

60 to 100W IP66 Power Supplies

Features

- ◆ Small Size
- ◆ 90-305VAC input range
- ◆ Constant Current or Constant Voltage Versions
- ◆ Splash proof plastic case (non-rust)
- ◆ -40°C start up
- ◆ Conservative component ratings for long life



Key Market Segments & Applications



Specifications			
Model		ALC	ALV
AC Input	VAC/Hz	90 - 305VAC, 47 - 63Hz	
Inrush Current (100/200VAC)	A	25 / 50A, 25°C ambient, cold start	
Input Current (110/200VAC)	A	Model dependant	
Power Factor (1)	-	IEC61000-3-2 Class C, (50% - 100% loading) 0.99/0.95 at 115/230VAC ⁽¹⁾	
Output Accuracy	%	±5%	±3%
Total Regulation	%	±5%	±3%
Overcurrent Protection	-	Automatic Recovery	> 105% of rated power
Overvoltage Protection	%	> 110% (Cycle AC to reset)	
Turn on time	ms	< 1000ms	
Leakage Current (240VAC 60Hz)	uA	< 250uA	
Operating Temperature	°C	-30 to +70°C, (Guaranteed start up at -40°C). AL60; derate linearly to 70% load from 50 to 70°C, AL80; derate linearly to 60% load from 50 to 70°C, AL100; derate linearly to 50% load from 50 to 70°C	
Storage Temperature	°C	-30 to +85°C	
Operating Humidity	-	15 - 90% RH (non condensing)	
Storage Humidity	-	15 - 90% RH (non condensing)	
Cooling	-	Convection	
Withstand Voltage	-	Input to Output 3kVAC (Class II, no ground connection needed)	
Isolation Resistance	-	>100M at 25°C & 70%RH, Input to Output at 500VDC	
Vibration (non operating)	-	10 - 55Hz: 19.6m/s ² constant sweep 1 min X, Y, Z for 30 mins	
Shock	-	< 196.1 m/s ² (20G)	
Immunity	-	IEC61000-4-2 (lv 3), -3 (lv 3), -4 (lv 3), -5 (lv 4), -6 (lv 3), -8 (lv 4), -11	
Safety Agency Approvals	-	UL8750 (Class 2) ⁽²⁾ , EN61347-1, EN61347-2-13, CSA C22.2 No. 60950-1, CE Mark	
Conducted & Radiated EMI	-	EN55015-B, EN55022-B, CISPR 22-B, FCC-B	
IP Class	-	IP66	
Weight (Typ)	g	ALx60: 380g, ALx80, 100: 500g	
Size (LxWxH)	in(mm)	9.49 x 1.7 x 1.36" (241 x 43.1 x 35mm)	
Warranty	yrs	Three Years	

(1) 0.98/0.93 for ALx60 models

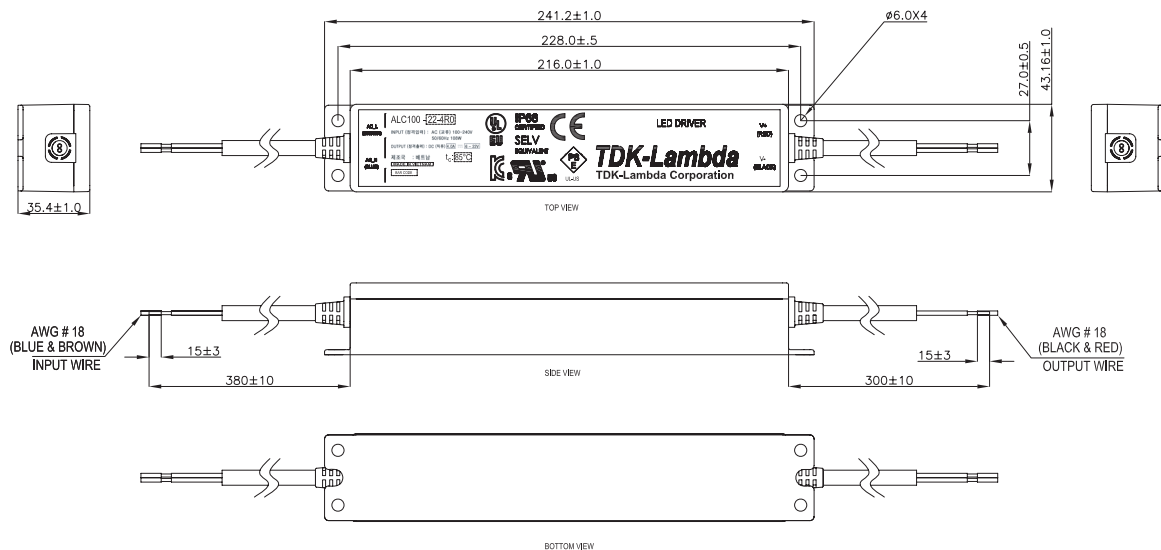
(2) See model selector for applicable units

Not recommended for new designs

Model Selector

Model	CV/CC	Output Voltage (V)	Output Current (A)	Efficiency	Maximum Average Power	Ripple & Noise	Class 2
ALC60-48-1R05	CC	6 - 48V	1.05A	85%	50.4W	-	Yes
ALC60-42-1R4	CC	6 - 42V	1.4A	86%	58.8W	-	Yes
ALV60-12-5R0	CV	12V	5A	85%	60W	180mV	Yes
ALV60-24-2R5	CV	24V	2.5A	88%	60W	240mV	Yes
ALV60-36-1R7	CV	36V	1.7A	87%	61W	360mV	Yes
ALV80-12-6R5	CV	12V	6.5A	86%	78W	180mV	No
ALV100-24-3R8	CV	24V	3.8A	89%	91.2W	240mV	Yes
ALV100-36-2R5	CV	36V	2.5A	88%	90W	360mV	Yes

Outline Drawings



NOTES:
 1. ALL DIMENSIONS ARE IN mm.
 2. DRAWINGS ARE NOT SCALE.
 3. FOUR MOUNTING SLOTS FOR M4 SCREWS.
 4. CASE MATERIAL IS LEXAN 920.
 5. MODEL NAME, INPUT VOLTAGE RANGE, MAX INPUT POWER, NOMINAL OUTPUT CURRENT AND OUTPUT VOLTAGE RANGE ARE SHOWN ON THE NAME PLATE IN ACCORDANCE WITH THE SPECIFICATIONS.

Options

Suffix	Description
Blank	Standard Cables
/W	UV Protected Cables

For Additional Information, please visit
us.tdk-lambda.com/lp/products/al-series.htm



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