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## AMED100-GY



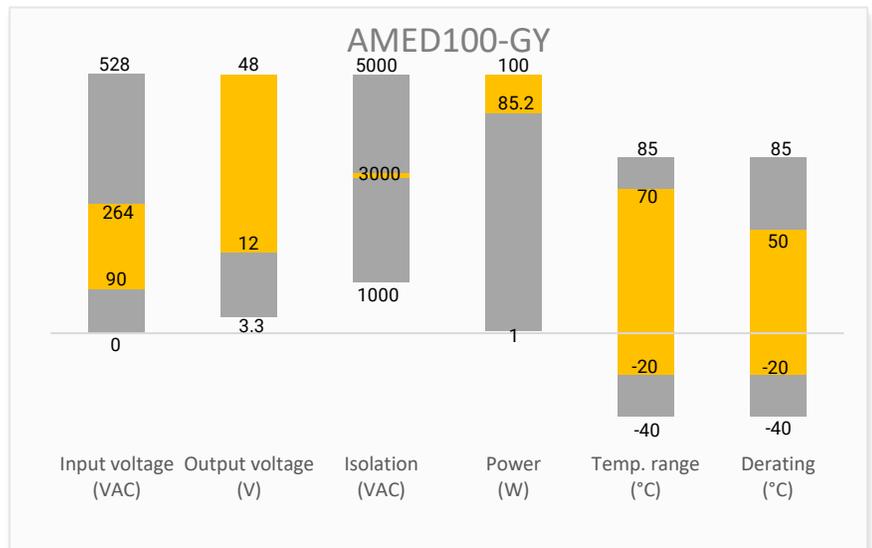
The AMED100-GY is a step shape DIN rail AC-DC converter series featuring a cost effective and energy efficient design. These lightweight AC-DC converters also have an extremely compact design and are ideal for applications such as industrial control equipment, building automation and numerous harsh environments applications. Measuring 90.00 x 70.20 x 58.40mm, there are ambient air-cooling vents both at the top and bottom of the converter for improved thermal performance.

This new series offers great operating temperatures, from -20°C to 70°C and features an isolation of 3000VAC for improved reliability and system safety. Furthermore, output short circuit protection (OSCP), overload protection (OLP), and an output overvoltage protection (OVP) come standard with the series.

## Features

- Universal Input: 90 - 264VAC/127 - 370VDC
- Operating Temp: -20 °C to +70 °C
- High isolation voltage: 3000VAC
- Low ripple & noise, 240mV(p-p), max.
- Short circuit protection, over-voltage protection, and overload protection.
- Operating Altitude: 2000 meters
- Over voltage category III (OVC III)

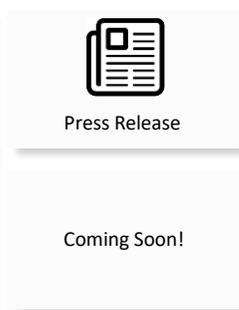
## Summary



## Training



Product Training Video  
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Application Notes

## 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 (mA)	Efficiency @ 230VAC Typ. (%)
AMED100-12SGY	90~264/47~63	127~370	85.2	12	7100	88
AMED100-15SGY	90~264/47~63	127~370	97.5	15	6500	89
AMED100-24SGY	90~264/47~63	127~370	100.0	24	4170	90
AMED100-48SGY	90~264/47~63	127~370	100.0	48	2080	90

### Input Specifications

Parameters	Conditions	Typical	Maximum	Units
Input Current	115VAC		3000	mA
	230VAC		1600	mA
Inrush Current	115VAC	35		A
	230VAC	70		A

### Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy	0 - 100% load	± 2		%
Line regulation	Rated load	± 1		%
Load regulation	230VAC	± 1		%
Ripple & Noise	20MHz bandwidth, 12 VDC Output		120	mV p-p
	20MHz bandwidth, 15 VDC Output		120	mV p-p
	20MHz bandwidth, 24 VDC Output		150	mV p-p
	20MHz bandwidth, 48 VDC Output		240	mV p-p
Hold up time	100-240VAC, full load	30		ms
Start up time	100-240VAC, full load		0.5	S
Rise time	100-240VAC, full load	50		ms
Voltage adjustable range	12 VDC Output, 50% load	14.2 – 16.2		V
	15 VDC Output, 50% load	18.8 – 22.5		V
	24 VDC Output, 50% load	30.0 – 36.0		V
	48 VDC Output, 50% load	56.5 – 64.8		V

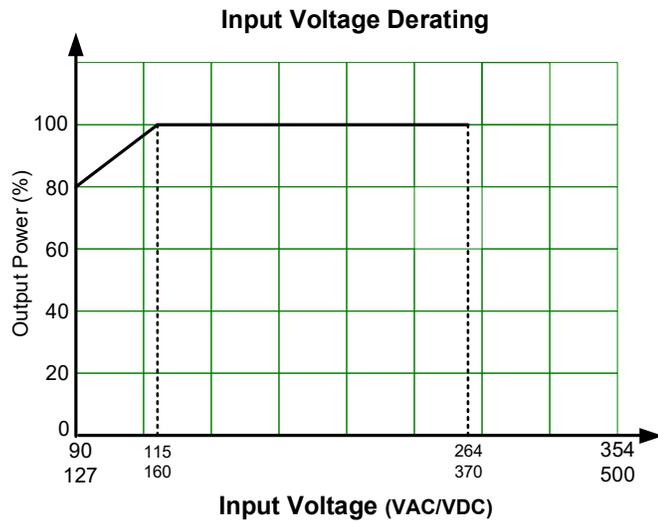
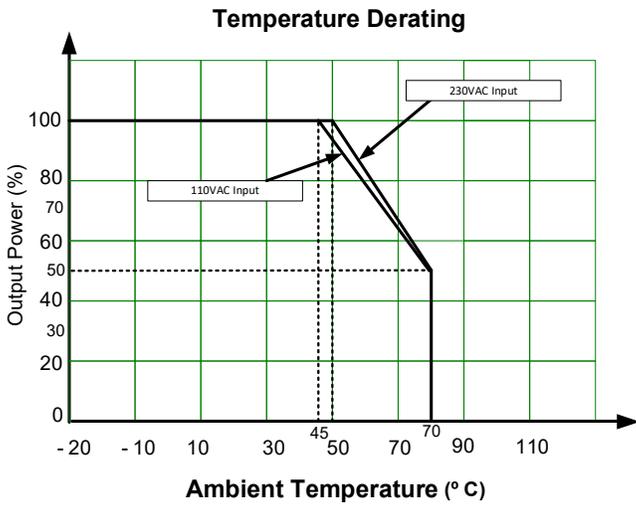
### Isolation Specifications

Parameters	Conditions	Typical	Maximum	Units
Tested I/O voltage	60 sec, Leakage current < 5mA	3000		VAC
Insulation Resistance	500VDC, 25°C, 70%RH	100		M Ohms

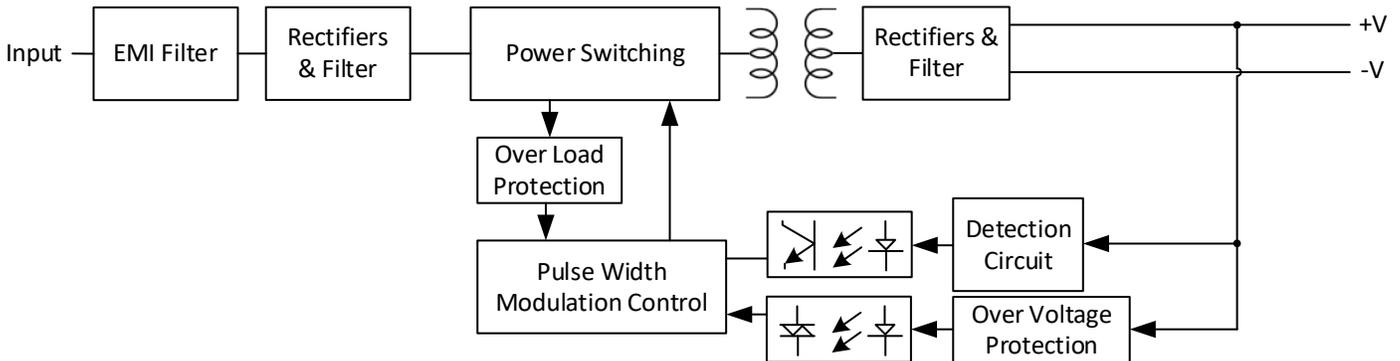
General Specifications				
Parameters	Conditions	Typical	Maximum	Units
Over voltage category	OVC III; According to EN61558, EN50178, EN60664-1, EN62477-1			
Over voltage protection	12 VDC Output	≤ 13		VDC
	15 VDC Output	≤ 18		VDC
	24 VDC Output	≤ 29		VDC
	48 VDC Output	≤ 55.2		VDC
Overload protection	102~110% rated output power; 105~150% rated output power; <50% rated output voltage, hiccup, auto-recovery 50%-100% rated output voltage, constant current limiting, auto-recovery			
Short circuit protection	Hiccup, Continuous, auto-recovery			
Operating temperature	20~90% RH Non-Condensing	-20 to +70		°C
Storage temperature	10~95% RH Non-Condensing	-40 to +85		°C
Operating altitude			2000	m
Power derating	110VAC input, 45 °C to 70 °C	2.0		% / °C
	230VAC input, 50 °C to 70 °C	2.5		% / °C
	90 to 115VAC	0.8		% / VAC
Temperature coefficient		± 0.03		% / °C
Protection Class	Class II			
Cooling	Free air convection			
Storage Humidity			95	% RH
Case material	Plastic			
Weight		270		g
Dimensions (L x W x H)	3.54 x 2.76 x 2.30 inches (90.00 x 70.20 x 58.40 mm)			
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	UL 62368-1, 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

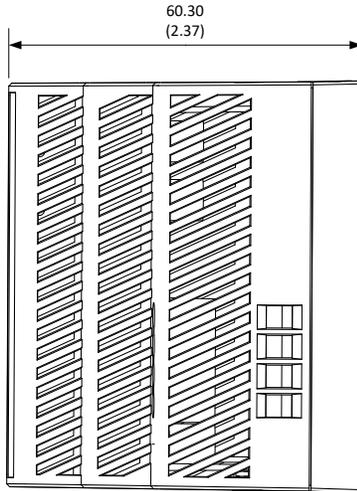
## Derating



## Functional Diagram



## Dimensions



Unit: mm (inch)

General tolerance:  $\pm 1.0$  (0.04)

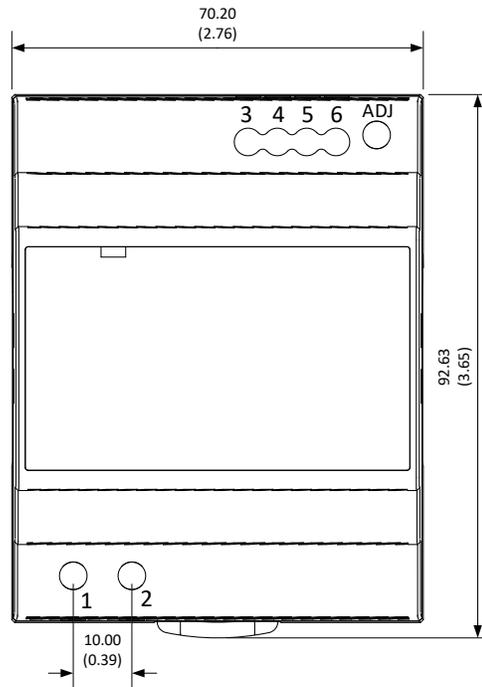
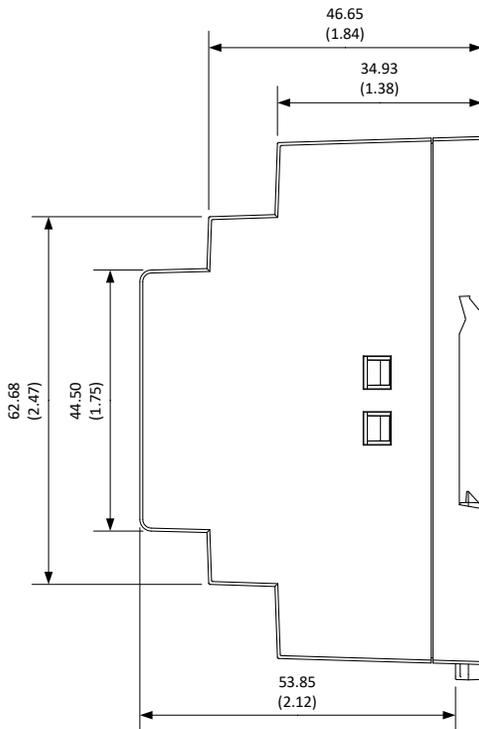
Wire gauge: 24 – 12AWG

Tightening torque: 0.4N·m Max.

Mounting rail: TS35,

Rail must be connected to safety ground

Pin Output Specifications	
Pin	Function
1	Input (L)
2	Input (N)
3	-V Output
4	-V Output
5	+V Output
6	+V Output
ADJ	Voltage adjustment



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