

# LDB100

## LED Power Supply

Constant Voltage /Current

### LDB Series

#### FEATURES

- **Universal Input: 90-305VAC**
- **Constant Voltage/Current**
- **High Efficiency 91%**
- **Class II**
- **IP67 rated**
- **Class 2 device (UL1310)**
- **Power Factor: Typical 0.95**
- **OCP, OVP, SCP, OTP**
- **-30 to 50°C deg operation**

**The LDB100 series of constant voltage/current LED power supplies can deliver up to 96W output power in an extremely compact package size.**

The LDB100 can deliver constant voltage/current 24V, 36V and 48V outputs in a compact package. At only 28.5mm high, the LDB100 offers the lowest profile LED driver solution. Furthermore, the LDB100 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
LDB100-024SW	12V-24V	4.00A	91.0%
LDB100-036SW	18V-36V	2.66A	91.0%
LDB100-048SW	24V-48V	2.00A	91.5%

Input Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
<b>Input Voltage Range</b>	Universal Input	90		305	VAC
<b>Input Frequency Range</b>		47		63	Hz
<b>Input Current</b>	240VAC, 92W			0.45	A
<b>Inrush Current</b>	240VAC in, 25°C, Cold Start			40	A
<b>Power Factor</b>	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>Voltage Range</b>	See individual models				
<b>Current Regulation</b>	Across Model Voltage Range			±3.0	%
<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>Overload Protection</b>	See Note 2	92		100	W
<b>Short Circuit Protection</b>	Auto Recovery				
<b>Over Voltage Protection</b>	Auto Recovery	105%		135%	V
<b>Over Temp Protection</b>	Auto Recovery, Case Temperature Range	85	92	100	°C
General Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
<b>Isolation Voltage</b>	Input to Output	3750			VAC
	Input to Chassis	3750			VAC
<b>Efficiency</b>	See individual models				
<b>Safety Agency Approvals</b>	UL8750, UL1310, CSA C22.2 No.223 Designed to meet EN61347-2-13, EN61347-1				
<b>No load Power Dissipation</b>	Measured at 100VAC and 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. See Note 3	-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. Output power will not exceed 100W under normal operating conditions.  
 Note 3. Maximum allowable case temperature is 80°C



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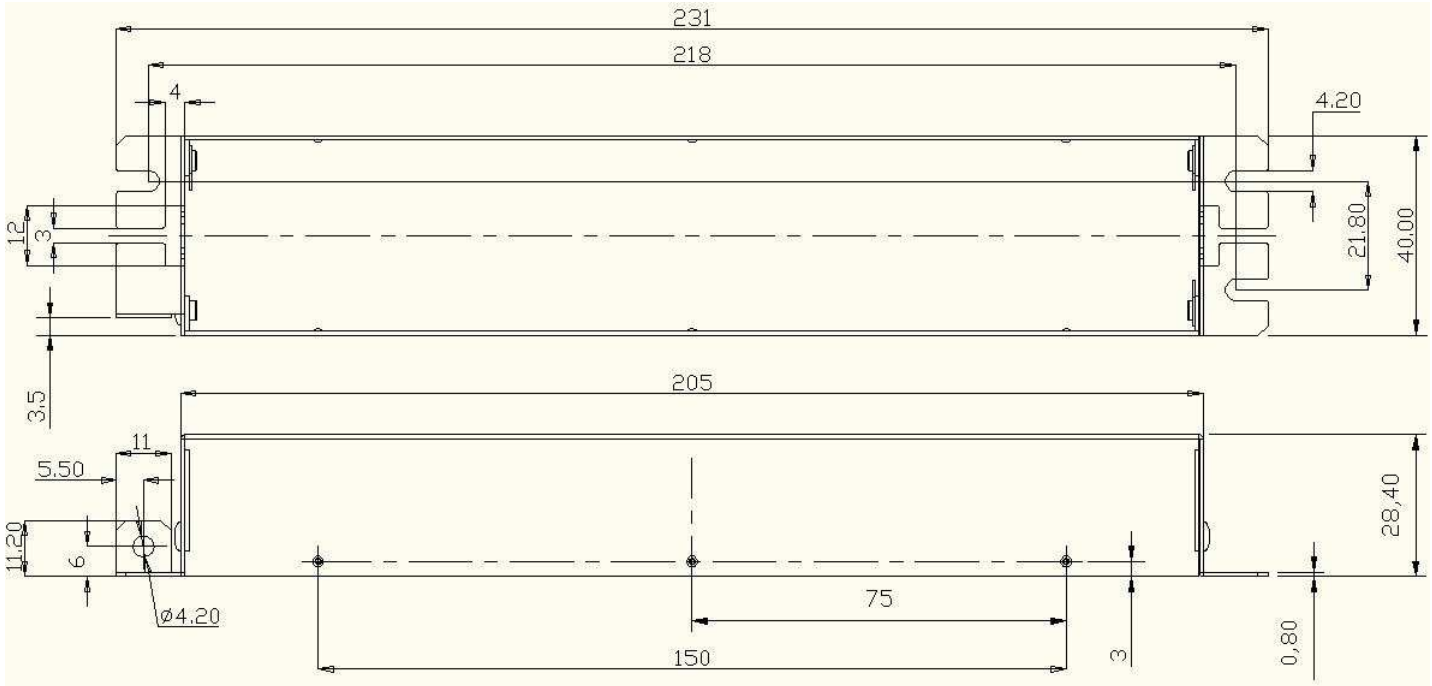
EMC					
Parameter	Standard Tessted To			Level	Units
Emissions					
Conducted	EN55015, EN55022 Class B			Compliant	
Radiated	EN55015, EN55022 Class B			Compliant	
Harmonic Distortion	EN61000-3-2, Class C			Compliant	
Flicker and Fluctuation	EN61000-3-3			Compliant	
Immunity					
ESD	EN61000-4-2			Level 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			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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