



**FEATURES:**

- RoHS compliant
- Efficiency up to 86%
- Wide 4:1 input range
- Continuous Short Circuit Protection
- Low ripple and noise
- Remote on/off control
- Input/Output Isolation 1500VDC
- Operating temperature -40°C to + 85°C



**Models**  
**Single output**

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Capacitive load (μF)	Efficiency (%)
AM15EW-2403SZ	9-36	3.3	3	3300	80
AM15EW-2405SZ	9-36	5	3	3300	83
AM15EW-2412SZ	9-36	12	1.25	680	85
AM15EW-2415SZ	9-36	15	1	470	86
AM15EW-4803SZ	18-72	3.3	3	3300	80
AM15EW-4805SZ	18-72	5	3	3300	83
AM15EW-4812SZ	18-72	12	1.25	680	85
AM15EW-4815SZ	18-72	15	1	470	86

**Models**  
**Dual output**

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Capacitive load (μF)	Efficiency (%)
AM15EW-2405DZ	9-36	±5	±1.5	±2200	83
AM15EW-2412DZ	9-36	±12	±0.625	±470	85
AM15EW-2415DZ	9-36	±15	±0.5	±330	86
AM15EW-4805DZ	18-72	±5	±1.5	±2200	83
AM15EW-4812DZ	18-72	±12	±0.625	±470	85
AM15EW-4815DZ	18-72	±15	±0.5	±330	86

**Input Specifications**

Parameters	Nominal	Typical	Maximum	Units
Voltage range	24	9-36		VDC
	48	18-72		
Filter	π (Pi) Network			
Remote ON/OFF Control	ON	2.5~5.5 or open circuit		VDC
	OFF	-0.7~ 0.8 or short circuit b/n pin 2 & 1		
Turn on Transient process time			350	ms
Start up time		20		ms
Absolute Maximum Rating	24 Vin	-0.7-40		VDC
	48 Vin	-0.7-80		
Peak Input Voltage time		100		ms

**Isolation Specifications**

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	3 sec		1500	VDC
Case/ Input & Output		1000		VDC
Resistance		> 1000		MOhm
Capacitance		1200		pF

**Output Specifications**

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±1		%
Voltage balance (Dual Output)	Balance Load	±1		%

### Output Specifications (continued)

Parameters	Conditions	Typical	Maximum	Units
Short Circuit protection		Continuous		
Short Circuit restart		Auto Recovery		
Current limiting			140	% of I <sub>out</sub> max
Line voltage regulation	HL-LL	±0.5		%
Load voltage regulation	10-100% load	±0.5		%
Load voltage regulation	below 10% load	±1.0		%
Temperature coefficient		±0.02		%/°C
Ripple & Noise	At 20Mhz bandwidth	75		mV p-p
Rising time		10		ms

### General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	300		KHz
Operating temperature	Derating above 60°C	-40 to +85		°C
Storage temperature		-40 to +125		°C
Maximum Case temperature			100	°C
Cooling		Free air convection		
Humidity			95	%
Case material		Nickel coated copper		
Weight		30		g
Dimensions (L x W x H)	Tolerance ±0.5mm	2.00 x 1.00 x 0.40 inches	50.80 x 25.40 x 10.16 mm	
MTBF		>1 121 000 hrs (MIL-HDBK -217F, Ground Benign, t <sub>v</sub> =+25°C)		

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.

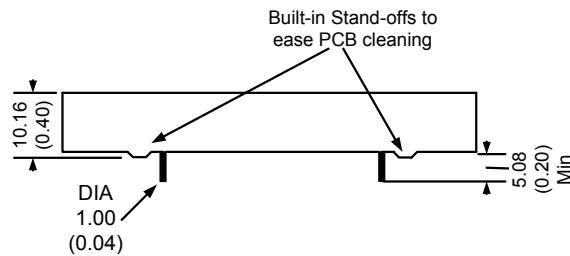
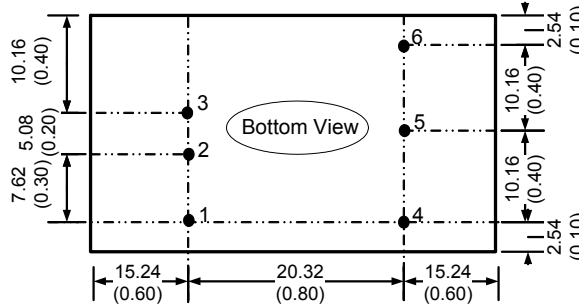
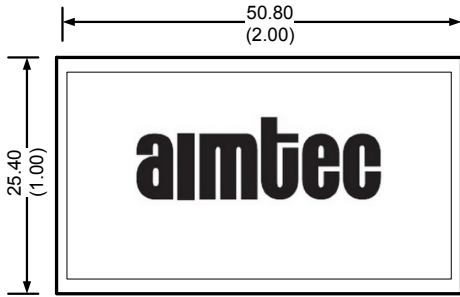
### Safety Specifications

Standards	
Agency Approvals	CE
Standards	EN55022 Class A, EN55024
	IEC61000-4-2, Perf. Criteria B
	IEC61000-4-3, Perf. Criteria A
	IEC61000-4-4, Perf. Criteria B
	IEC61000-4-6, Perf. Criteria A
	IEC61000-4-8, Perf. Criteria A
NOTE: also designed to meet IEC 60950 1:2001	

### Pin Out Specifications

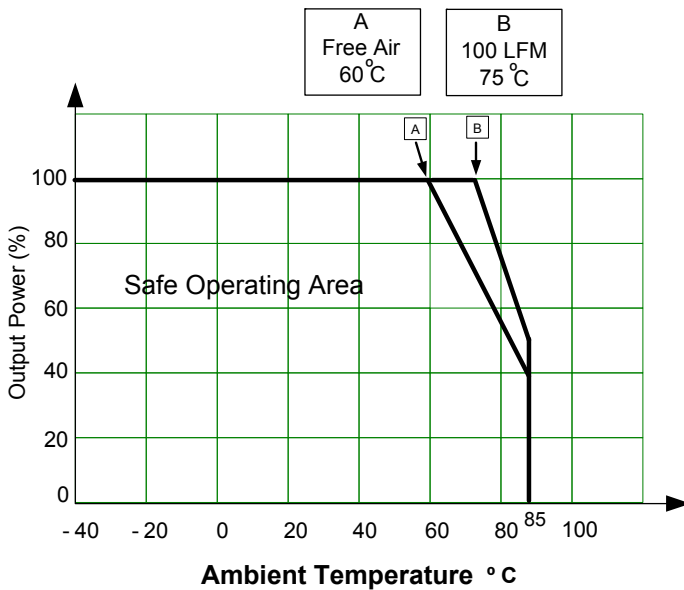
Pin	Single	Dual
1	On/Off Control	On/Off Control
2	-V Input	-V Input
3	+V Input	+V Input
4	-V Output	-V Output
5	No Pin	Common
6	+V Output	+V Output

### Dimensions



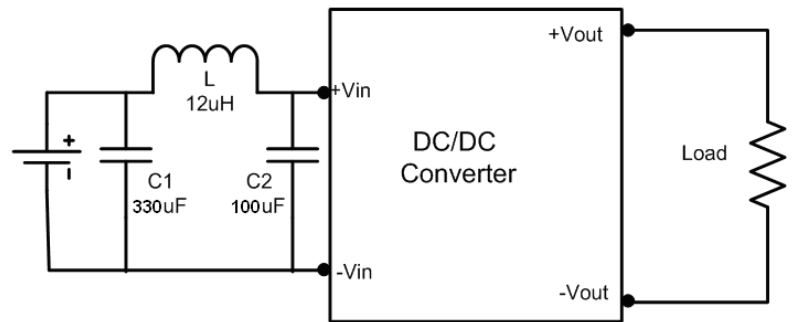
Notes:  
All dimensions are typical  
in millimeters (inches).  
Tolerance  $\pm 0.25$  ( $\pm 0.01$ )

### Derating



### Test Circuit

#### Conducted Emissions:



**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).