Celsys LED Drive

# LXC25 series

## **LED Power Supply**

Constant Current LED Power Supplies



**FEATURES** 

• High Efficiency (up to 84%)

• Constant Current Output

Active PFC (Typical 0.98)

• IP66 Waterproof

• OVP, SCP

• -20 to 70°C deg operation

• Input 90-305VAC

UL8750 compliant

• EN61347-1, -2-13 compliant

The LXC25 series of constant current LED power supplies from Excelsys Technologies can deliver up to 25W of output power in an extremely compact package size.

The LXC25 series of constant current power supplies provides up to 2080mA of output current and 72V output voltage solutions for specific LED requirements. With industry leading efficiencies, and an extensive protection feature set, the LXC25 series provides high reliability and high performance in a compact package

The LXC25 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 Hiccup max	Efficiency
LXC25-0350SW	24-72V	350mA	90-305VAC	90V	84.0%
LXC25-0450SW <sup>(3)</sup>	19-56V	450mA	90-305VAC	62V	84.0%
LXC25-0620SW(3)	13-40V	620mA	90-305VAC	48V	83.0%
LXC25-0700SW(3)	12-36V	700mA	90-305VAC	46V	83.0%
LXC25-1050SW <sup>(3)</sup>	8-24V	1050mA	90-305VAC	30V	82.0%
LXC25-1400SW(3)	6-18V	1400mA	90-305VAC	24V	81.0%
LXC25-1750SW <sup>(3)</sup>	5-14V	1750mA	90-305VAC	20V	81.0%
LXC25-2080SW <sup>(3)</sup>	4-12V	2080mA	90-305VAC	18V	80.0%

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, 25W output			0.32	Α
Inrush Current	230VAC in, 25°C, Cold Start			60	Α
Power Factor	220VAC, 110VAC	0.92		0.98	
Output Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
Line Regulation				±3	%
Load Regulation				±5	%
Voltage Range	See table of outputs				
Output Current Range	See Dimming Graphs				
Ripple and Noise	20MHz Bandwidth. See Note 1	3.0		5.0	V
Turn-on Delay	Measured at 220VAC and full load			2.0	S
Short Circit Protection	Auto Recovery				
Over Voltage Protection	Hiccup. Auto Recovery				
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	2000	84		%
Safety Agency Approvals	UL8750,EN61347-1, -2-13, UL1310 Class 2 Note 3		-		1.2
No load Power Dissipation	Measured at 120VAC and 220VAC			6.0	W
MTBF	MIL HDBK 217F, 110VAC input, 80% load, 25°C		484,000		Hours
Lifetime	110VAC input, 80% load, 45°C		79,000		Hours
Weight	· · · · · · · · · · · · · · · · · · ·		200		g
Operating Temperature	Derate 1.5%/°C from 50°C to 70°C	-20		+70	°C
Storage Temperature		-40		+85	°C
Relative Humidity	Non-condensing (operating)	10		100	%RH
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Note 1. Output connected in parallel with 0.1uF ceramic capacitor and 10uF electrolytic capacitor.

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

UL1310 Class 2 outputs for US and Canada except LXC25-0450SW which is Class 2 in 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	
Conducted RFI	EN61000-4-6	Compliant	
Power Freq Magnetic Field	EN61000-4-8	Compliant	
Voltage Dips	EN61000-4-11		

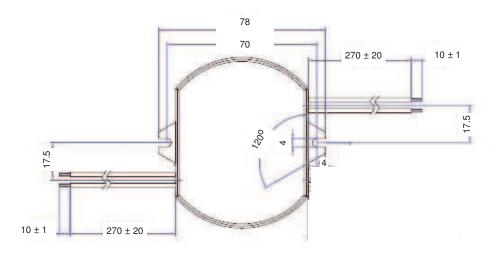
#### INPUT / OUTPUT WIRING **INPUT CABLE**

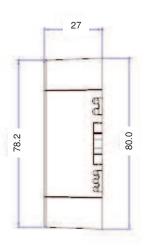
SJTW 18AWG 2C Black (L), White(N) 270±20mm

#### **OUTPUT CABLE**

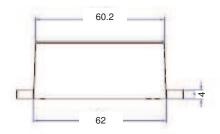
SJTW 18AWG 2C Black (-V) and Red (+V) 270±20mm

### **MECHANICAL SPECIFICATIONS**





2



Specifications are subject to change without notice LXC25 Datasheet 28 April 2011

