# LXV42 series

# **LED Power Supply**

## Constant Voltage LED Power Supplies



**LED POWER** next generation power source

#### **FEATURES**

- High Efficiency (up to 88%)
- Active PFC (Typical 0.92)
- IP66 Waterproof
- OVP, SCP, OLP
- UL1310 Class 2
- -20 to +70°C deg operation
- Input 90-305VAC
- UL8750 compliant
- EN61347-1, -2-13 compliant

The LXV42 series of constant voltage LED power supplies from Excelsys Technologies can deliver up to 42W of output power in an extremely compact package size.

The LXV42 series has 4 models offering outputs of 12V, 24V, 36V and 48V solutions for specific LED lighting applications. With industry leading efficiencies, and an extensive protection feature set, the LXV42 series provides high reliability and high performance in a compact package. The LXV42 series carries the UL and CE mark for safety and is also RoHS compliant.

Model Number	Output Voltage	Output Current	Input Voltage	Efficiency
LXV42-012SW(3)	12V	3500mA	90-305VAC	85.0%
LXV42-024SW <sup>(3)</sup>	24V	1750mA	90-305VAC	87.0%
LXV42-036SW(3)	36V	1160mA	90-305VAC	87.0%
LXV42-048SW(3)	48V	875mA	90-305VAC	88.0%

Input Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
Input Voltage Range	Wide Input	90		305	VAC
Input Frequency Range		47		63	Hz
Input Current	100VAC in, Full Load			0.60	Α
Inrush Current	230VAC in, 25°C, Cold Start			60	Α
Power Factor	220VAC, 110VAC	0.92		0.98	

Output Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
Line Regulation				±2	%
Load Regulation				±3	%
Voltage Accuracy				±5	%
Output Current Range	No minimum load	0		100	%
Ripple and Noise	20MHz Bandwidth. See Note 1	3		4	V
Overshoot/Undershoot	On Turn ON/OFF			10	%
Turn-on Delay	Measured at 220VAC and full load		0.3	0.5	S
Over Current Protection	Hiccup, Auto Recovery	110	150	170	%
Short Circuit Protection	Auto Recovery				
Over Voltage Protection	Hiccup. Auto Recovery	110	120	130	%

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				%
Safety Agency Approvals	UL8750 EN61347-1, -2-13 UL1310 Class 2 (See Note 3)				
No load Power Dissipation	Measured at 120VAC and 220VAC			4.0	W
MTBF	MIL HDBK 217-F, 110VAC Input, 80% Load, 25°C,	327,000			Hours
Lifetime	45°C, 110VAC Input, 80% Load,12V output model	71,000			Hours
Weight			300		g
Operating Temperature		-20		+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 out on power supply.

UL1310 Class 2 outputs for US and Canada except LXV42-048SW which is Class 2 in 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	Compliant	
Radiated RFI	EN61000-4-3	Compliant	
Fast Transients - burst	EN61000-4-4	Level 3(A)	
Surge Immunity	EN61000-4-5	Compliant	
Conducted RFI	EN61000-4-6	Compliant	
Power Freq Magnetic Field	EN61000-4-8	Compliant	
Voltage Dips	EN61000-4-11	Compliant	1

### **INPUT / OUTPUT WIRING**

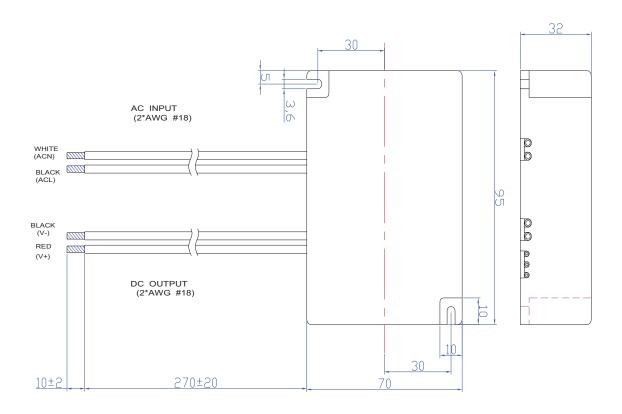
**INPUT CABLE** 

SJTW 18AWG Black (L), White(N) 270±20mm

#### **OUTPUT CABLE**

SJTW 18AWG Black (-V) and Red (+V) 270±20mm

#### **MECHANICAL SPECIFICATIONS**



Specifications are subject to change without notice



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