

# RXC SERIES LED DRIVERS

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## DL-150H-RXC V1.0

A decorative graphic at the bottom of the page, consisting of several overlapping, curved teal shapes that resemble a stylized circuit board or a wave. It features white lines and dots, suggesting electronic components or a signal path.

Guangdong DONE Electronic Technology Co., Ltd

## Features

- Class I structure
- Input voltage: 200-240Vac ~ 50/60Hz
- Efficiency :88%(Typ.)
- Constant power drive and constant voltage output control mode
- Metal housing structure, protection grade: IP67
- Lightning protection level: differential mode 4KV, common mode 6KV
- All-round protection: output temperature, output over-voltage, output over-current, short circuit protection
- 5 years warranty



## Product introduction

DONE DL-150H-RXC is a series of constant voltage products with output power of 150W. 150H-RXC operates from 176-264Vac, and offers 12、24、36、48Vdc with different mode .The also provide perfect OTP、OVP、OLP、SCP.and the product is designed with IP67 protection. The aluminum housing greatly improves the heat dissipation efficiency of the product and increases the reliability of outdoor applications. Provide reliable power supply solutions for outdoor landscape lighting, architectural lighting, and advertising signage lighting.

## Model list

Model NO.	Input voltage	Output power	Output voltage	The default current	Eff. ( Typ. )	T.H.D	PF
DL-150H-V12-RXC	200-240Vac 50/60Hz	150W	12Vdc	0-12.5A	≥88%	/	/
DL-150H-V24-RXC	200-240Vac 50/60Hz	150W	24Vdc	0-6.25A	≥89%	/	/
DL-150H-V36-RXC	200-240Vac 50/60Hz	150W	36Vdc	0-4.17A	≥89%	/	/
DL-150H-V48-RXC	200-240Vac 50/60Hz	150W	48Vdc	0-3.13A	≥89%	/	/

### 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.

## Input characteristics

Parameter	Min	Typ	Max	Note
Rated input voltage	200Vac 250Vdc	220Vac	240Vac 360Vdc	
Input voltage range	176Vac	-	264Vac	
Rated frequency	47Hz	50/60Hz	63Hz	N/A
Power factor	-	-	-	-
Power factor	-	-	-	-
T.H.D.	-	-	-	-
T.H.D.	-	-	-	-
Input current	-	-	1.3A	@180Vac full load
Inrush current	-	-	90A	230Vac, cold start (25°C)
16A Circuit breaker The number of power supplies of the same model can be configured	4pcs (Type B circuit breaker) 5pcs (Type C circuit breaker) for 230Vac input			

## Output characteristics

Parameter	Min	Typ.	Max	Note
Rated current				
DL-150H-V12-RXC		12.5A		
DL-150H-V24-RXC	-	6.25A	-	N/A
DL-150H-V36-RXC		4.17A		
DL-150H-V48-RXC		3.13A		
Output current range				
DL-150H-V12-RXC			12.5A	
DL-150H-V24-RXC	0A	-	6.25A	N/A
DL-150H-V36-RXC			4.17A	
DL-150H-V48-RXC			3.13A	
Output voltage range				
DL-150H-V12-RXC		12V		
DL-150H-V24-RXC		24V		
DL-150H-V36-RXC	-	36V	-	N/A
DL-150H-V48-RXC		48V		
Rated power(200-240Vac)	-	150W	-	-
No-load voltage				
DL-150H-V12-RXC			12.5V	
DL-150H-V24-RXC	-	-	24.5V	N/A
DL-150H-V36-RXC			36.7V	
DL-150H-V48-RXC			48.9V	
Efficiency@230Vac				
DL-150H-V12-RXC	88%	89%		
DL-150H-V24-RXC	89%	90%	-	full load @230Vac
DL-150H-V36-RXC	89%	90%		
DL-150H-V48-RXC	90%	90%		

## Output characteristics

Parameter	Min	Typ.	Max	Note
Output voltage Ripple	-	<2%	-	100% load
Accuracy of output voltage	-3%	-	+3%	100% load
Line regulation	-3%	-	+3%	50-100% load@230Vac
Load regulation	-3%	-	+3%	50-100% load@230Vac
Starting time	-	-	500ms	Full load@230Vac

## Protection

Function	Function instructions
Output overload protection	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-current protection	Output current >1.1-1.5 times turn-off

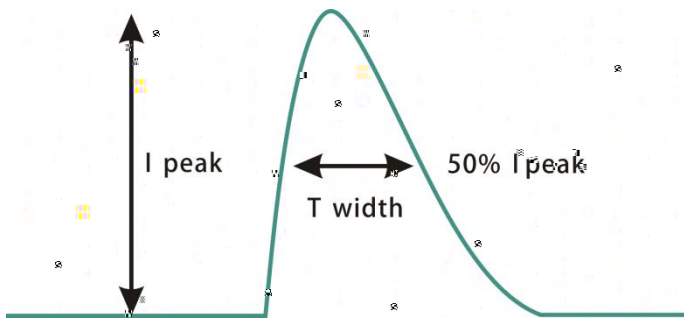
## Safety and EMC

Safety categories	Standard
Safety	GB4943.1 , IEC62368-1 , EN62368-1
EMC	CQC12-045670 , GB/T 9254.1 , EN55032/55035
Surge protection	Differential mode L-N ±4KV ( 2 ohm ) ,common mode L, N-PE± 6 KV ( 12 ohm ); Refer to IEC61000-4-5 2014
High-pot test	I/P-O/P:3.75KVac I/P-PE :2KVac O/P-PE : 0.5KVac
Insulation impedance	I/P-PE:100MΩ / 500VDC; I/P-O/P:100MΩ / 500VDC / 25℃ / 70% RH
Leakage current	<5mA@240Vac

## Environmental

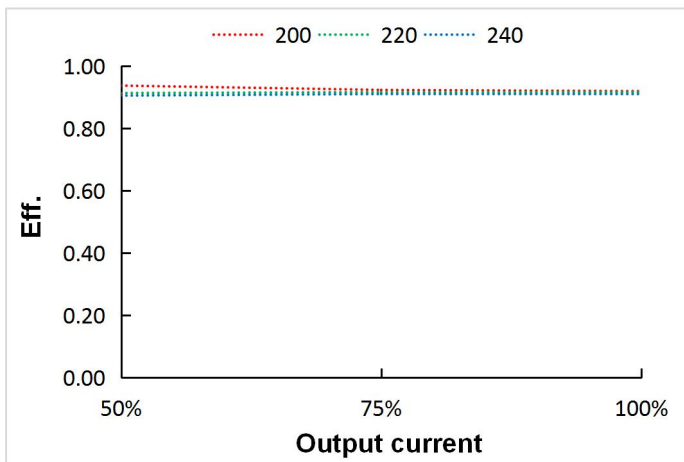
Environmental categories	Parameter
Working temperature	-40 ~ +55℃@200-240Vac, (refer to "Life Curve ")
Working humidity	20 ~ 95% RH, non condensing
Storage temperature、 humidity	-30 ~ +80℃, 10 ~ 95% RH
Resistant to vibration	10 ~ 500Hz, 5G 12 min/cycle, X, Y, Z axis 72 min each
MTBF	230Khrs min. MIL-HDBK-217F (Ta=25℃)
Lifetime	50,000 hours @Tcase≤75℃,230Vac, 100% Load, Please refer to "Tcase VS Lifetime" section

### Inrush current

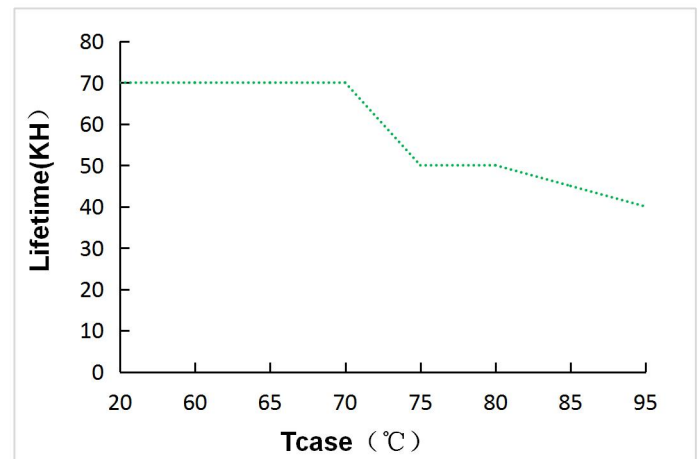


Input voltage	Peak current	T(@50% Peak current)
176Vac	76A	1.68us
230Vac	74A	3.3us
264Vac	110.67A	1.64us

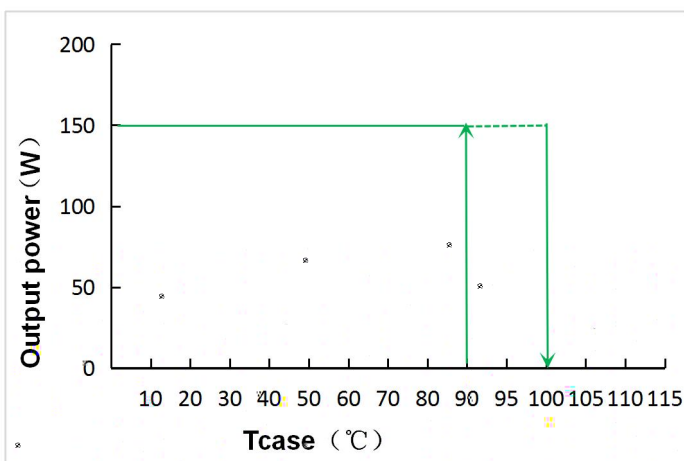
### DL-150H-RXC Parametric curves



Eff. VS Output current

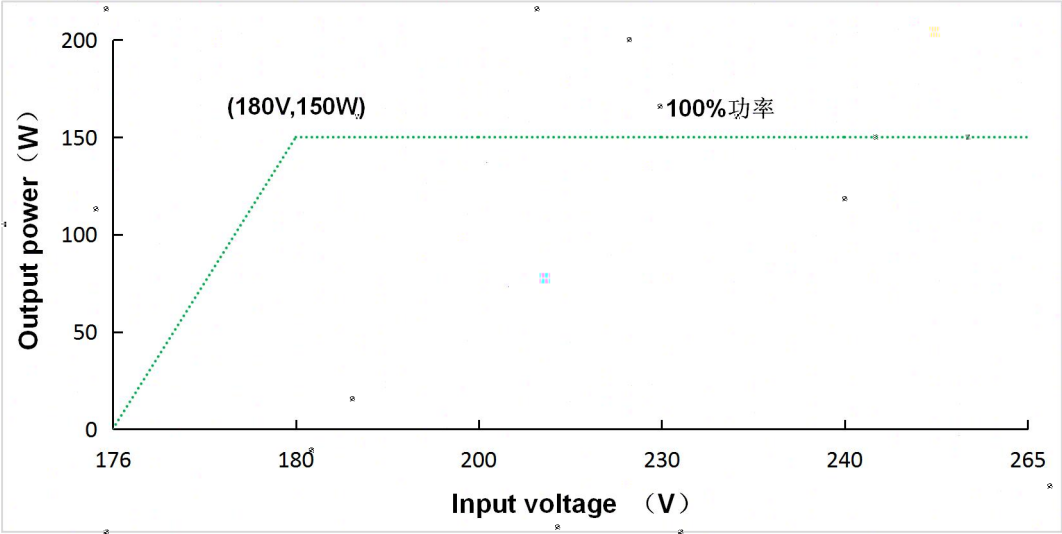


Lifetime VS Tcase



Output power VS Tcase

DL-150H-RXC Parametric curves



Output power VS Input voltage

**Note:** If the input voltage is lower than 176Vac, the output power should be derated to 75% of the load.

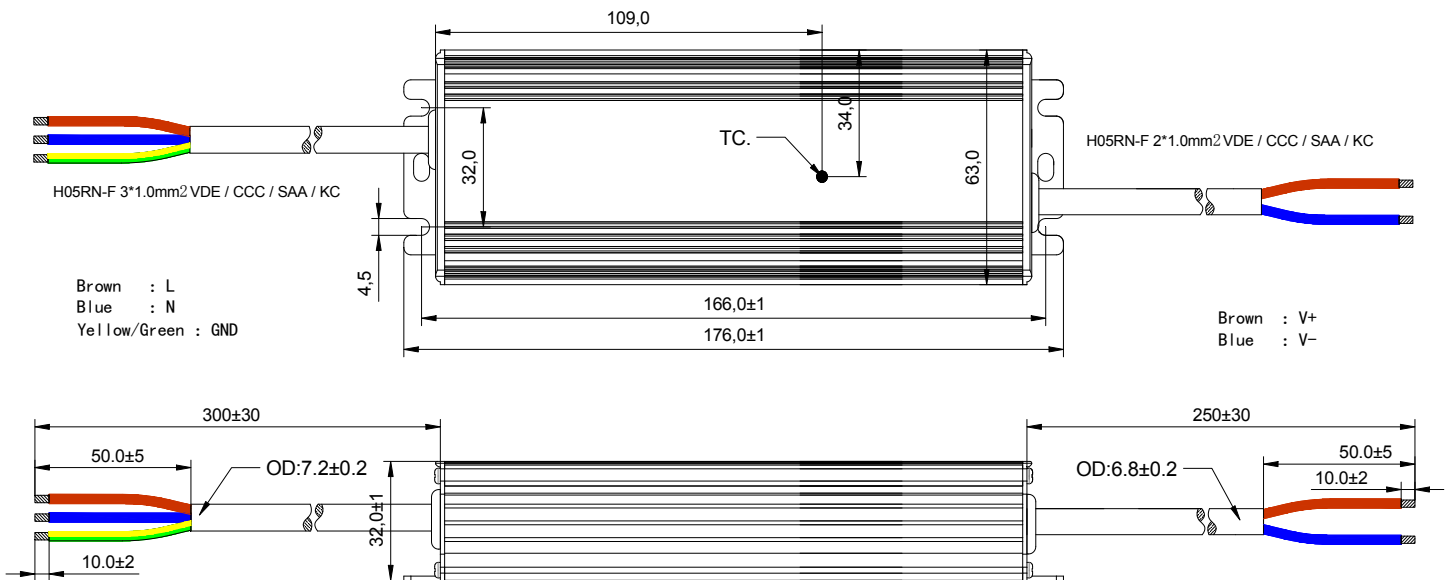
## Mechanical specification

Size (mm)

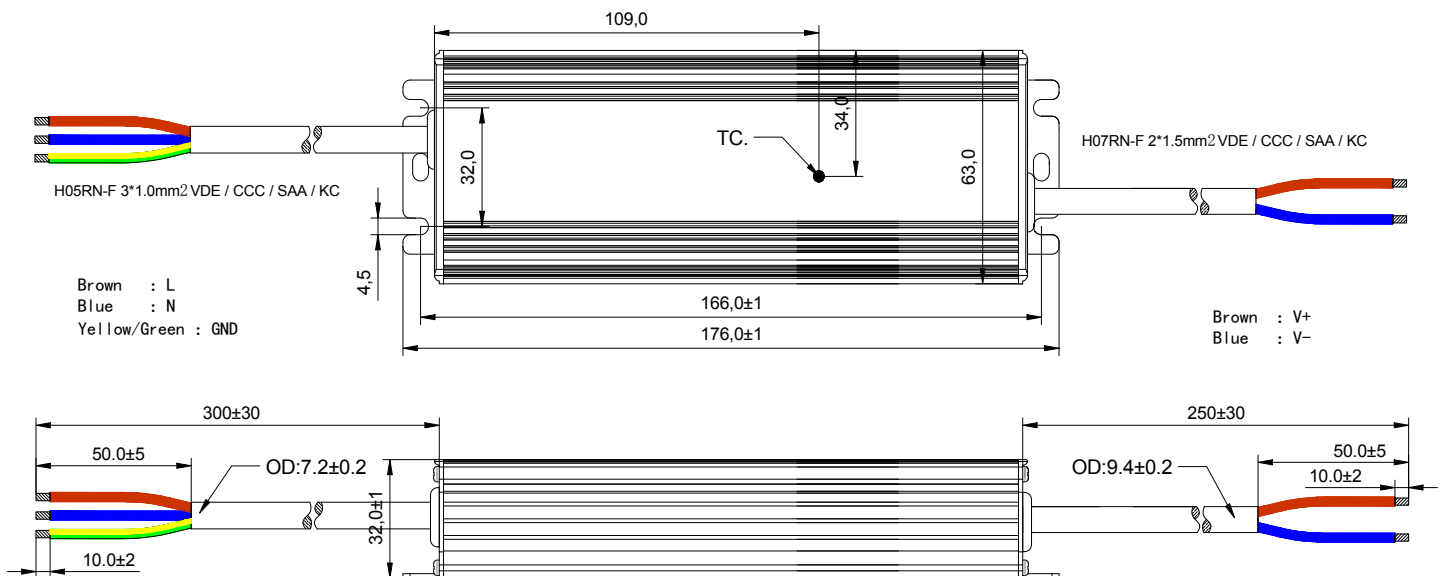
L176mm\*W63mm\*H32mm

0.616KG

### DL-150H-V24/V36/V48-RXC

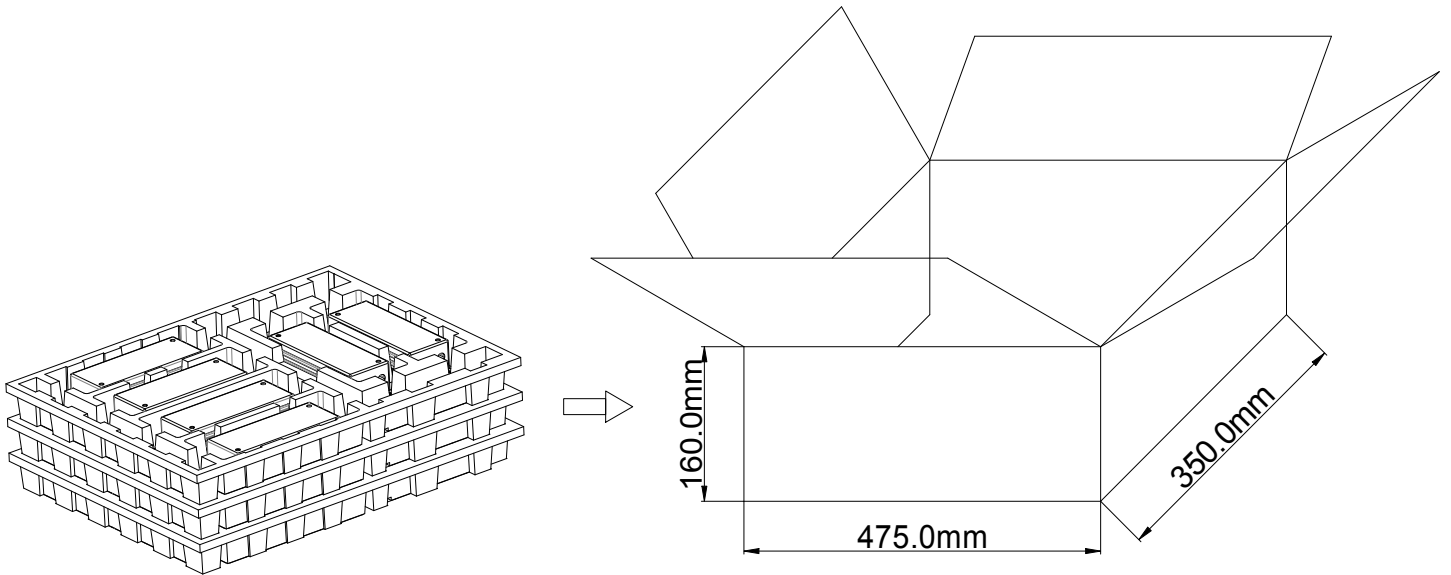


### DL-150H-V12-RXC



## Packaging

Packaging (mm) L475\*W350\*H160



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

### Note:

1. According to the certificate obtained by the LED DRIVER, the LED DRIVER with the English label is sold in Europe, America and India.
2. The LED DRIVER with Chinese label is only used for China market.

**Version**

DATE	DESCRIPTION	REV.	CHECK
2024.03.04	Initial version.	V1.0	

MANUFACTURER		
EDIT	CHECK	APPROVE