

LXD25 series

LED Power Supply

Dimmable LED Power Supplies

LED POWER

next generation power source

FEATURES

- High Efficiency (up to 84%)
- Dimmable Output Current
- Active PFC (Typical 0.92)
- IP66 Waterproof
- OVP, SCP
- -20 to 70°C deg operation
- Input 90-305VAC
- UL8750 compliant
- EN61347-1, -2-13 compliant

The LXD25 series of dimmable LED power supplies from Excelsys Technologies can deliver up to 25W of output power in an extremely compact package size.

The LXD25 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 LXD25 series provides high reliability and high performance in a compact package.

The LXD25 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
LXD25-0350SW	24-72V	350mA	90-305VAC	90V	84.0%
LXD25-0450SW ⁽³⁾	19-56V	450mA	90-305VAC	62V	84.0%
LXD25-0620SW ⁽³⁾	13-40V	620mA	90-305VAC	48V	83.0%
LXD25-0700SW ⁽³⁾	12-36V	700mA	90-305VAC	46V	83.0%
LXD25-1050SW ⁽³⁾	8-24V	1050mA	90-305VAC	30V	82.0%
LXD25-1400SW ⁽³⁾	6-18V	1400mA	90-305VAC	24V	81.0%
LXD25-1750SW ⁽³⁾	5-14V	1750mA	90-305VAC	20V	81.0%
LXD25-2080SW ⁽³⁾	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	A
Inrush Current	230VAC in, 25°C, Cold Start			60	A
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
Overshoot				10	%Vout
Turn-on Delay	Measured at 220VAC and full load			2.0	s
Short Circuit Protection	Auto Recovery				
Over Voltage Protection	Hiccup. Auto Recovery		1.25Vmax		

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		84		%
Safety Agency Approvals	UL8750 compliant to UL1310 Class 2 EN61347-1, -2-13				
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	45°C, 110VAC input, 80% load		79,000		Hours
Weight			200		g
Operating Temperature	Derating 1.5% per °C from 50°C to 70°C	-20		+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 LXD25-0450SW and LXD25-0620 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			

Dimming Control					
Parameter		Min	Nom	Max	Units
10V Output Voltage		9.8	10.0	10.2	VDC
10V Output Source Current		-10		2	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		1	mA

- Note A. If dimming function is not used, 10V(yellow) 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 GND of Dimming cable to Output..

INPUT / OUTPUT WIRING

INPUT CABLE

SJTW 18AWG 2C

Black (L),White(N) 270±20mm

OUTPUT CABLE

SJTW 18AWG 2C

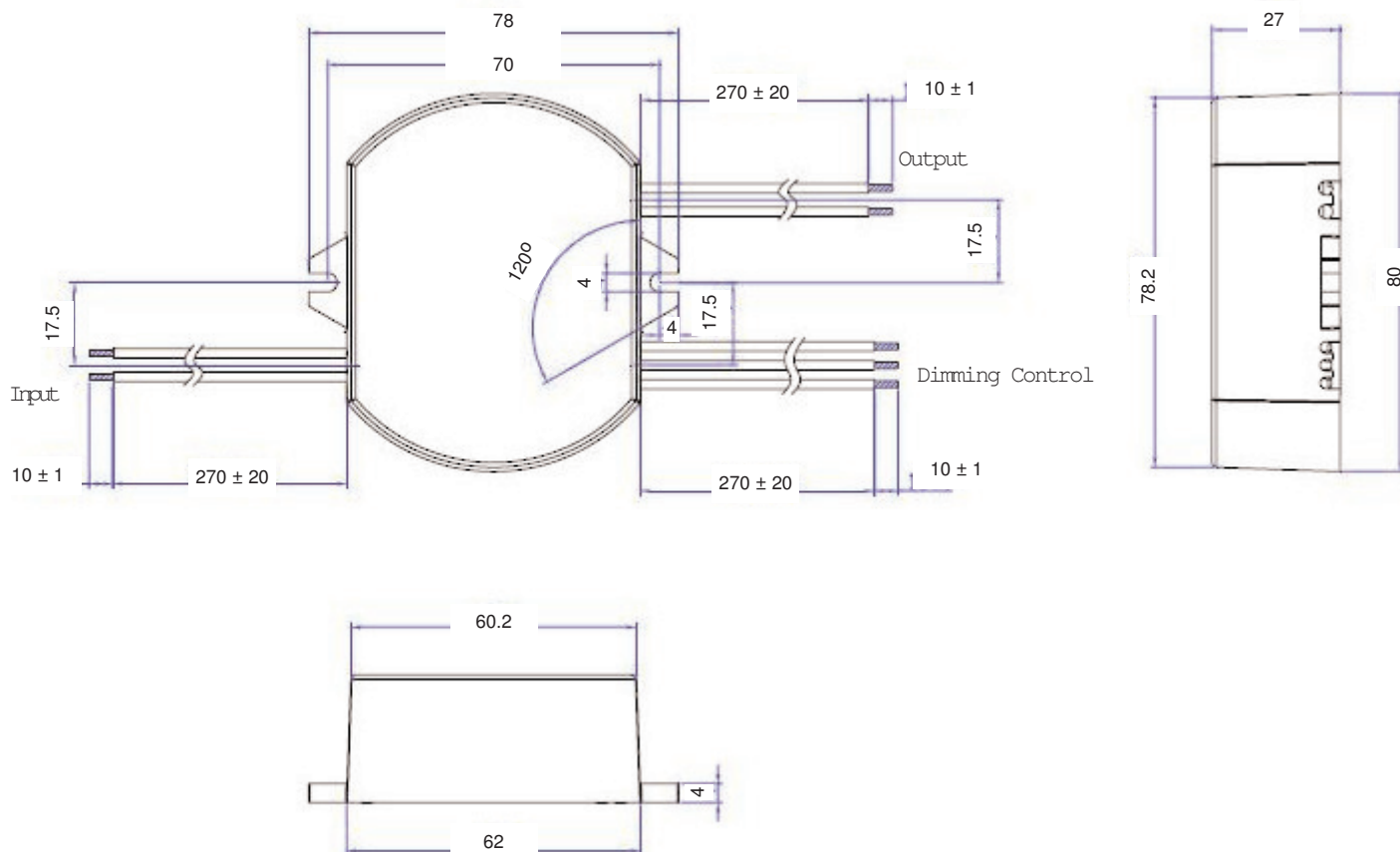
Black (-V) and Red (+V) 270±20mm

DIMMING CABLE

SJTW 22AWG 3C

Yellow (10V output), Purple (1-10V input), Green (GND) 270±20mm

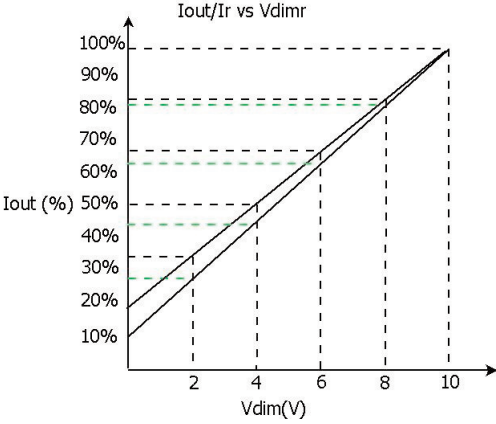
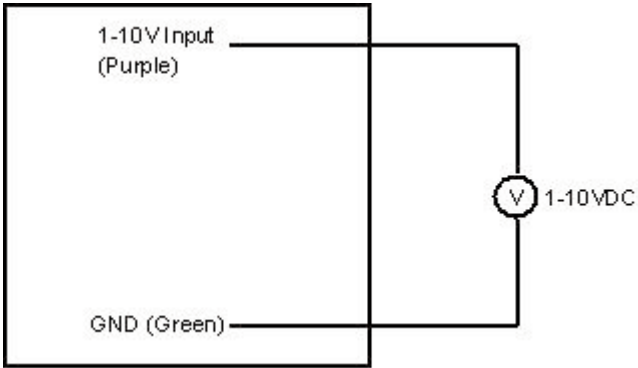
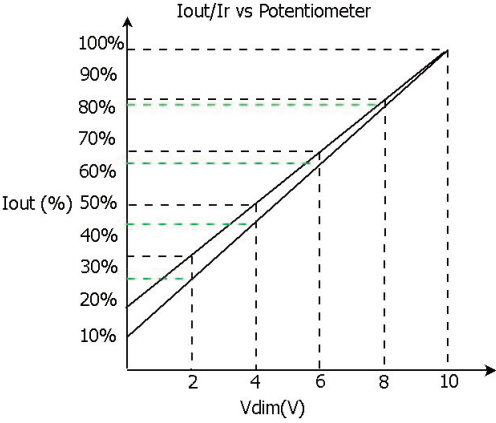
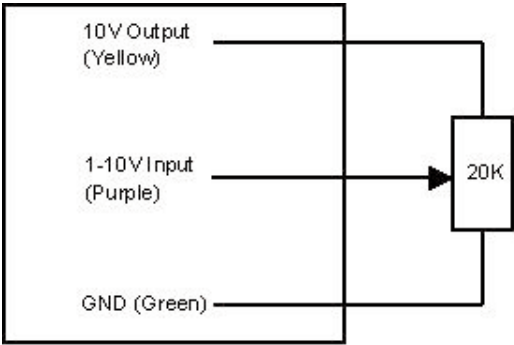
MECHANICAL SPECIFICATIONS



Specifications are subject to change without notice

Dimming Implementation Diagrams

**LED Power
25W**



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