

# 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
Input Voltage Range	Universal Input	90		305	VAC
Input Frequency Range		47		63	Hz
Input Current	100VAC in, 96W output			1.2	A
Leakage Current	277VAC in, 79W output			1.0	mA
Inrush Current	220VAC in, 25°C, Cold Start			50	A
Power Factor	220VAC, 110VAC	0.96		0.99	

#### Output Specifications

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

#### General Specifications

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

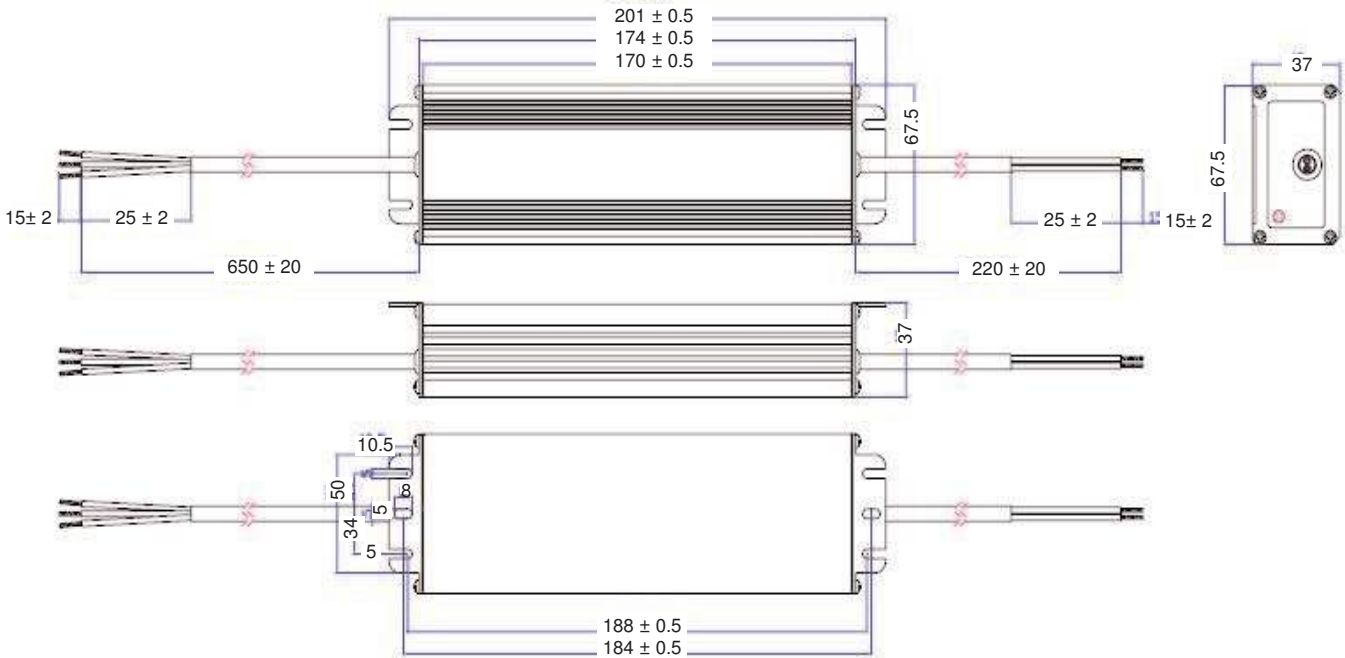
**INPUT CABLE**

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**



Specifications subject to change without notice

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