

# LXV40 series

## LED Power Supply

### Constant Voltage LED Power Supplies



LED Power  
40W

#### LED POWER next generation power source

#### FEATURES

- High Efficiency (up to 87%)
- Active PFC (Typical 0.92)
- IP66 Waterproof
- OVP, SCP
- UL1310 Class 2
- -20 to 60°C deg operation
- Input 90-305VAC
- UL8750 compliant
- EN61347-1, -2-13 compliant

The LXV40 series of constant voltage LED power supplies from Excelsys Technologies can deliver up to 40W of output power in an extremely compact package size.

The LXV40 series has 5 models offering outputs of 12V, 18V, 24V, 36V and 48V solutions for specific LED lighting applications. With industry leading efficiencies, and an extensive protection feature set, the LXV40 series provides high reliability and high performance in a compact package. The LXV40 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 Hiccup max	Efficiency
LXV40-012SW <sup>(3)</sup>	12V	3000mA	90-305VAC	18V	84.0%
LXV40-018SW <sup>(3)</sup>	18V	2000mA	90-305VAC	23V	85.0%
LXV40-024SW <sup>(3)</sup>	24V	1500mA	90-305VAC	32V	86.0%
LXV40-036SW <sup>(3)</sup>	36V	1050mA	90-305VAC	43V	87.0%
LXV40-048SW <sup>(3)</sup>	48V	800mA	90-305VAC	54V	87.0%

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			0.48	A
Inrush Current	230VAC in, 25°C, Cold Start			60	A
Power Factor	220VAC, 110VAC	0.92		0.98	
Output Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
Line Regulation				±3	%
Load Regulation				±10	%
Voltage Accuracy				±10	%
Output Current Range	No minimum load	0		100	%
Ripple and Noise	20MHz Bandwidth. See Note 1	3		5	V
Overshoot				10	%
Turn-on Delay	Measured at 220VAC and full load			2.0	s
Over Current Protection	Hiccup, Auto Recovery	110	150	170	%
Short Circuit Protection	Auto Recovery				
Over Voltage Protection	Hiccup, Auto Recovery		1.25Vmax		
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		87		%
Safety Agency Approvals	UL8750 compliant to UL1310 Class 2 EN61347-1, -2-13				
No load Power Dissipation	Measured at 120VAC and 220VAC			4.0	W
MTBF	MIL HDBK 217-F, 110VAC Input, 80% Load, 25°C,		487,000		Hours
Lifetime	45°C, 110VAC Input, 80% Load		77,000		Hours
Weight			300		g
Operating Temperature		-20		+60	°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.

Note 3. UL1310 Class 2 outputs for US and Canada except LXV40-048SW which is Class 2 in US only



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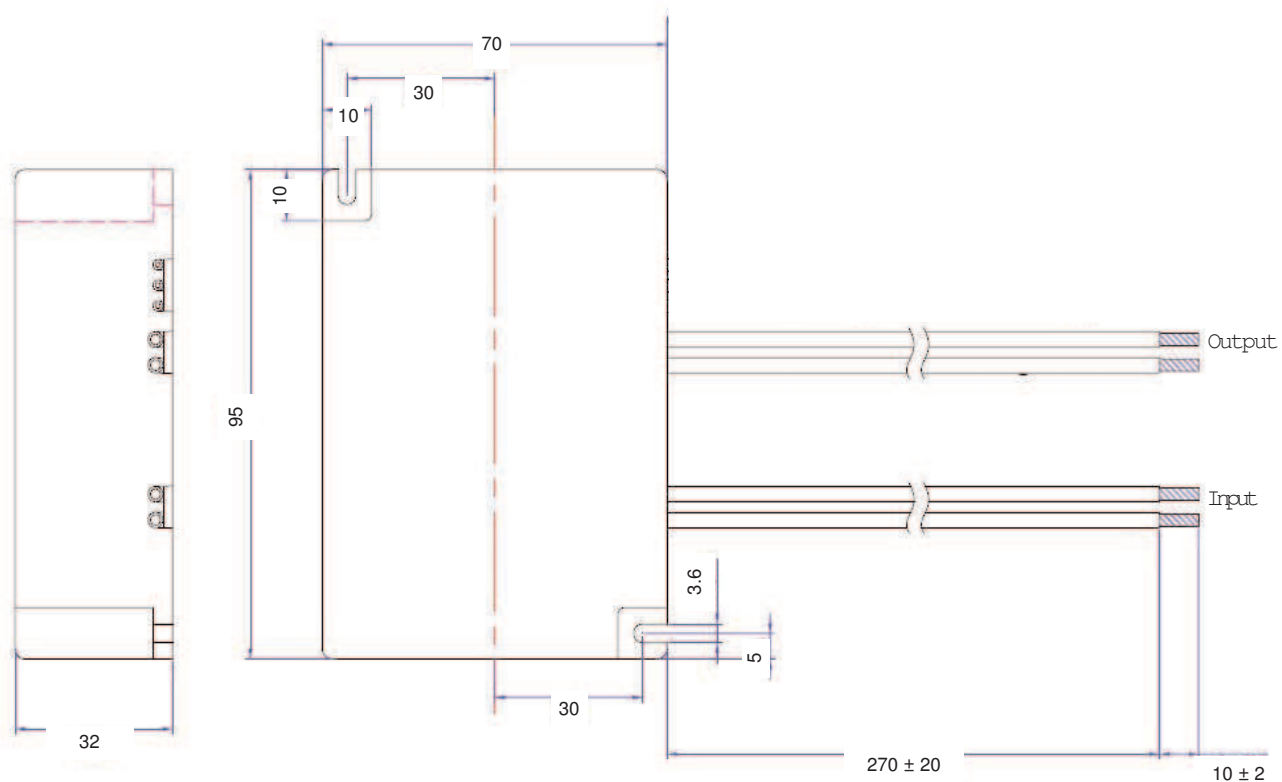
EMC					
Parameter	Standard		Level		Units
<b>Emissions</b>					
Conducted	EN55015		Level B		
Radiated	EN55015		Level B		
Harmonic Distortion	EN61000-3-2		Compliant		
Flicker and Fluctuation	EN61000-3-3		Compliant		
<b>Immunity</b>					
ESD	EN61000-4-2		Level 4		
Radiated RFI	EN61000-4-3		Level 3		
Fast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

**INPUT / OUTPUT WIRING****INPUT CABLE**

SJTW 18AWG 2C  
Black (L), White(N) 270±20mm

**OUTPUT CABLE**

SJTW 18AWG 2C  
Black (-V) and Red (+V) 270±20mm

**MECHANICAL SPECIFICATIONS**

Specifications are subject to change without notice  
LXV40 datasheet Pre Release April2011

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