# 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** 

• -30 to 50°C deg operation

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

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

Parameter	Conditions/Description	Min	Nom	Max	Units
Input Voltage Range	Universal Input	90		264	VAC
Input Frequency Range		47		63	Hz
Input Current	100VAC, 80W (220/240VAC, 90W)			0.40	Α
Inrush Current	220/240VAC in, 25°C, Cold Start			40	Α
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-
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
General Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
Isolation Voltage	Input to Output See Note 2	3750			VAC
_	Input to Chassis	3750			VAC
Efficiency	See individual models		90		%
Safety Agency Approvals	UL8750, EN61347-1, EN61347-2-13				
No load Power Dissipation	Measured at 100VAC and 220/240VAC			1.5	W
MTBF	Telecordia SR-33, Full Load, 25°C		1,000,000		Hours
Lifetime	T case = 60°C		100,000		Hours
Weight			0.66		Kg
Operating Temperature	Maximum T case = 80°C	-30		+50	°C
Storage Temperature		-40		+85	°C
Relative Humidity	Non-condensing (operating)	5		95	%RH
Altitude	Operating, Non Operating 10,000m			2000	m
Vibration	5-500Hz, random vibration			1.0	Grms
Shock	Half-Sine, 11ms duration			10	Grms
Dimensions	L x H x W: 231.0 x 28.4 x 40.0mm				00
	nected in parallel with 0.1uF ceramic capacitor and 10u	uF electrolytic ca	pacitor.	-	-
	est may not be carried out on unit. Contact Applications				
	allowable case temperature is 80°C				
	ver rating of 80W at 100VAC. At 220/240VAC output p				



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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					

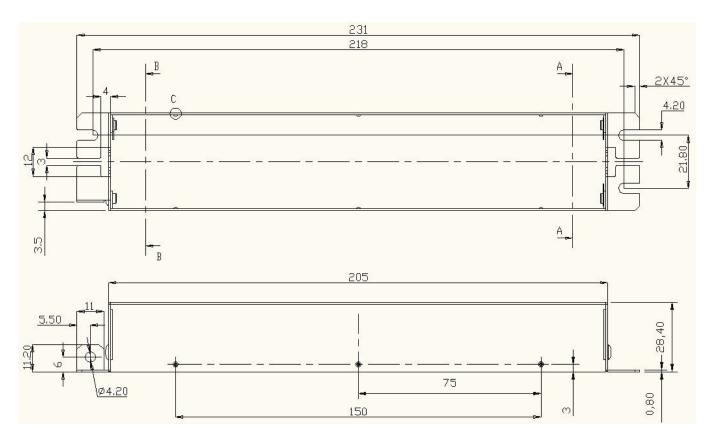
### INPUT / OUTPUT WIRING

#### **INPUT CABLE**

Black (L) and White(N) 300±20mm 18AWG

#### **OUTPUT CABLE**

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



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Specifications are subject to change without notice

LDV100-012SN datasheet Pre Release 14 March 2011