

LXC52 series

LED Power Supply

Constant Current LED Power Supplies

LED Power
52W

LED POWER

next generation power
source

FEATURES

- High Efficiency (up to 91%)
- Constant Output Current
- Active PFC (Typical 0.98)
- IP67 Waterproof
- OVP, SCP
- -35 to 70°C deg operation
- Universal Input 90-305VAC
- UL8750 recognised
- EN61347-1, -2-13 compliant

The LXC52 series of Constant Current LED power supplies from Excelsys Technologies can deliver up to 52W of output power in an extremely compact package size.

The LXC52 series of constant current power supplies provides up to 2100mA of output current and 149V output voltage solutions for specific LED requirements. With industry leading efficiencies, and an extensive protection feature set, the LXC52 series provides high reliability and high performance in a compact package

The LXC52 series carries the UL and CE mark for safety and is also RoHS compliant.

Model Number	Output Voltage	Output Current	Input Voltage	Efficiency
LXC52-0350SW ⁽¹⁾	75-149V	350mA	90-305VAC	91.0%
LXC52-0450SW ⁽¹⁾	58-116V	450mA	90-305VAC	90.0%
LXC52-0700SW ⁽¹⁾	38-75V	700mA	90-305VAC	89.0%
LXC52-1050SW ⁽²⁾	25-50V	1050mA	90-305VAC	89.0%
LXC52-1400SW ⁽³⁾	19-37V	1400mA	90-305VAC	89.0%
LXC52-2100SW ⁽³⁾	13-25V	2100mA	90-305VAC	88.0%

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, 52W output			0.8	A
Inrush Current	230VAC in, 25°C, Cold Start			60	A
Power Factor	220VAC, 1100VAC	0.95		0.98	
Output Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
Line Regulation				±1	%
Load Regulation				±3	%
Voltage Range	See individual models				
Output Current Range	% of Output			±5	%
Output Current Ripple				50	%
Overshoot				10	%Io
Turn-on Delay	Measured at 110VAC and full load		0.6	1.0	s
Turn-on Delay	Measured at 220VAC and full load		0.3	0.5	s
Short Circuit 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 4	3750			VAC
	Input to Chassis	1500			VAC
Efficiency	See individual models	88		91	%
Safety Agency Approvals	UL8750, EN61347-1, -2-13, UL1310 (Notes 1, 2, & 3)				
No load Power Dissipation	Measured at 230 Vac			6.0	W
MTBF	MIL HDBK-217F, 110VAC input, 80% load, 25°C (2100mA)	321,000			Hours
Lifetime	Case Temperature 65°C, 110VAC input, 80% load	59,000			Hours
Weight			480		g
Operating Temperature	Derating 2% per °C from 55°C to 70°C	-35		+70	°C
Storage Temperature		-40		+85	°C
Relative Humidity	Non-condensing (operating)	10		100	%RH

NOTE 1. Non-Class 2 Output US & Canada

NOTE 2. Class 2 Output US - Non-Class 2 Output Canada

NOTE 3. Class 2 Output US & Canada

NOTE 4. Primary to Secondary Isolation test not to be carried out on power supply



LXC52 Preliminary Datasheet Release 16 Mar

Europe/Asia

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 USA

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		Compliant	
Radiated RFI	EN61000-4-3		Compliant	
Fast Transients - burst	EN61000-4-4		Compliant	
Surge Immunity	EN61000-4-5		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

SJTW 18AWG

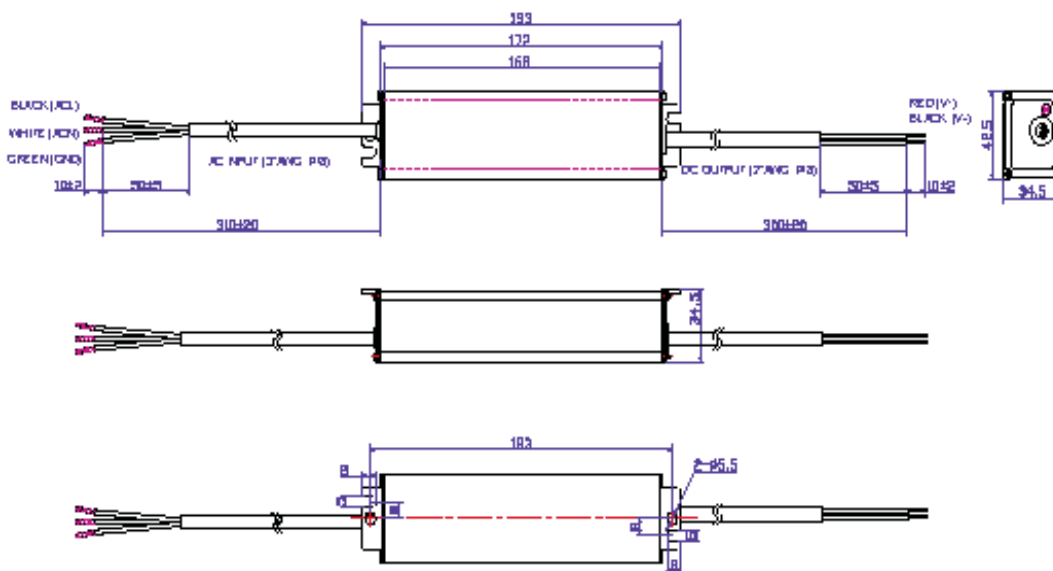
Black (L), White (N), Green (G) 310±20mm

OUTPUT CABLE

SJTW 18AWG

Black (-V) and Red (+V) 300±20mm

MECHANICAL SPECIFICATIONS



2

Specifications are subject to change without



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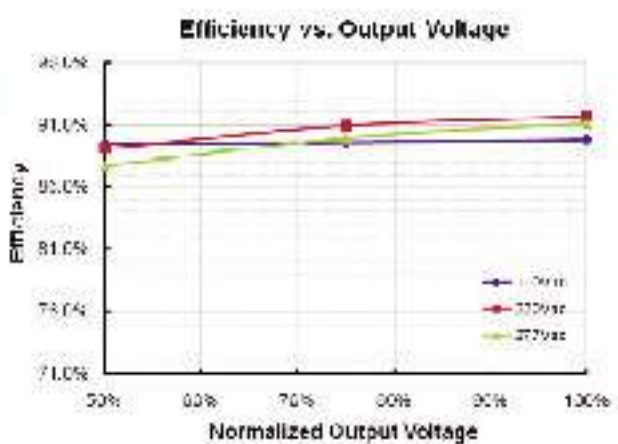
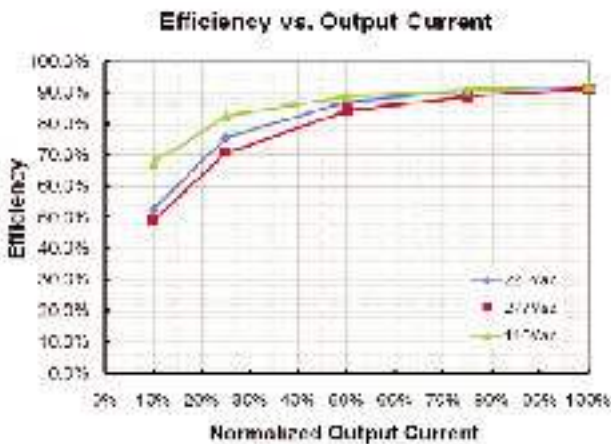
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Efficiency V Load for 350mA Model



Power Factor Characteristics

