

**FEATURES:**

- 4000VAC I/O Isolation
- Operating temperature: -40 to +80°C
- Over load, Over Voltage, Short Circuit Protection
- Universal input: 90-264VAC, 47-440Hz
- RoHS compliant
- Soft start
- Energy Star compliant
- CE, cULus, CB approvals

**Models**  
**Single output**



Model	Input Voltage (VAC/Hz)	Input voltage (VDC)	Max Output wattage (W)	Output Voltage (V)	Output Current max (A)	Ripple & Noise (mV)	Maximum Capacitive Load (µF)	Efficiency (%)
AME15-3.3SMAZ	90-264/47-440	120-370	9.9	3.3	3	50	4700	74
AME15-5SMAZ	90-264/47-440	120-370	15	5	3	50	2200	78
AME15-12SMAZ	90-264/47-440	120-370	15	12	1.25	100	1000	81
AME15-15SMAZ	90-264/47-440	120-370	15	15	1	100	680	81
AME15-24SMAZ	90-264/47-440	120-370	15	24	0.63	100	470	83

**Models**  
**Dual output**

Model	Input Voltage (VAC/Hz)	Input voltage (VDC)	Max Output wattage (W)	Output Voltage (V)	Output Current max (A)	Ripple & Noise (mV)	Maximum Capacitive Load (µF)	Efficiency (%)
AME15-5DMAZ	90-264/47-440	120-370	15	±5	±1.5	50	±1000	78
AME15-12DMAZ	90-264/47-440	120-370	15	±12	±0.63	100	±470	80
AME15-15DMAZ	90-264/47-440	120-370	15	±15	±0.5	100	±330	81

\*Ripple & Noise measured with 1µF M/C and 47µF E/C (20MHz bandwidth)

**Input Specifications**

Parameters	Conditions	Typical	Maximum	Units
Current	115VAC		350	mA
	230VAC		180	mA
Inrush current <2ms (Cold Start)	115 VAC		10	A
	230 VAC		20	A
Leakage current	115 VAC		0.1	mA
	264 VAC		0.2	mA
External Fuse (recommend)	slow blow type	2		A
Input Dissipation	No Load	<0.5		W
Under Voltage Protection		88		VAC

**Output Specifications**

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±2		%
Line regulation	LL-HL	±0.5		%
Load regulation (single)	0-100%	±0.5		%
Cross regulation (dual)	25% load - 1 <sup>st</sup> out, 100% load - 2 <sup>nd</sup> out	±5		%
Transient Recovery Time		200		µs
Transient Response Deviation	25% load step	±2		% of Vout
Hold-up time	min	20		ms

## Isolation Specifications

Parameters	Conditions	Typical	Maximum	Units
Tested I/O voltage	3sec	4000		VAC
Isolation resistance		>1000		MΩ

## General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency		132		KHz
Over load protection	Auto recovery, hiccup mode	>131		%
Over voltage protection		Zener diode clamp		
Short Circuit protection		Continuous		
Short Circuit restart		Auto recovery		
Operating temperature	With derating over 55 °C	-40 to +80		°C
Storage temperature		-40 to +100		°C
Max Case temperature			100	°C
Temperature coefficient		±0.02		% / °C
Cooling		Free air convection		
Humidity			95	% RH
Weight		100		g
Dimensions (L x W x H)		2.56 x 1.83 x 0.79 inches	65.0 x 46.5 x 20.1 mm	±0.5mm
MTBF		> 400 000hrs (MIL-HDBK -217F, t=+25°C)		
Case material		Plastic resin + Fiberglass (flammability to UL 94V-0)		

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.

## Environment Approval

Parameters	Conditions
Shock	Wave form: Half sine wave
	Acceleration amplitude: 5gn
	Bump duration: 30 ms
	Number of bumps: 18 (3 in each direction for every axis)
	Converter operation before and after test, body mounted (on chassis)
Vibrations	Test mode: Sweep sine
	10-100Hz, speed 0.05Hz/s
	Displacement: 1mm
	Acceleration: 3g
	3 loops 30min one cycle, 3h total, every axis tested
	Converter operation before and after test, body mounted (on chassis)

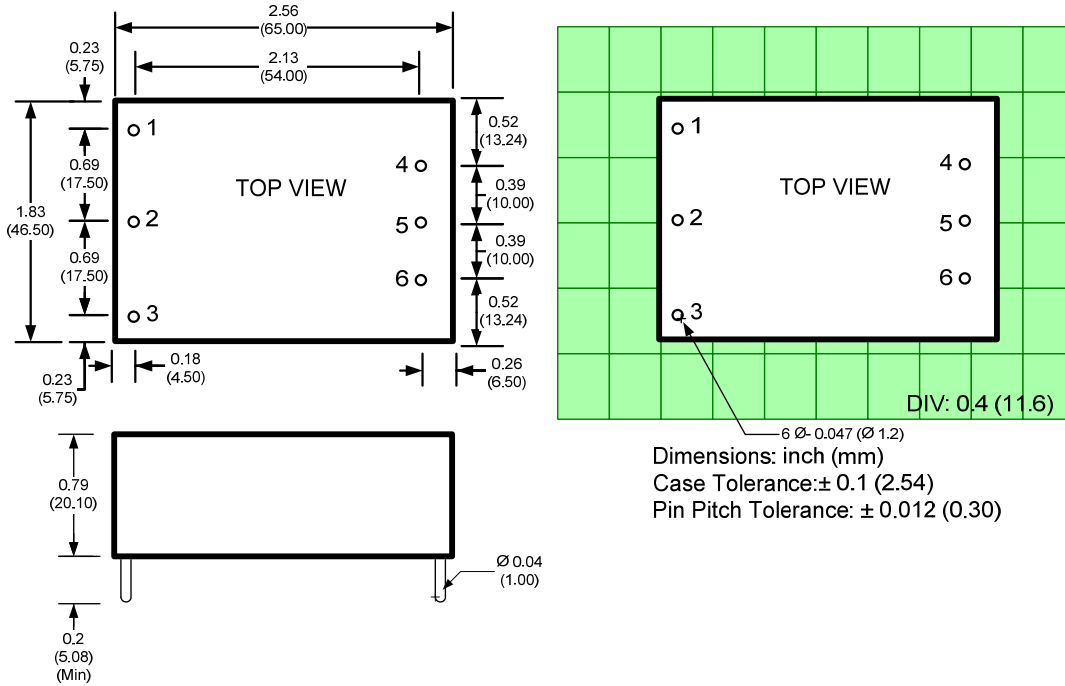
## Safety & EMC Specifications

Standards		
Agency approvals	cULus, CE, CB	
Safety	EMI - Conducted and radiated emission	EN55011, class B
	Medical Electrical Equipment	EN 60601-1, CSA-C22.2 No. 601.1-M90
	Harmonic Current Emissions	IEC/EN 61000-3-2, (EN60555-2)
	Voltage fluctuations and flicker	IEC/EN 61000-3-3, (EN60555-3)
	Electrostatic Discharge Immunity	IEC 61000-4-2
	RF, Electromagnetic Field Immunity	IEC 61000-4-3
	Electrical Fast Transient/Burst Immunity	IEC 61000-4-4
	Surge Immunity	IEC 61000-4-5
	RF, Conducted Disturbance Immunity	IEC 61000-4-6
	Power frequency Magnetic Field Immunity	IEC 61000-4-8
Voltage dips, Short Interruptions Immunity	IEC 61000-4-11	

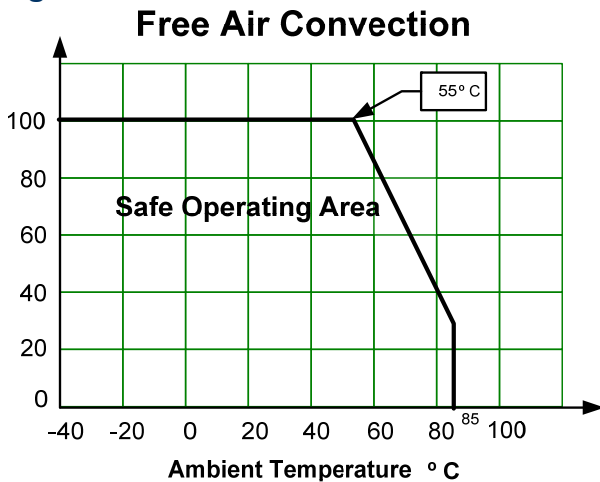
## Pin Out Specifications

Pin	Single	Dual
1	No pin	No pin
2	AC Input (N)	AC Input (N)
3	AC Input (L)	AC Input (L)
4	-V Output	-V Output
5	No pin	Common
6	+V Output	+V Output

### Dimensions (Top View)



### Derating



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