



**FEATURES:**

- RoHS compliant
- Wide 4:1 input range
- Low ripple and noise
- Remote On/Off control
- Power modules for PCB mounting
- Regulated output
- Operating temperature range: -40 to +85°C
- Capacitive loading up to 4500  $\mu\text{F}$  (18-75V input)

**Models**  
**Single output**



Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Ripple & Noise typ	Isolation (VDC)	Efficiency (%)
AM15EW-2403SIZ	9-36	3.3	4	80mV p-p	1500	77
AM15EW-2405SIZ	9-36	5	3	80mV p-p	1500	80
AM15EW-2412SIZ	9-36	12	1.25	120mVp-p	1500	85
AM15EW-2415SIZ	9-36	15	1	150mVp-p	1500	84
AM15EW-4803SIZ	18-75	3.3	4	80mV p-p	1500	77
AM15EW-4805SIZ	18-75	5	3	80mV p-p	1500	80
AM15EW-4812SIZ	18-75	12	1.25	120mVp-p	1500	85
AM15EW-4815SIZ	18-75	15	1	150mVp-p	1500	84

**Models**  
**Dual output**

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Ripple & Noise typ	Isolation (VDC)	Efficiency (%)
AM15EW-2405DIZ	9-36	$\pm 5$	$\pm 1.5$	50mVp-p	1500	80
AM15EW-2412DIZ	9-36	$\pm 12$	$\pm 0.625$	120mVp-p	1500	85
AM15EW-2415DIZ	9-36	$\pm 15$	$\pm 0.5$	150mVp-p	1500	84
AM15EW-4805DIZ	18-72	$\pm 5$	$\pm 1.5$	50mVp-p	1500	80
AM15EW-4812DIZ	18-72	$\pm 12$	$\pm 0.625$	120mVp-p	1500	85
AM15EW-4815DIZ	18-72	$\pm 15$	$\pm 0.5$	150mVp-p	1500	84

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	Nominal	Typical	Maximum	Units
Voltage range	24 48	9-36 18-75		VDC
Filter	$\pi$ (Pi) Network			
Absolute Maximum Rating	24 Vin 48 Vin		40 83	VDC
Permissible absolute maximum duration			2	h

**Isolation Specifications**

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec		1500	VDC
Resistance		> 1000		MOhm
Capacitance		1000		pF

**Output Specifications**

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		$\pm 2$		%
Short Circuit protection		Continuous		
Short Circuit restart		Auto recovery		
Over voltage protection		Zener diode clamp protection		

### Output Specifications (continued)

Parameters	Conditions	Typical	Maximum	Units
Over load protection	Auto recovery	Over 110% full load		
Line voltage regulation (Single)	HL-LL	±0.5		%
Line voltage regulation (Dual)	HL-LL	±0.5		%
Load voltage regulation (Single)	25-100%	±0.5		%
Load voltage regulation (Dual)	25-100%	±2		%
Temperature coefficient		±0.05		%/°C

### General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	200		KHz
Operating temperature	With derating above +75		-40 to +85	°C
Storage temperature			-55 to +115	°C
Max Case temperature			95	°C
Cooling	Free air convection			
Humidity			95	%
Case material	Nickel coated copper with non-conductive base			
Weight		33		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 10.50 mm	
MTBF	> 800 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)			

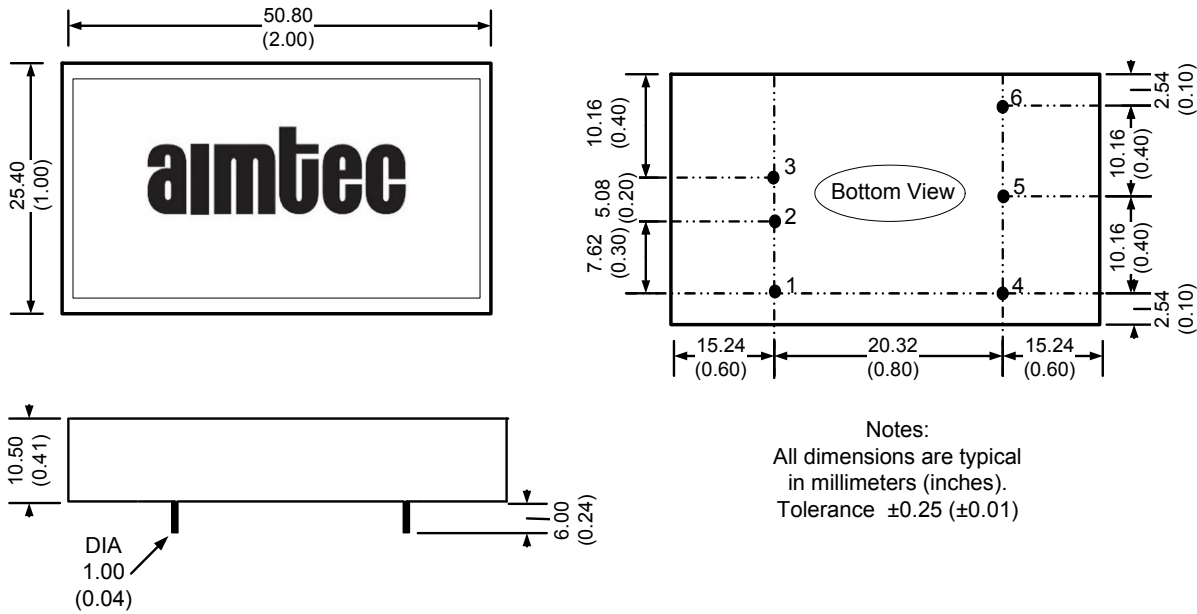
### Safety Specifications

Parameters	
Agency Approvals	CE
Standards	EN 55022, EN 55024
	IEC61000-3-2
	IEC61000-3-3
	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 standard IEC 60950-1:2001	

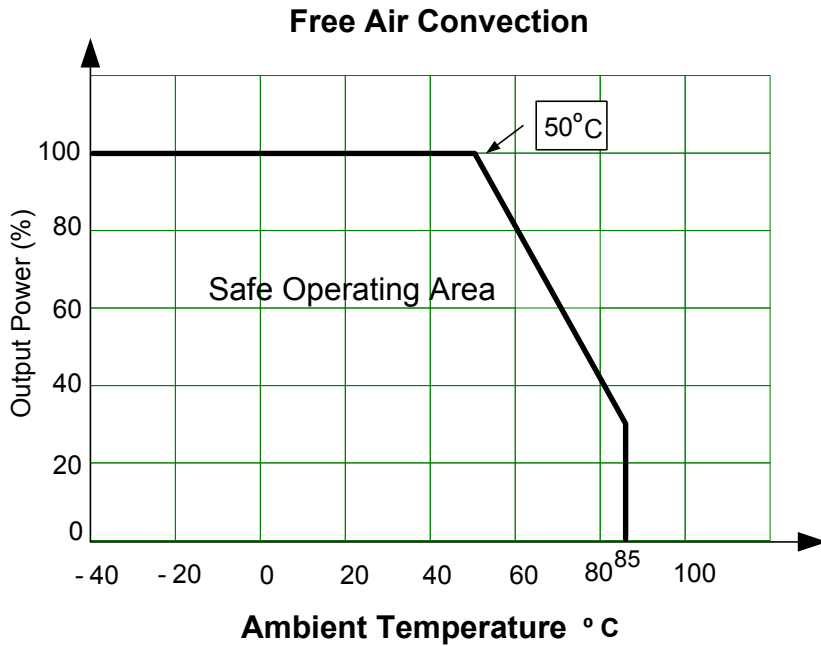
### Pin Out Specifications

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**

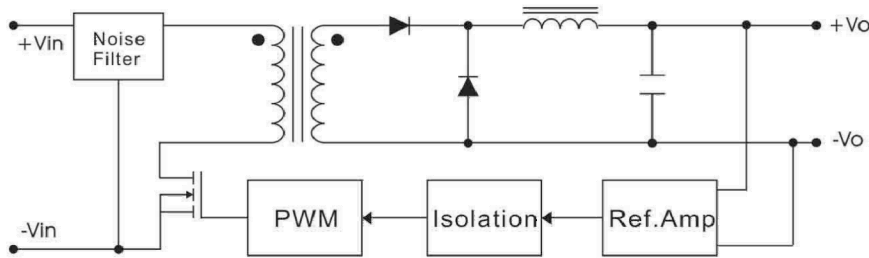


**Derating**

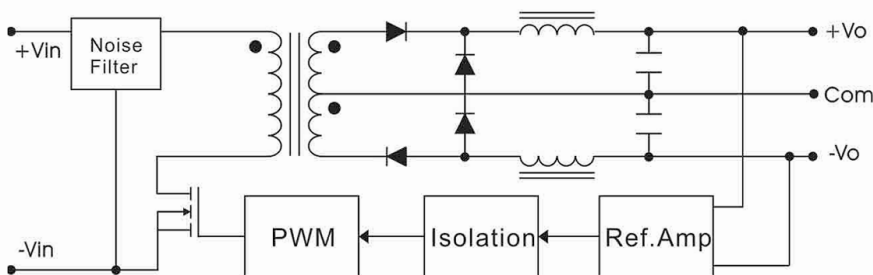


## Block diagram

### Single Output



### Dual Output



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