

LXD75 series

LED Power Supply

Dimmable LED Power Supplies

LED Power
75W

LED POWER

next generation power
source

FEATURES

- High Efficiency (up to 92%)
- Dimming Control
- Active PFC (Typical 0.99)
- IP67 Waterproof
- OVP, SCP
- -35 to 70°C deg operation
- Universal Input 90-305VAC
- UL8750 compliant
- EN61347-1, -2-13 compliant

The LXD75 series of dimmable LED power supplies from Excelsys Technologies can deliver up to 75W of output power in an extremely compact package size.

The LXD75 series of dimming LED power supplies provide up to 5000mA of output current and 214V output voltage solutions for specific LED requirements. With industry leading efficiencies, and an extensive protection feature set, the LXD75 series provides high reliability and high performance in a compact package.

Model Number	Output Voltage	Output Current	Input Voltage	OVP Latching max	Efficiency
LXD75-0350SW	107-214V	350mA	90-305VAC	250V	92.0%
LXD75-0450SW	83-166V	450mA	90-305VAC	215V	92.0%
LXD75-0700SW	54-108V	700mA	90-305VAC	130V	91.0%
LXD75-1050SW	36-72V	1050mA	90-305VAC	88V	90.0%
LXD75-1400SW ⁽³⁾	27-54V	1400mA	90-305VAC	70V	90.0%
LXD75-2100SW ⁽³⁾	18-36V	2100mA	90-305VAC	45V	89.0%
LXD75-2800SW ⁽³⁾	13-27V	2800mA	90-305VAC	38V	89.0%
LXD75-3750SW ⁽³⁾	10-20V	3750mA	90-305VAC	30V	88.0%
LXD75-5000SW ⁽³⁾	7-15V	5000mA	90-305VAC	25V	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, 75W output			0.9	A
Inrush Current	230VAC in, 25°C, Cold Start			50	A
Power Factor	220VAC, 110VAC	0.96		0.99	
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 Dimming Graphs				
Ripple and Noise	20MHz Bandwidth. See Note 1	3.0		5.0	V
Overshoot				10	%
Turn-on Delay	Measured at 220VAC and full load			0.6	s
Short Circuit Protection	Auto Recovery				
Over Voltage Protection	Latching. See individual models OVP levels				
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		90		%
Safety Agency Approvals	UL8750, EN61347-1, -2-13, UL1310 Note 3				
MTBF	MIL HDBK-217F, 110VAC input, 80% load, 25°C		450,000		Hours
Lifetime	45°C, 110VAC Input, 80% Load		65,000		Hours
Weight			750		g
Operating Temperature		-35		+70	°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.

Note 3. UL1310 Class 2 outputs for US and Canada except LXD75-1400SW which is Class 2 in US only



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

Dimming Control					
Parameter		Min	Nom	Max	Units
10V Output Voltage		9.8	10.0	10.2	VDC
10V Output Source Current		-10		10	mA
Control Voltage (1-10V input)	Voltage applied on 1-10V input wire	-2		12	V
Source Current (1-10V input)	Source current on 1-10V input wire	0		0.5	mA

- Note A. If dimming function is not required, dimming wires are to be floating
- 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. See graphs for Dimming control. If Dimming Signal Voltage is 0-1V, output current is 10% rated current. If Dimming Signal Voltage is 8.5-10V, output current is 100% rated current
- Note F. See Dimming Implementation diagrams for various dimming methods.
- Note G. Do not connect GND of Dimming cable to Output..

INPUT / OUTPUT WIRING

INPUT CABLE

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

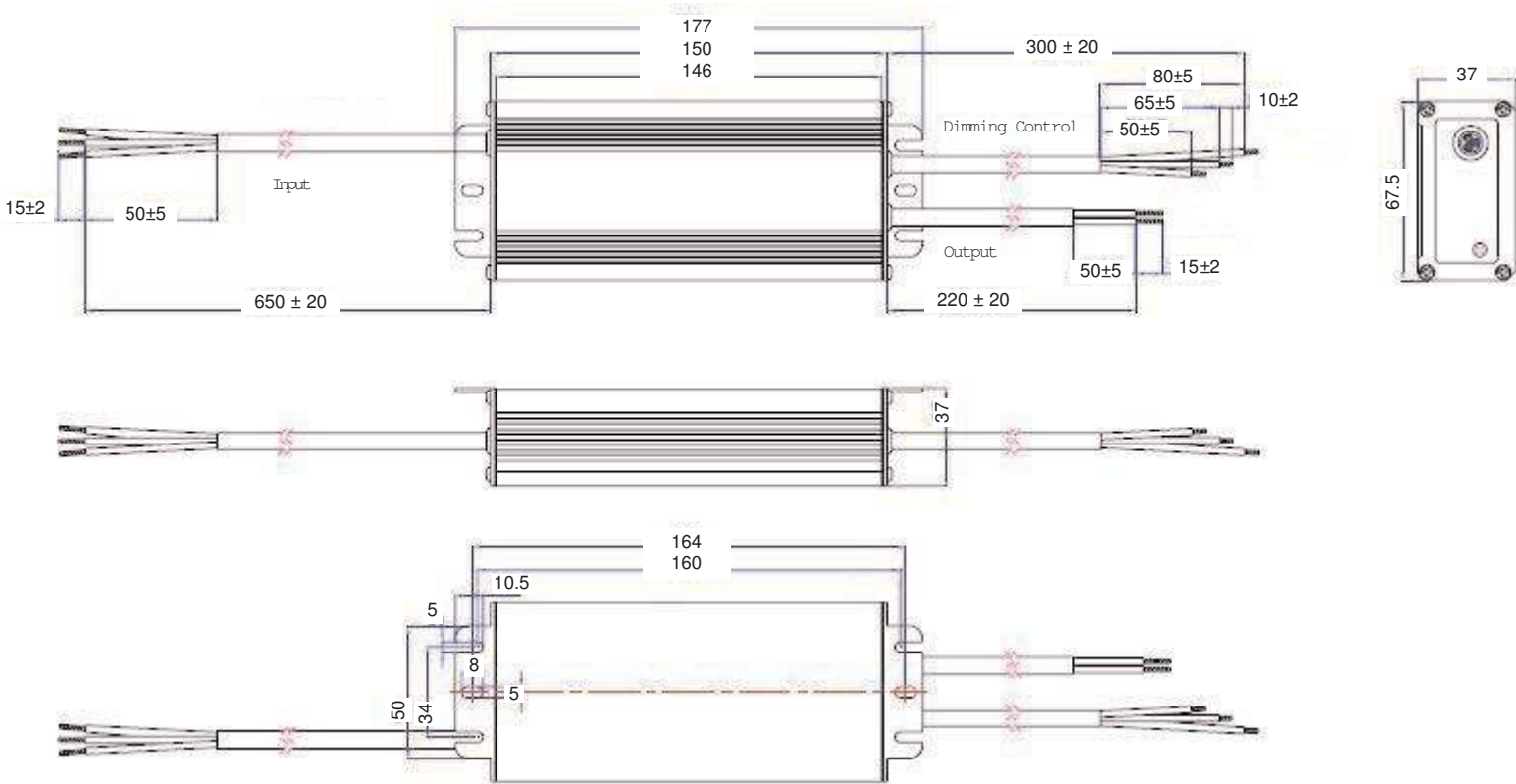
OUTPUT CABLE

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

DIMMING CABLE

SJTW 22AWG 3C
Yellow (10V), Purple (1-10V), Green (GND)

MECHANICAL SPECIFICATIONS



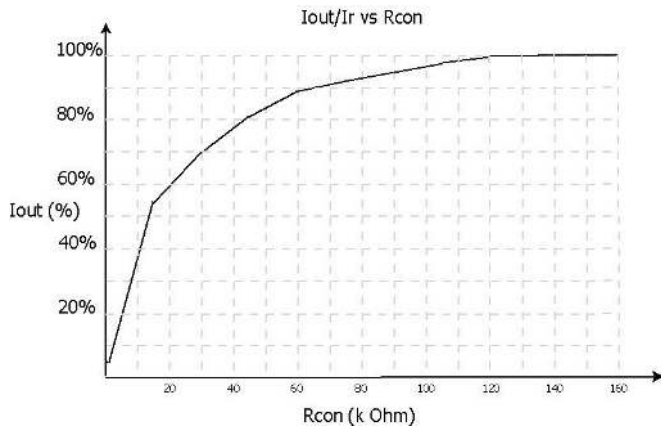
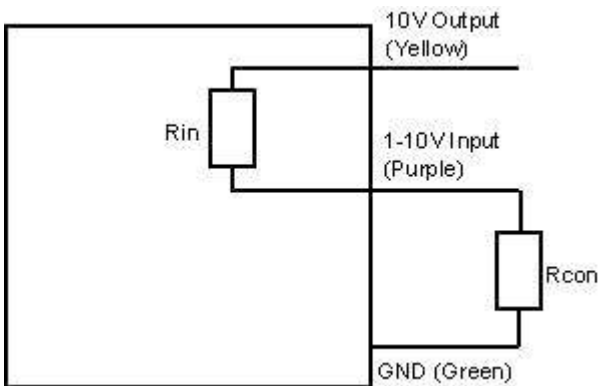
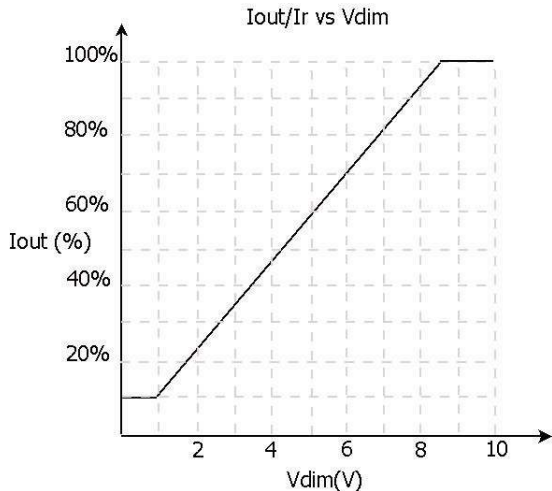
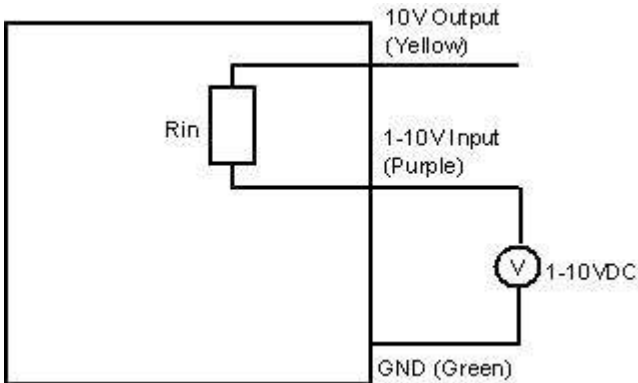
Specifications are subject to change without notice



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Dimming Implementation Diagrams

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LXD75 Datasheet Release 8 April 2011



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