

LXC100 series

LED Power Supply

Constant Current Power Supplies



LED Power
100W

LED POWER
next generation power
source

FEATURES

- High Efficiency (up to 92%)
- Constant Output Current
- Active PFC (Typical 0.99)
- IP67 Waterproof
- OVP, SCP
- -35 to 70°C deg operation
- Universal Input 90-305VAC
- UL8750 compliant
- EN61347-1, -2-13 compliant

The LXC100 series of constant current LED power supplies from Excelsys Technologies can deliver up to 100W of output power in an extremely compact package size.

The LXC100 series of constant current power supplies provides up to 4200mA of output current and 286V output voltage solutions for specific LED requirements. With industry leading efficiencies, and an extensive protection feature set, the LXC100 series provides high reliability and high performance in a compact package.

Model Number	Output Voltage	Output Current	Input Voltage	OVP Latching max	Efficiency
LXC100-0350SW	172-286V	350mA	90-305VAC	400V	92.0%
LXC100-0450SW	132-222V	450mA	90-305VAC	311V	92.0%
LXC100-0700SW	86-143V	700mA	90-305VAC	200V	91.0%
LXC100-1050SW	57-95V	1050mA	90-305VAC	133V	91.0%
LXC100-1400SW	43-71V	1400mA	90-305VAC	101V	91.0%
LXC100-1750SW	34-57V	1750mA	90-305VAC	80V	91.0%
LXC100-2100SW	29-48V	2100mA	90-305VAC	67V	91.0%
LXC100-2450SW	25-41V	2450mA	90-305VAC	58V	91.0%
LXC100-2800SW	22-36V	2800mA	90-305VAC	51V	90.5%
LXC100-3150SW	19-32V	3150mA	90-305VAC	45V	90.5%
LXC100-3570SW	17-28V	3570mA	90-305VAC	40V	90.5%
LXC100-4200SW	14-24V	4200mA	90-305VAC	34V	90.5%

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, 100W output			1.3	A
Inrush Current	230VAC in, 25°C, Cold Start			65	A
Power Factor	220VAC, 110VAC	0.96		0.99	

Output Specifications

Parameter	Conditions/Description	Min	Nom	Max	Units
Line Regulation				±1	%
Load Regulation				±5	%
Voltage Range	See table of outputs				
Output Current Range	% of Vout			±5	%
Ripple and Noise	20MHz Bandwidth. See Note 1			3.0	% pk-pk
Overshoot				10	%
Turn-on Delay	Measured at 220VAC and full load			1	s
Short Circuit Protection	Auto Recovery				
Over Voltage Protection	Latching. See individual models OVP levels				

General Specifications

Parameter	Conditions/Description	Min	Nom	Max	Units
Isolation Voltage	Input to Output See Note 2 Input to Chassis	3000 1500			VAC VAC
Efficiency	See individual models		91		%
Safety Agency Approvals	UL8750, EN61347-1, -2-13				
No load Power Dissipation	Measured at 230 Vac			1.0	W
MTBF	MIL HDBK 217F, 110VAC Input, 80% load, 25°C		415,000		Hours
Lifetime	220VAC Input, 80% load, 45°C		126,000		Hours
Weight			1000		g
Operating Temperature		-35		+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.



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EMC			
Parameter	Standard	Level	Units
Emissions			
Conducted	EN55015	Compliant	
Radiated	EN55015	Compliant	
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	
Surge Immunity	EN61000-4-5	Level 4	
Conducted RFI	EN61000-4-6	Compliant	
Power Freq Magnetic Field	EN61000-4-8	Compliant	
Voltage Dips	EN61000-4-11		

INPUT / OUTPUT WIRING

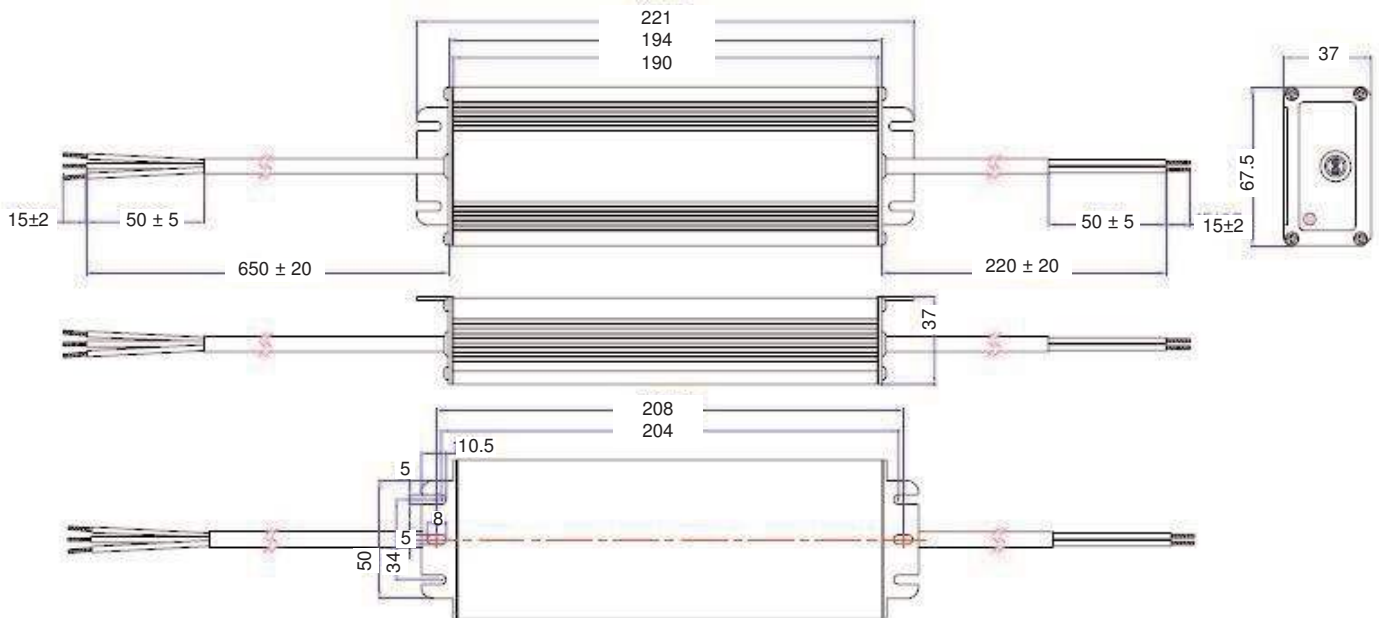
INPUT CABLE

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

OUTPUT CABLE

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

MECHANICAL SPECIFICATIONS



Specifications are subject to change without notice

LXC100 Datasheet 28 April 2011



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