

LXV50 series

LED Power Supply

Constant Voltage Power Supplies

LED POWER

next generation power source

FEATURES

- High Efficiency 87%
- IP67 Waterproof
- Active PFC (Typical 0.92)
- OVP, SCP
- -35 to 55°C deg operation
- Wide Input 90-305VAC
- UL8750 recognised
- EN61347-1, -2-13 compliant



LED Power
50W

The LXV50 series of constant voltage LED power supplies from Excelsys Technologies can deliver up to 50W of output power in an extremely compact package size.

The LXV50 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 LXV50 series provides high reliability and high performance in a compact package. The LXV50 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	OCP Hiccup	Efficiency
LXV50-012SW ⁽³⁾	12V	4.20A	90-305VAC	17V	120-170%	82.0%
LXV50-018SW ⁽³⁾	18V	2.78A	90-305VAC	23V	120-170%	84.0%
LXV50-024SW ⁽³⁾	24V	2.10A	90-305VAC	30V	120-170%	84.0%
LXV50-036SW ⁽³⁾	36V	1.40A	90-305VAC	42V	120-170%	86.0%
LXV50-048SW ⁽³⁾	48V	1.05A	90-305VAC	55V	120-170%	87.0%

Input Specifications						
Parameter	Conditions/Description	Min	Nom	Max	Units	
Input Voltage Range	Universal Input. see Note 3	90		305	VAC	
Input Frequency Range		47		63	Hz	
Input Current	100VAC in, 50W output			0.70	A	
Leakage Current	277VAC in, 50Hz			0.50	mA	
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	% of Vout			±10	%	
Ripple and Noise	20MHz Bandwidth. See Note 1		4		V pk-pk	
Dynamic Response	Output Deviation R/S : 1 A / uS		5		%	
	Settling Time Load : 25% ~ 75% full Load		10		mS	
Overshoot	On power on.			40	%	
Turn-on Delay	Measured at 220VAC and full load			3	s	
Short Circuit Protection	Auto Recovery					
Over Voltage Protection	Hiccup, Auto Recovery. See individual models OVP levels					
General Specifications						
Parameter	Conditions/Description	Min	Nom	Max	Units	
Isolation Voltage	Input to Output See Note 2	3750			VAC	
	Input to Chassis	1500			VAC	
Efficiency	See individual models		86.0		%	
Safety Agency Approvals	UL8750, EN61347-1, -2-13, UL1310					
No load Power Dissipation	Measured at 120VAC and 220VAC			4	W	
MTBF	MIL-HDBK, 110VAC input, 80% load, 25°C		487,000		Hours	
Lifetime	110VAC input, 80% load, 45°C		66,000		Hours	
Weight			480		g	
Operating Temperature		-35		+55	°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.

UL 1310 Class 2 product, except LXV50-048SW which is Class 2 US only.



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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**

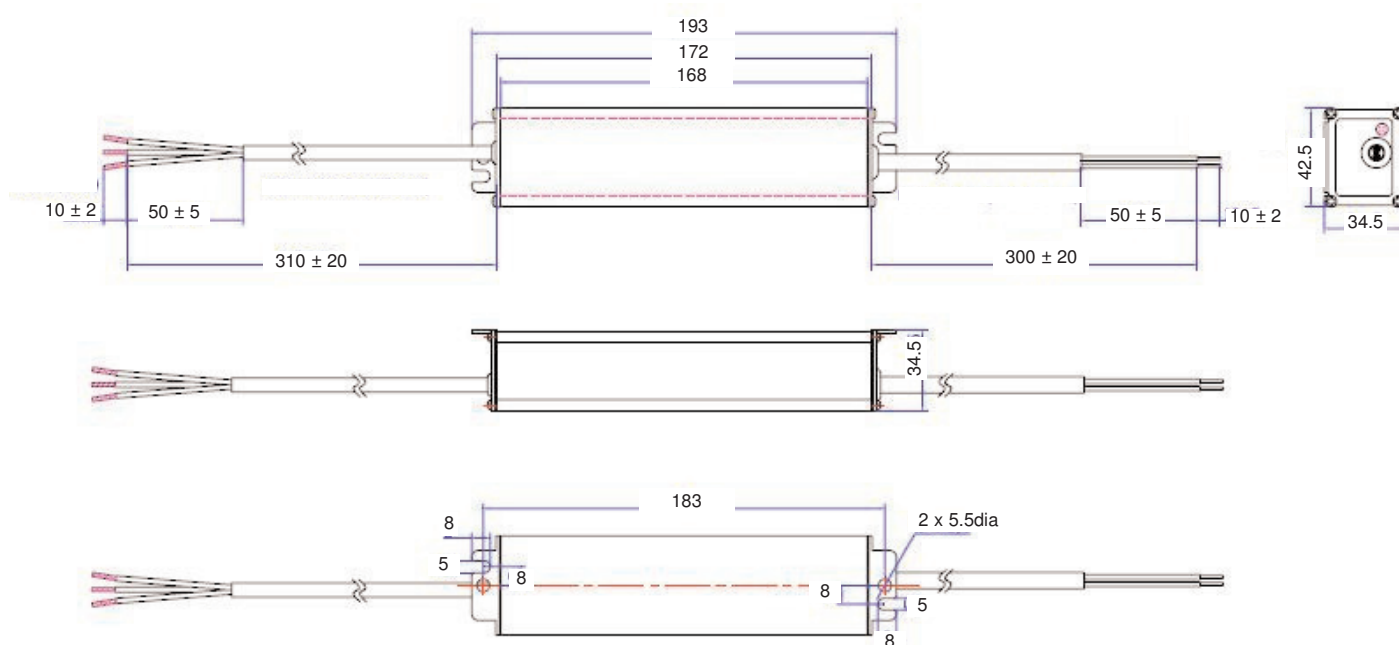
SJTW 18AWG 3C

Black (L) and White(N) Green(Earth) 310±20mm

OUTPUT CABLE

SJTW 18AWG 2C

Black (-V) and Red (+V) 300±20mm

MECHANICAL SPECIFICATIONS**Europe/Asia**

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