

AD1500S Series

500Watts, Single Output



Dimensions: 121(D)x100(W)x110(H) mm

Features

- High power density
- RoHS compliance
- Built-in temperature controlled fan
- 3 year warranty
- Great reliability
- DIN Rail / Wall bracket mounting solution
- Over voltage protection
- Overload protection
- Short circuit protection

Safety Standards



EN 60950 (Marking)

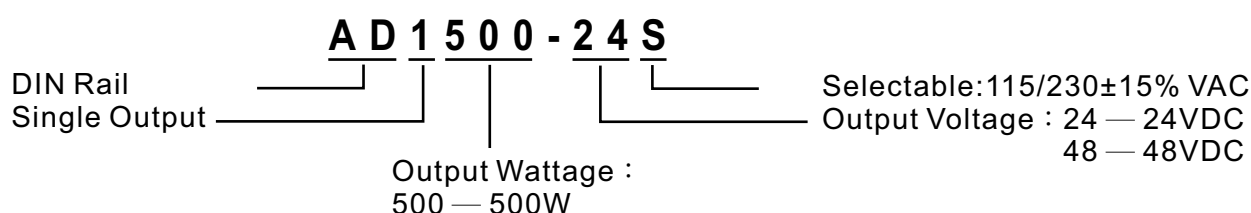
EMC Standards

EN55011	Class B
EN55022	Class B
EN61000-4-2	Level 3
EN61000-4-3	Level 3
EN61000-4-4	Level 3
EN61000-4-5	Level 3
EN61000-4-6	Level 3
EN61000-4-8	Level 3
EN61000-4-11	Level 3

Model List

Model	O/P Voltage Adjustment	Min.	Loading Rated	Max.	Ripple Noise	Efficiency	Over Voltage Protection
AD1500-24S	+24VDC±10%	0A	21.0A	21.0A	150mVp-p	84%	27~30VDC
AD1500-48S	+48VDC±10%	0A	10.5A	10.5A	250mVp-p	85%	52~56VDC

Model Encoding



Specification

General

Switching Frequency		85kHz
Isolation Voltage	Input-Output	3000VAC /4242VDC
	Input-FG	1500VAC/2121VDC
	Output-FG	500VAC/ 710VDC
Isolation Resistance		100M Ω when Input-Output @500VDC
Operating Temperature		-40°C~40°C ambient
Derating		2.5% per degree from 40°C to 60°C
Storage Temperature		-40°C to +85°C
Relative Humidity		5%~95% RH, Non-condensing.
Temperature Coefficient		$\pm 0.04\%$ of output voltage per °C
MTBF		60,000hrs Min. Per MIL-HDBK-217F, 25°C GB
Attitude During Operation		2000m
Installation position		Vertical
Vibration		Random Vibration, 10~500Hz. 3 axise

Input

Input Voltage	115/230VAC $\pm 15\%$ Selectable
Input Frequency	47~63Hz
Inrush Current (cold start)	22A/115VAC 44A/230VAC
Rated Input Current	10A Max.@Vi=115VAC, 6A Max.@Vi=230VAC
Leakage Current	Input-output 0.25mA, Input-FG 3.5mA, Vi=250VAC

Output

Output Voltage accuracy	$\pm 1\%$
Minimun Load	0%
Line Regulation	$\pm 1\%$, measuring from low line to high line rated load
Load Regulation	$\pm 1\%$, measuring from 20% to 100% of rated load 230VAC input
Voltage Trim Range	$\pm 10\%$
Rated Continuous Loading	21A@24VDC, 10.5A@48VDC
Hold Up Time	20mS Min., Full load@230VAC.
Turn On Time	1300mS
Rise Time	15mS
Fall Time	35mS

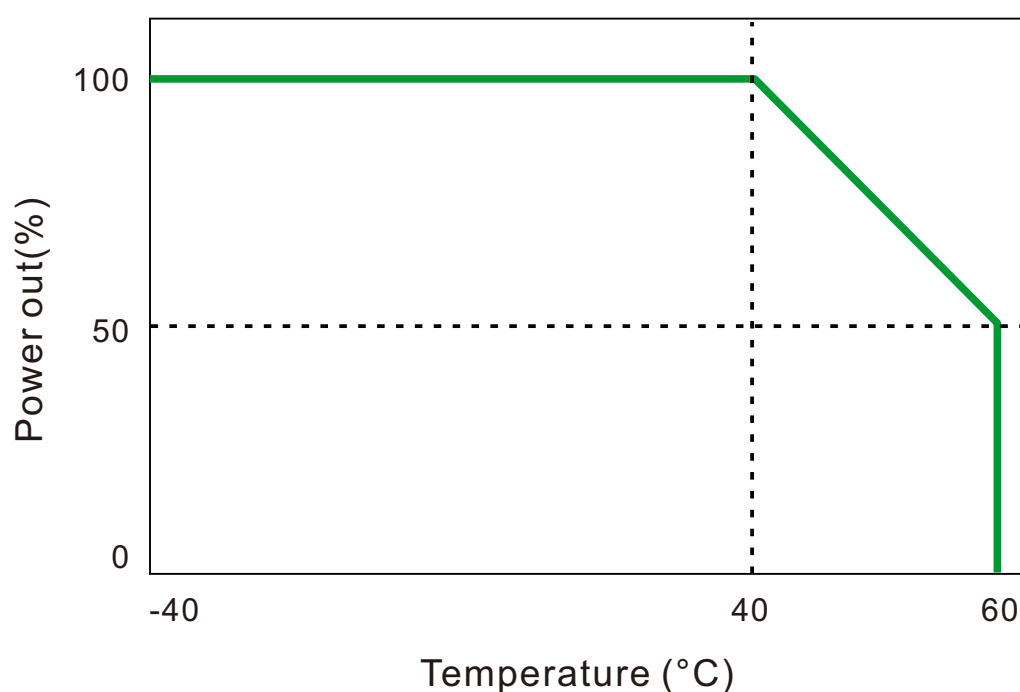
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ACRO
ENGINEERING INC.

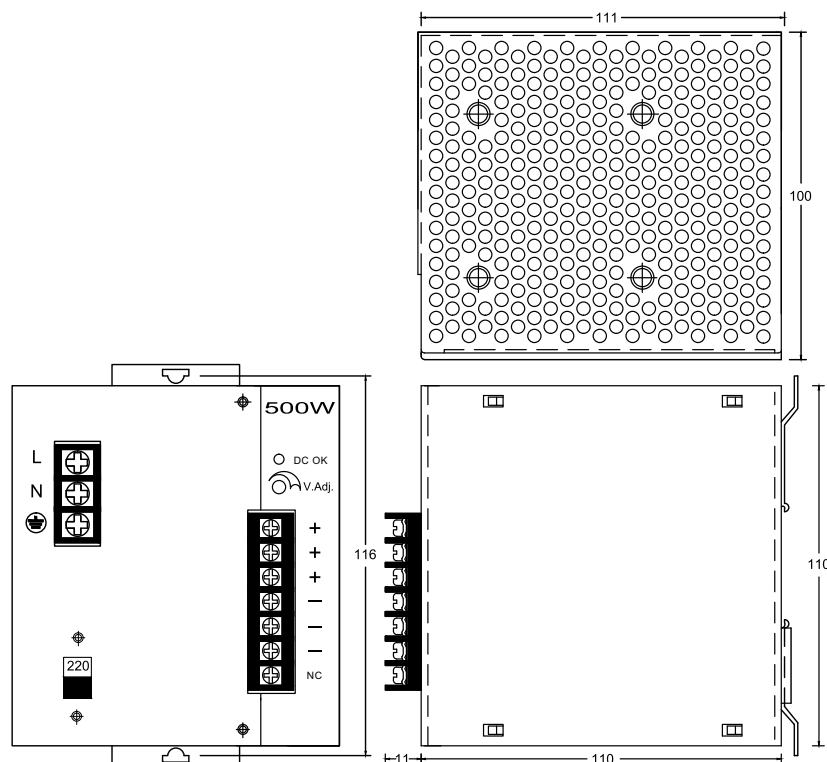
Specification

Output		
Transient Response	Recovery Time	2mS, Load change 50% to 100%
	Voltage Deviation	5%, Load change 50% to 100%
Efficiency		See model list, measuring at rated load and 230VAC input
Ripple and Noise		See model list, measuring by using a 0.1 μ F/630V metalize capacitor and a 47 μ F electrolytic capacitor parallel on the test point, at rated load and 230VAC input.
Protection		
Input Fuse		10A/250V
Internal Surge Load Protection		Varistor, IEC6100-4-5
Degree of Protection		IP20
Short Circuit Protection		Autorecovery
Over Voltage Protection		Autorecovery
Rated Over Load Protection		110~130%
Overload protection		Power limited
Over Current protection		105~110%

Derating Curve



Mechanical Details

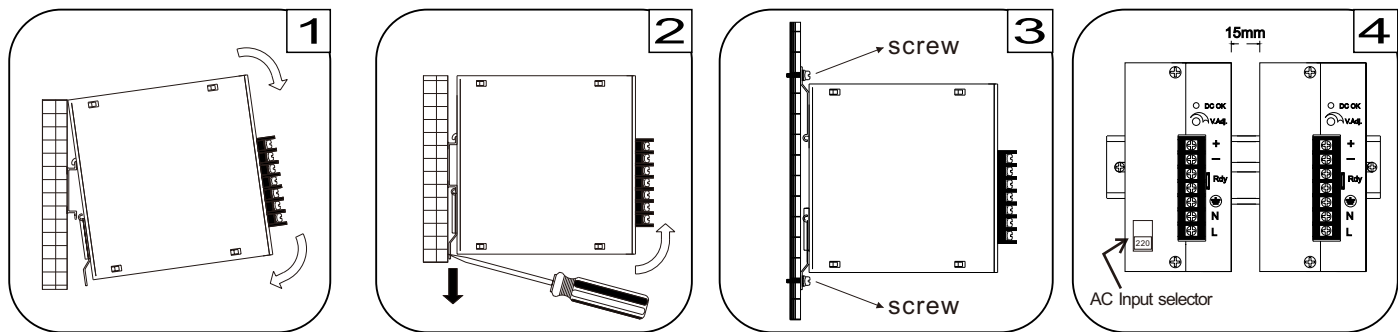


Case No.		AD500
Dimensions		121(D)x100(W)x110(H)mm
Case Material		Metal
weight	AD1500-24S	1220 g
	AD1500-48S	1200 g

Terminal Allocation

Designation	Description
DC OK	Green LED Indicator
V Adj.	O/P Voltage adjustment
+	Output Positive
-	Output Negative
NC	No Connect
Earth	Earth
N	Input Neutral
L	Input Line

Installation instruction



Place the top of the AD1500S rail mount over the top of the DIN rail. Tilt the bottom of the AD1500S toward the DIN rail until it snaps into place.

To remove the AD1500S from the DIN rail, use a flathead screwdriver to pull down the bottom of the rail mount and tilt it away from the DIN rail.

To install AD1500S on wall/plate, loosening screws on mounting bracket and pull both brackets out first. Then re-screwing the two brackets with screws onto wall/plate.

The left housing of AD1500S is designed as a heat sink, please keeping a minimum distance of 15mm from each other.