load, 230Vac input  |
| Input current  | -                | -       | 1.75A            | @100Vac full load  |
| Inrush current   | -                | -       | 120A             | 277Vac, cold start (25°C)  |
| 16A Circuit breaker The number of power supplies of the same model can be configured | -                | -       | -                | 14pcs (Type B circuit breaker)24pcs (Type C circuit breaker) for 230Vac input        |

## Output characteristics

| Parameter                  | Min | Typ.  | Max   | Note                   |
|----------------------------|-----|-------|-------|------------------------|
| Accuracy of output voltage | -   | ±2%   | -     | 100% load              |
| Line regulation            | -   | ±2%   | -     | 50-100% load@230Vac    |
| Load regulation            | -   | ±2%   | -     | 50-100% load@230Vac    |
| Starting time              | -   | -     | 500ms | Full load@230V         |
| Hold time                  | -   | -     | -     | Load@230V              |
| Output voltage Ripple      | -   | 240mV | -     | DL-150W-V12-RXG Models |
|                            | -   | 400mV | -     | DL-150W-V24-RXG Models |
|                            | -   | 600mV | -     | DL-150W-V36-RXG Models |
|                            | -   | 800mV | -     | DL-150W-V48-RXG Models |

## Dimming characteristic

| Dimming function                           |                                     | Min   | Typ. | Max    | 说明   |
|--|-------------------------------------|-------|------|--------|--|
| 1-10V dimming<br>(optional) S version      | Safe applied voltage range          | 1V    | -    | 12V    | When the external voltage is greater than or equal to 12V, the dimming will be damaged |
|  | Dimming output range                | 10%   | -    | 100%   | -  |
| PWM dimming<br>(optional) S version        | PWM High level                      | 9.5V  | -    | 10.5V  | -  |
|  | PWM Low level                       | 0     | -    | 0.3V   | -  |
|  | PWM Frequency band                  | 300Hz | -    | 2000Hz | -  |
|  | PWM Duty cycle                      | 10%   | -    | 99%    | Full power output at 99% duty cycle-   |
| Resistance dimming<br>(optional) S version | Resistance of the external resistor | 10KΩ  | -    | 100KΩ  | 90K output full power -  |
|  | Dimming output range                | 10%   | -    | 100%   | -  |
| DALI 2.0 Dimming<br>(D version)            | Dimming range                       | 1‰    | -    | 100%   | Supports a minimum dimming depth of 1‰   |
| PUSH Dimming<br>(D version)                | Dimming range                       | -     | -    | -      | -  |

## Protection

| Function                        | Function instructions   |
|---------------------------------|---|
| Output overload protection      | >1.4-1.8 Protection mode:hiccup mode,recovers automatically after fault condition is removed. |
| Output short circuit protection | Hiccup mode:recovers automatically after fault condition is removed                           |
| Over temperature protection     | Self-recovery mode: when the housing temperature is greater than 90℃, the output power off.   |
| Output over-voltage protection  | Output voltage > working voltage 1.08-1.2 times turn-off                                      |

## Environmental

| Environmental categories            | Environmental categorier   |
|-------------------------------------|--|
| Working temperature                 | -40 ~ +45℃@100-200Vac -40 ~ +55℃@200-277Vac (refer to "Life Curve ")                   |
| Safety regulation shell temperature | -40~90℃  |
| Working humidity                    | 20 ~ 95% RH, non condensing  |
| Storage temperature、humidity        | -40~+80℃, 10 ~ 95% RH  |
| Resistant to vibration              | 10 ~ 500Hz, 5G 12 min/cycle, X, Y, Z axis 72 min each                                  |
| MTBF                                | 230Khrs min. MIL-HDBK-217F (Ta=25℃)  |
| Lifetime                            | 70,000 hours @Tcase≤75℃,230Vac, 100% Load, Please refer to "Tcase VS Lifetime" section |

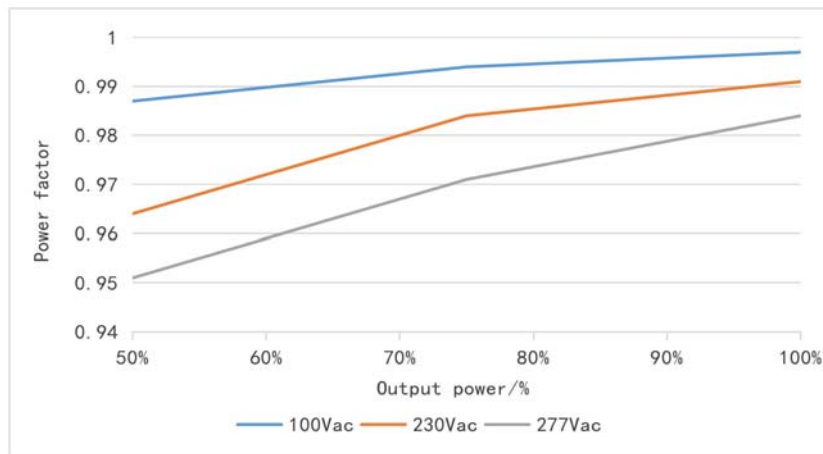
## Safety and EMC

| Safety categories    | Standard  |
|----------------------|---|
| Safety               | EN61347-1、EN61347-2-13、IEC61347-1、IEC61347-2-13、EN 62384、EN62493、GB19510.14   |
| EMC                  | EN 55015、EN 61000-3-2 、EN 61000-3-3、EN 61547、GB/T 17743、GB 17625.1  |
| Surge protection     | Differential mode L-N $\pm 4\text{KV}$ (2 ohm) ,common mode L, N-PE $\pm 6\text{KV}$ ( 12 ohm ); Refer to IEC61000-4-5 2014 |
| High-pot test        | I/P-O/P:3.75KVac I/P-PE :1.5KVac O/P-PE : 0.5KVac I/P-DIM:1.5KVac O/P-DIM:1.5KVac   |
| Insulation impedance | I/P-PE:100M $\Omega$ / 500VDC; I/P-O/P:100M $\Omega$ / 500VDC / 25 $^{\circ}\text{C}$ / 70% RH                              |
| Leakage current      | <0.75mA@277Vac  |

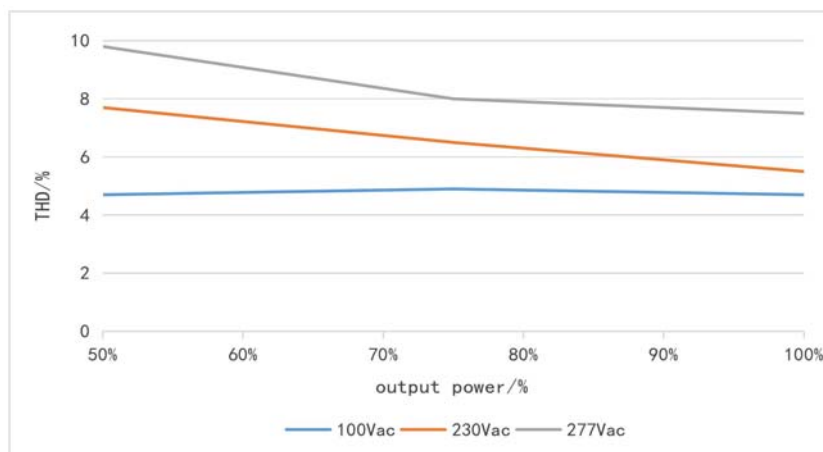
Note: The power supply is used as a component and terminal equipment, and EMC is affected by the whole set of devices, and the end equipment manufacturer needs to re-confirm the EMC of the whole device.

## Parametric curves

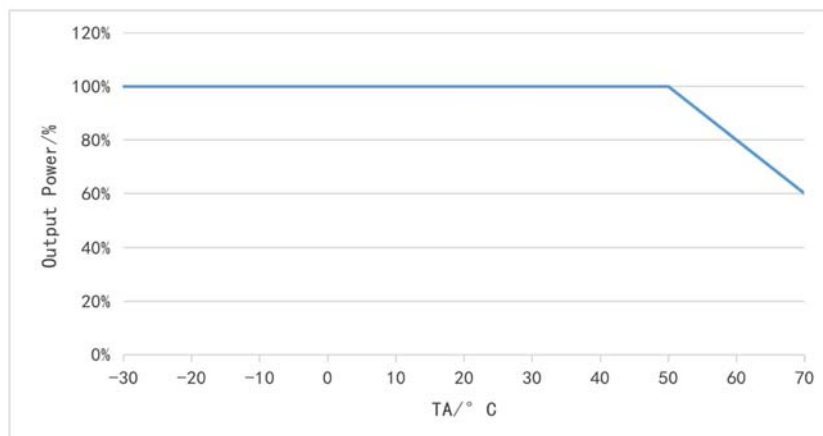
### Power factor/Output power



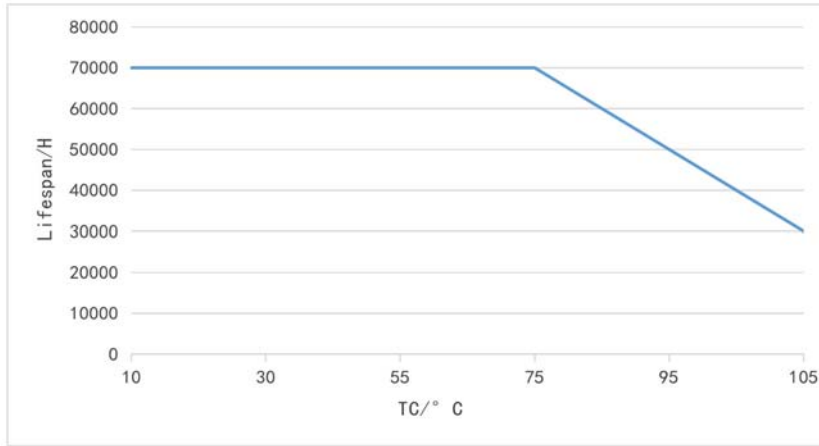
### THD/Output power



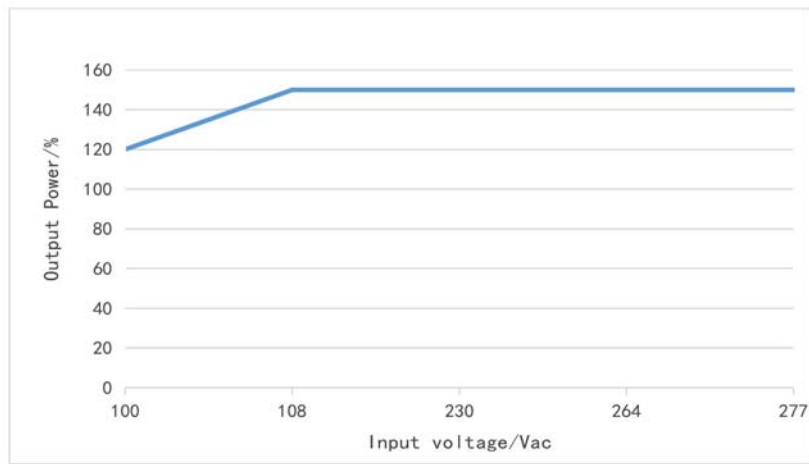
### Power/TA



Lifetime/TC



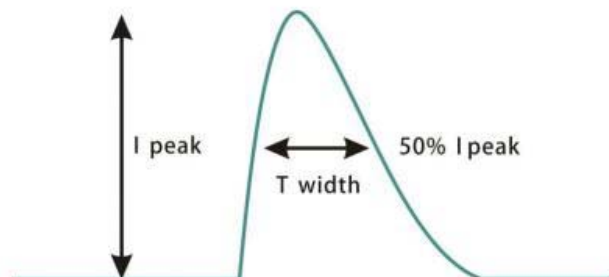
Power/Input Voltage



If the input voltage is lower than 108VAC that the output power should be derated to 80% load

Inrush current

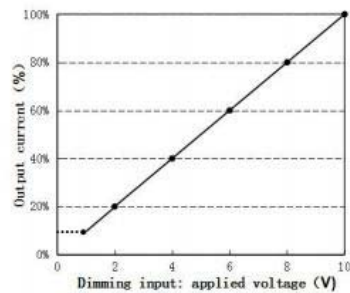
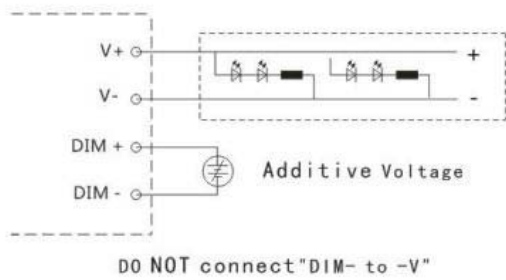
| Input voltage | Peak current | T(@50% Peak current) |
|---------------|--------------|----------------------|
| 100Vac        | 42.36A       | 102.72uS             |
| 230Vac        | 76.93A       | 122.94uS             |
| 277Vac        | 89.33A       | 113.18uS             |



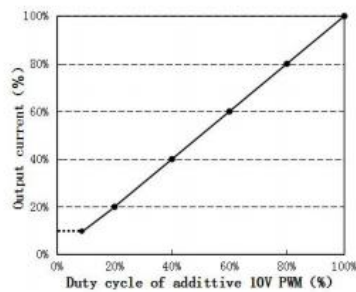
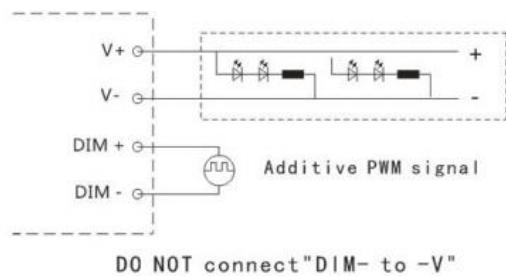
## 1-10V three-in-one dimming function (S Version)

1. The output current can be adjusted by connecting a resistor 10-100K or 1-10V DC voltage or 10V PWM signal between DIM+ and DIM-
2. Dimming port output current: 100uA (typical).

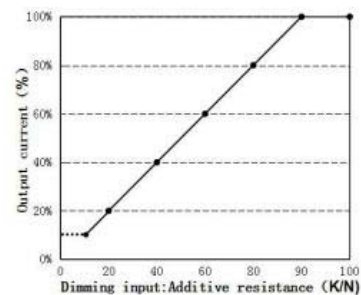
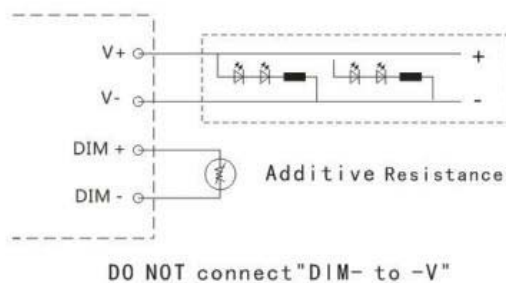
With applied 0-10V voltage:



PWM dimming



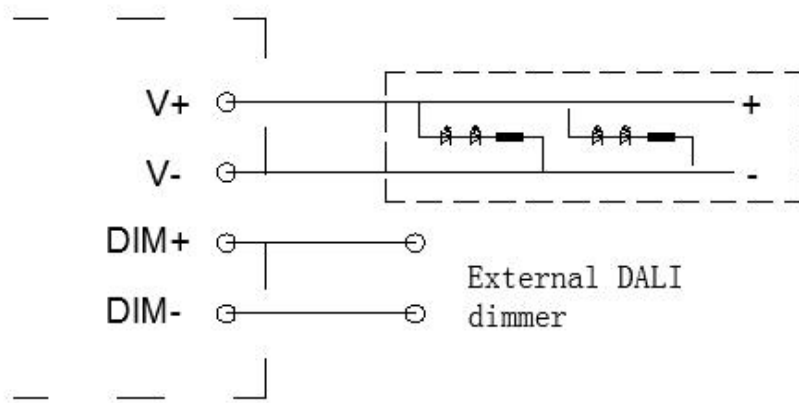
Resistive dimming



Remark:

1. For the 1.1 - 10 series three - in - one dimmable and turn - off lamps, although they support dimming and turn - off functions, they cannot meet the requirement of standby power consumption  $\leq 0.5W$ .
2. PWM dimming mode is to apply PWM frequency of 300-2KHz.

## DALI 2.0 Dimming function (Version D)



- 18 -

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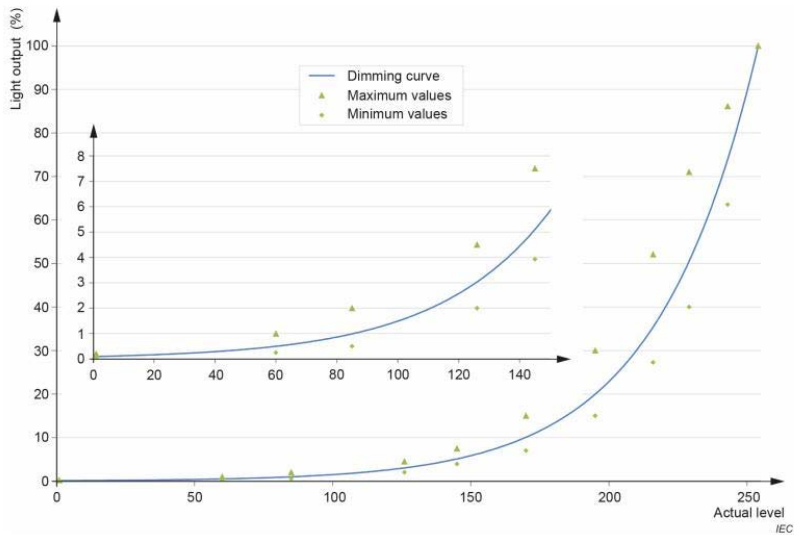


Figure 3 – Dimming curve

Note:

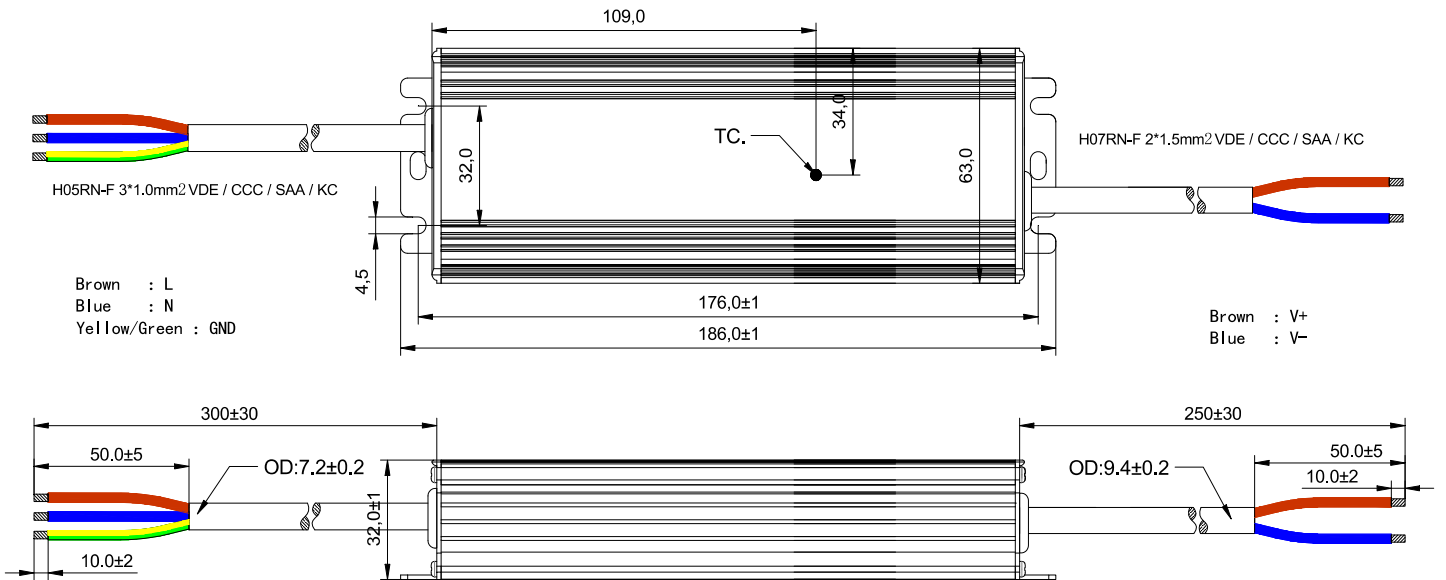
1. The initial brightness of DALI dimming is 100%
2. Supports a maximum dimming depth of 1‰

# Mechanical specification

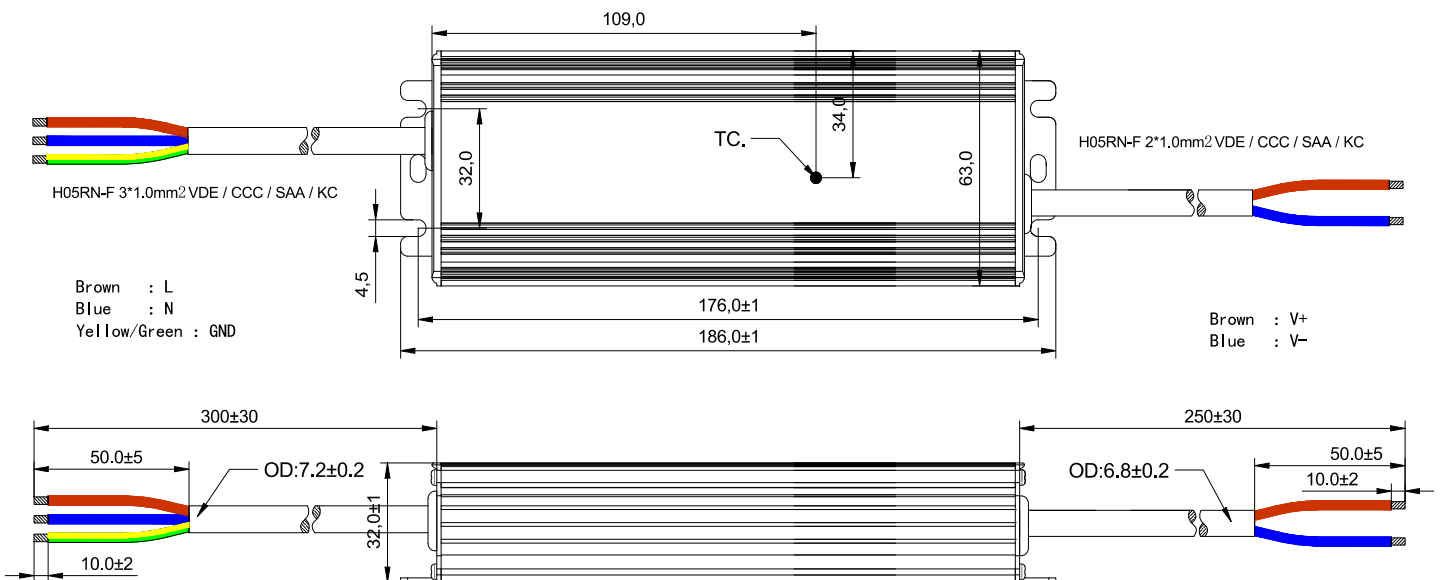
## Weight

|        |         |
|--------|---------|
| Weight | 0.685KG |
|--------|---------|

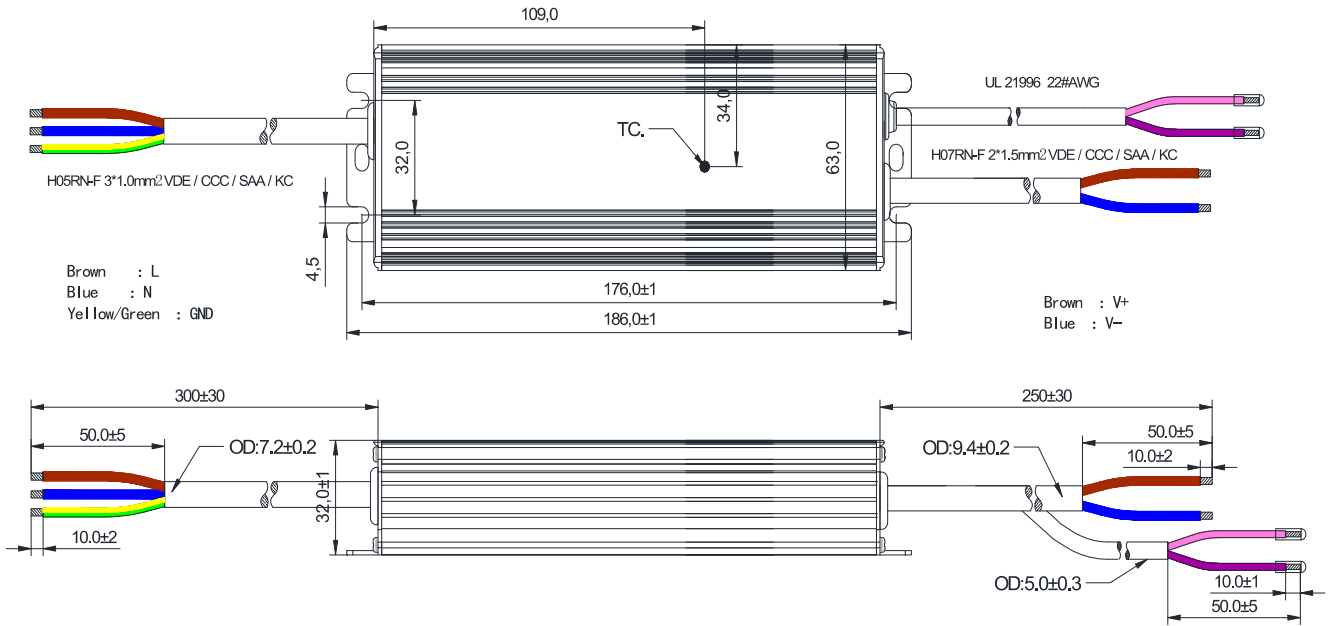
### DL-150W-V12-RXG



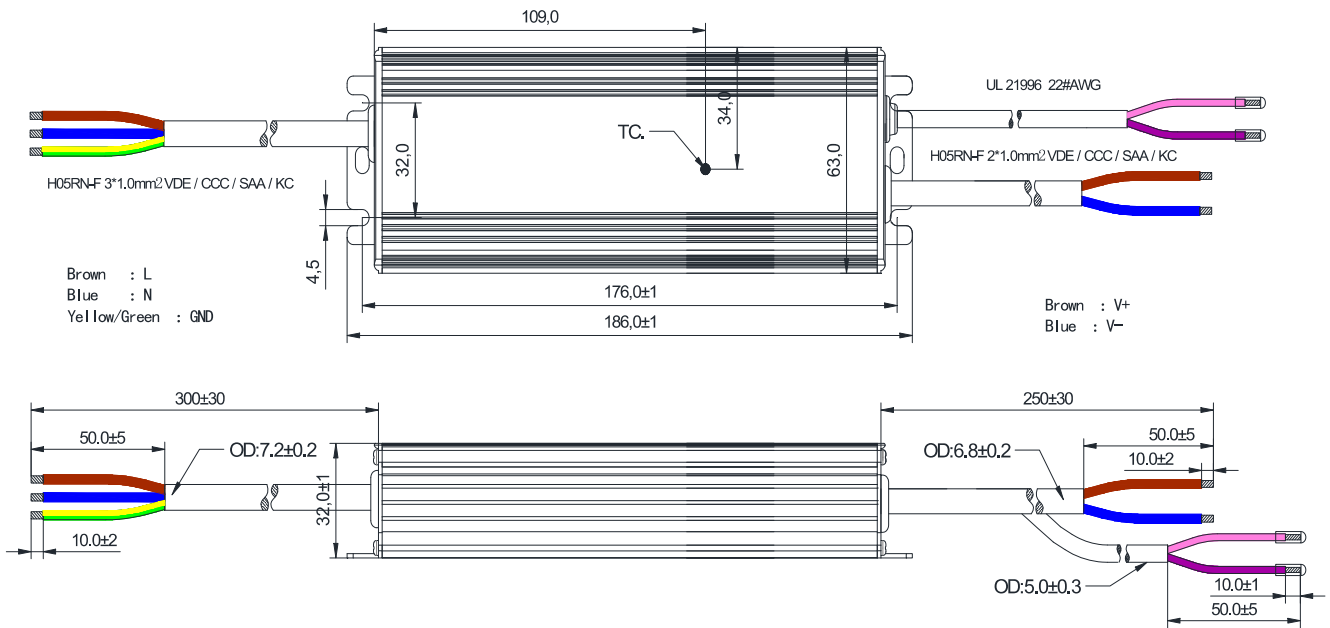
### DL-150W-V24/V36/V48-RXG



DL-150W-V12S/D-RXG



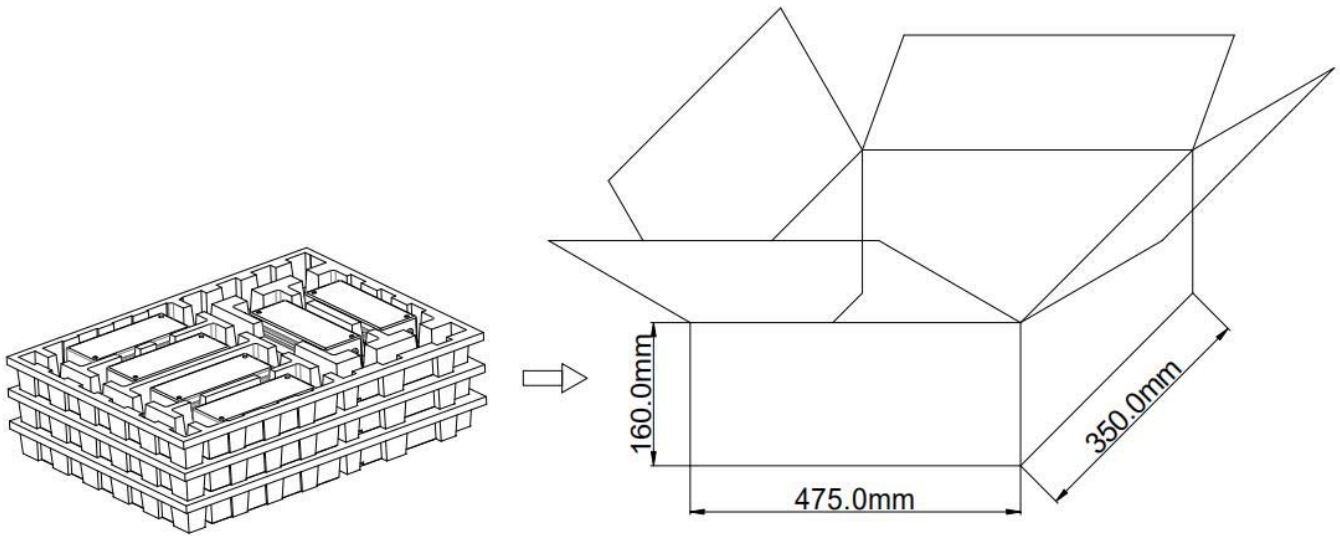
DL-150W-V24/V36/V48S/D-RXG



## Packaging

Packaging (mm)

L475\*W350\*H160mm



Note:

a.Note: One Carton 3 layers and 6pcs each layer, total 18pcs/carton.

b. According to the certificate obtained by the LED DRIVER, the LED DRIVER with the English label is sold in Europe, America and India.

c. The LED DRIVER with Chinese label is only used for China market.