

# LDV series

## LED Power Supply

### Miniature LED Power Supplies

LED Power  
80W

### LDV Series

#### FEATURES

- **Universal Input: 90-264VAC**
- **Constant Output Voltage**
- **High Efficiency 90%**
- **IP67 rated**
- **Power Factor: Typical 0.95**
- **OCP, OVP, SCP, OTP**
- **-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 outdoor and urban lighting applications such as street lighting, emergency lighting, signs and displays.

For more information contact [sales@excelsys.com](mailto:sales@excelsys.com) or visit [www.excelsys.com](http://www.excelsys.com)

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

Input Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
<b>Input Voltage Range</b>	Universal Input	90		264	VAC
<b>Input Frequency Range</b>		47		63	Hz
<b>Input Current</b>	100VAC, 80W (220/240VAC, 90W)			0.40	A
<b>Inrush Current</b>	220/240VAC in, 25°C, Cold Start			40	A
<b>Power Factor</b>	220/240VAC, 100VAC		0.95		
Output Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
<b>Line Regulation</b>				±0.5	%
<b>Load Regulation</b>				±1.5	%
<b>Voltage Accuracy</b>	% of Vout			±2.0	%
<b>Ripple and Noise</b>	20MHz Bandwidth. See Note 1			2.0	% pk-pk
<b>Turn-on Delay</b>	Measured at 200VAC and full load			0.5	s
<b>Hold Up Time</b>		15			ms
<b>Over Current Protection</b>		8.0		9.0	A
<b>Overload Protection</b>		96		106	W
<b>Short Circuit Protection</b>	Auto Recovery				
<b>Over Voltage Protection</b>	Auto Recovery			26	V
<b>Over Temp Protection</b>	Auto Recovery	85	92	100	°C
General Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
<b>Isolation Voltage</b>	Input to Output See Note 2	3750			VAC
	Input to Chassis	3750			VAC
<b>Efficiency</b>	See individual models		90		%
<b>Safety Agency Approvals</b>	UL8750, EN61347-1, EN61347-2-13				
<b>No load Power Dissipation</b>	Measured at 100VAC and 220/240VAC			1.5	W
<b>MTBF</b>	Telecordia SR-33, Full Load, 25°C		1,000,000		Hours
<b>Lifetime</b>	T case = 60°C		100,000		Hours
<b>Weight</b>			0.66		Kg
<b>Operating Temperature</b>	Maximum T case = 80°C	-30		+50	°C
<b>Storage Temperature</b>		-40		+85	°C
<b>Relative Humidity</b>	Non-condensing (operating)	5		95	%RH
<b>Altitude</b>	Operating, Non Operating 10,000m			2000	m
<b>Vibration</b>	5-500Hz, random vibration			1.0	Grms
<b>Shock</b>	Half-Sine, 11ms duration			10	Grms
<b>Dimensions</b>	L x H x W: 231.0 x 28.4 x 40.0mm				

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

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

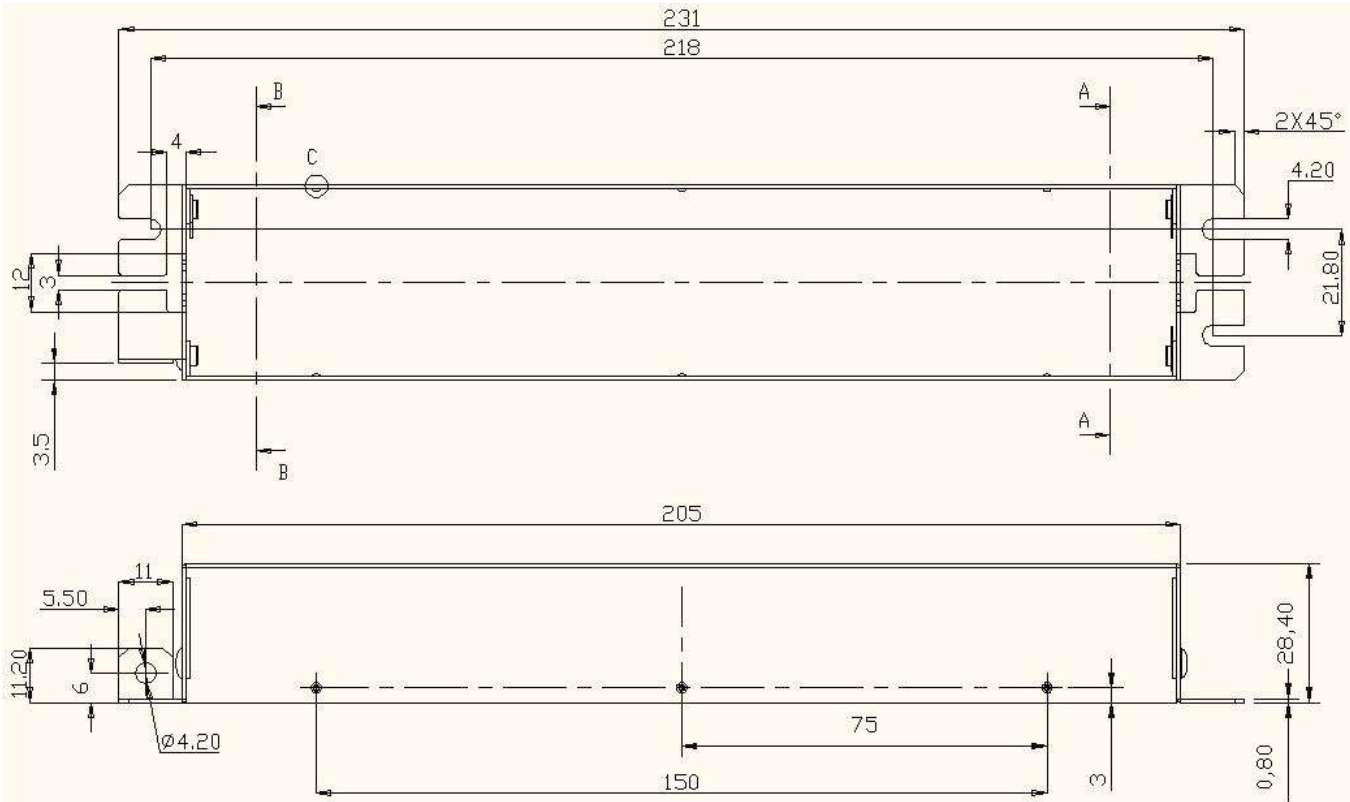
**INPUT / OUTPUT WIRING**

**INPUT CABLE**

Black (L) and White(N) 300±20mm  
18AWG

**OUTPUT CABLE**

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



Specifications are subject to change without notice  
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