

# LXV75 series

## LED Power Supply

### Constant Voltage Power Supplies

LED Power  
75W

#### LED POWER

next generation power source

#### FEATURES

- High Efficiency 93%
- IP67 Waterproof
- Active PFC (Typical 0.99)
- OVP, SCP, OTP
- -35 to 70°C deg operation
- Wide Input 90-305VAC option
- UL8750 recognised
- EN61347-1, -2-13 compliant

The LXV75 series of constant voltage LED power supplies from Excelsys Technologies can deliver up to 75W of output power in an extremely compact package size.

The LXV75 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 LXV75 series provides high reliability and high performance in a compact package. The LXV75 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
LXV75-012S	12V	6.25A	90-264VAC <sup>(3)</sup>	16V	110-180%	90.0%
LXV75-024S	24V	3.13A	90-264VAC <sup>(3)</sup>	34V	110-180%	92.0%
LXV75-036S	36V	2.08A	90-264VAC <sup>(3)</sup>	50V	110-180%	92.0%
LXV75-042S	42V	1.79A	90-264VAC <sup>(3)</sup>	57V	110-180%	93.0%
LXV75-048S	48V	1.56A	90-264VAC <sup>(3)</sup>	63V	110-180%	92.0%
LXV75-054S	54V	1.39A	90-264VAC <sup>(3)</sup>	75V	110-180%	92.0%
LXV75-081S	81V	0.93A	90-264VAC <sup>(3)</sup>	100V	110-180%	92.0%
LXV75-105S	105V	0.71A	90-264VAC <sup>(3)</sup>	140V	110-180%	92.0%

#### Input Specifications

Parameter	Conditions/Description	Min	Nom	Max	Units
<b>Input Voltage Range</b>	Universal Input. see Note 3	90		264/305	VAC
<b>Input Frequency Range</b>		47		63	Hz
<b>Input Current</b>	100VAC in, 75W output			0.90	A
<b>Inrush Current</b>	230VAC in, 25°C, Cold Start			65	A
<b>Power Factor</b>	220VAC, 110VAC	0.95		0.99	
<b>Leakage Current</b>	240VAC, 50Hz			0.75	mA

#### 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			2.0	% pk-pk
<b>Dynamic Response</b>	Output Deviation R/S : 1 A / $\mu$ S			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			3	s
<b>Short Circuit Protection</b>	Auto Recovery				
<b>Over Voltage Protection</b>	Latching. See individual models OVP levels				
<b>OverTemperature Protection</b>	Internal Component Temperature			110	°C

#### General Specifications

Parameter	Conditions/Description	Min	Nom	Max	Units
<b>Isolation Voltage</b>	Input to Output See Note 2	3750			VAC
	Input to Chassis	1500			VAC
<b>Efficiency</b>	See individual models		93.0		%
<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, 80% load, 25°C		467,000		Hours
<b>Lifetime</b>	110VAC, 80% load, 45°C		83,000		Hours
<b>Weight</b>			950		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 0.1 $\mu$ F ceramic capacitor and 10 $\mu$ F electrolytic capacitor.

Note 2. Primary to Secondary Isolation test not to be carried on power supply.

Note 3. 90-305VAC input voltage range available. Add Suffix "W" to part number e.g. LXV75-012SW



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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**

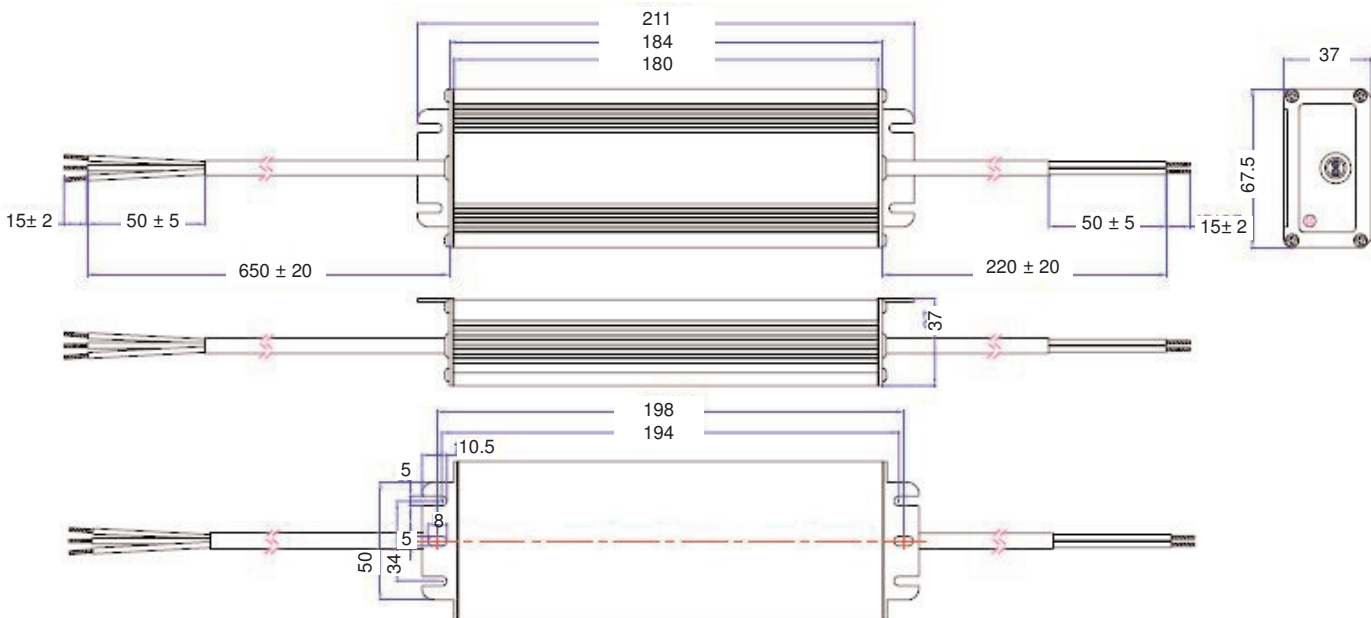
**INPUT CABLE**

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**



All Tolerances ± 0.2mm unless specified

Specifications subject to change without notice  
LXV75 Datasheet 27 April 2011

