# LXC42 series

# **LED Power Supply**

# Constant Current LED Power Supplies



## **LED POWER** next generation power source

#### **FEATURES**

- High Efficiency (up to 90%)
- Constant Current
- Active PFC (Typical 0.95)
- IP66 Waterproof
- OVP, SCP
- -20 to 70°C deg operation
- Input 90-305VAC
- UL8750 compliant
- EN61347-1,-2-13 compliant

The LXC42 series of constant current LED power supplies from Excelsys Technologies can deliver up to 42W of output power in an extremely compact package size.

The LXC42 series of constant current power supplies provides up to 1750mA of output current and 120V output voltage solutions for specific LED requirements. With industry leading efficiencies, and an extensive protection feature set, the LXC42 series provides high reliability and high performance in a compact package.

The LXC42 series carries the UL and CE mark for safety and is also RoHS compliant.

Model Number	Output Voltage	Output Current	Input Voltage	Efficiency
LXC42-0350SW(2)	60-120V	350mA	90-305VAC	90.0%
LXC42-0450SW <sup>(2)</sup>	47-94V	450mA	90-305VAC	89.0%
LXC42-0700SW(2)	30-60V	700mA	90-305VAC	89.0%
LXC42-1050SW(3)	20-40V	1050mA	90-305VAC	88.0%
LXC42-1280SW <sup>(4)</sup>	17-32V	1280mA	90-305VAC	88.0%
LXC42-1400SW(4)	15-30V	1400mA	90-305VAC	88.0%
LXC42-1750SW <sup>(4)</sup>	12-24V	1750mA	90-305VAC	87.0%

Input Specifications Parameter	Conditions/Description	Min	Nom	Max	Units
	Wide Universal Input	90	NOIII	305	VAC
Input Voltage Range Input Frequency Range	wide Universal Input	90 47		63	Hz
	100V/AC in 43W autout	47		0.60	
Input Current Inrush Current	100VAC in, 42W output 230VAC in, 25°C, Cold Start			60	A
Power Factor		0.05			А
Power Factor	220VAC, 110VAC (also see graphs on page 3)	0.95		0.98	
Output Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Unit
Line Regulation				±1	%
Load Regulation				±3	%
Voltage Range	See table of outputs				
Output Current Range	% of Output			±5	%
Overshoot				10	%
Turn-on Delay	Measured at 110VAC		0.6	1.0	S
Turn-on Delay	Measured at 220VAC		0.3	0.5	S
Short Circuit Protection	Auto Recovery				
Over Temp Protection	Hiccup. Auto Recovery	95	110	125	°C
General Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Unit
Isolation Voltage	Input to Output See Note 1	3000			VAC
	Input to Chassis	1500			VAC
Efficiency	See individual models (also see graphs on page 3)				%
Safety Agency Approvals	UL8750 compliant to UL1310 Class 2 EN61347-1, -2-13				
No load Power Dissipation	Measured at 120VAC and 220VAC			6.0	W
MTBF	MIL-HDBK-217F 110VAC,80% Ld,25°C,(LXC42-1750SW)		327.000		Hour
Lifetime	Case Temperture =70°C		71,000		Hour
Weight			350		g
Operating Temperature		-20		+70	°C
Storage Temperature		-40		+85	°C
Relative Humidity	Non-condensing (operarting)	10		100	%RH

Note 1. Primary to Secondary Isolation test not to be carried out on power supply. Please contact Excelsys for full test method.

Note 2. Non UL1310 Class 2

UL1310 Class 2 outputs for US only Non Class 2 for Canada UL1310 Class 2 outputs for US and Canada Note 3.

Note 4.



**IRELAND** 

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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 (8kV air discharge, 4kV contact discharge)	Compliant	
Radiated RFI	EN61000-4-3	Compliant	
Fast Transients - burst	EN61000-4-4	Level 3	
Surge	EN61000-4-5 (AC Power Line: Line to Line 2KV)	Compliant	
Conducted RFI	EN61000-4-6	Compliant	
Power Freq Magnetic Field	EN61000-4-8	Compliant	
Voltage Dips	EN61000-4-11	Compliant	

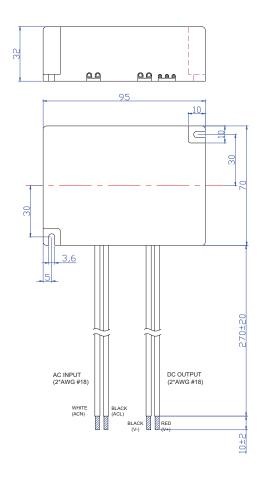
### **INPUT / OUTPUT WIRING** INPUT CABLE

18AWG (UL1015 Rated) Black (L), White(N) 270±20mm

#### **OUTPUT CABLE**

18AWG (UL1015 Rated) Black (-V) and Red (+V) 270±20mm

#### **MECHANICAL SPECIFICATIONS**





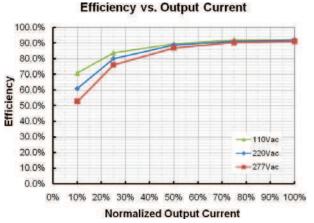
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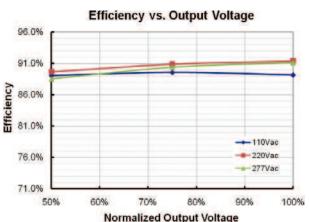
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# North America

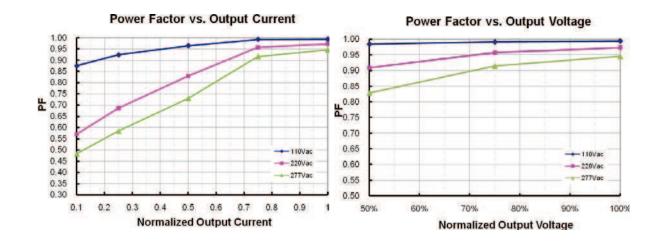
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#### **Power Factor Characteristics**





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