

LXV300 SERIES

LED Power Supply: Constant Voltage: 300 watts



Description

The LXV300 series of constant voltage power supplies provides a range of output voltage solutions for specific LED requirements. With industry leading efficiencies, and an extensive protection feature set, the LXV300 series provides high reliability and high performance in a compact package. The LXV300 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 Protection
- -35°C to 70°C Operating Temperature
- Input 90-305VAC
- UL8750 compliant
- EN61347-1, -2-13 Compliant
- Safety approval no: NSW24814

Model	Output V	Output A	Input V	OVP	Eff	
LXV300-012SW	12V	23.3A	90-305VAC	18V	110-180%	92.0%
LXV300-024SW	24V	12.50A	90-305VAC	35V	110-180%	93.0%
LXV300-036SW	36V	8.33A	90-305VAC	50V	110-180%	94.0%
LXV300-042SW	42V	7.14A	90-305VAC	55V	110-180%	93.5%
LXV300-048SW	48V	6.25A	90-305VAC	61V	110-180%	93.5%
LXV300-052SW	52V	5.76A	90-305VAC	66V	110-180%	93.5%
LXV300-054SW	54V	5.55A	90-305VAC	66V	110-180%	94.0%
LXV300-056SW	56V	5.35A	90-305VAC	78V	110-180%	94.0%
LXV300-060SW	60V	5.00A	90-305VAC	78V	110-180%	94.0%
LXV300-084SW	84V	3.57A	90-305VAC	105V	110-180%	94.0%
LXV300-105SW	105V	2.85A	90-305VAC	130V	110-180%	94.0%
LXV300-150SW	150V	2.00A	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, 300W output			3.3	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 / μ S Settling Time Load : 25% ~ 75% full Load			5% Vo 10 mS	
Overshoot				10	%
Turn-on Delay	Measured at 220VAC and full load			3	s
Short Circuit Protection	Auto Recovery				
Over Voltage Protection	Non -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	3750			VAC
	Input to Chassis	1500			VAC
Efficiency	See individual models		94.0		%
Safety Agency Approvals	UL8750, EN61347-1, -2-13 pending				
No load Power Dissipation	Measured at 120VAC and 220VAC			3.0	W
MTBF	MIL HDBK-217F, 110VAC input, 80% load, 25°C		296,000		Hours
Lifetime	220VAC input, 80% load, 45°C		156,000		Hours
Weight			1540		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 0.1 μ F ceramic capacitor and 10 μ F 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

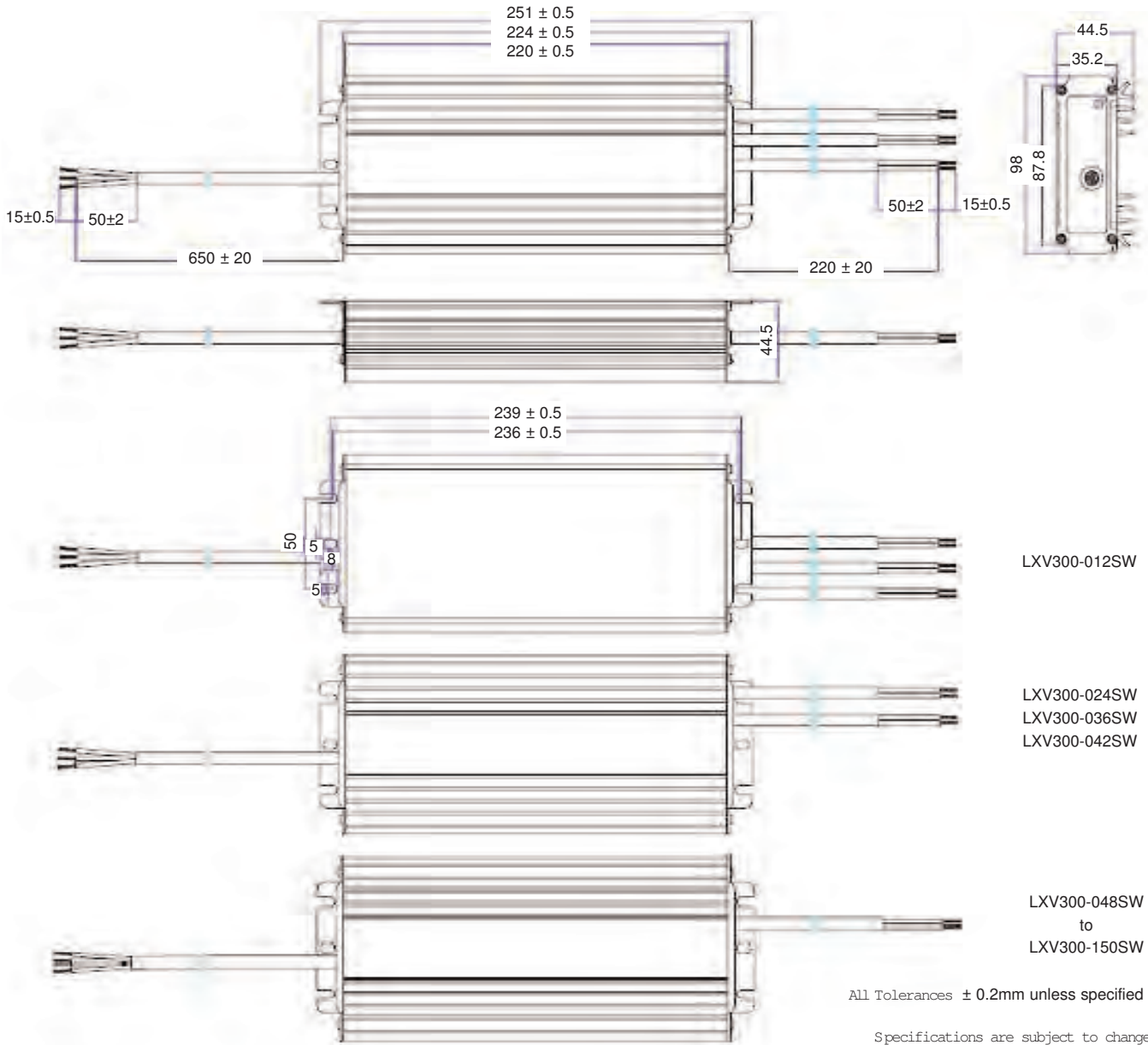
INPUT CABLE

SJTW 18AWG 2C
Black (L) and White(N), Green (Earth) 650±20mm

OUTPUT CABLE

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

MECHANICAL SPECIFICATIONS



All Tolerances ± 0.2mm unless specified