



**FEATURES:**

- AC-DC Constant Current LED Driver
- Universal Input: 90-264VAC, 47-63Hz
- Short circuit protection
- RoHS compliant
- Waterproof IP67
- Over current protection
- Over voltage protection
- Power Factor Correction



**Models**  
**Single output**

Model	Max Output Power (W) *	Output Voltage Range (VDC)	Output Current (mA)	Input Voltage (VAC/Hz)	Efficiency (%)
AMER48-48100KZ-C1	50.4	30-48	1000 ± 50	90-264/ 47-63	85

\* Exceeding the maximum output power will permanently damage the converter

NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

**Input Specifications**

Parameters	Conditions	Typical	Maximum	Units
Voltage range		90-264		VAC
Inrush current <2ms	115V	20		A
	230V	30		
Leakage current	230V	0.25		mA
AC current	115V	0.50		A
	230V	0.35		
No-load consumption		2.5		W
External fuse			250V/1.5A	
Power Factor		0.95		

**Output Specifications**

Parameters	Conditions	Typical	Maximum	Units
Current accuracy		±10		%
Line regulation	LL-HL	±5		%
Load regulation	0% to 100%	±10		%
Ripple & Noise	20MHz Bandwidth	150		mV p-p
Hold-up time (min)	100% load	4	8	ms

**Isolation Specifications**

Parameters	Conditions	Typical	Maximum	Units
Tested I/O voltage	2mA/60Sec	3000		VAC
Input FG		1500		VAC
Isolation resistance		>50		MΩ

**General Specifications**

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% Load	100		KHz
Over current protection		115		%
Over voltage protection		Zener Diode clamp		%
Short circuit protection		Continuous		
Short Circuit restart		Auto recovery		
Operating temperature *		-30 to +55		°C
Maximum case temperature			90	°C
Storage temperature		-40 to +80		°C

**General Specifications (continued)**

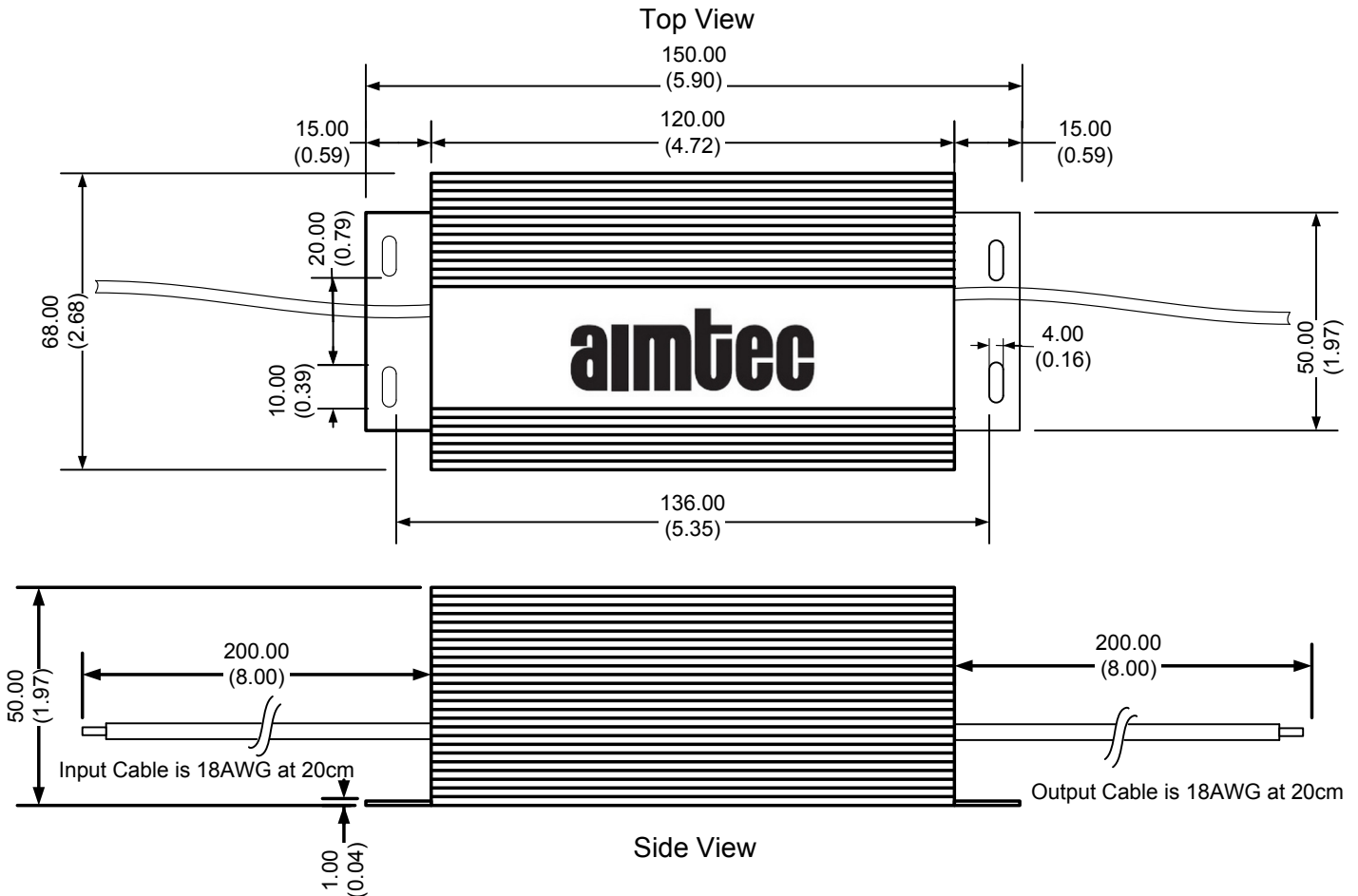
Parameters	Conditions	Typical	Maximum	Units
Temperature coefficient		0.05		% / °C
Cooling	Free Air Convection			
Humidity			95	% RH
Case material	Aluminum			
Weight		750		g
Dimensions (L X H X W)	5.90 x 2.68 x 1.97 inches 150.00 x 68.00 x 50.00 mm			
MTBF	> 50,000 hrs (MIL-HDBK-217 F at +25 °C)			

\*NOTE: Converters do not have Over Temperature Protection and will be damaged if their maximum case temperature is exceeded.

**Safety Specifications**

Parameters	
Agency approvals	CE
Standards	GB195110.1-2004/IEC61347-1:2003, EN55015, EN61000, EN61547

**Dimensions**



**NOTE:** 1. Datasheets are updated as needed and as such, specifications are subject to change without notice. Once printed or downloaded, datasheets are no longer controlled by Aimtec; refer to [www.aimtec.com](http://www.aimtec.com) for the most current product specifications. 2. Product labels shown, including safety agency certifications on labels, may vary based on the date manufactured. 3. Mechanical drawings and specifications are for reference only. 4. All specifications are measured at an ambient temperature of 25°C, humidity < 75%, nominal input voltage and at rated output load unless otherwise specified. 5. Aimtec may not have conducted destructive testing or chemical analysis on all internal components and chemicals at the time of publishing this document. CAS numbers and other limited information are considered proprietary and may not be available for release. 6. This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other than the ones listed in this datasheet. 7. Warranty is in accordance with Aimtec's standard Terms of Sale available at [www.aimtec.com](http://www.aimtec.com).