

LXD75H series

LED Power Supply

480VAC Input Dimmable LED Power Supplies



LED Power
75W

LED POWER

next generation power source

FEATURES

- High Efficiency (up to 87%)
- High Input 249-528VAC
- Constant Output Current
- Active PFC (Typical 0.95)
- IP67 Waterproof
- OVP, SCP, OTP
- -35 to 70°C deg operation
- UL8750 Approved
- EN61347-1, -2-13 compliant

The LXD75H series of constant output 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 LXD75H series provides up to 3150mA of output current or 214V output voltage solutions for specific LED requirements. With industry leading efficiencies, and an extensive protection feature set, the LXD75H series provides high reliability and high performance in a compact package. The LXD75H series carries the UL and CE mark for safety and is also RoHS compliant.

Model Number	Output Voltage	Output Current Range	Input Voltage	OVP Latching max	Efficiency
LXD75-0350SH ⁽²⁾	107-214V	35-350mA	249-528VAC	321V	87.0%
LXD75-0700SH ⁽²⁾	53-107V	70-700mA	249-528VAC	161V	86.0%
LXD75-1050SH ⁽²⁾	36-72V	105-1050mA	249-528VAC	108V	87.0%
LXD75-1400SH ⁽³⁾	26-53V	140-1400mA	249-528VAC	81V	87.0%
LXD75-2100SH ⁽⁴⁾	18-36V	210-2100mA	249-528VAC	54V	86.0%
LXD75-3150SH ⁽⁴⁾	12-24V	315-3500mA	249-528VAC	36V	85.0%

Input Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
Input Voltage Range		249		528	VAC
Input Frequency Range		47		63	Hz
Input Current	277AC in, 75W output			0.32	A
Leakage Current	480VAC in, 50Hz			2.0	mA
Inrush Current	480VAC in, 25°C, Cold Start			60	A
Power Factor	480VAC, 277VAC	0.90		0.95	
Output Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
Line Regulation				±1	%
Load Regulation				±3	%
Voltage Range	See table of outputs				
Output Current Range	See table of outputs				
Output Current Tolerance				±5	%
Output Current Ripple	% load		20	30	%
Turn-on Delay	Measured at 277/480VAC and full load		1.0	3.0	s
Short Circuit Protection	Auto Recovery				
Over Voltage Protection	Latching. See individual models OVP levels	120	135	150	%Vout
Over Temp Protection	Latching, 110°C internal component temperature				
General Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
Isolation Voltage	Input to Output See Note 1	3750			VAC
	Input to Chassis	1500			VAC
Efficiency	See individual models				
Safety	UL8750, UL1310 (See Notes 2,3 & 4), EN61347-1,-2-13				
MTBF	MIL-HDBK-217F, 480VAC input, 80% load, 25°C		380,000		Hours
Lifetime	480VAC input, 80% load, 45°C		140,000		Hours
Weight			1000		g
Operating Temperature		-35		+70	°C
Storage Temperature		-40		+85	°C
Relative Humidity	Non-condensing (operating)	10		100	%RH

- Note 1. Primary to Secondary Isolation test not to be carried out on power supply.
 Note 2. Non - UL1310 Class 2 output in USA and Canada.
 Note 3. UL1310 Class 2 output for in USA only.
 Note 4. UL1310 Class 2 outputs for USA and Canada.

Specifications are subject to change without notice



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EMC					
Parameter	Standard			Level	Units
Emissions					
Conducted	EN55015			Compliant	
Radiated	EN55015			Compliant	
Harmonic Distortion	EN61000-3-2			Class C	
Flicker and Fluctuation	EN61000-3-3			Compliant	
Immunity					
ESD	EN61000-4-2			Level 3 (A)	
Radiated RFI	EN61000-4-3			Level 3 (A)	
Fast Transients - burst	EN61000-4-4			Level 3 (A)	
Surge Immunity	EN61000-4-5			Compliant	
Conducted RFI	EN61000-4-6			Level 3 (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 - (Grey) cable to Output -V cable

INPUT / OUTPUT WIRING

INPUT CABLE

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

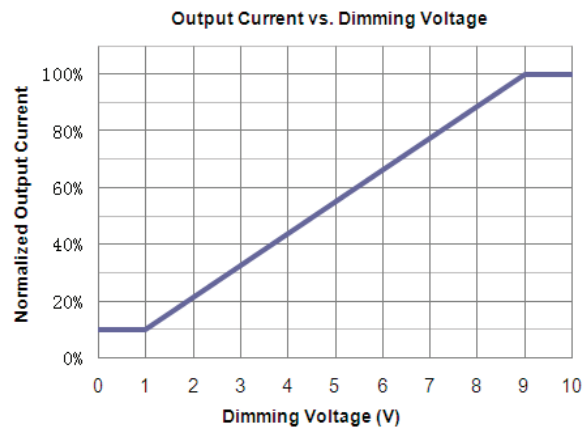
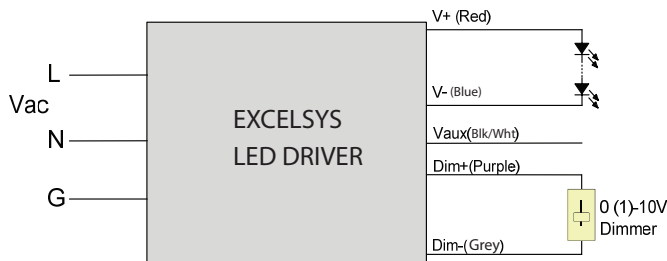
OUTPUT CABLE

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

DIMMING CONTROL CABLE

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

Dimming Implementation Diagrams



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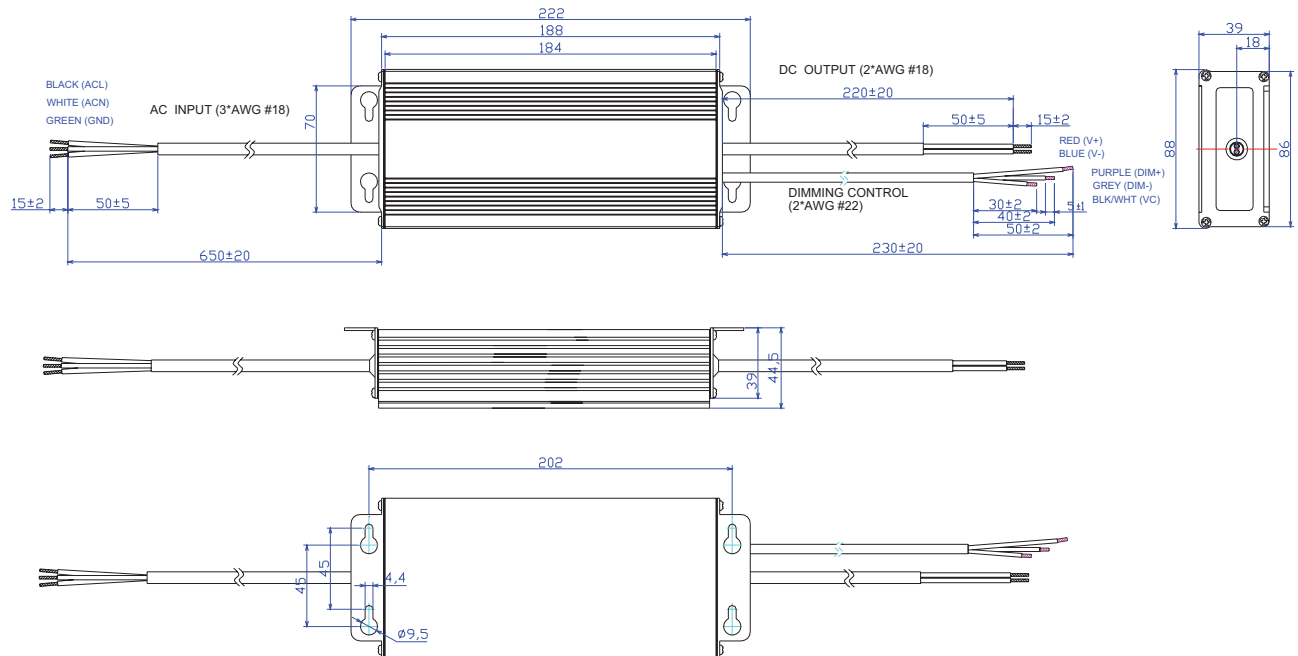
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MECHANICAL SPECIFICATIONS

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