

AMED240N-GY



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DIN Rail

Features

- Universal Input: 90 - 264VAC/127 - 370VDC
- Operating Temp: -20 °C to +70 °C
- High isolation voltage: 3000VAC
- Low ripple & noise: 150mV(p-p), max.
- Short circuit protection, over-voltage protection, overload protection, and over-temperature protection



Training

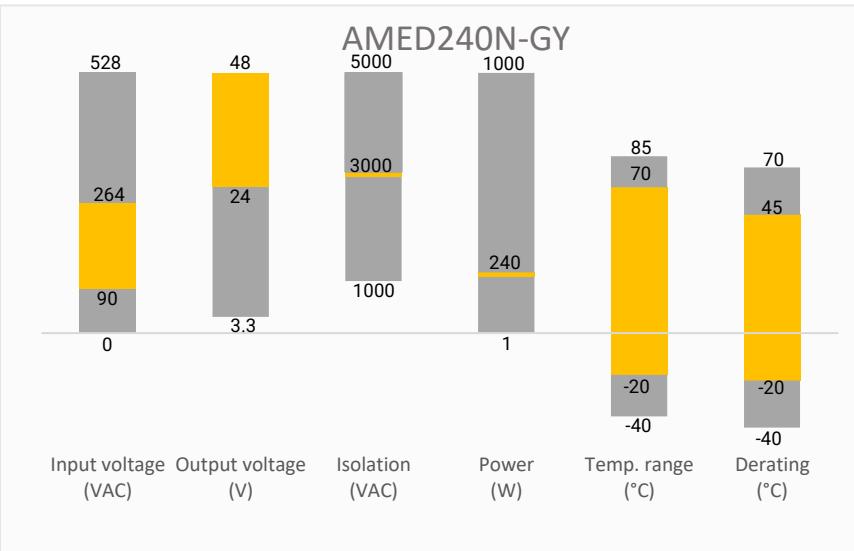


Product Training Video
(click to open)



Application Notes

Summary



Applications



Power Grid



Industrial



Telecom

Models & Specifications



Model	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Max Output wattage (W)	Output Voltage (V)	Output Current max (A)	Efficiency Typ. (%)
AMED240N-24SGY	90~264/47~63	127~370	240	24	10	87
AMED240N-48SGY	90~264/47~63	127~370	240	48	5	88

Input Specifications					
Parameters	Conditions	Typical	Maximum	Units	
Input Current	115VAC		2.5	A	
	230VAC		1.3	A	
Inrush Current	115VAC, cold start	37.2		A	
	230VAC, cold start	70.0		A	
Leakage Current	240VAC	<1.0		mA	
Power Factor	115VAC at full load	>0.98			
	230VAC at full load	>0.95			

Output Specifications					
Parameters	Conditions	Typical	Maximum	Units	
Voltage accuracy	0 - 100% load	± 2		%	
Line regulation	Rated load	± 0.5		%	
Load regulation	0 - 100% load	± 1		%	
Ripple & Noise*			150	mV p-p	
Start-up time	230VAC input, full load		3.0	s	
	115VAC input, full load		1.5	s	
Rise time	230VAC input, full load		100	ms	
	115VAC input, full load		100	ms	
Hold up time	230VAC input, full load	16		ms	
	115VAC input, full load	12		ms	
Voltage adjustable range	24 VDC Output	24 - 28		V	
	48 VDC Output	48 - 55		V	

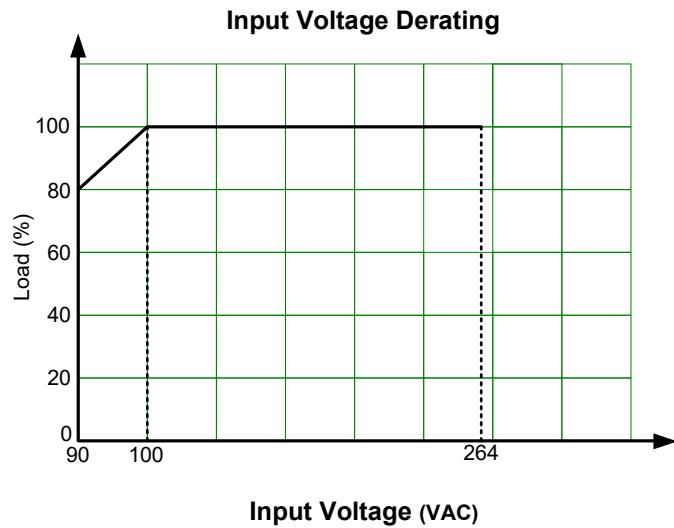
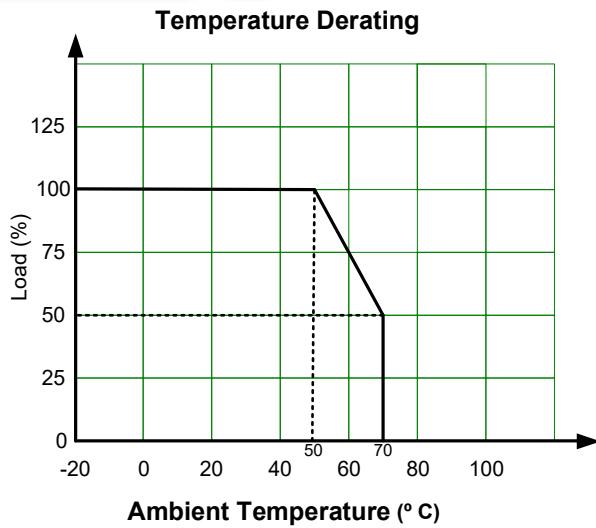
* Ripple and Noise are measured at 20MHz bandwidth. Please refer to the application note for specific details. Measured with a 47µF electrolytic capacitor and a 0.1µF ceramic capacitor.

Isolation Specifications					
Parameters	Conditions	Typical	Maximum	Units	
Tested I/O voltage	60 sec, Leakage current < 10mA	3000		VAC	
Tested Input to GND voltage	60 sec, Leakage current < 10mA	2000		VAC	
Tested Output to GND voltage	60 sec, Leakage current < 10mA	500		VAC	
Insulation resistance	500VDC	>100		MΩ	

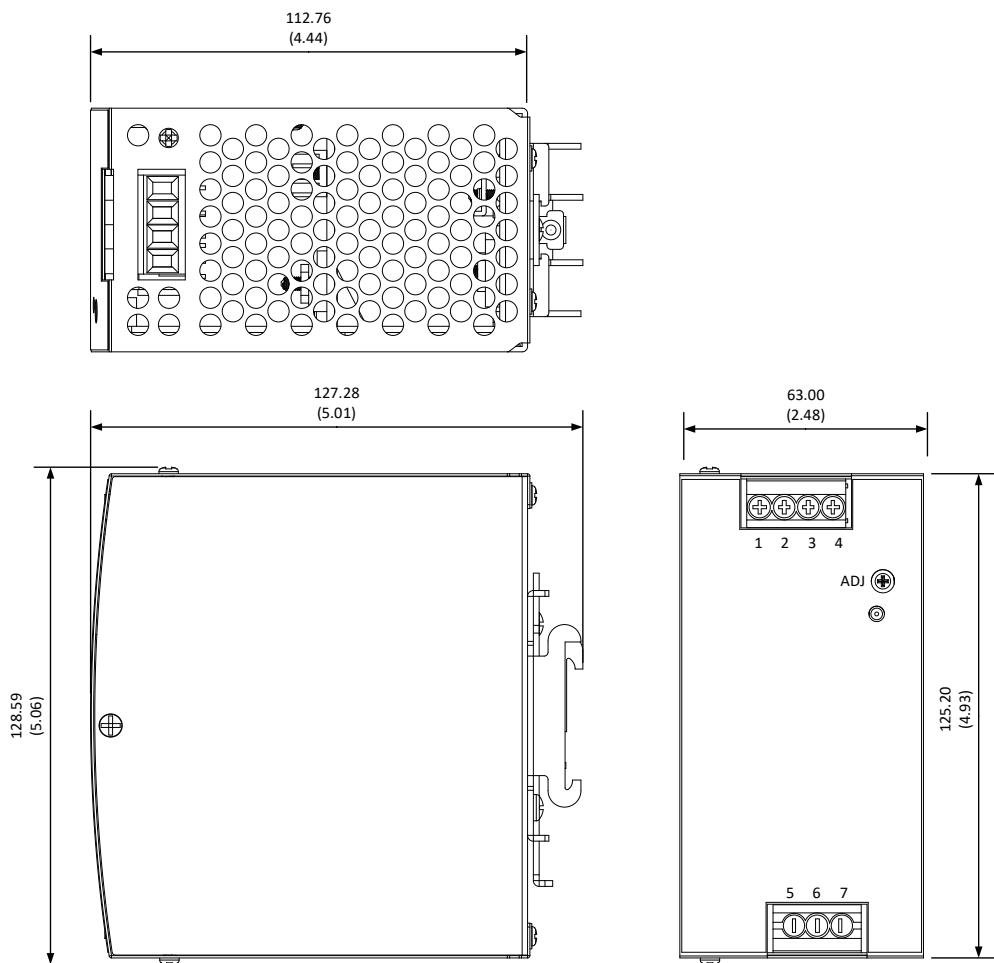
General Specifications				
Parameters	Conditions	Typical	Maximum	Units
Over voltage protection	24 VDC Output, manual-recovery	≤ 33		VDC
	48 VDC Output, manual-recovery	≤ 65		VDC
Over temperature protection	Shuts down output voltage, auto-recovery			
Overload protection	105 ~ 130% rated output power, hiccup mode, auto-recovery			
Short circuit protection	Hiccup, auto-recovery			
Operating temperature	20 ~ 95% RH	-20 to +70		°C
Storage temperature	10 ~ 95% RH	-40 to +85		°C
Power derating	230VAC, 50 °C to 70 °C	2.5		% / °C
	90 to 100 VAC	2		% / VAC
Cooling	Free air convection			
Storage Humidity	Non-condensing	>10	95	% RH
Operating Humidity	Non-condensing	>20	95	% RH
Case material	Metal			
Weight		1000		g
Dimensions (L x W x H)	2.48 x 4.92 x 4.47 inches (63.00 x 125.00 x 113.50 mm)			
MTBF	1398.4K hrs min. Telcordia SR-332 (Bellcore)			
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 approval	UL508, BS EN/EN62368-1			
Standards	EMC - Conducted and radiated emission	CISPR32 / EN55032, Class B		
	Harmonic Current emission	IEC/EN 61000-3-2, Class A		
	Voltage Fluctuations & Flicker	IEC/EN 61000-3-3		
	Electrostatic Discharge Immunity	IEC/EN 61000-4-2 Contact ±4KV, Air ±8KV, Criteria B		
	RF, Electromagnetic Field Immunity	IEC/EN 61000-4-3 3V/m, Criteria A		
	Electrical Fast Transient/Burst Immunity	IEC/EN 61000-4-4 ±1KV, Criteria B		
	Surge Immunity	IEC/EN 61000-4-5 L-L ±1KV, L-G ±2KV, Criteria B		
	CS, Conducted Disturbance Immunity	IEC/EN 61000-4-6 3V, 3V~1V, 1V r.m.s, Criteria A		
	Power Frequency Magnetic Field Immunity	IEC/EN 61000-4-8 50, 60Hz, Criteria A		
	Voltage dips, Short Interruptions Immunity	IEC/EN 61000-4-11 100% Voltage Dips/Interruptions, 3 cycles, Criteria B		
	EMC Immunity	BS EN/EN55035, BS EN/EN61000-6-2(BS EN/EN50082-2)		

Derating

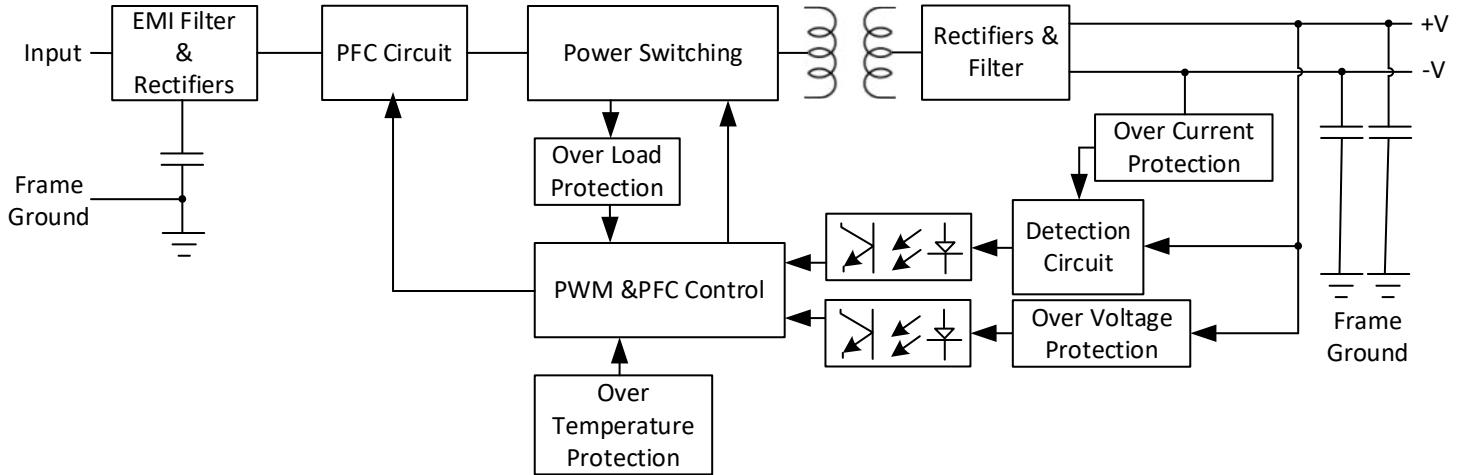


Dimensions



Pin Output Specifications	
Pin	Function
1	-V Output
2	-V Output
3	+V Output
4	+V Output
5	GND \pm
6	N
7	L
ADJ	Voltage Adjustment

Functional Diagram



NOTE: 1. Datasheets are updated as needed and as such, specifications are subject to change without notice. Once printed or downloaded, datasheets are no longer controlled by Aimtec; refer to www.aimtec.com for the most current product specifications. 2. Product labels shown, including safety agency certifications on labels, may vary based on the date manufactured. 3. Mechanical drawings and specifications are for reference only. 4. All specifications are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified. 5. Aimtec may not have conducted destructive testing or chemical analysis on all internal components and chemicals at the time of publishing this document. CAS numbers and other limited information are considered proprietary and may not be available for release. 6. This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other the ones listed in this datasheet. 7. Warranty is in accordance with Aimtec's standard Terms of Sale available at www.aimtec.com.