

# @ 8 & ) SERIES

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**AMTEX**  
ELECTRONICS PTY LTD

[www.amtex.com.au](http://www.amtex.com.au)

"DC Power Solutions...not just components"



## Features

- High Efficiency ( up to 84% )
- Dimmable output Current
- Active PFC ( typical 0.92 )
- IP66 Waterproof case
- Over voltage & Overload / SC Protection
- -20°C to 70°C Operating Temperature
- Input 90-305VAC
- UL8750 compliant
- EN61347-1, -2-13 Compliant

## Description

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.

Model	Output V	Output A	Input V	OVP	Eff
LXD25-0350SW	24-72V	350mA	90-305VAC	90V	84.0%
LXD25-0450SW <sup>(3)</sup>	19-56V	450mA	90-305VAC	62V	84.0%
LXD25-0620SW <sup>(3)</sup>	13-40V	620mA	90-305VAC	48V	83.0%
LXD25-0700SW <sup>(3)</sup>	12-36V	700mA	90-305VAC	46V	83.0%
LXD25-1050SW <sup>(3)</sup>	8-24V	1050mA	90-305VAC	30V	82.0%
LXD25-1400SW <sup>(3)</sup>	6-18V	1400mA	90-305VAC	24V	81.0%
LXD25-1750SW <sup>(3)</sup>	5-14V	1750mA	90-305VAC	20V	81.0%
LXD25-2080SW <sup>(3)</sup>	4-12V	2080mA	90-305VAC	18V	80.0%



## Input Specifications

Parameter	Conditions/Description	Min	Nom	Max	Units
<b>Input Voltage Range</b>	Wide Input	90		305	VAC
<b>Input Frequency Range</b>		47		63	Hz
<b>Input Current</b>	100VAC in, 25W output			0.32	A
<b>Inrush Current</b>	230VAC in, 25°C, Cold Start			60	A
<b>Power Factor</b>	220VAC, 110VAC	0.92		0.98	

## Output Specifications

Parameter	Conditions/Description	Min	Nom	Max	Units
<b>Line Regulation</b>				±3	%
<b>Load Regulation</b>				±5	%
<b>Voltage Range</b>	See table of outputs				
<b>Output Current Range</b>	See Dimming Graphs				
<b>Ripple and Noise</b>	20MHz Bandwidth. See Note 1	3.0		5.0	V
<b>Overshoot</b>				10	%Vout
<b>Turn-on Delay</b>	Measured at 220VAC and full load			2.0	s
<b>Short Circuit Protection</b>	Auto Recovery				
<b>Over Voltage Protection</b>	Hiccup. Auto Recovery		1.25Vmax		

## General Specifications

Parameter	Conditions/Description	Min	Nom	Max	Units
<b>Isolation Voltage</b>	Input to Output See Note 2 Input to Chassis	3000 1500			VAC VAC
<b>Efficiency</b>	See individual models		84		%
<b>Safety Agency Approvals</b>	UL8750 compliant to UL1310 Class 2 EN61347-1, -2-13				
<b>No load Power Dissipation</b>	Measured at 120VAC and 220VAC			6.0	W
<b>MTBF</b>	MIL HDBK 217F, 110VAC input, 80% load, 25°C		484,000		Hours
<b>Lifetime</b>	45°C, 110VAC input, 80% load		79,000		Hours
<b>Weight</b>			200		g
<b>Operating Temperature</b>	Derating 1.5% per °C from 50°C to 70°C	-20		+70	°C
<b>Storage Temperature</b>		-40		+85	°C
<b>Relative Humidity</b>	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
<b>Emissions</b>					
Conducted	EN55015		Level B		
Radiated	EN55015		Level B		
Harmonic Distortion	EN61000-3-2		Compliant		
Flicker and Fluctuation	EN61000-3-3		Compliant		
<b>Immunity</b>					
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

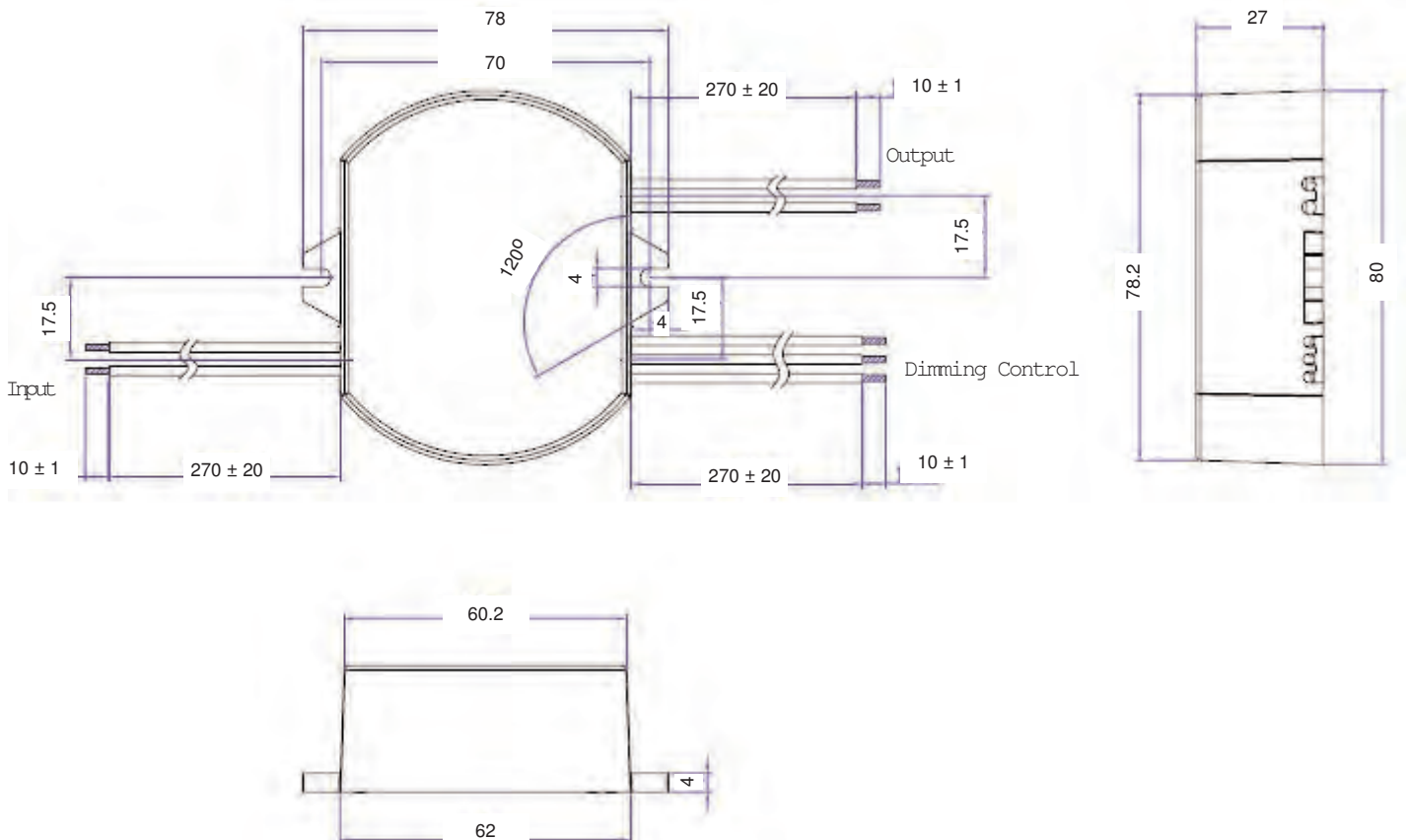
### OUTPUT CABLE

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



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## Dimming Implementation Diagrams

