

LDB150

LED Power Supply

Constant Voltage /Current

LED Power
150W

LDB Series

FEATURES

- **Universal Input: 90-305VAC**
- **Constant Voltage/Current**
- **High Efficiency 92%**
- **IP67 rated**
- **Power Factor: Typical 0.95**
- **OCP, OVP, SCP, OTP**
- **-30 to 60°C deg operation**

The LDB150 series of constant voltage/current LED power supplies can deliver up to 150W output power in an extremely compact package size.

The LDB150 can deliver constant voltage single outputs 24V, 36V and 48V outputs in a compact package. At only 35mm high, the LDB150 offers the lowest profile LED driver solution. Furthermore, the LDB150 can operate as a constant current driver delivering the maximum output current range over the defined voltage range.

Model Number	Output Voltage Range	Output Current (max)	Efficiency
LDB150-024SW	12V - 24V	6.25A	92.0%
LDB150-036SW	18V - 36V	4.16A	92.0%
LDB150-048SW	24V - 48V	3.125A	92.5%

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, 150W			0.715	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	Across Model Voltage Range			±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
Short Circuit Protection	Hiccup, Auto Recovery				
Over Voltage Protection	Hiccup, Auto Recovery	105%		130%	V
Over Temp Protection	Hiccup, Auto Recovery	85	92	100	°C

General Specifications

Parameter	Conditions/Description	Min	Nom	Max	Units
Isolation Voltage	Input to Output See Note 2 Input to Chassis	3750 1500			VAC VAC
Efficiency	See individual models		92		%
Safety Agency Approvals	UL8750, CSA C22.2 No.223, 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			1		Kg
Operating Temperature	Maximum T case = 80°C. See Note 3	-30		+60	°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

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



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EMC				
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 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), White(N) and Green/Yellow (E) 400±20mm
SJTW 18AWG

OUTPUT CABLE

Red (+V) and Black (-V) 220±20mm
SJTW 18AWG

