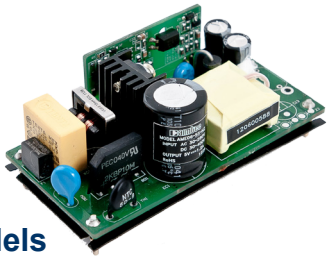
Not recommended for new Designs

Series AMEO6-NZ

6 Watt | AC-DC / DC-DC Converter



FEATURES:

- Open Frame design
- 4000 VAC Isolation
- Short Circuit Protection
- Over-voltage Protection
- Very wide input range
- Low Ripple & Noise
- High Efficiency
- Low Standby Power < 0.55W

Models

Single output

Model	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Temperature range (ºC)	Output Voltage (V)	Output Current max (A)	Maximum capacitive load (µF)	Efficiency (%)
AMEO6-5S-NZ	30-280 / 47-440	30-400	-25 to +70	5	1.2	6000	71
AMEO6-12S-NZ	30-280 / 47-440	30-400	-25 to +70	12	0.55	2000	77

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	Conditions	Typical	Maximum	Units
Current	Vin=220VAC	100		mA
Inrush current <2ms	Vin=220VAC	20		A
	Vin=110VAC	10		
Leakage current	Vin=230VAC, 50Hz	0.3		mA
External fuse	Slow Blow Type	3.15A 250V		A
Input dissipation	Vin=220VAC, Io=0A	0.55		W

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		± 1		%
Line regulation		± 0.5		%
Load regulation	10 – 100% of Load	± 1		%
Transient recovery time	500µs for 25% load step	1000		µs
Transient response deviation		± 4		mV%
Ripple & Noise	20MHz Bandwidth		(5V Model) 75 (12V Model) 130	mV p-p
Hold-up time (min)		200		ms

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60s > 50MΩ		4000	VAC

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency		60		KHz
Start up time		50		mS
Over voltage protection		Clamp Diode		%
Short circuit protection	Continuous			
Short circuit restart	Auto Recovery			
Operating temperature	Refer to Derating Curve	-25 to +70		°C
Storage temperature		-25 to +85		°C
Cooling		Free Air Convection		
Temperature coefficient		±0.02		% / °C
Humidity		20 - 90		% RH
Weight	55			g
Dimensions (L x W x H)	3.14 (L) x 1.57 (W) x 1.81 (H) inches 80 (L) x 40 (W) x 30 (H) mm			
MTBF	> 300,000h @25°C			

Environment Approval

Test	Parameters	Conditions
Shock	Acceleration amplitude	196.1 m/s²
	Bump duration	11 ms
	Number of bumps	Along x, y, z, once each
Vibration	Test mode	10 ~ 55 Hz
	Displacement	3 minutes / cycle
	Acceleration	19.6 m/s²
	Converter operation	60 minutes

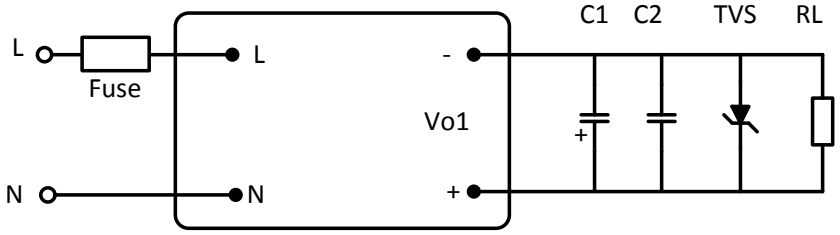
Safety Specifications

Parameters	
Standards	Designed to meet : IEC EN61000-4-2, EN61000-4-3, EN61000-4-4, IEC EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, EN 55022 class B

Pin Out Specifications

Pin	Designation
1	AC Input (L)
2	AC Input (N)
3	NC
4	No Pin
5	Common
6	+V Output

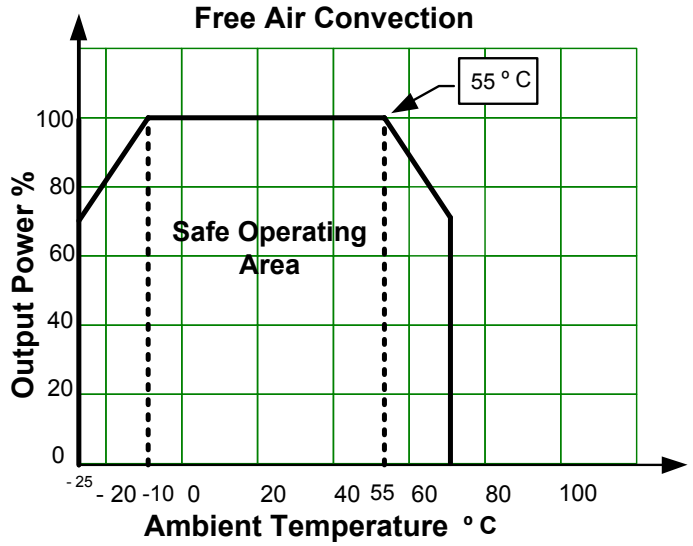
Typical Applications



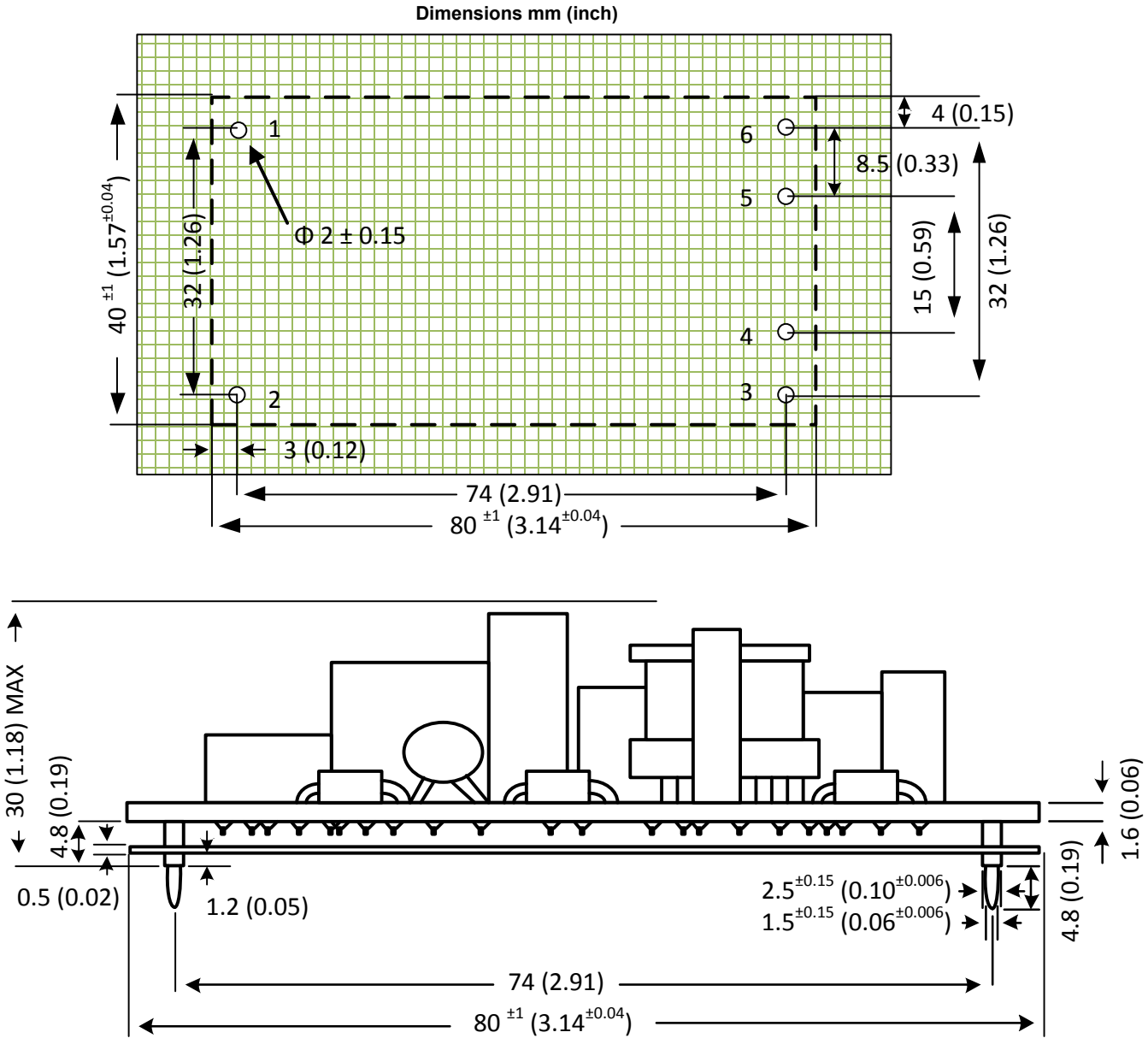
Device	Value
C1	Electrolytic 100 µF / 25V
C2	Ceramic 0.1 µF / 50V
TVS	P6SMB7.5A (AMEO6-5S-NZ) P6SMB16A (AMEO6-12S-NZ)

It is recommended that the output adds TVS (transient voltage suppressor) to protect adjacent circuits (if device fails).

Derating



Dimensions



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