

# LXV96 series

## LED Power Supply

### Constant Voltage Power Supplies

#### LED POWER

next generation power source

#### FEATURES

- High Efficiency 90%
- UL1310 Class 2
- IP67 Waterproof
- Active PFC (Typical 0.96)
- OVP, SCP, OTP
- -35 to 70°C deg operation
- Wide Input 90-305VAC
- UL8750 recognised
- EN61347-1, -2-13 compliant



LED Power  
96W

The LXV96 series of UL1310 Class 2 constant voltage LED power supplies from Excelsys Technologies can deliver up to 96W of output power in an extremely compact package size.

The LXV96 series of constant voltage power supplies provides a range of output voltage solutions for specific LED requirements. With industry leading efficiencies, and an extensive protection feature set, the LXV96 series provides high reliability and high performance in a compact package. The LXV96 series carries the CE mark for safety and is also RoHS compliant. For more details contact [sales@excelsys.com](mailto:sales@excelsys.com)

Model Number	Output Voltage	Output Current	Input Voltage	OVP Max	OCP Hiccup	Efficiency
LXV96-024SW <sup>(3)</sup>	24V	4.00A	90-305VAC	35V	100-110%	88.0%
LXV96-036SW <sup>(3)</sup>	36V	2.66A	90-305VAC	50V	100-110%	89.0%
LXV96-048SW	48V	2.00A	90-305VAC	60V	100-110%	89.0%
LXV96-054SW	54V	1.77A	90-305VAC	75V	100-110%	90.0%

#### Input Specifications

Parameter	Conditions/Description	Min	Nom	Max	Units
<b>Input Voltage Range</b>	Universal Input	90		305	VAC
<b>Input Frequency Range</b>		47		63	Hz
<b>Input Current</b>	100VAC in, 96W output			1.2	A
<b>Leakage Current</b>	277VAC in, 79W output			1.0	mA
<b>Inrush Current</b>	220VAC in, 25°C, Cold Start			50	A
<b>Power Factor</b>	220VAC, 110VAC	0.96		0.99	

#### Output Specifications

Parameter	Conditions/Description	Min	Nom	Max	Units
<b>Line Regulation</b>				±1	%
<b>Load Regulation</b>				±2	%
<b>Voltage Accuracy</b>	% of Vout			±5	%
<b>Ripple and Noise</b>	20MHz Bandwidth. See Note 1			3.0	% pk-pk
<b>Dynamic Response</b>	Output Deviation R/S : 1 A/uS			5	%
	Settling Time Load : 25% ~ 75% full Load			10	mS
<b>Overshoot</b>				10	%
<b>Turn-on Delay</b>	Measured at 220VAC and full load			1.0	s
<b>Short Circuit Protection</b>	Auto Recovery				
<b>Over Voltage Protection</b>	Latching. See individual models OVP levels				
<b>OverTemperature Protection</b>	Latching. Internal Component Temperature			110	°C

#### General Specifications

Parameter	Conditions/Description	Min	Nom	Max	Units
<b>Isolation Voltage</b>	Input to Output See Note 2	3000			VAC
	Input to Chassis	1500			VAC
<b>Efficiency</b>	See individual models		89.0		%
<b>Safety Agency Approvals</b>	UL8750, EN61347-1, -2-13				
<b>No load Power Dissipation</b>	Measured at 120VAC and 220VAC			1.5	W
<b>MTBF</b>	MIL-HDBK-217F, 110VAC input, 80% load, 25°C		400,000		Hours
<b>Lifetime</b>	60°C Case temperature		50,000		Hours
<b>Weight</b>			850		g
<b>Operating Temperature</b>		-35		+70	°C
<b>Storage Temperature</b>		-40		+85	°C
<b>Relative Humidity</b>	Non-condensing (operating)	10		100	%RH

Note 1. Output connected in parallel with 0.1uF ceramic capacitor and 10uF electrolytic capacitor.  
 Note 2. Primary to Secondary Isolation test not to be carried on power supply.  
 Note 3. UL 1310 Class 2 product, except for LXV96-036SW which Class 2 for US only



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EMC				
Parameter	Standard		Level	Units
<b>Emissions</b>				
Conducted	EN55015		Level B	
Radiated	EN55015		Level B	
Harmonic Distortion	EN61000-3-2		Compliant	
Flicker and Fluctuation	EN61000-3-3		Compliant	
<b>Immunity</b>				
ESD	EN61000-4-2		Level 4	
Radiated RFI	EN61000-4-3		Level 3	
Fast Transients - burst	EN61000-4-4		Level 4	
Input Line Surges	EN61000-4-5		Level 4	
Conducted RFI	EN61000-4-6		Compliant	
Power Freq Magnetic Field	EN61000-4-8		Compliant	
Voltage Dips	EN61000-4-11		Compliant	

## INPUT / OUTPUT WIRING

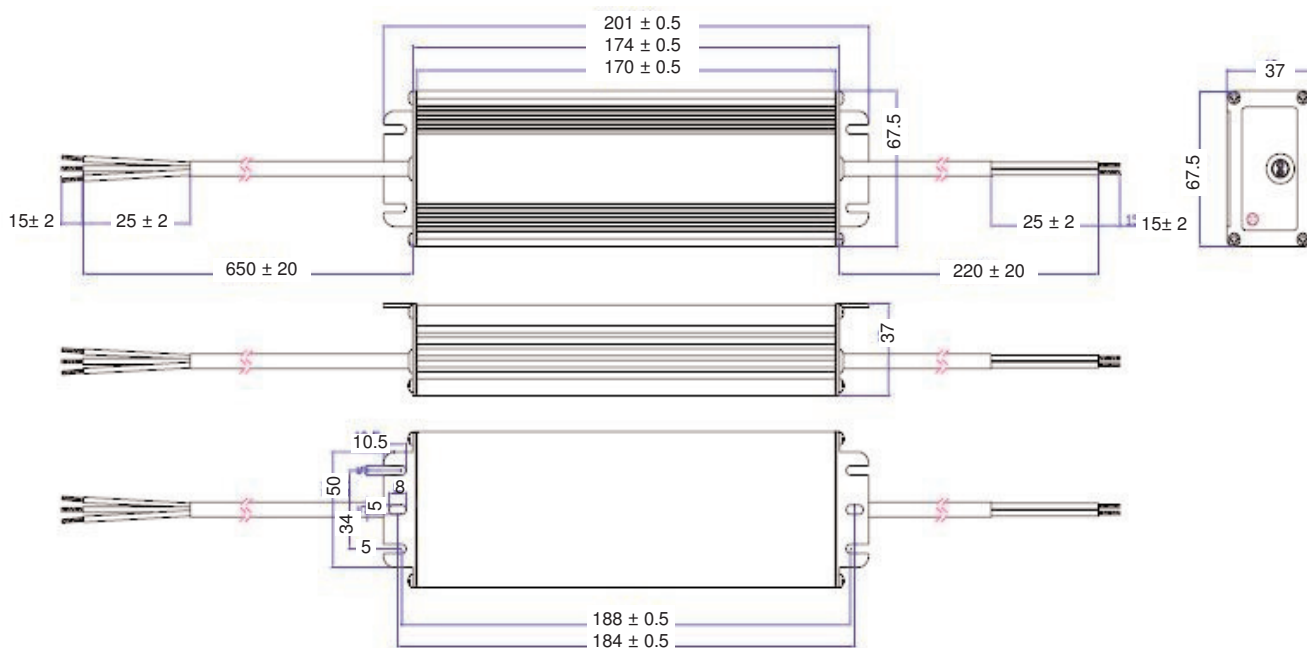
### INPUT CABLE

SJTW 18AWG 3C  
Black (L) and White(N), Green(E) 650±20mm

### OUTPUT CABLE

SJTW 18AWG 2C  
Black (-V) and Red (+V) 220±20mm

### MECHANICAL SPECIFICATIONS



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