Click to ORDER samples

AMED75-NZ

DIN Rail

The AMED75-NZ is whole new DIN rail bracket AC-DC converter featuring a cost effective, energy efficient solution. The products offer a high level of stability and immunity to noise, compliant with international IEC/EN/UL62368, IEC/EN/UL60335, GB4943 and UL508 standards. These lightweight AC-DC converters also have an extremely compact design for space saving and are ideal for applications such as industrial control
equipment machinery and numerous applications for harsh environments.
This new series offers great operating temperatures, from -40°C to 70°C and an isolation of 4000VAC for improved reliability and system safety. Furthermore, a high MTBF of 300,000h, output short circuit protection (OSCP), output over-current protection (OCP) and an output over-voltage protection (OVP) come standard with the series.

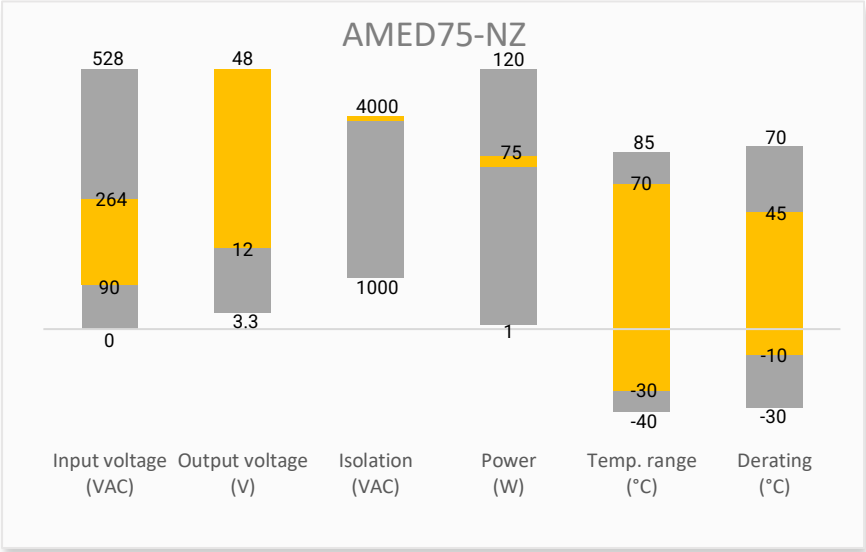
Features

- Universal Input: 90 - 264VAC/120 - 373VDC
- Operating Temp: -30 °C to +70 °C
- High isolation voltage: 4000VAC
- Low ripple & noise, 150mV(p-p), max.
- Output short circuit, over-current, over-voltage, over-temperature protection

RoHS

3yr Warranty

Summary



Training

Product Training Video (click to open)

Press Release

Coming Soon!

Application Notes

Applications

Power Grid

Industrial

Telecom

Instrumentation

Models & Specifications

Single Output							
Model	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Max Output wattage (W)	Output Voltage (V)	Output Current max (A)	Maximum capacitive load (µF)	Efficiency @ 230VAC Typ. (%)
AMED75-12SNZ	90~264/47~63	120~373	75	12	6.3	6000	86
AMED75-24SNZ	90~264/47~63	120~373	75	24	3.2	1500	89
AMED75-48SNZ	90~264/47~63	120~373	75	48	1.6	1000	90

Input Specifications				
Parameters	Conditions	Typical	Maximum	Units
Input Current	115VAC		2000	mA
	230VAC		1000	
Inrush Current	115VAC	25		A
	230VAC	45		
Leakage Current	240VAC / 50Hz		3.5	mA RMS

Output Specifications					
Parameters	Conditions		Typical	Maximum	Units
Voltage accuracy	0 - 100% load	12 VDC Output	± 2		%
		24,48 VDC Output	± 1		%
Line regulation	Rated load		± 0.5		%
Load regulation	0 - 100% load		± 1		%
Ripple & Noise	20MHz bandwidth	12 VDC Output		80	mV p-p
		24 VDC Output		120	
		48 VDC Output		150	
Hold up time	115VAC		12		ms
	230VAC		60		ms
Voltage adjustable range	12 VDC Output		12 – 14		V
	24 VDC Output		24 - 28		
	48 VDC Output		48 - 53		

Isolation Specifications				
Parameters	Conditions	Typical	Maximum	Units
Tested I/O voltage	60 sec, Leakage current < 10mA	4000		VAC
Tested Input to GND voltage		2000		
Tested Output to GND voltage		500		
Insulation resistance	500VDC	>50		MΩ

General Specifications

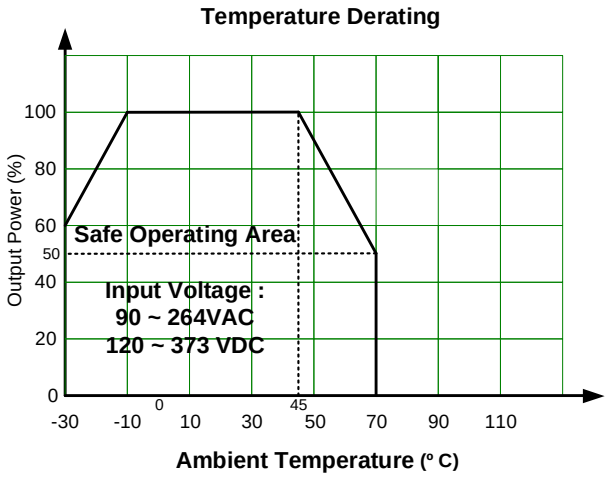
Parameters	Conditions	Typical	Maximum	Units
Over Current protection	Self- recovery	105 - 150		% of Iout
Over voltage protection	12 VDC Output, manual-recovery	≤ 17		VDC
	24 VDC Output, manual-recovery	≤ 33		
	48 VDC Output, manual-recovery	≤ 60		
Over temperature protection	Output voltage turn off, manual-recovery			
Short circuit protection	Hiccup, Continuous, Self-recovery(Recovery time < 3S)			
Switching Frequency		65		KHz
Operating temperature		-30 to +70		°C
Storage temperature		-40 to +85		°C
Power derating	-30 °C to -10°C	2.0		% / °C
	45 °C to 70 °C	2.0		% / °C
	90 to 100 VAC	2.0		% / VAC
Temperature coefficient		± 0.03		% / °C
Protection Class	Class I			
Cooling	Free air convection			
Storage Humidity			95	% RH
Case material	Metal (AL5052, SGCC) and Plastic(PC940)			
Weight		370		g
Dimensions (L x W x H)	1.18 x 5.04 x 4.72 inches (30.00 x 128.00 x 120.00 mm)			
MTBF	> 300 000 hrs (MIL-HDBK -217F, t=+25°C)			

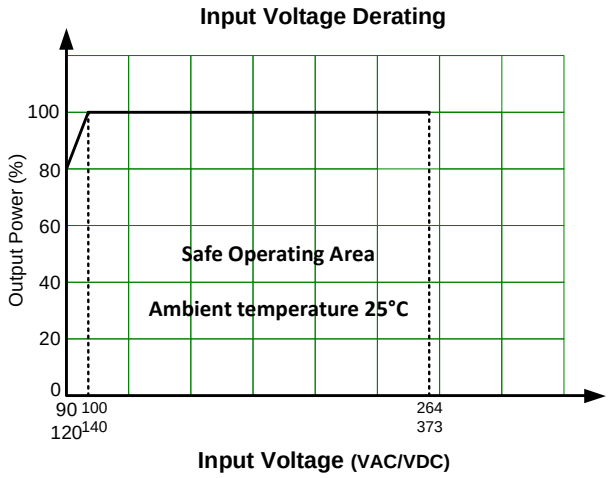
NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

Safety Specifications

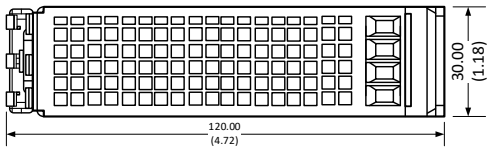
Parameters		
Standards	Designed to meet IEC/EN/UL 62368, IEC/EN/UL 60335, GB4943, UL508	
	EMC - Conducted and radiated emission	CISPR32 / EN55032, Class B
	Harmonic current	IEC/EN 61000-3-2, Class A
	Electrostatic Discharge Immunity	IEC 61000-4-2 Contact ±4KV, Air ±6KV, Criteria A
	RF, Electromagnetic Field Immunity	IEC 61000-4-3 10V/m, Criteria A
	Electrical Fast Transient/Burst Immunity	IEC 61000-4-4 ±2KV, Criteria A
	Surge Immunity	IEC 61000-4-5 L-L ±2KV, L-G ±4KV, Criteria A
	CS, Conducted Disturbance Immunity	IEC 61000-4-6 10V r.m.s, Criteria A
	Voltage dips, Short Interruptions Immunity	IEC 61000-4-11 0%, 70%, Criteria B

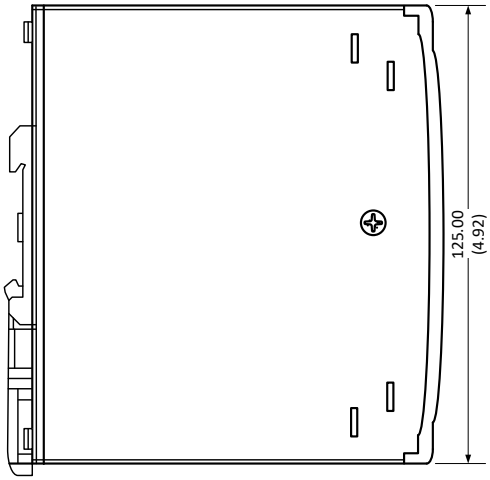
Derating

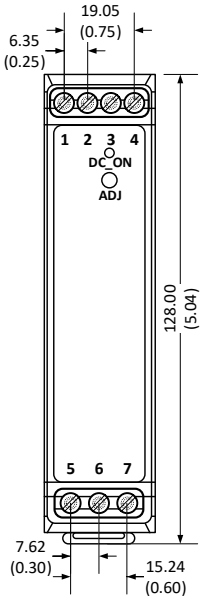




Dimensions







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

Note:
Unit: mm (inch)
General tolerance : ±1.0 (0.04)
Wire gauge : 26 - 10AWG
Tightening torque : 0.4N·m Max.
Mounting rail : TS35, rail need to connect 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.