

LXD150H series

LED Power Supply

480VAC Input LED Power Supplies

LED Power
150W

LED POWER

next generation power source

FEATURES

- High Efficiency (up to 91%)
- High Input 249-528VAC
- Constant Output Current
- Active PFC (Typical 0.95)
- IP67 Waterproof
- OVP, SCP, OTP
- -35 to 65°C deg operation
- UL8750 Approved
- EN61347-1, -2-13 compliant

The LXD150H series of constant current LED power supplies operates off an input voltage of 249-528VAC making it ideal for 347VAC and 480VAC input lighting systems, such as highway lighting.

The LXD150H series of constant current power supplies provides up to 4200mA of output current or 428V output voltage solutions for specific LED requirements. With industry leading efficiencies, and an extensive protection feature set, the LXD150H series provides high reliability and high performance in a compact package.

The LXD150H series carries the UL and CE mark for safety and is also RoHS compliant.

Model Number	Output Voltage	Output Current	Input Voltage	Efficiency
LXD150-0580SH	129-258V	350mA	249-528VAC	91.0%
LXD150-0700SH	107-214V	700mA	249-528VAC	91.0%
LXD150-1050SH	71-142V	1050mA	249-528VAC	90.0%
LXD150-1400SH	53-107V	1400mA	249-528VAC	90.0%
LXD150-2800SH	27-54V	2800mA	249-528VAC	90.0%
LXD150-3500SH	21-43V	3500mA	249-528VAC	89.0%
LXD150-4200SH	18-36V	4200mA	249-528VAC	89.0%

Input Voltage Range		249		528	VAC
Input Frequency Range		47		63	Hz
Input Current	277AC in, 150W output			0.70	A
Leakage Current	480VAC in, 50Hz			1.0	mA
Inrush Current	480VAC in, 25°C, Cold Start			50	A
Power Factor	480VAC, 277VAC	0.90		0.95	
Line Regulation				±1	%
Load Regulation				±3	%
Voltage Range	See table of outputs				
Output Current Range	% of Iout			±5	%
Ripple and Noise	20MHz Bandwidth. See Note 1			5.0	% pk-pk
Overshoot				10	%
Turn-on Delay	Measured at 277/480VAC and full load			3.0	s
Short Circuit Protection	Auto Recovery				
Over Voltage Protection	Latching.	120	135	150	%Vout
Over Temp Protection	Auto Recovery, 110°C internal component temperature				
Isolation Voltage	Input to Output See Note 2	3750			VAC
	Input to Chassis	1500			VAC
Efficiency	See individual models				
Safety	UL8750, EN61347-1, -2-13, UL1012, CAN/CSA-C22.2 No. 223-M91, C22.2 No. 107.1-01				
MTBF	MIL-HDBK-217F, 480VAC input, 80% load, 25°C		132,000		Hours
Lifetime	480VAC input, 80% load, 45°C		56,000		Hours
Weight			1300		g
Operating Temperature		-35		+65	°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.

Specifications are subject to change without notice



Europe/Asia

Excelsys Technologies Ltd t: +353 21 4354716
 27 Eastgate Drive f: +353 21 4354864
 Eastgate Business Park e: sales@excelsys.com
 Little Island, Cork, Ireland
 IRELAND

North America

Excelsys Technologies t: (972) 771 4544
 519 Interstate 30, #309 f: (972) 421 1805
 Rockwall, TX 75087 e: salesusa@excelsys.com
 USA

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 3 (B)	
Radiated RFI	EN61000-4-3		Level 2 (A)	
Fast Transients - burst	EN61000-4-4		Level 2 (B)	
Surge Immunity	EN61000-4-5		Compliant	
Conducted RFI	EN61000-4-6		Level 2 (A)	
Power Freq Magnetic Field	EN61000-4-8		Compliant	
Voltage Dips	EN61000-4-11		Compliant	

Dimming Control					
Parameter		Min	Nom	Max	Units
12V Output Voltage		10.8	12	13.2	V
12V Output Source Current		0		20	mA
Control Voltage (1-10V input)	Voltage applied on 1-10V input wire	-2		15	V
Source Current (1-10V input)	Source current on 1-10V input wire	0		200	uA

- Note A. If dimming function is not used, 12V(Blk/Wht) and 1-10V(purple)wire must be connected together.
- Note B. Primary to Secondary Isolation test not to be carried on power supply.
- Note C. Load Voltage must be maintained above minimum voltage. See models for voltage range.
- Note D. Dimming range is 10%-100%
- Note E. Dimming Signal Voltage should be above 1V for linear dimming control.
- Note F. See Dimming Implementation diagrams for various dimming methods.
- Note G. Do not connect Dim - (Gray) cable to Output -V cable

INPUT / OUTPUT WIRING

INPUT CABLE

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

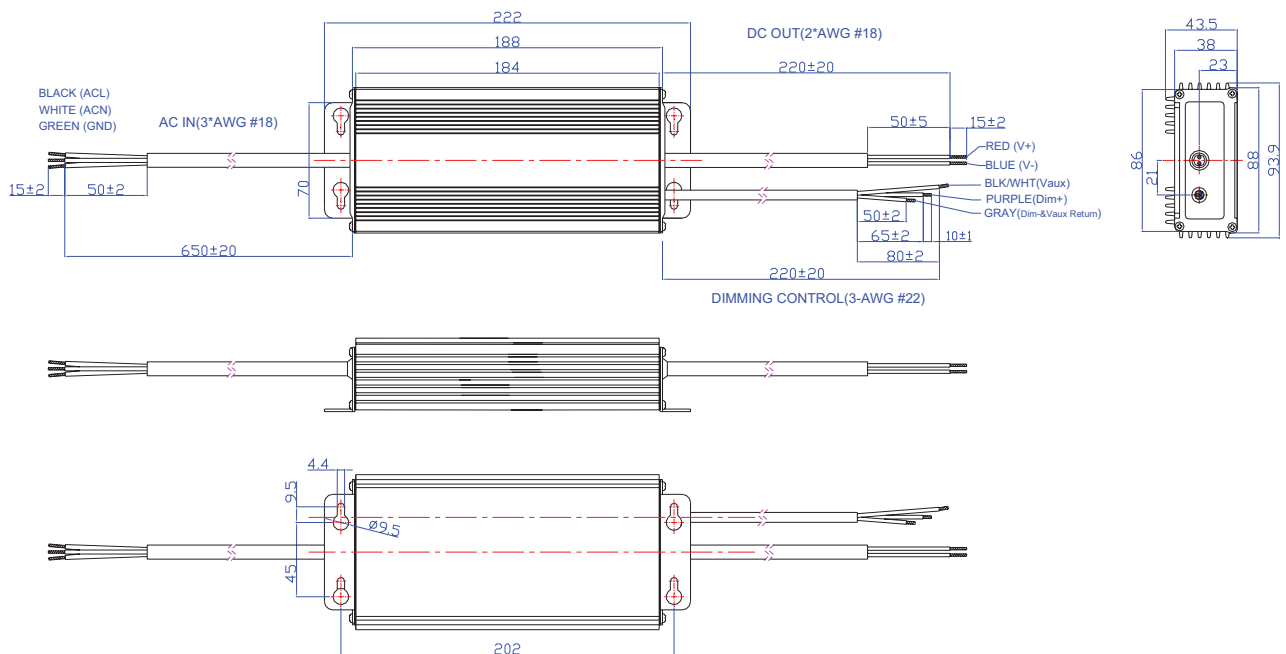
OUTPUT CABLE

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

DIMMING CONTROL CABLE

22AWG 3C
Blk/Wht (12V), Purple (1-10V), Gray (Dim -)
270±20mm

MECHANICAL SPECIFICATIONS



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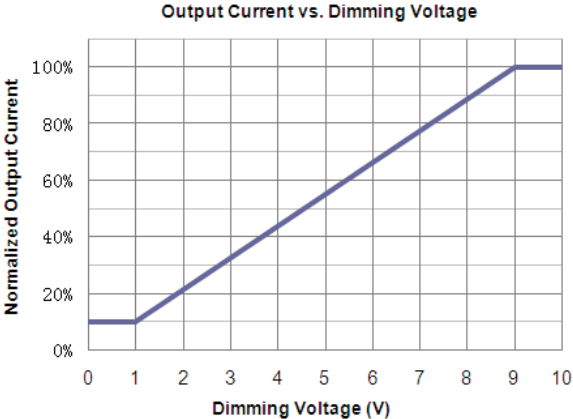
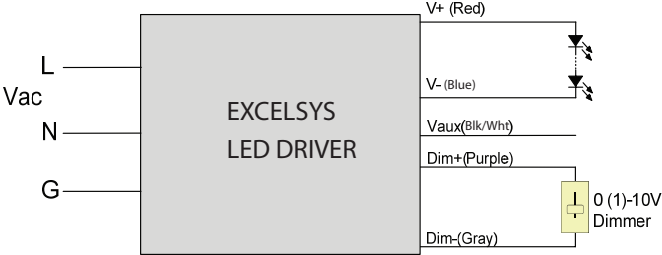
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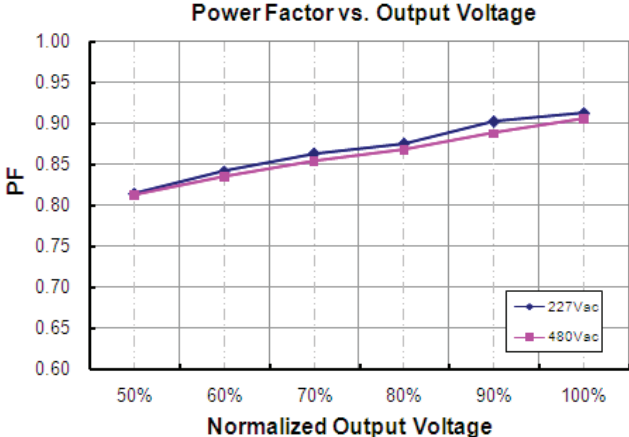
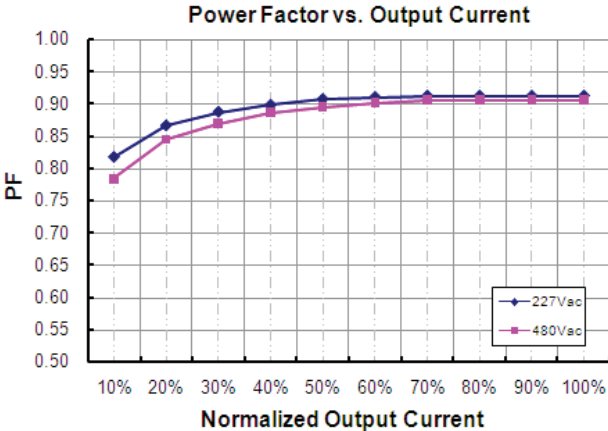
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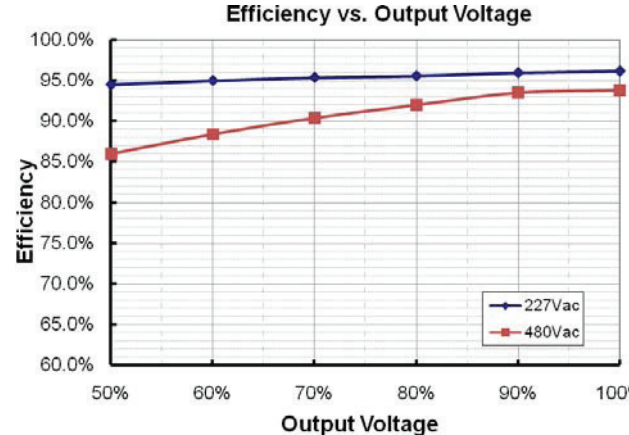
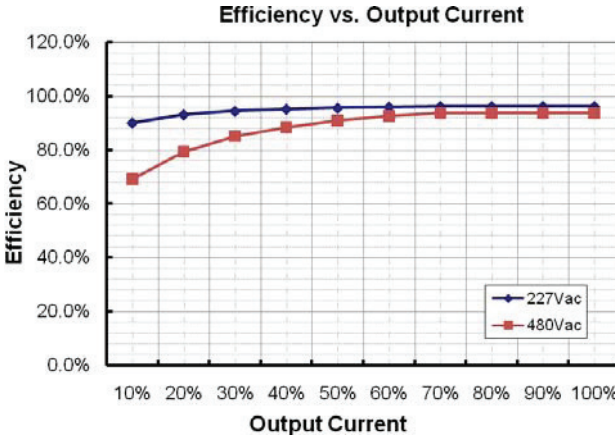
Dimming Implementation Diagrams



Power Factor Characteristics



Efficiency vs Load (580mA Model)



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