

# AMG2004A

## 12V<sub>DC</sub>, 48W Power Supply



## Industrial Power Supplies

The AMG2004A Power Supply is a 12-15V<sub>DC</sub> 48W Power Supply which is suitable for all AMG Industrial Ethernet equipment without PoE.



PSU 48W 12VDC	Temp -25--+71°C	Mounting DIN

[ AMG2004A ]

### / OVERVIEW

AC - DC DIN Rail mountable 48W power supply.

### / FEATURES

- AC/DC Power Module
- Universal Input 85~264V<sub>AC</sub>
- High Efficiency - up to 87%
- Short Circuit Protection
- Internal Input Filter
- Low standby power consumption
- High average efficiency meet ErP
- DIN Rail Mountable

# Specifications.

All specifications typical at nominal line full load, 25°C unless otherwise noted.

## General.

Characteristics	Conditions	Min	Typ	Max	Unit
Isolation Voltage	Input/Output	3000/4242			VAC/VDC
Isolation Resistance	Input/Output @500V <sub>DC</sub>	100			MΩ
Ambient Temperature	Operating at Vi nom.	-25		+71	°C
Derating	Vi nom from +61°C to +71°C			2.5	%/°C
Storage Temperature	N on operational	-40		+85	°C
Relative Humidity	Vi nom, lo nom	20		90	% RH
Dimension (L x W x D)	Spring terminal type		90 x 30 x 100		mm
Cooling	Free air convection				
MTBF	556,000hrs				
Case Material	Plastic				

## Input Specifications.

Characteristics	Conditions	Min	Typ	Max	Unit
Rated Input Voltage	IO nom	100		240	VAC
Input Voltage Range	Ta min... Ta max	AC in	85	264	VAC
	IO nom	DC in	120	375	VDC
Input current	Vi: 115/230VAC, lo nom		1000/500		mA
Inrush Current	Vi: 115/230VAC, lo nom			30/60	A
Power dissipation	Vi: 230VAC, lo nom		8.0		A
Standby power consumption	Vi nom, lo=0A			0.3	W

## Output Specifications.

Characteristics	Conditions	Min	Typ	Max	Unit
Output Voltage Accuracy	Vi nom, lo max	0		+1	%
Minimum Load	Vi nom	0			%
Line Regulation	lo nom, Vi min...Vi max			±1	%
Load Regulation	Vi nom, lo min...lo nom			±1	%
Transient Recovery Time	Vi nom, 1~0.5 lo nom			2	ms
Fall time	Vi nom, lo min			150	ms
Ripple & Noise	Vi nom, lo nom, BW=20MHz			100	mV
Hold Up Time	Vi = 115VAC, lo nom	20			ms
	Vi = 230VAC, lo nom	50			ms
Voltage Trim Range	Vi nom, 0.8 lo nom	11.4		15.6	V
Turn on time	Vi nom, lo nom			1,000	ms
Power back immunity	Vi nom, lo nom - 1 second	22			VDC
DC On Indicator Threshold at Start Up (green LED)	Vi nom, IO nom	9.6		10.8	VDC
Efficiency	Vi nom, IO nom, Po/Pi			87	%

# Specifications.

## Control and Protection.

Characteristics	Conditions	Min	Typ	Max	Unit
Input Fuse			T2A / 250V		VAC internal
Rated Over Load Protection	Vi nom	140			%
Output Short Circuit	Vi nom		Hiccup mode		
Over voltage protection	Vi nom, 0.8 Io nom	16.2		18	VDC
Degree of protection			IP20		

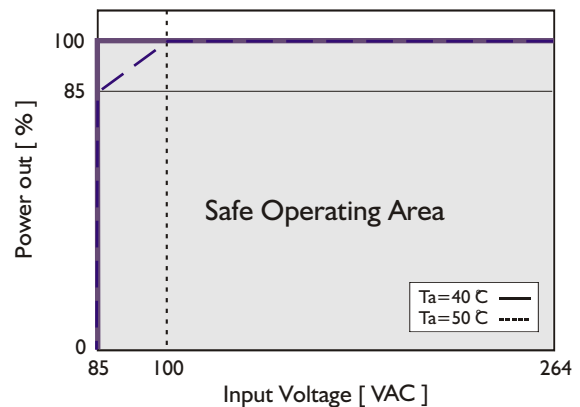
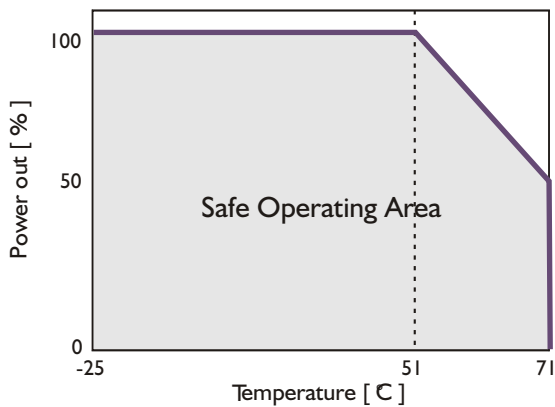
## Approvals and Standards.

UL / cUL	UL 508 Listed
cTUV <sub>US</sub>	UL 60950-1
TUV	EN 60950-1
CE	EN 61000-6-3, EN55022 Class B, EN 61000-3-2, EN 61000-3-3 EN 61000-6-2, EN 55024, EN 61000-4-2 level 4, EN 61000-4-3 level 3 EN 61000-4-4 level 4, EN 61000-4-5 level 3, L/N-FG level 4 EN 61000-4-6 level 3, EN 61000-4-8 level 4, EN 61000-4-11 ENV 50204 level 2, EN 61204-3
Vibration resistance	meet IEC 60068-2-6
Shock resistance	meet IEC 60068-2-27

## Physical characteristic.

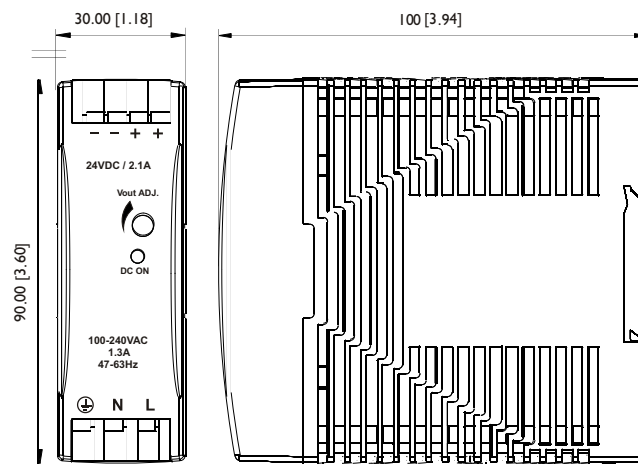
Case size	90 x 30 x 100mm
Case material	Plastic
Weight	200g

## Derating curve.



## Dimensions.

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## Part Numbers.

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12 - 15V<sub>DC</sub>, 48W, DIN-Rail mounting, -25°C to +71°C, power derated between 51°C & to 71°C