

## Features

- Class I structure
- Input voltage: 100-240Vac
- Compliant with EMC EN55035/55032 Class B conducted/ radiated emission requirements.
- Operating temperature up to 70°C
- Over-voltage Category: III
- Low standby power consumption, standby power consumption < 0.3W
- OVP/OLP/SCP protection.
- 3 years warranty



## Applications



Industrial control system, industrial equipment, power system, rail transportation, lighting system

## Model list

Model No.	Input Voltage	Power max.	Output Voltage	Output Current max.	Efficiency typ.	Ripple Voltage	Voltage ADJ.
DL-50W-V12-EXC	100-240Vac	50W	12Vdc	4.16A	88%	240mV	±10%
DL-50W-V15-EXC	100-240Vac	50W	15Vdc	3.34A	88%	240mV	±10%
DL-50W-V24-EXC	100-240Vac	50W	24Vdc	2.08A	89%	240mV	±10%
DL-50W-V36-EXC	100-240Vac	50W	36Vdc	1.4A	89%	360mV	±10%
DL-50W-V48-EXC	100-240Vac	50W	48Vdc	1.05A	89%	360mV	±10%

Remark:

1. The above parameters are tested under the following conditions:  $T_a = 25^\circ\text{C}$ , 230Vac input, and after 30 minutes of full load operation.
2. Ripple and noise measurement method: use a 12" twisted-pair wire terminated with  $0.1\mu\text{F}$  &  $47\mu\text{F}$  parallel capacitor, and measured at 20MHz bandwidth.

## Input characteristics

Parameter	Min.	Typ.	Max.	Remark
Rated input voltage	100Vac/140Vdc	230Vac	240Vac/330Vdc	-
Input voltage range	90Vac	-	264Vac	-
Rated frequency	47Hz	50/60Hz	63Hz	-
Power factor	-	>0.5	-	100% load, 230Vac
T.H.D.	-	N/A	-	-
Input current/100Vac	-	-	1.2A	100% load, 100Vac
Inrush current/230Vac	-	-	70A	230Vac, cold start (25°C)
Leakage current	-	-	0.75mA	RMS Max.

## Output characteristics

Parameter	Min.	Typ.	Max.	Remark
Output tolerance	-	±1%	-	0-100% load
Line regulation	-	±1%	-	Rated load
Load regulation	-	±1%	-	@230Vac
Setup/Rise Time	-	-	500ms/30ms	@230Vac
Hold up time	16ms	-	-	230Vac, rated load

## Protection

Function	Description
Output overload protection	1.4-1.8times the rated output power; hiccup restart mode, which can automatically recover after the abnormal load condition is removed
Output short-circuit protection	Hiccup mode: recovers automatically after fault condition is removed
Output overvoltage protection	Output voltage > working voltage 1.08-1.2times hiccup

## Environmental

Environmental Categories	Parameter
Rated working temperature	-40 ~ +50°C@100-240Vac
Max. operating temperature range	-40 ~ 70°C; When the operating temperature exceeds 50°C, the power will be reduced by 2% for per 1° C increase in temperature. please refer to the derating curve for details.
Working humidity	20 ~ 90% RH, non-condensing
Storage temperature, humidity	-30~+85°C, 10 ~ 95% RH non-condensing
Vibration	10 ~ 500Hz, 5G 12min/cycle, 72 min, each along X, Y, Z axes
MTBF	230Khrs min. MIL-HDBK-217F (Ta=25°C)
Lifetime	50000 hours@230Vac, ambient temperature 50°C, please refer to "Lifetime/ Ambient temperature curve"

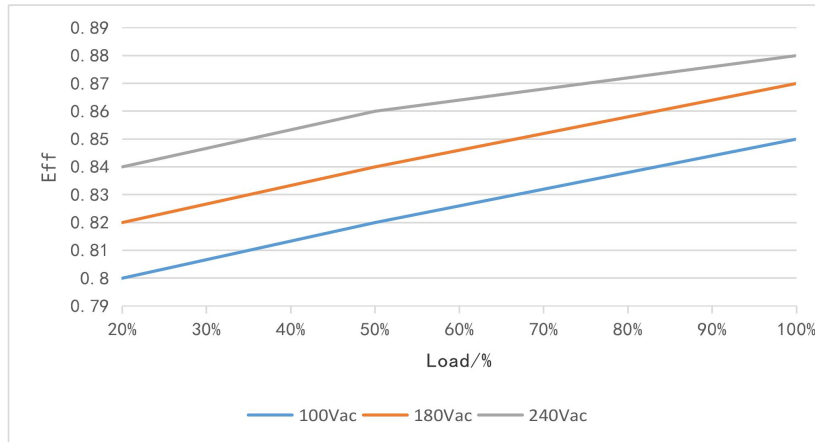
## Safety and EMC

Safety categories	Standard
Safety	Compliance to UL62368-1, TUV BS EN/EN62368-1, BS EN/EN60335-1, BS EN/EN61558-1/-2-16,GB 4943.1
EMC	EMI BS EN/EN55032, EN55035, Class B
	Harmonic Current BS EN/EN 61000-3-2 Class A
	ESD BS EN/EN 61000-4-2
	EFT/Burst BS EN/EN 61000-4-4
Surge protection	Differential mode L-N $\pm$ 2KV (2 $\Omega$ ), common mode L, N-G $\pm$ 4 KV (12 $\Omega$ ) Harmonic Current Refer to IEC61000-4-5 2014
Withstand voltage	I/P-O/P:4KVac I/P-PE :2KVac O/P-PE: 1.25KVac
Insulation resistance	I/P-PE:100M $\Omega$ / 500VDC; I/P-O/P:100M $\Omega$ / 500Vdc / 25°C/ 70% RH

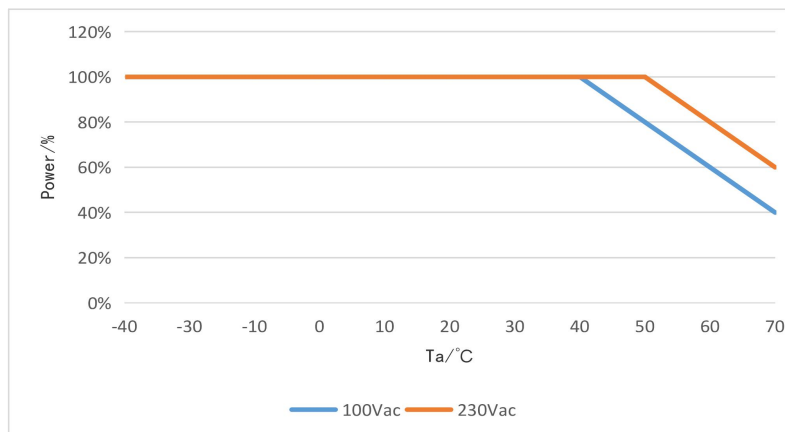
Note: The power supply is considered a component which will be installed into the terminal equipment. The EMC is affected by the entire equipment. The terminal equipment must be reconfirmed to meet the EMC directives.

## Parametric curves

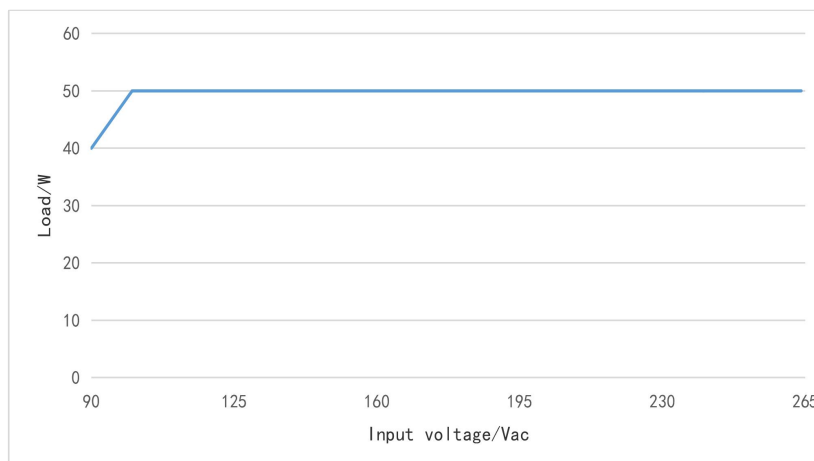
### Power/ Efficiency curve



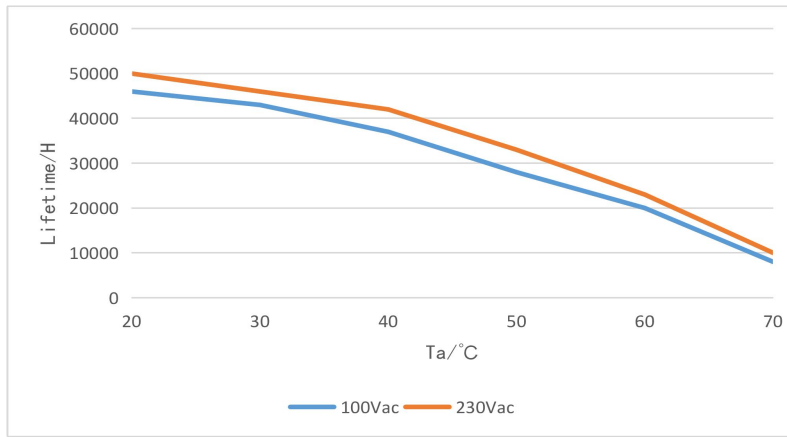
### Power/ Ambient temperature



### Power/ Input voltage

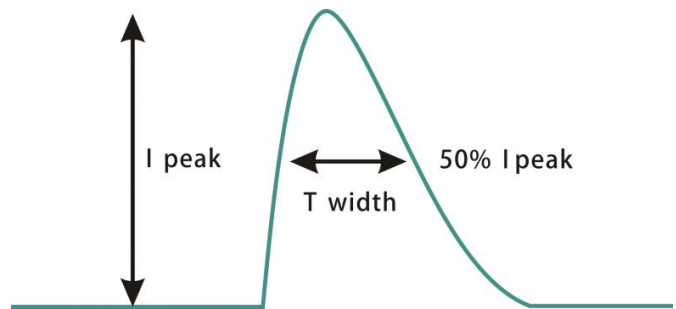


### Lifetime/ Ambient temperature



Inrush current

Input voltage	Peak current	T (@50% peak current)
100Vac	27.33A	166us
230Vac	62.67A	187us
240Vac	66A	205us

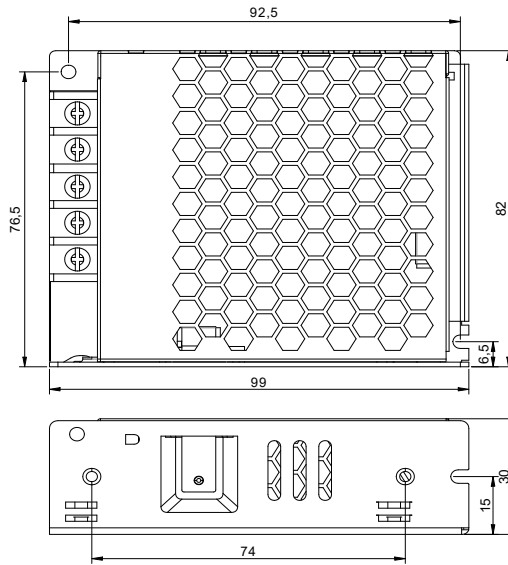


## Mechanical specification

### Weight

Weight

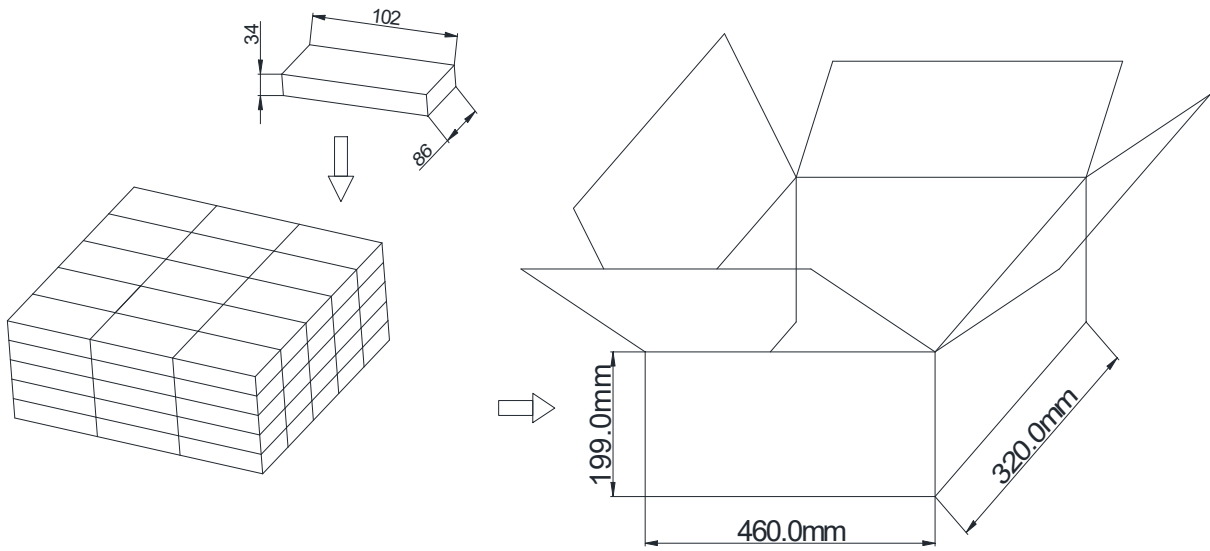
185g



## Packaging

packaging (mm)

L460mm\*W320mm\*H199mm

**NOTE:**

1. Each box has 5 layers, with 15 pieces on each layer, totaling 75 pieces per box.
2. According to the certificates obtained by LED DRIVER, LED DRIVER with English labels are sold in Europe, America and India.
3. LED driver power supplies with Chinese labels are only for the Chinese market.