



## Features

- Wide input range: 90-305Vac
- Constant voltage mode operation
- Infrared remote control
- Surge protection: Line-Line 5KV / Line-Earth 10KV
- Built-in active PFC function
- Output over-current, over-voltage, over-temperature and short-circuit protections
- IP67 enclosure for indoor and outdoor applications
- UL 8750 listed



**Class P**

## Applications

- Landscape lighting, strip lighting, decorative lighting, architecture lighting

## Selection Guide

Part Number	Max. Output Power (W)	Output Voltage (Vdc)	Output Current Adjustable Range (A)	Output Mode	Typical Efficiency
LSA200B-012C	200	12	0-16.67	CV	91%
LSA200B-024C		24	0-8.33	CV	92%
LSA200B-036C		36	0-5.56	CV+CC	92%
LSA200B-048C		48	0-4.17	CV+CC	92%

## Input Specifications

Parameter	Notes & Conditions	Min	Typical	Max	Unit
Input Voltage Range	AC input	90	100-277	305	Vac
Input Frequency Range		47	50/60	63	Hz
Power Factor	230Vac input, full load	0.95	0.96	-	-
Input Current	100-277Vac input, full load	-	-	2.8	A
Inrush Current	230Vac input, full load, cold start	-	-	75	A
Leakage Current	277Vac input, 50Hz	-	-	0.75	mA
THD	230Vac input, 80-100% of full load	-	-	15	%

## Output Specifications

Parameter	Notes & Conditions	Min	Typical	Max	Unit
Output Current Tolerance	Full load	-5	-	+5	%Iset
Output Voltage Ripple		-	-	10	%
Output Overshoot		-	-	10	%
Line Regulation	90-305Vac input, full load	-	-	3	%
Load Regulation	230Vac input, 50-100% of full load	-	-	3	%
Turn-on Delay	115Vac input, full load	-	-	3	s
	230Vac input, full load	-	0.5	1	s
Efficiency LSA200B-012C LSA200B-024C LSA200B-036C LSA200B-048C	115Vac input, full load	86 87 87 87	88 89 89 89	- - - -	%
Efficiency LSA200B-012C LSA200B-024C LSA200B-036C LSA200B-048C	230Vac input, full load	89 90 90 90	91 92 92 92	- - - -	%
Efficiency LSA200B-012C LSA200B-024C LSA200B-036C LSA200B-048C	277Vac input, full load	89 90 90 90	91 92 92 92	- - - -	%

Note: 1. Unless otherwise specified, data in this datasheet should be tested under the conditions of 230Vac input, rated load and  $T_a=25^{\circ}\text{C}$ .

2. Ripple is measured at 20MHz bandwidth by using a 0.1 $\mu\text{F}$  & 10 $\mu\text{F}$  parallel capacitor.

## Protection Specifications

Parameter	Notes & Conditions	Min	Typical	Max	Unit
Over Current Protection Set Point	Hiccup, auto-recovery	110	-	200	%Io
Over Voltage Protection Set Point	Auto-recovery	110	-	130	%Vo
Over Temperature Protection Set Point	Auto-recovery	90	-	-	$^{\circ}\text{C}$
Short-circuit Protection	Hiccup, auto-recovery				

## Environmental and Other Specifications

Parameter	Notes & Conditions	Min	Typical	Max	Unit
Ambient Temperature	$T_a$	-40	-	+60	$^{\circ}\text{C}$
Operating Case Temperature	$T_c$	-40	-	+85	$^{\circ}\text{C}$
Storage Temperature		-40	-	+85	$^{\circ}\text{C}$
Storage Relative Humidity		20	-	95	%RH
Isolation Voltage	Input-Output	-	3,750	-	Vac
	Input-PE	-	1,600	-	
	Output-PE	-	500	-	
Insulation Resistance	Input-Output/Input-PE/Output-PE, 500Vdc/60s /70%RH	50	-	-	M $\Omega$
Grounding Resistance	25A/60s	-	-	0.1	$\Omega$
Life Time	230Vac, full load, 70 $^{\circ}\text{C}$ case temperature	-	50	-	10 <sup>3</sup> hrs
MTBF(MIL-HDBK-217F)	230Vac input, 80% of full load	-	200	-	10 <sup>3</sup> hrs
Dimensions (L*W*H)	LSA200B-012C/LSA200B-024C	232.0 x 68.0 x 43.5			mm
	LSA200B-036C/LSA200B-048C	247.0 x 68.0 x 43.5			
Weight	1350 $\pm$ 100g				

## EMC Specifications

Parameter	Standards
EMI	EN55015
	EN61000-3-2,3
EMS	EN61547
	EN61000-4-2, 3, 4, 5, 6, 8, 11

## Characteristic Curves

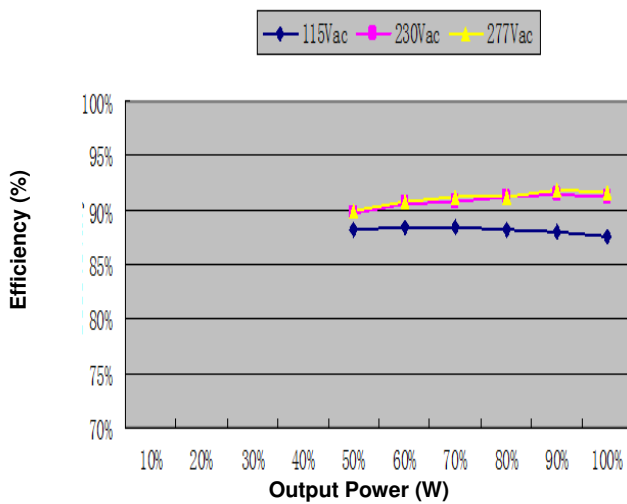


Figure 1: Efficiency vs. Output Power (Vo=12V)

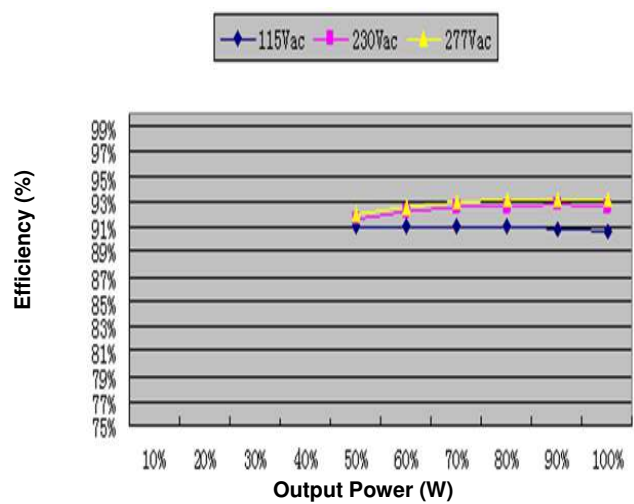


Figure 2: Efficiency vs. Output Power (Vo=24V)

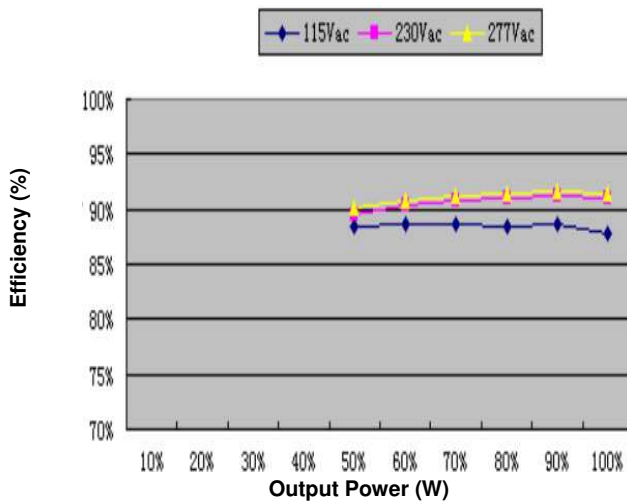


Figure 3: Efficiency vs. Output Power (Vo=36V)

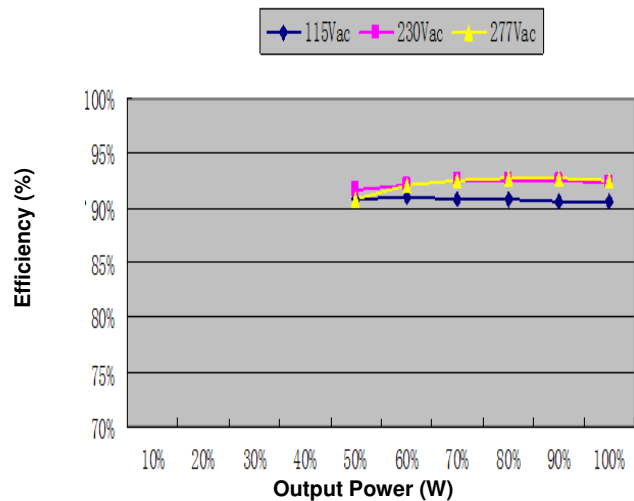


Figure 4: Efficiency vs. Output Power (Vo=48V)

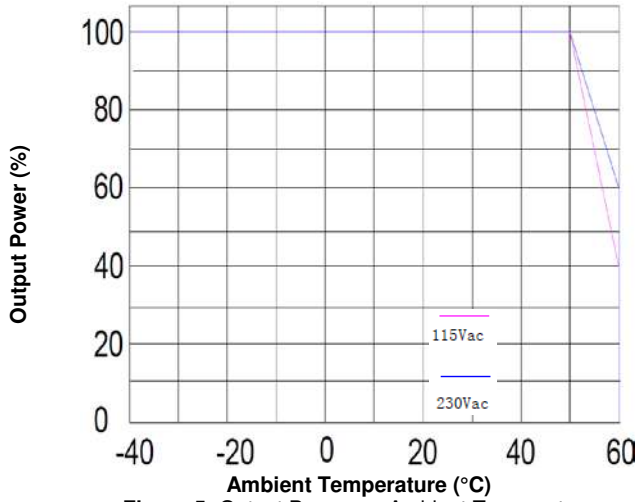


Figure 5: Output Power vs. Ambient Temperature

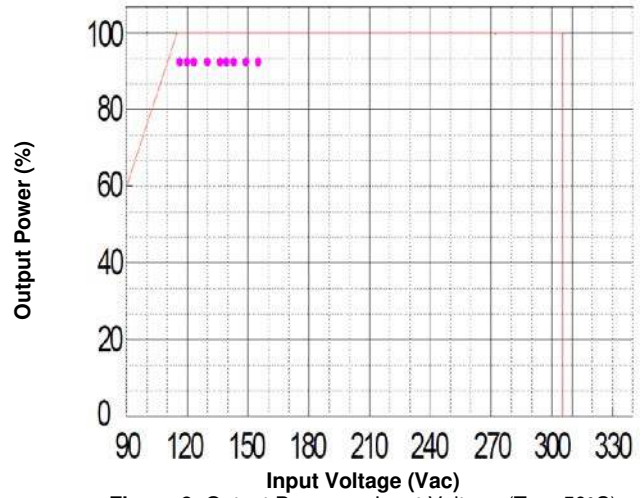


Figure 6: Output Power vs. Input Voltage (Ta = 50°C)

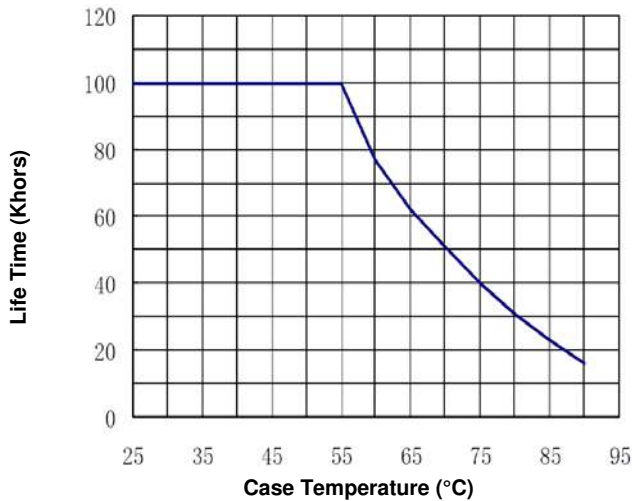


Figure 7: Life Time vs. Case Temperature

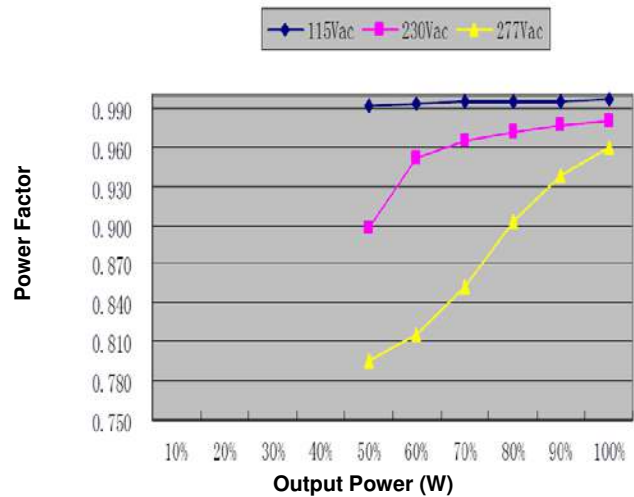


Figure 8: Power Factor vs. Output Power

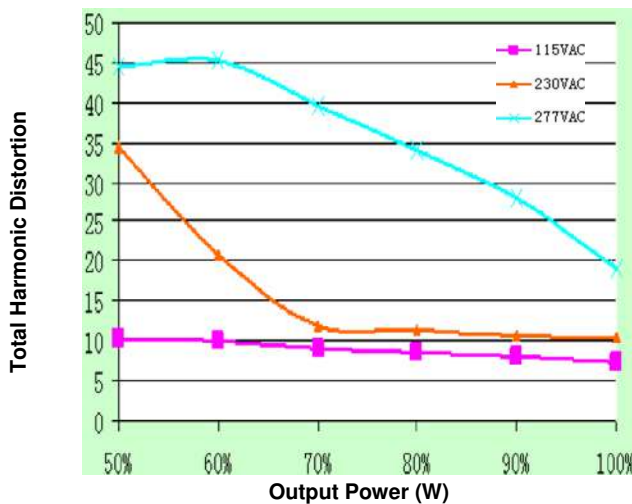
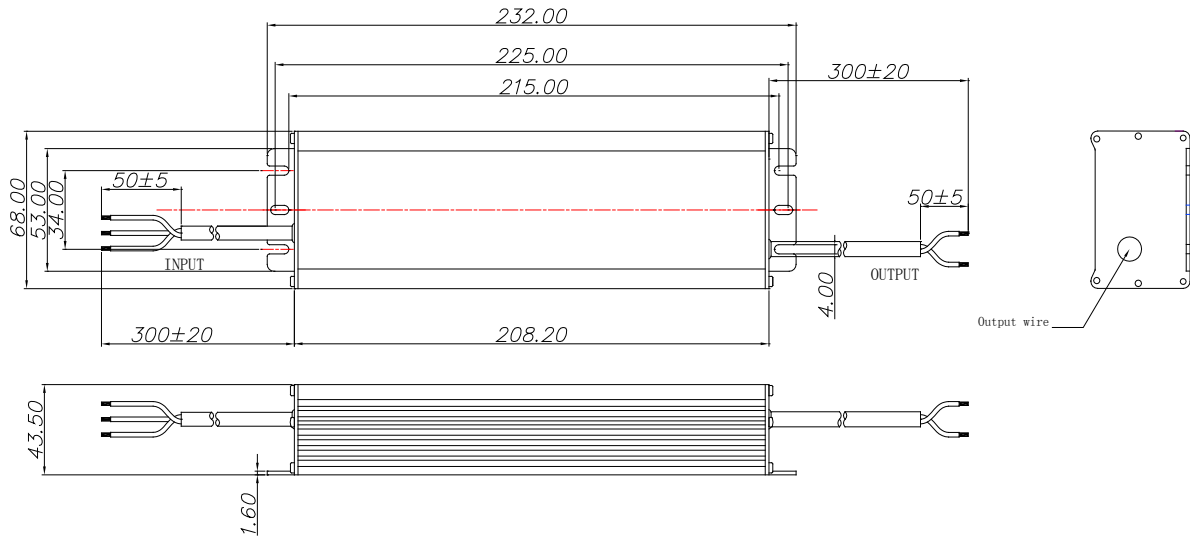


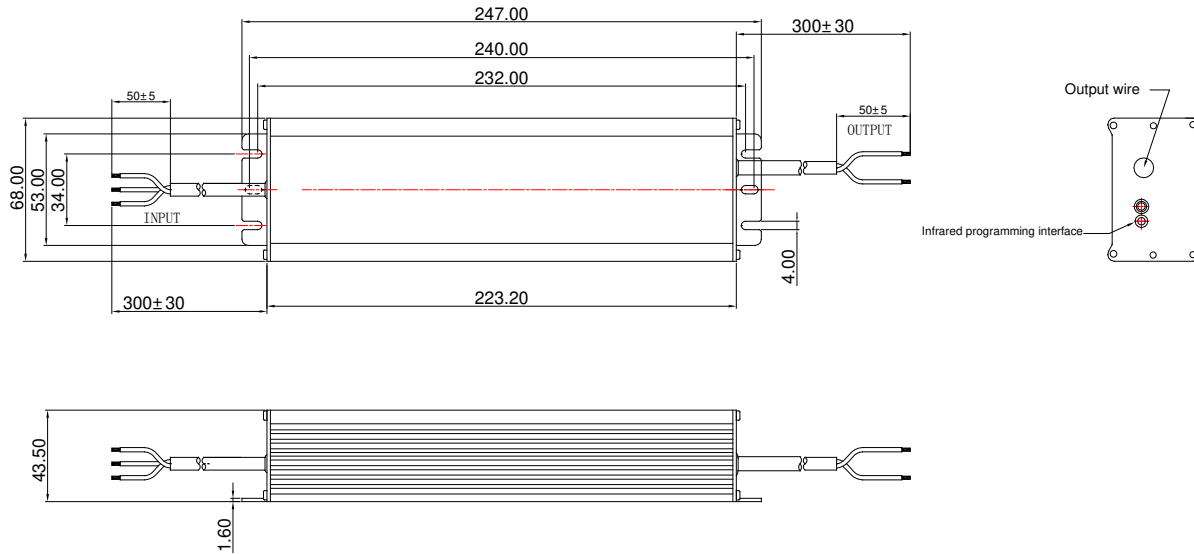
Figure 9: Total Harmonic Distortion vs. Output Power

### Mechanical Drawing

LSA200B-012C & LSA200B-024C (Unit: mm)



LSA200B-036C & LSA200B-048C (Unit: mm)



Wire	Specification
Input	SJOW 18AWG*3C
Output	SJOW 14AWG*2C (for 12V output)
	SJOW 16AWG*2C (for 24V output)
	SJOW 18AWG*2C (for 36V/48V output)