



FEATURES:

- I/O Isolation 4000VAC
- Operating Temp: -25 to +80 °C
- Input: 90-260VAC, 47-440Hz, or 120-370VDC
- Over load, Over Voltage, Short Circuit Protection
- 100% RoHS
- Energy Star compliant
- Ultra small package
- Soft start

Models
Single output

Model	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Temperature range (°C)	Output Voltage (V)	Output Current max (A)	Maximum capacitive Load (µF)	Efficiency (%)
AMEL5-3.3SMAZ	90-264/47-440	120-370	-25 ~ +80	3.3	1.5	2200	68
AMEL5-5SMAZ	90-264/47-440	120-370	-25 ~ +80	5	1	1100	70
AMEL5-12SMAZ	90-264/47-440	120-370	-25 ~ +80	12	0.42	680	73
AMEL5-15SMAZ	90-264/47-440	120-370	-25 ~ +80	15	0.333	330	73
AMEL5-24SMAZ	90-264/47-440	120-370	-25 ~ +80	24	0.21	220	75

Models
Dual output

Model	Input Voltage (VAC, Hz)	Input Voltage (VDC)	Temperature range (°C)	Output Voltage (V)	Output Current max (A)	Maximum capacitive load (µF)	Efficiency (%)
AMEL5-5DMAZ	90-264/47-440	120-370	-25 ~ +80	±5	±0.5	±470	72
AMEL5-12DMAZ	90-264/47-440	120-370	-25 ~ +80	±12	±0.21	±220	73
AMEL5-15DMAZ	90-264/47-440	120-370	-25 ~ +80	±15	±0.168	±150	75

Input Specifications

Parameters	Conditions	Typical	Maximum	Units
Current (full load)	115 VAC		120	mA
	230 VAC		70	mA
Inrush current <2ms (cold start)	115 VAC		10	A
	230 VAC		20	A
Leakage current			0.2	mA
External fuse	Recommended slow blow type	1.5		A
Input Dissipation (No Load)		<0.3		W
Start up time	Soft Start	15		mS
Under Voltage Protection		89		VAC

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±2		%
Line regulation		±0.5		%
Load regulation (0-100% load)		±0.5		%
Cross Regulation (dual output)	25% load - 1 st out, 100% load - 2 nd out	±5		%
Transient Recovery Time		200		µs
Transient Response Deviation	25% load step	±2		% of Vout
Minimum load		0		%
Ripple & Noise	3.3 & 5V models	50		mV p-p
	12, 15 & 24V models	100		mV p-p
Hold-up time (minimum)		15		ms

Isolation Specifications

Parameters	Conditions	Typical	Maximum	Units
Input / Output (tested)	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	>116		%
Over voltage protection		Zener diode clamp		
Short circuit protection	Auto recovery			
Operating temperature	With derating above 50°C	-25 to +80 max		°C
Storage temperature		-40 to +95		°C
Maximum Case temperature			100	°C
Temperature coefficient		0.02		% / °C
Cooling	Free air convection			
Humidity	Non condensing	20 ~ 95		% RH
Case material	Plastic resin + Fiberglass (flammability to UL 94V-0)			
Weight		30		g
Dimensions (L x W x H)	2.03 x 1.03 x 0.62 inches		51.50 x 26.1 x 15.8 mm	
MTBF	> 400 000 hrs (MIL-HDBK -217F, t=+25°C)			

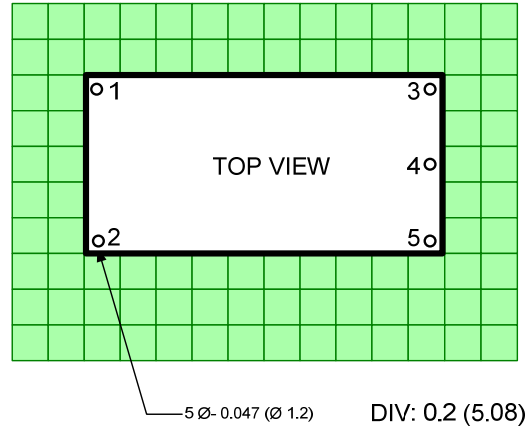
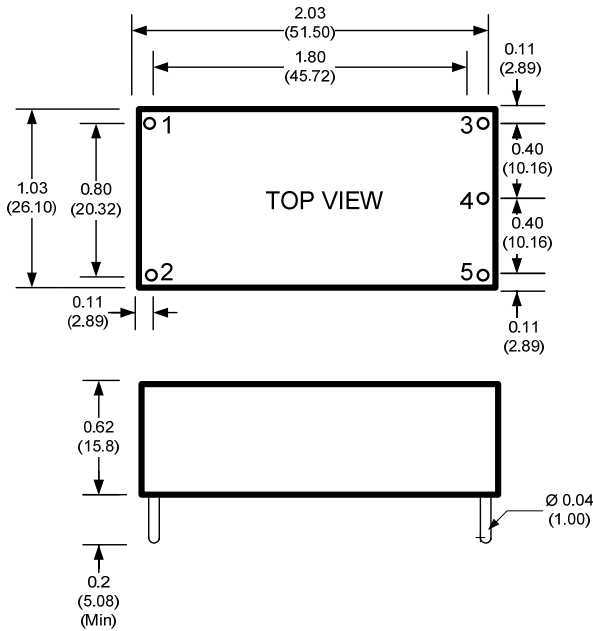
Safety Specifications

Standards		
Agency approvals	cULus, CE, CB	
Safety	EMI - Conducted and radiated emission	EN55011, class B
	Harmonic Current Emissions	IEC/EN 61000-3-2, (EN60555-2)
	Voltage fluctuations and flicker	IEC/EN 61000-3-3, (EN60555-3)
	Medical Electrical Equipment	EN 60601-1
	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

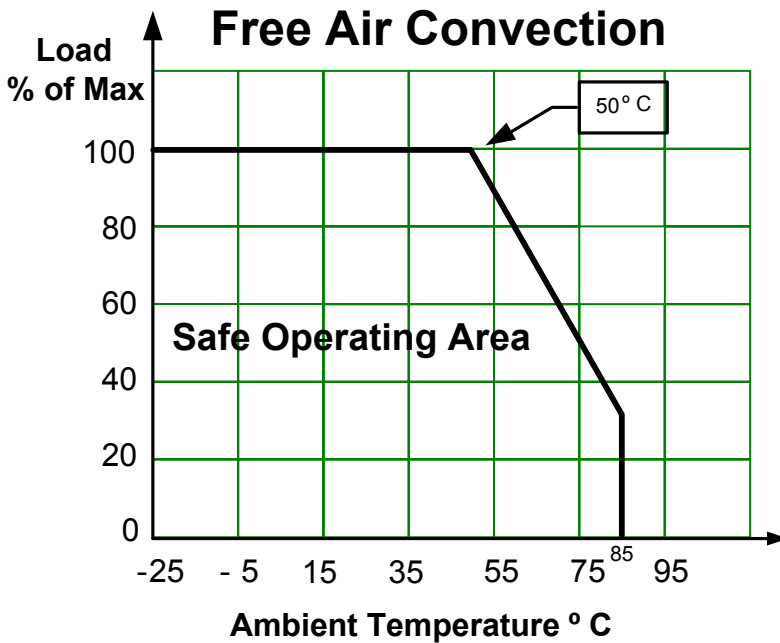
Pin	Single	Dual
1	AC Input (N)	AC Input (N)
2	AC Input (L)	AC Input (L)
3	+V Output	+V Output
4	-V Output	Common
5	No pin	-V Output

Dimensions



Dimensions: inch (mm)
Case Tolerance: ± 0.012 (0.30)
Pin Pitch Tolerance: ± 0.012 (0.30)

Derating



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