

LDB060

LED Power Supply

Constant Voltage /Current

LED Power
60W

LDB Series

FEATURES

- **Universal Input: 90-305VAC**
- **Constant Voltage/Current**
- **High Efficiency 88%**
- **Class II**
- **IP67 rated**
- **Class 2 device (UL1310)**
- **Power Factor: Typical 0.95**
- **OCP, OVP, SCP, OTP**
- **-30 to 50°C deg operation**

The LDB series of Xled constant voltage/current LED power supplies can deliver up to 60W output power in an extremely compact package size.

The LDB060 can deliver a constant voltage single 12V output in a compact package. At only 28.5mm high, the LDB100 offers the lowest profile LED driver solution. Furthermore, the LDB060 can operate as a constant current driver delivering the maximum output current range over the defined voltage range.

Model Number	Output Voltage	Output Current (max)	Efficiency
LDB060-012SW	6V-12V	5.0A	88.0%

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	240VAC, 60W			0.3	A
Inrush Current	240VAC in, 25°C, Cold Start			40	A
Power Factor	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	%
Voltage Range	See individual models				
Current Regulation	Vout 6.0V to 12.0V			±3.0	%
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		20			ms
Over Current Protection	5A max on 12V version			10	%
Overload Protection	See Note 2			60	W
Short Circuit Protection	Auto Recovery				
Over Voltage Protection	Auto Recovery			16	V
Over Temp Protection	Auto Recovery	85	92	100	°C
General Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
Isolation Voltage	Input to Output	3750			VAC
	Input to Chassis	3750			VAC
Efficiency			88		%
Safety Agency Approvals	UL8750, UL1310, CSA C22.2 No.223, Designed to meet EN61347-2-13, EN61347-1				
No load Power Dissipation	Measured at 100VAC and 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				

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

Note 2. LBB060-012SW can deliver a maximum of 56W output power guaranteed at nominal output voltage. Output power will not exceed 60W under normal operating conditions.

Note 3. Maximum allowable case temperature is 80°C



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EMC				
Parameter	Standard		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 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	

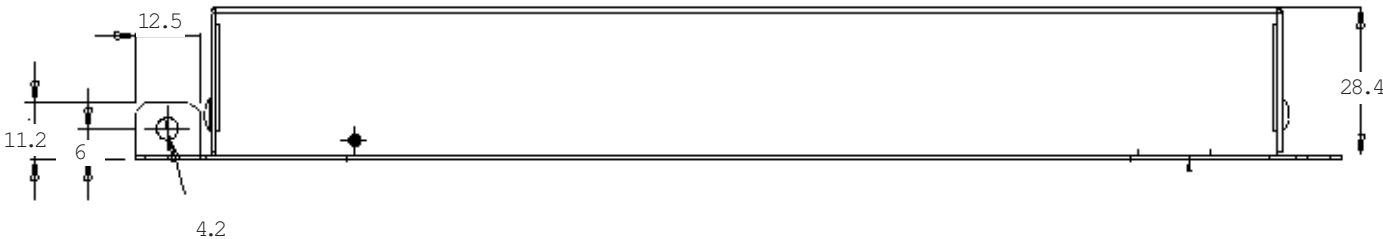
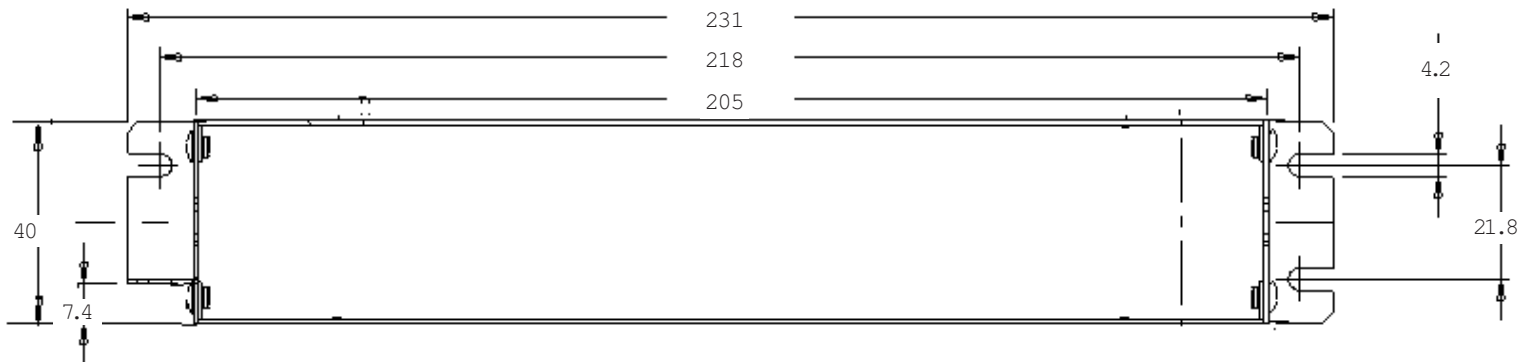
INPUT / OUTPUT WIRING

INPUT CABLE

Black (L) and White(N) 300±20mm
18AWG

OUTPUT CABLE

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



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