Product Features

- High power factor: **PF>0.95**
- Low harmonic distortion: **THD<10%**
- Efficiency: **92%**
- No load/Standby power ⩽**0.5W**
- Anti-surge voltage: **differential mode1kV (L-N)**
- Designed for **CE-ErP** compliance
- Over-heat /Over-load / Short circuit protection
- Suitable for Class II III fixtures

Advantages of the LN-150-XX Series Products

- **High conversion efficiency:** 92% efficiency rate, low no-load loss (≤0.5W), compliant with energy efficiency regulations (CE-ErP)
- **Ultra-low energy consumption:** Active PFC design with PF > 0.95
- **Safety protection:** Class II insulation design and multiple protection functions

Product Description

- 150W, 24V
- **Constant voltage** output,
  1CH non-dimmable LED power supply
- Service life: **50,000 hours**
- 5 years warranty

Housing Features

- Housing material: Polycarbonate, white color
- Input wiring: Press-type terminal
- Output wiring: Screw terminal
- Ingress protection: **IP20**, for indoor use

Product Applications

- LED strips for indoor lighting
- Wall Washer for Hotel/Retail Lighting
- Panel lights for office/commercial lighting

Model List

Model	Input voltage ~	Input voltage ⎓	Output power	Power factor	Efficiency	Certification
LN-150-12	220-240V	12V	150W	>0.95	92%	ENEC, TUV, CB, CE, RoHS, UKCA, ERP
LN-150-24	220-240V	24V	150W	>0.95	94%	ENEC, TUV, CB, CE, RoHS, UKCA, ERP

Model Naming Rule

L N - 1 5 0 - 2 4

Case series: LN = Long line type
Output power: 150 =150W
Output voltage: 24 = 24V

Technical Parameters

Output Parameter			
Item	Value	Unit	Note
Output Voltage	24 ±2.5%	VDC	-
Output Current	Max. 6.25	A	-
Output Power	Max. 150	W	-
Ripple & Noise	240	mV	-

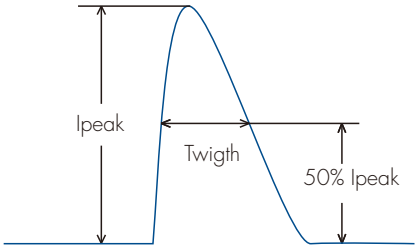
Input Parameter			
Item	Value	Unit	Note
Input Voltage Range	220~240	VAC	-
Frequency Range	50/60	Hz	-
Efficiency	93	%	230VAC
Alternating Current	0.8 Max.	A	-
Power Factor	>0.95	-	For 90-150W load refer to the "Char.Curve Figure3"
THD	<10	%	Full load, refer to the "Char.Curve Figure4"
Inrush Current	35	A	Cold start at 230VAC
Anti Surge	1	KV	diff. mode: L-N Acc. to IEC61000-4-5.1.2/50us,8/20us
Leakage Current	≤0.5	mA	-
No Load Power	≤0.5	W	-

Operation Environment			
Item	Value	Unit	Note
Woking Temperature	-20~45	°C	-
T-case Max	85	°C	-
Working Humidity	20~90	%	non-condensing
Storage Humidity	10~95	%	-
Storage Temperature	-40~80	°C	-
Temperature Coefficient	±0.03	%/°C	0-50%
Vibration Resistance	10-500	Hz	Hz, 2G, 6min/cycle, X,Y,Z axes/2min
IP Rating	IP20	-	-
Lifetime	50000	Hrs	@Tc 85°C, refer to the"Char.Curve Figure5"

Safety & EMC			
Item	Value	Unit	Note
Withstand Voltage	3750	VAC	I/P-O/P
Insulation Resistance	100/500/25/70	MΩ/VDC/°C/%	I/P-O/P
EMC Emission	EN55015, EN61547 EN61000-3-2,EN61000-3-32	-	-
EMC Immunity	EN61000-4-2.3.4.5.6.8.11 EN61547	-	-
Certications	ENEC, TUV, CB, CE, RoHS, UKCA, ERP	-	-

Certification Standards:
EN61347-1, EN61347-2-13, EN62493, EN62384,EN61547, EN55015, EN61000-3-2, EN61000-3-3

Inrush Current & MCB						
Item	Value				Unit	Note
Inrush current	35				A	-
Twigth	1.52				ms	-
MCB type	B10	B16	C10	C16	pcs	-
	4	6	7	10		



- The calculation is based on the parameters of the ABB S200 series of miniature circuit breakers.
- For miniature circuit breakers of different brands and models, the number of power supplies that can be connected varies.
- When the installation environment temperature of the MCB exceeds 30°C, or parallel connection installed, the number of connectable power supplies will also decrease, need recalculation.
- Type B MCB are suitable for household lighting, Type C MCB are suitable for commercial lighting.

Insulation Betwwen Circuits			
Insulation	Output	Case	PUSH
Input	-	SELV	SELV
Output	SELV	-	SELV
Case	SELV	SELV	SELV

Basic insulation: The minimum insulation required for the normal operation of the equipment, used to isolate energized parts from accessible parts (e.g., shells, parts that may be touched by the human body) and to prevent direct contact with electric shocks.

Double insulation: It is composed of basic insulation and additional insulation, forming two independent layers of insulation protection, even if one layer fails, the other layer can still prevent electric shock.

Protection function

Over Load: When the load ≥110%~140%, hiccup protection.

Over Temperature: Current decrease when PCB temp >100°C, recovers automatically after fault condition is removed.

Test note

If not specified, the above parameters are the result of testing at ambient temperature of 25°C, humidity of 50%, full load conditions.
The startup time is measured during a cold start. Frequent powering on and off may lead to an increase in the startup time.
The ripple voltage and standby power consumption are measured under full load conditions.

Characteristic Curve

Figure 1

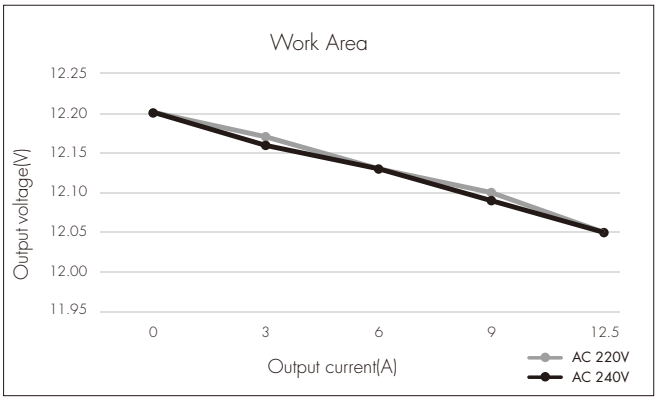


Figure 2

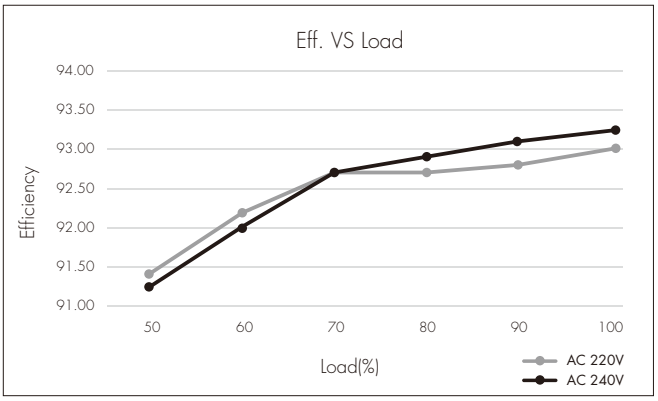


Figure 3

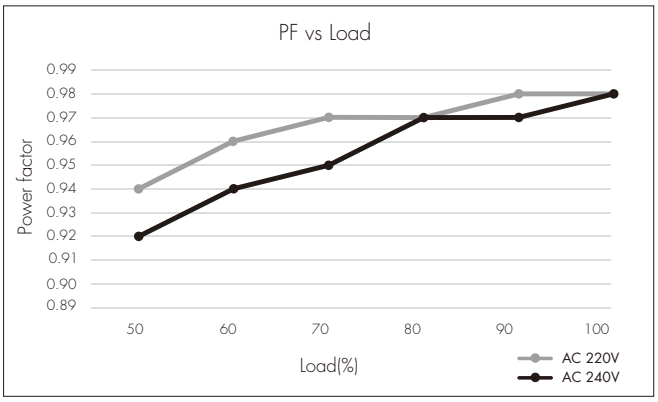


Figure 4

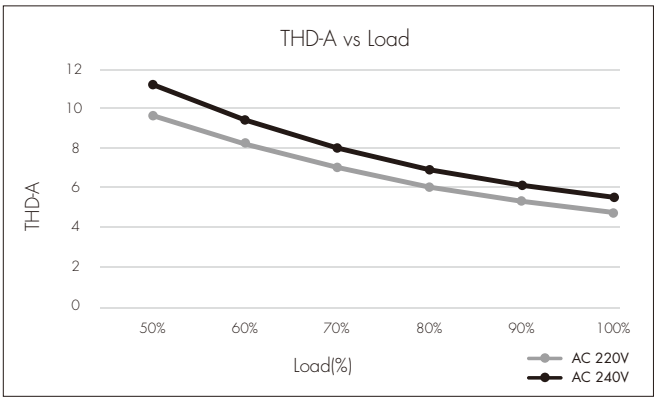
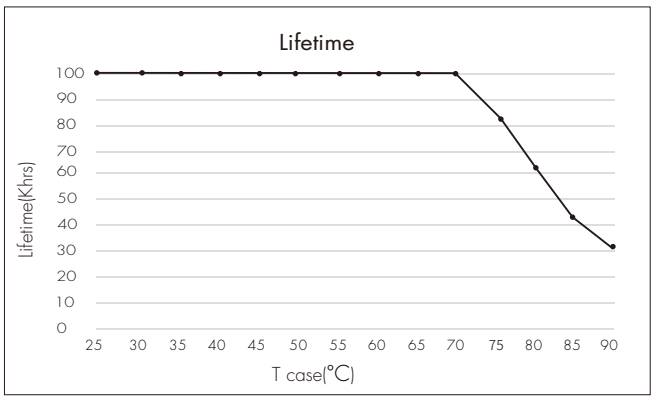


Figure 5



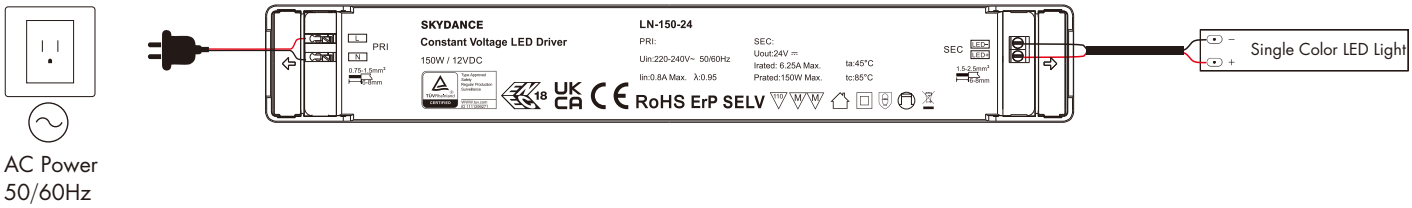
The relationship of the Tc temperature also depends on the lighting fixture setting.

Wiring Diagram

● Wiring Instructions

Input/Output Wiring	Port Definition	Wire Diameter and Stripping Length
Input Wiring(PRI)	AC-L, AC-N	Wire Diameter: 0.75-1.5mm² (20-16AWG) Stripping Length: 6-8mm 
Output Wiring(SEC)	LED+, LED-	Wire Diameter:0.15-2.5mm² (14-12AWG) Stripping Length:6-8mm 

● Wiring diagram



Installation Precautions

1. Hot plug-in

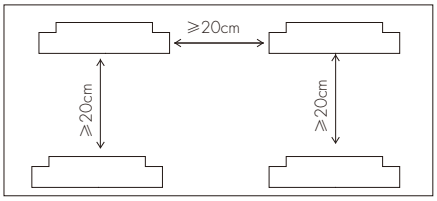
- Hot plug-in is not supported due to residual output voltage of > 0V.
- If a load is connected, the device needs has to be restarted.
- A restart can be achieved by re power on.

2. Wiring guidenlines

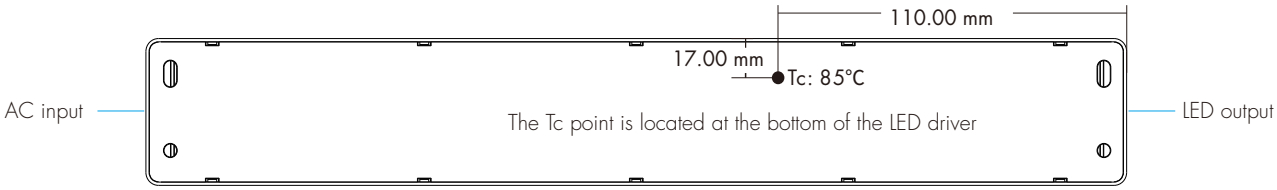
- This product must be installed and adjusted by a qualified professional.
- Before you power on the product, please make sure all the wiring is correct in case of incorrect connection.
- PC covers, housings and plug light kits for power supplies assembled within the fixture are required to meet UL94-V0 and above fire ratings.
- The power supply is used as part of the luminaire system in conjunction with the end device (luminaire), and since the EMC performance is affected by the LEDs and the alignment. The end device manufacturer needs to re-verify the EMC of the complete unit.
- If a fault occurs, please do not attempt to x the product by yourself; If you have any questions, please contact us in time.

3. Installation environment

- This product is non-waterproof. When installed outdoors, please ensure it is mounted in a water proof enclosure.
- This product should be installed in a dry, acid-free, oil-free environment.
- Please use the product within the operating temperature range of -20°C~45°C to ensure stable performance.
- LED driver should keep a certain distance from the heating stuff (such as the luminaries radiator). The installation interval between the product and the product is recommended to be 20cm, so as not to affect the service life due to poor heat dissipation(show in Figure).

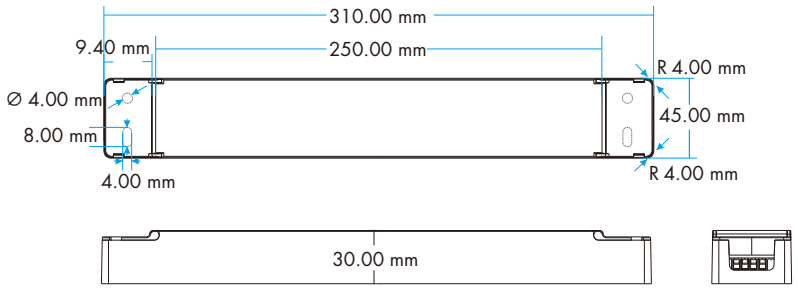


Tc Point Location

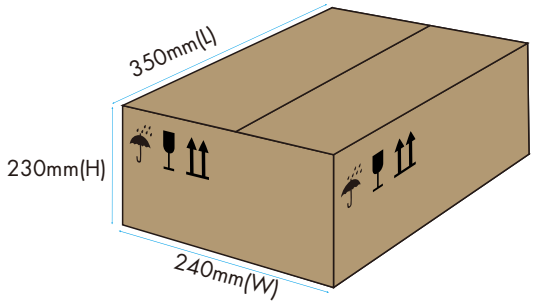


Product Size and Packaging Information

Product size:



Carton size:



Model	Product size (mm)	White box size(mm)	N.W(pcs)	Carton size(mm)	Qty/carton	N.W/carton	G.W/carton
LN-150-24	310*45*30(L*W*H)	325*47*38(L*W*H)	390g	350*240*230(L*W*H)	25pcs	10.4kg (±0.02kg)	10.9kg (±0.02kg)

Version Log

Version	Update time	Update Content
1.0.0	2025.5.6	First edition