# LXV76 series

# **LED Power Supply**

# Constant Voltage Power Supplies

**LED POWER** next generation power source

## **FEATURES**

- High Efficiency 91%
- 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



The LXV76 series of UL1310 Class 2 constant voltage LED power supplies from Excelsys Technologies can deliver up to 76W of output power in an extremely compact package size.

The LXV76 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 LXV76 series provides high reliability and high performance in a compact package The LXV76 series carries the CE mark for safety and is also RoHS compliant. For more details contact sales@excelsys.com

Model Number	Output Voltage	Output Current	Input Voltage	OVP Max	Efficiency
LXV76-012SW <sup>(3)</sup>	12V	5.00A	90-305VAC	22V	87.0%
LXV76-024SW(3)	24V	3.17A	90-305VAC	40V	88.0%
LXV76-036SW <sup>(3)</sup>	36V	2.11A	90-305VAC	55V	89.0%
LXV76-042SW	42V	1.81A	90-305VAC	63V	89.0%
LXV76-048SW	48V	1.58A	90-305VAC	65V	90.0%
LXV76-054SW	54V	1.41A	90-305VAC	70V	91.0%

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, 76W output			0.9	Α
Leakage Current	277VAC in, 76W output			1.0	mA
Inrush Current	220VAC in, 25°C, Cold Start			50	Α
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			2.0	% pk-pk
Dynamic Response	Output Deviation R/S: 1 A/uS			5	%
	Settling Time Load : 25% ~ 75% full Load			10	mS
Overshoot				10	%
Turn-on Delay	Measured at 220VAC and full load			0.6	S
Short Circuit Protection	Auto Recovery				
Over Voltage Protection	Latching. See individual models OVP levels				
OverTemperature Protection	Latching Internal Component Temperature			110	°C

General Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
Isolation Voltage	Input to Output See Note 2	3000			VAC
	Input to Chassis	1500			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		450,000		Hours
Lifetime	110VAC input, 80% load, 45°C		65,000		Hours
Weight			750		g
Operating Temperature		-35		+70	°C
Storage Temperature		-40		+85	°C
Relative Humidity	Non-condensing (operating)	10		100	%RH

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. UL 1310 Class 2 product, except LXV76-036SW which is Class 2 US only. Note 3.



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EMC			
Parameter	Standard	Level	Units
Emissions			
Conducted	EN55015	Level B	
Radiated	EN55015	Level B	
Harmonic Distortion	EN61000-3-2	Compliant	
Flicker and Fluctuation	EN61000-3-3	Compliant	
Immunity			
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

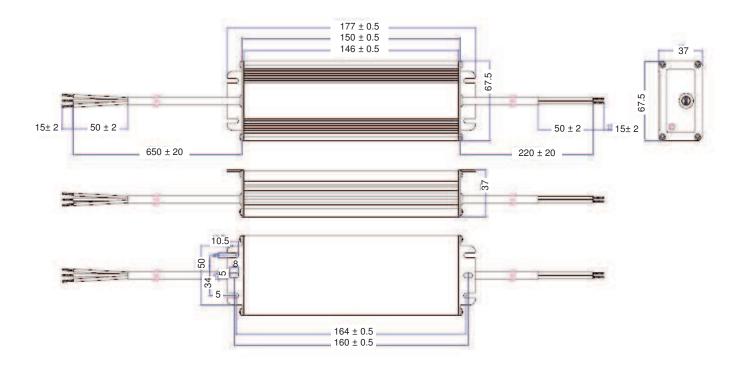
#### **INPUT CABLE**

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

## **MECHANICAL SPECIFICATIONS**

### **OUTPUT CABLE**

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



Specifications subject to change without notice

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