LXV250 SERIES

LED Power Supply Constant Voltage: 250 watts

AMTEX ELECTRONICS PTY LTD
www.amtex.com.au
"DC Power Solutions...not just components"

Description

With industry leading efficiencies, and an extensive protection feature set, the LXV250 series provides high reliability and high performance in a compact package
The LXV250 series carries the CE mark for safety and is also RoHS compliant.

Features

- High Efficiency (up to 94%)
- Constant Voltage operation
- Active PFC (typical 0.98)
- IP67 Waterproof case
- Over voltage & Overload / SC Protectio
- -35ºC to 70ºC Operating Temperature
- Input 90-305VAC
- UL8750 compliant
- EN61347-1, -2-13 Compliant

Model	Output V	Output A	Input V	OVP	OCP	Eff
LXV250-012SW	12V	18.33A	90-305VAC	18V	110-180%	91.5%
LXV250-024SW	24V	10.41A	90-305VAC	35V	110-180%	93.0%
LXV250-028SW	28V	8.93A	90-305VAC	36V	110-180%	93.5%
LXV250-036SW	36V	6.94A	90-305VAC	50V	110-180%	94.0%
LXV250-042SW	42V	5.95A	90-305VAC	55V	110-180%	93.5%
LXV250-048SW	48V	5.20A	90-305VAC	61V	110-180%	93.5%
LXV250-052SW	52V	4.80A	90-305VAC	66V	110-180%	93.5%
LXV250-054SW	54V	4.62A	90-305VAC	66V	110-180%	94.0%
LXV250-056SW	56V	4.46A	90-305VAC	78V	110-180%	94.0%
LXV250-060SW	60V	4.16A	90-305VAC	78V	110-180%	94.0%
LXV250-084SW	84V	2.97A	90-305VAC	105V	110-180%	94.0%
LXV250-105SW	105V	2.38A	90-305VAC	130V	110-180%	94.0%
LXV250-150SW	150V	1.66A	90-305VAC	185V	110-180%	94.0%

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, 250W output			2.8	A
Power Factor	220VAC, 110 VAC	0.96		0.99	
Inrush Current	At 230 Vac input, 25°C cold start			50	A
Output Specifications					
Parameter	**Conditions/Description**	**Min**	**Nom**	**Max**	**Units**
Line Regulation				±1	%
Load Regulation				±3	%
Voltage Accuracy	% of Vout			±5	%
Ripple and Noise	20MHz Bandwidth. See Note 1			2.0	% pk-pk
Dynamic Response	Output Deviation R/S : 1 A /uS Settling Time Load : 25% ~ 75% full Load			5 10	% Vo mS
Overshoot				10	%
Turn-on Delay	Measured at 220VAC and full load			0.2	s
Short Circuit Protection	Auto Recovery				
Over Voltage Protection	Latching. See individual models OVP levels				
OverTemperature Protection	Internal Component Temperature		110		°C
General Specifications					
Parameter	**Conditions/Description**	**Min**	**Nom**	**Max**	**Units**
Isolation Voltage	Input to Output See Note 2 Input to Chassis	3750 1500			VAC VAC
Efficiency	See individual models		94.0		%
Safety Agency Approvals	UL8750, EN61347-1, -2-13				
No load Power Dissipation	Measured at 120VAC and 220VAC			3.0	W
MTBF	MIL-HDBK-217F, 110VAC input, 80% load, 25°C		145,000		Hours
Lifetime	220VAC input, 80% load, 45°C		162,000		Hours
Weight			1300		g
Operating Temperature		-35		+70	°C
Storage Temperature		-40		+85	°C
Relative Humidity	Non-condensing (operating)	10		100	%RH
Power Derating	At 100 VAC, derates linearly from 100% at 60°C to 80% at 70 °C				
	At 277 VAC, derates linearly from 100% at 65°C to 90% at 70 °C				

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 on power supply.

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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		
Input Line Surges	EN61000-4-5		Level 4		
Conducted RFI	EN61000-4-6		Compliant		
Power Freq Magnetic Field	EN61000-4-8		Compliant		
Voltage Dips	EN61000-4-11		Compliant		

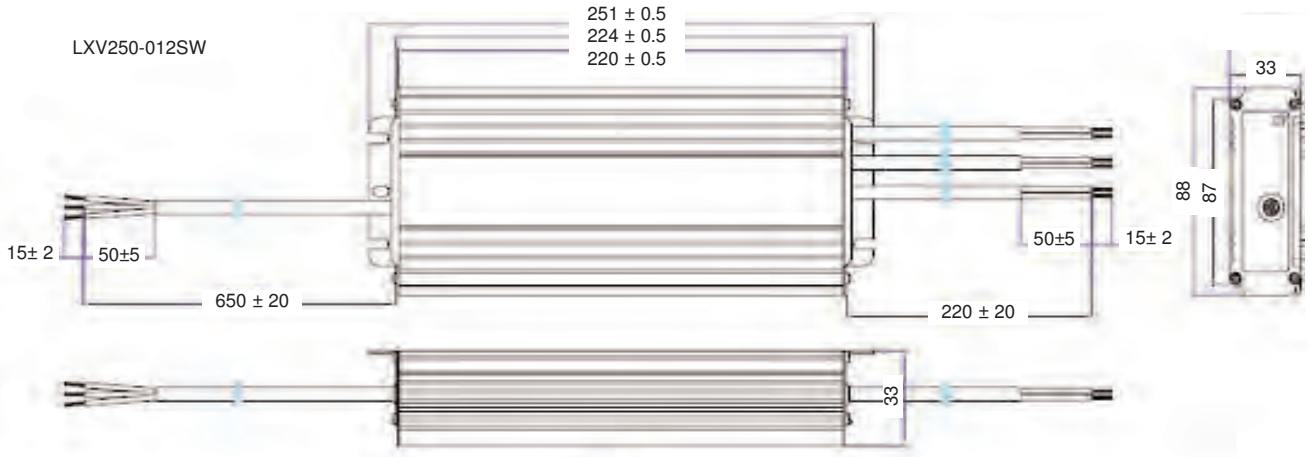
INPUT / OUTPUT WIRING

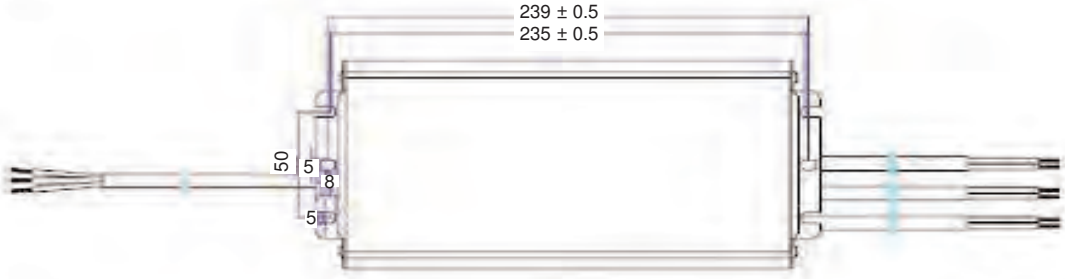
INPUT CABLE
SJTW 18AWG 3C
Black (L) and White(N), Green (Earth) 650±20mm

OUTPUT CABLE
SJTW 18AWG 2C except LXV250-028SW with SJTW 14AWG 2C
Black (-V) and Red (+V) 220±20mm

MECHANICAL SPECIFICATIONS

LXV250-012SW





3 x DC output cables ae connected in parallel internally. Please connect the 3 red wires and 3 black wires together in the application or ensure that each cable carries the same current.

LXV250-024SW
LXV250-036SW
LXV250-042SW

2 x DC output cables ae connected in parallel internally. Please connect the 2 red wires and 2 black wires together in the application or ensure that each cable carries the same current.

LXV250-028SW (14AWG)
LXV250-048SW
to
LXV250-150SW