Series AME5-VZ

5 Watt | AC-DC / DC-DC Converter

FEATURES:

- I/O Isolation 4000VAC
- Operating Temp: -40˚C to +85˚C
- Input: 85-264VAC, 47-63Hz, or 100-370VDC
- Over current, Over Voltage Protection
- Continuous Short circuit protection
- Regulated Output
- Compact package
- Efficiency up to 82%

Picture coming soon

RoHS

Models

Single output

Model	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Output Voltage (V)	Output Current max (A)	Maximum capacitive Load (µF)	Efficiency 230VAC (%)
AME5-3.3SVZ	85-264/47-63	100-370	3.3	1.25	8100	70
AME5-5SVZ	85-264/47-63	100-370	5	1	6800	75
AME5-9SVZ	85-264/47-63	100-370	9	0.55	1200	77
AME5-12SVZ	85-264/47-63	100-370	12	0.42	1000	79
AME5-15SVZ	85-264/47-63	100-370	15	0.330	680	80
AME5-24SVZ	85-264/47-63	100-370	24	0.23	270	82

Input Specifications

Parameters	Conditions	Typical	Maximum	Units
Current (full load)	115 VAC		125	mA
	230 VAC		80	mA
Inrush current <2ms (cold start)	115 VAC	10		A
	230 VAC	20		A
Leakage current	230VAC/50Hz		0.3	mA
External fuse	Recommended slow blow type	1		A

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±2		%
Line regulation	Full load	±0.5		%
Load regulation (single output)	0%-100% load	±1		%
Minimum load	Single output	0		%
Ripple & Noise *		50	150	mV p-p
Hold-up time	115VAC, 20MHz bandwidth	15		ms
	230VAC, 20MHz bandwidth	80		ms

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec		4000	VAC
Isolation Resistance		>1000		MΩ

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Protection class	Class I			
Over current protection		150-300		% of Iout
Over voltage protection	Zener diode clamp			
Short circuit protection	Continuous, Auto recovery			
Operating temperature	See derating curve	-40 to +85		ºC
Storage temperature		-40 to +105		ºC
Temperature coefficient		±0.02		% / ºC
Cooling	Free air convection			

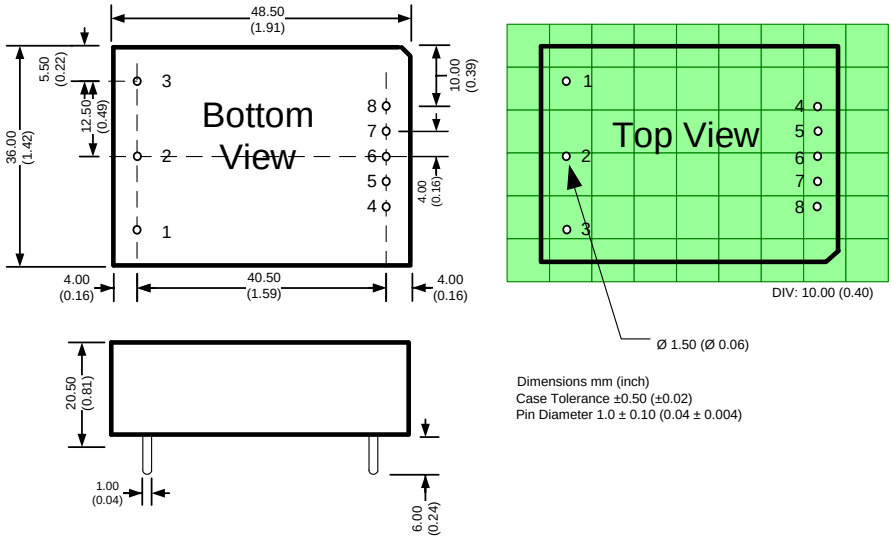
Humidity	Non condensing		95	% RH
Case material	Plastic (flammability to UL 94V-0)			
Weight		55		g
Dimensions (L x W x H)		1.909 x 1.417 x 0.807 inches (48.50 x 36.00 x 20.50mm)		
MTBF	> 300,000 hrs (MIL-HDBK -217F, t=+25ºC)/Full Load			

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

Parameters		
Agency approvals	Designed to meet UL62368	
Standards	Designed to meet IEC/EN/UL 62368-1	
	EMI - Conducted and radiated emission	EN55032, class B
	Electrostatic Discharge Immunity	IEC 61000-4-2, Contact: ±6KV/Air: ±8KV, Criteria B
	RF, Electromagnetic Field Immunity	IEC 61000-4-3, 10V/m, Criteria A
	Electrical Fast Transient/Burst Immunity	IEC 61000-4-4, ±2KV, Criteria B
		IEC 61000-4-4, ±4KV, Criteria B with EMC recommended circuit
	Surge Immunity	IEC 61000-4-5, ±1KV Criteria B
		IEC 61000-4-5, ±2KV, Criteria B with EMC recommended circuit
	RF, Conducted Disturbance Immunity	IEC 61000-4-6, 10Vrms, Criteria A
	Voltage dips, Short Interruptions Immunity	IEC 61000-4-11, 0-70%, Criteria B

Dimensions

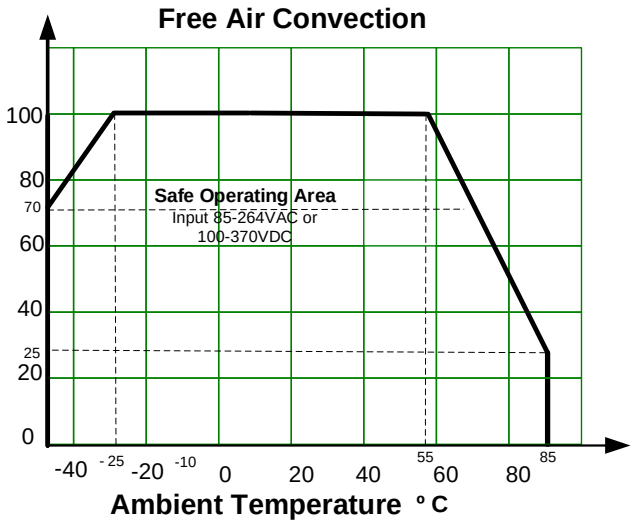


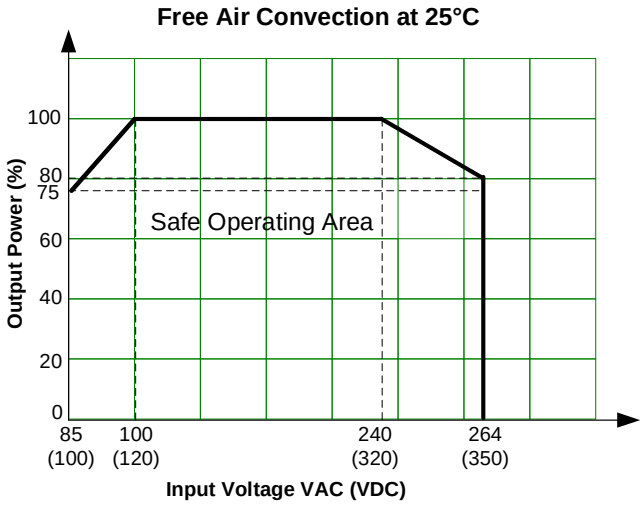
Dimensions mm (inch)
Case Tolerance ±0.50 (±0.02)
Pin Diameter 1.0 ± 0.10 (0.04 ± 0.004)

Pin Out Specifications

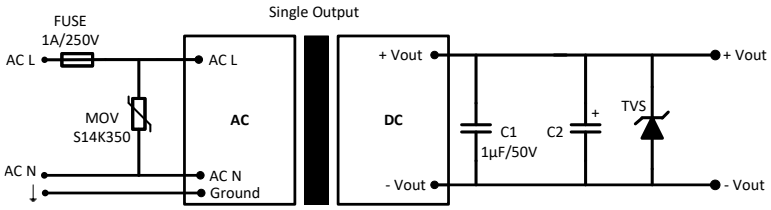
Pin	Single
1	Ground
2	AC Input (N)
3	AC Input (L)
4	-V Output
5	No pin
6	No pin
7	No pin
8	+V Output

Derating



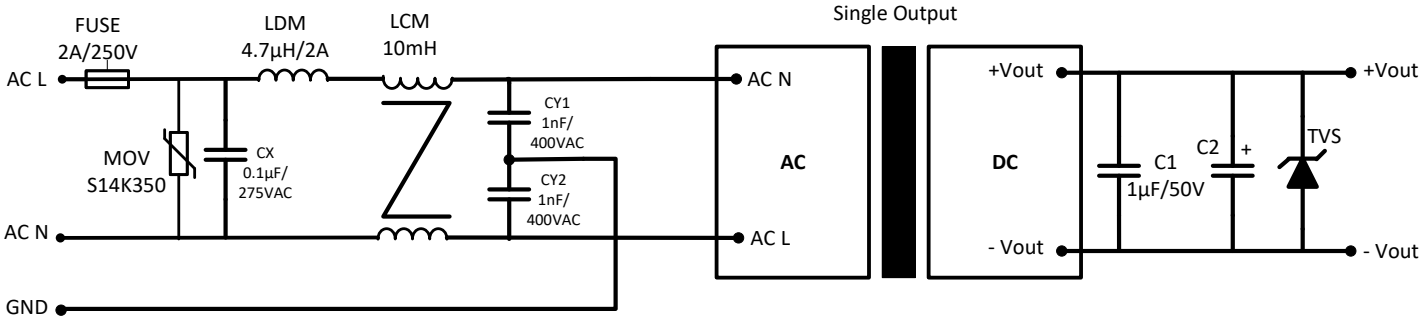


Typical application circuit



Model	C2	TVS
3.3 & 5 Vout	330 µF / 35V	7V
9 Vout	120 µF / 35V	12V
12 Vout	120 µF / 35V	20V
15 Vout	68 µF / 35V	20V
24 Vout	68 µF / 35V	30V

EMC recommended circuit



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