

AMED60S-GY



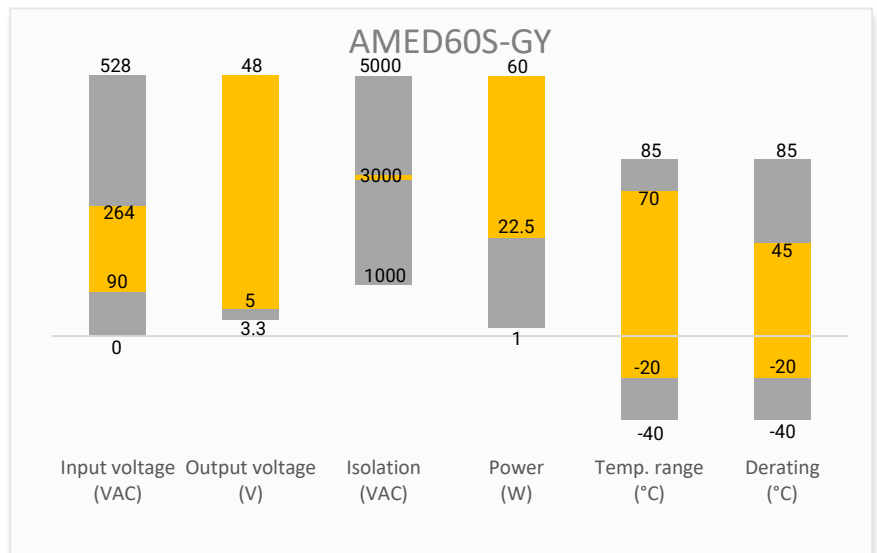
The AMED60S-GY is a whole new step shape DIN rail bracket AC-DC converter series featuring a cost effective, energy efficient solution. These lightweight AC-DC converters have a 90-264VAC input and have an extremely compact design for space saving making them ideal for applications such as industrial control equipment, building automation and numerous applications in harsh environments. Measuring 52.00 x 90.00 x 58.00mm, there are ambient air-cooling vents both at the top and bottom of the converter. The DIN rail is easy to install and remove for maintenance, while efficiently organizing all your electrical cables.

This 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.
- Overvoltage category III (OVC III)

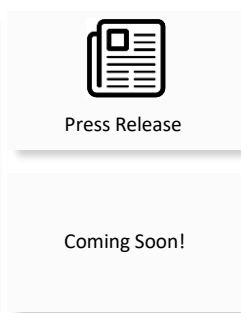
Summary



Training



Product Training Video
(click to open)



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. (%)
AMED60S-5SGY	90~264/47~63	127~370	22.5	5	4500	85
AMED60S-12SGY	90~264/47~63	127~370	54	12	4500	88
AMED60S-15SGY	90~264/47~63	127~370	60	15	4000	89
AMED60S-24SGY	90~264/47~63	127~370	60	24	2500	90
AMED60S-48SGY	90~264/47~63	127~370	60	48	1250	91

Input Specifications

Parameters	Conditions	Typical	Maximum	Units
Input Current	115VAC		1200	mA
	230VAC		800	mA
Inrush Current	115VAC	30		A
	230VAC	60		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, 5 VDC Output		80	mV p-p
	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	230VAC input, full load	30		ms
	115VAC input, full load	12		ms
Start up time	230VAC input, full load		0.5	S
	115VAC input, full load		0.5	S
Rise time	230/115VAC input, full load	50		ms
Voltage adjustable range	50% load, 5 VDC Output	4.0 - 6.0		V
	50% load, 12 VDC Output	11.0 - 13.0		V
	50% load, 15 VDC Output	14.0 - 16.0		V
	50% load, 24 VDC Output	23.0 - 25.0		V
	50% load, 48 VDC Output	47.0 - 49.0		V

Isolation Specifications

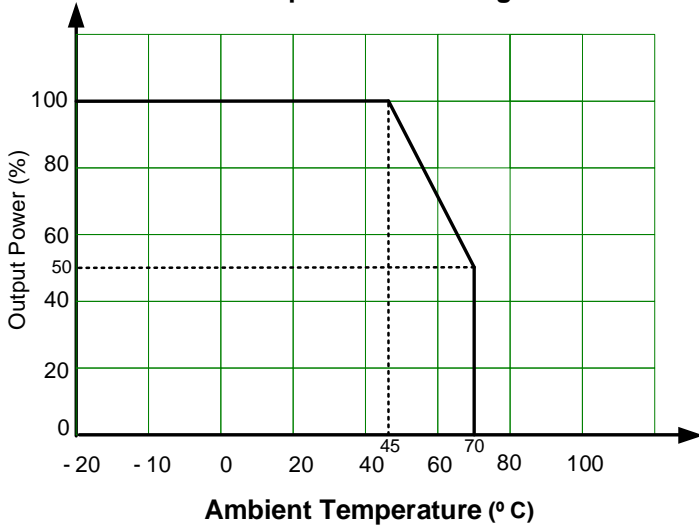
Parameters	Conditions	Typical	Maximum	Units
Tested I/O voltage	60 sec, Leakage current < 5mA	3000		VAC
Insulation Resistance	500VDC, 25°C, 70%RH	100		M Ohms

General Specifications				
Parameters	Conditions	Typical	Maximum	Units
Over voltage category	OVC III; According to EN61558, EN50178, EN60664-1, EN62477-1			
Over voltage protection	Voltage clamp or hiccup, 5 VDC Output	≤ 6.75		VDC
	Voltage clamp or hiccup, 12 VDC Output	≤ 16.2		VDC
	Voltage clamp or hiccup, 15 VDC Output	≤ 22.5		VDC
	Voltage clamp or hiccup, 24 VDC Output	≤ 36		VDC
	Voltage clamp or hiccup, 48 VDC Output	≤ 64.8		VDC
Overload protection	105~145% rated output power <50% rated output voltage, hiccup, auto-recovery 50%-100% rated output voltage, constant current limiting, auto-recovery			
Short circuit protection	Hiccup, auto-recovery			
Operating temperature	20 ~ 90% RH Non-Condensing	-20 to +70		°C
Storage temperature	10 ~ 90% RH Non-Condensing	-40 to +85		°C
Operating altitude			2000	m
Power derating	45 °C to 70 °C	2		% / °C
	90 to 100 VAC	2		% / VAC
Temperature coefficient	0 ~ 50°C RH Non-Condensing	± 0.03		% / °C
Protection Class	Class II			
Cooling	Free air convection			
Storage Humidity			95	% RH
Case material	Plastic			
Weight		190		g
Dimensions (L x W x H)	2.05 x 3.54 x 2.28 inches (52.00 x 90.00 x 58.00 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.				

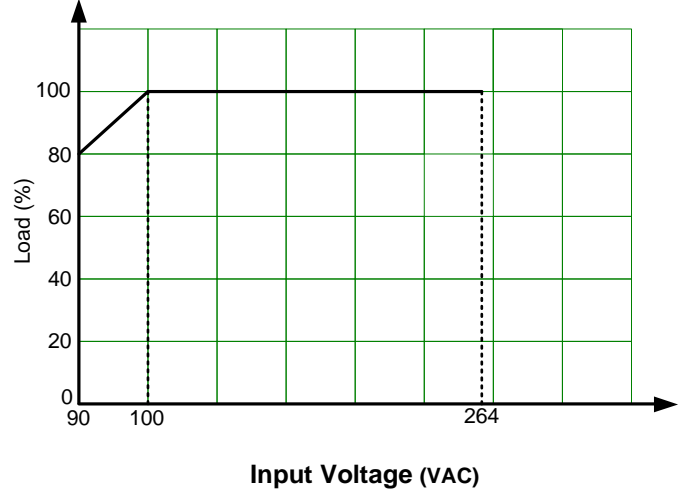
Safety Specifications		
Parameters		
Agency approval	UL 62368-1, BS EN/EN62368-1	
Standards	EMC - Conducted and radiated emission	CISPR32 / EN55032, Class B
	Harmonic Current emission	IEC/EN 61000-3-2, Class A
	Voltage Fluctuations & Flicker	IEC/EN 61000-3-3
	Electrostatic Discharge Immunity	IEC/EN 61000-4-2 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

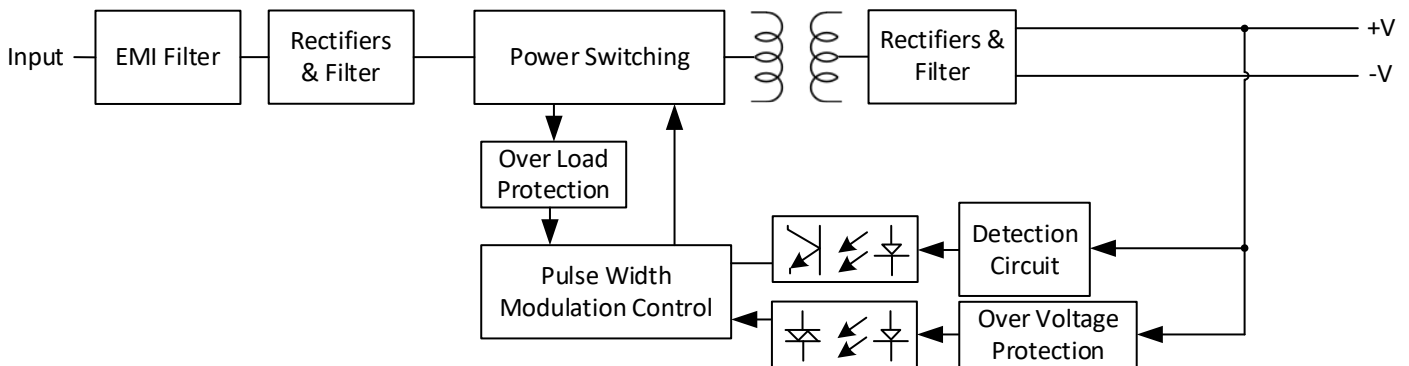
Temperature Derating



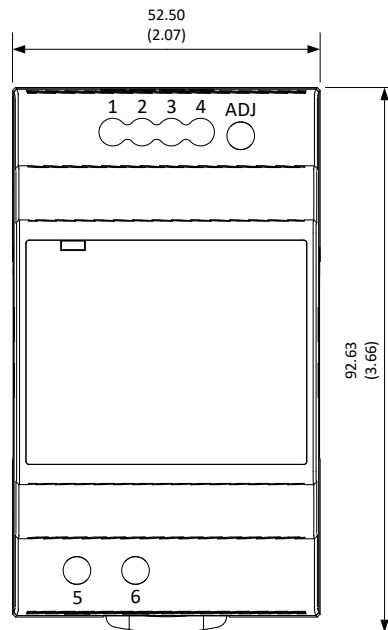
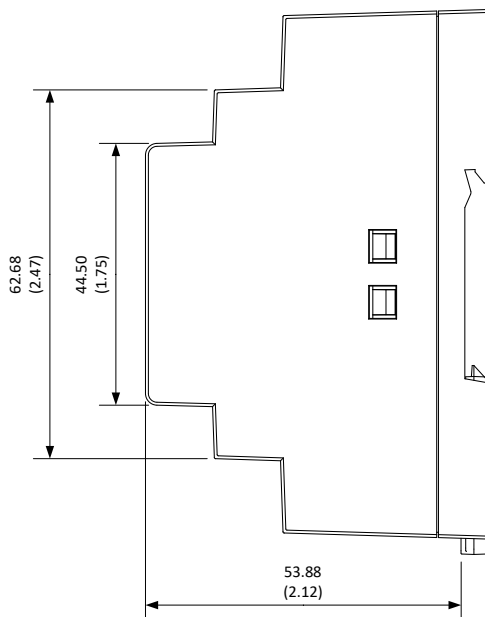
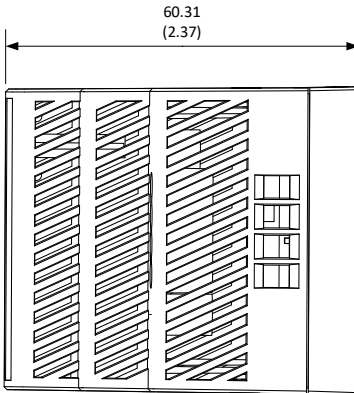
Input Voltage Derating



Functional Diagram



Dimensions



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

Unit: mm (inch)

General tolerance: ± 1.0 (0.04)

Wire gauge: 24 – 12AWG

Tightening torque: 0.4N·m Max.

Mounting rail: TS35,

Rail must be connected to safety ground

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.