# LDV series

# **LED Power Supply**

### Miniature LED Power Supplies

#### **LDV Series**

#### **FEATURES**

- Universal Input: 90-264VAC
- Constant Output Voltage
- High Efficiency 90%
- IP67 rated
- Power Factor: Typical 0.95
- OCP, OVP, SCP, OTP

**Input Specifications** 

**Input Voltage Range** 

**Input Current** 

Input Frequency Range

• -30 to 50°C deg operation

Conditions/Descriptio

100VAC, 80W (220/240VAC, 90W)

Universal Input



The LDV100-012SN, the latest addition to the LDV series of Xled constant voltage LED power supplies delivers a single 12V output up 80W(see note 4) in the smallest package size in the industry.

These waterproof IP67, offer industry leading efficiencies of over 90% in the lowest profile (28mm) package. These ultra compact LED power supplies are ideal for space critical applications including commercial refrigeration, retail and office lighting as well as harsh outdoorand urban lighting applications such as street lighting, emergency lighting, signs and displays.

For more information contact sales@excelsys.com or visit www.excelsys.com

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Model Number	Output Voltage	Output Current (max)	Efficiency
LDV100-012SN	12V	6.67A	90.0%

Inrush Current	220/240VAC in, 25°C, Cold Start			40	A
Power Factor	220/240VAC, 100VAC		0.95		
Output Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
Line Regulation				±0.5	%
Load Regulation				±1.5	%
Voltage Accuracy	% of Vout			±2.0	%
Ripple and Noise	20MHz Bandwidth. See Note 1			2.0	% pk-pk
Turn-on Delay	Measured at 200VAC and full load			0.5	S
Hold Up Time		15			ms
Over Current Protection		8.0		9.0	Α
Overload Protection		96		106	W
Short Circuit Protection	Auto Recovery				
Over Voltage Protection	Auto Recovery			26	V
Over Temp Protection	Auto Recovery	85	92	100	°C
	•				

Conditions/Description	Min	Nom	Max	Units
Input to Output See Note 2	3750			VAC
Input to Chassis	3750			VAC
See individual models		90		%
UL8750, EN61347-1, EN61347-2-13				
Measured at 100VAC and 220/240VAC			1.5	W
Telecordia SR-33, Full Load, 25°C		1,000,000		Hours
T case = 60°C		100,000		Hours
		0.66		Kg
Maximum T case = 80°C	-30		+50	°C
	-40		+85	°C
Non-condensing (operating)	5		95	%RH
Operating, Non Operating 10,000m			2000	m
5-500Hz, random vibration			1.0	Grms
Half-Sine, 11ms duration			10	Grms
L x H x W: 231.0 x 28.4 x 40.0mm				
	Input to Output See Note 2 Input to Chassis See individual models UL8750, EN61347-1, EN61347-2-13 Measured at 100VAC and 220/240VAC Telecordia SR-33, Full Load, 25°C T case = 60°C  Maximum T case = 80°C  Non-condensing (operating) Operating, Non Operating 10,000m 5-500Hz, random vibration Half-Sine, 11ms duration	Input to Output See Note 2 3750 Input to Chassis 3750 See individual models UL8750, EN61347-1, EN61347-2-13 Measured at 100VAC and 220/240VAC Telecordia SR-33, Full Load, 25°C T case = 60°C  Maximum T case = 80°C -30 -40 Non-condensing (operating) Operating, Non Operating 10,000m 5-500Hz, random vibration Half-Sine, 11ms duration	Input to Output See Note 2 Input to Chassis  See individual models  90  UL8750, EN61347-1, EN61347-2-13  Measured at 100VAC and 220/240VAC  Telecordia SR-33, Full Load, 25°C  1,000,000  T case = 60°C  Maximum T case = 80°C  -30  Non-condensing (operating)  Operating, Non Operating 10,000m  5-500Hz, random vibration  Half-Sine, 11ms duration	Input to Output See Note 2   3750   3750   3750   See individual models   90   90   90   90   90   90   90   9

Output connected in parallel with 0.1uF ceramic capacitor and 10uF electrolytic capacitor. Note 1.

Note 2. Isolation test may not be carried out on unit. Contact Applications Support for details

Note 3. Maximum allowable case temperature is 80°C

Note 4. Output Power rating of 80W at 100VAC. At 220/240VAC output power can be 90W



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VAC

Hz

Α

63

0.40

EMC Characteristics				
Parameter	Standard Tested To	Level	Units	
Emissions				
Conducted	EN55015, EN55022 Class B	Compliant		
Radiated	EN55015, EN55022 Class B	Compliant		
Harmonic Distortion	EN61000-3-2, Class C	Compliant		
Flicker and Fluctuation	EN61000-3-3	Compliant		
Immunity				
ESD	EN61000-4-2	Level 2		
Radiated RFI	EN61000-4-3	Level 3		
Fast Transients - burst	EN61000-4-4	Level 3		
Input Line Surges	EN61000-4-5	Level 3		
Conducted RFI	EN61000-4-6	Level 3		
Power Freq Magnetic Field	EN61000-4-8	Compliant		
Voltage Dips	EN61000-4-11	Criterion B		

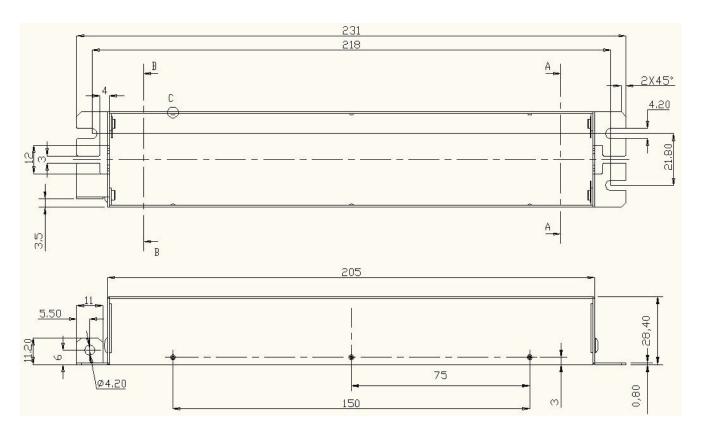
#### **INPUT / OUTPUT WIRING**

#### **INPUT CABLE**

Black (L) and White(N) 300±20mm 18AWĠ

#### **OUTPUT CABLE**

Red (+V) and Black (-V) 300±20mm 18AWG



Specifications are subject to change without notice LDV100-012SN datasheet Pre Release 14 March 2011



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