

AD2240MS Series

240Watts, Dual Independent Output



Dimensions: 121(D)x75(W)x110(H) mm

Features

- High power density
- Built-in cooling fan
- RoHS compliance
- 3 year warranty
- Great reliability
- DIN rail / Wall bracket mounting solution
- Over voltage protection
- Overload protection
- Short circuit protection
- Build-in O-ring diode
- Build-in CEMF damper
- High peak current (2 times of rated current)

Safety Standards



EN 60950 (Marking)

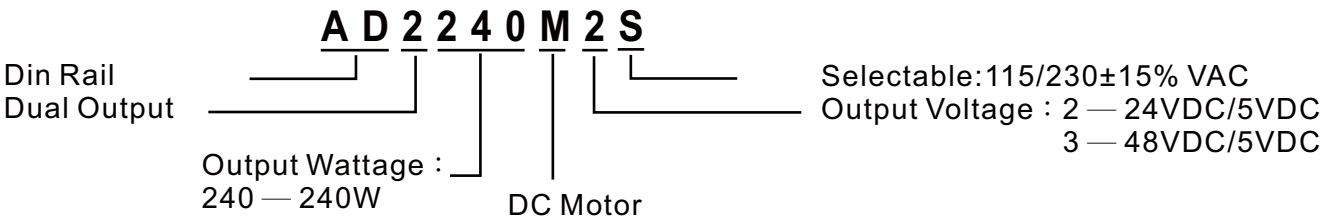
EMC Standards

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	Peak	Ripple Noise	Efficiency	Over Voltage Protection
AD2240M2S	+24VDC $\pm$ 10% +5VDC -----	0A	9.0A 3.0A	18.0A 5.0A	150mVp-p 60mVp-p	80%	27~30VDC -----
AD2240M3S	+48VDC $\pm$ 10% +5VDC -----	0A	4.5A 3.0A	9.0A 5.0A	250mVp-p 60mVp-p	82%	52~56VDC -----

Model Encoding



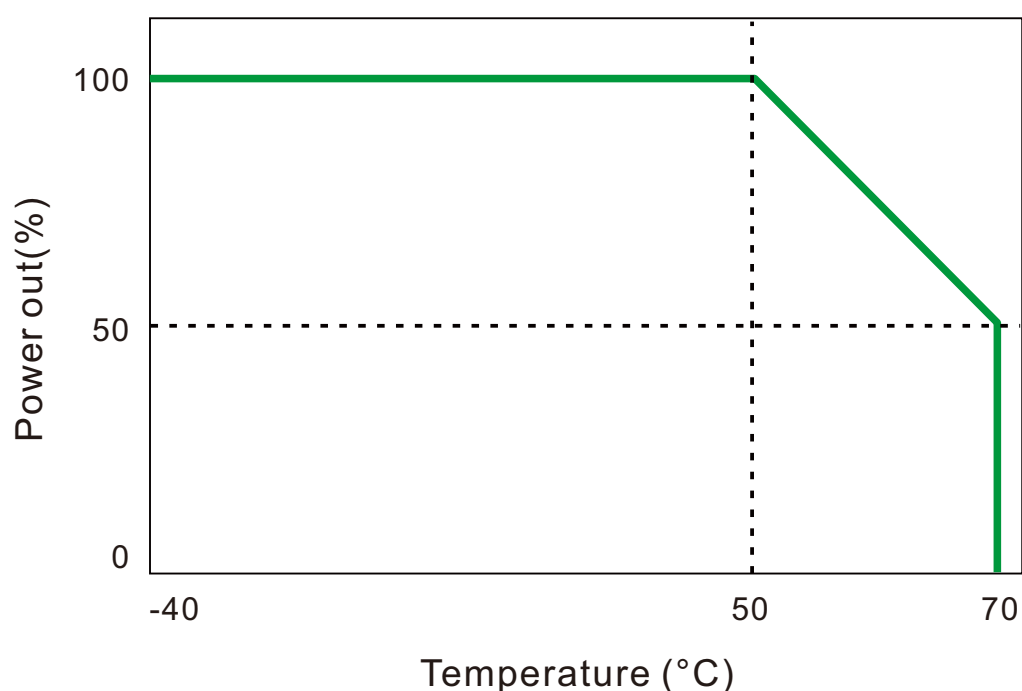
Specification

General		
Switching Frequency		85k Hz
Isolation Voltage	Input-Output	3000 VAC/4242 VDC
	Input-FG	1500 VAC/2121 VDC
	Output-FG	500 VAC/710 VDC
Isolation Resistance		100MΩ when Input-Output @500VDC
Operating Temperature		-40°C ~50°C ambient
Derating		2.5% per degree from 50°C to 70°C
Storage Temperature		-40°C to +85°C
Relative Humidity		5%~95% RH, Non-condensing.
Temperature Coefficient		±0.04% of output voltage per °C
MTBF		80,000hrs Min. Per MIL-HDBK-217F, 25°C GB
Altitude During Operation		2000m
Installation position		Vertical
Vibration		Random vibration, 10~500Hz, 3 axise
Input		
Input Voltage		115~230VAC±15% selectable
Input Frequency		47~63 HZ
Inrush Current (cold start)		22A/115VAC 44A/230VAC
Rated Input Current		5A Max@Vi=115VAC, 3A Max@Vi=230VAC
Leakage Current		Input-output 0.25mA, Input-FG 3.5mA
Output		
Output Voltage accuracy		±1%
Minimum Load		±0%
Line Regulation		±1%/±1%, measuring from low line to high line at rated load.
Load Regulation		±3%/±3%, measuring from 20% to 100% of rated load at 230VAC input.
Voltage Trim Range		±10%
Hold Up Time		30mS Min., Full load@230VAC.
Turn On Time		1300nS
Rise Time		15mS
Fall Time		30mS

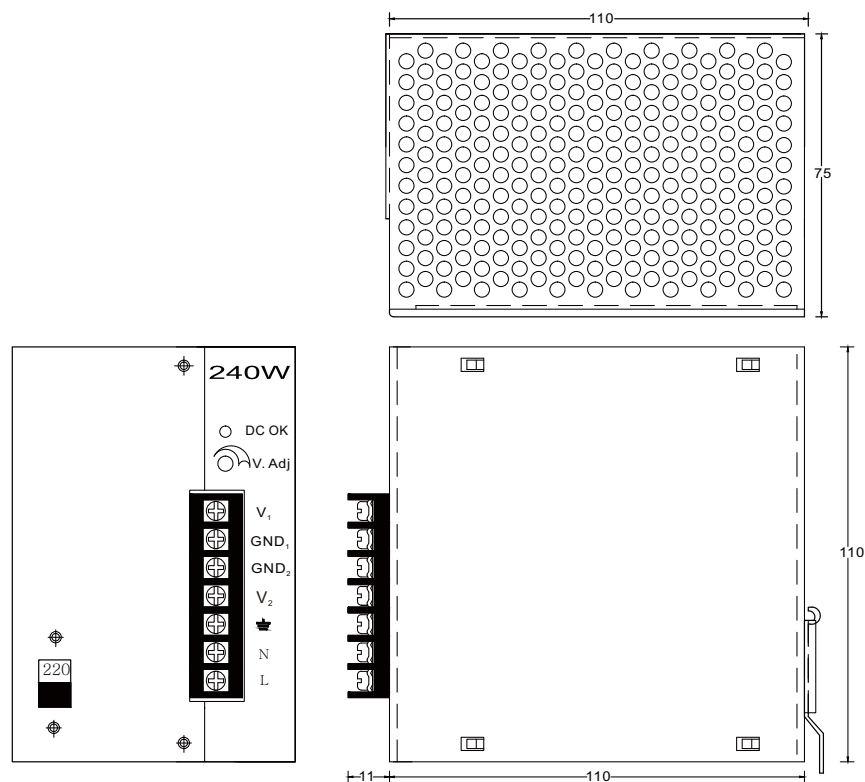
Specification

Output		
Transient Response	Recovery Time	10mS, Load change 50% to 100%.
	Voltage deviation	10%, Load change 50% to 100%.
Capacitor Load		10000uF(CAP)@ AD2240M2S.,5000uF(CAP)@ AD2240M3S
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		5A/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		180~200 %
Overload protection		Power limited

Derating Curve



Mechanical Details

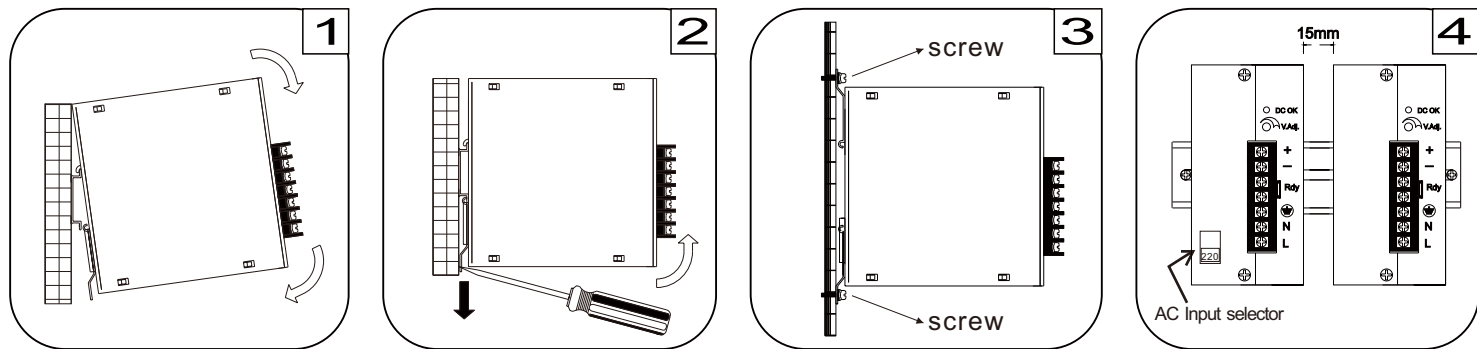


Case No.	AD240S
Dimensions	121(D)x75(W)x110(H)mm
Case Material	Metal

Terminal Allocation

Designation	Description
DC OK	Green LED Indicator
V Adj.	O/P Voltage adjustment
V ₁	Output Voltage 1
V ₂	Output Voltage 2
Gnd ₁	Ground 1
Gnd ₂	Ground 2
Earth	Earth
N	Input Neutral
L	Input Line

Installation instruction



Place the top of the AD2240MS rail mount over the top of the DIN rail. Tilt the bottom of the AD2240MS toward the DIN rail until it snaps into place.

To remove AD2240MS 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 AD2240MS 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 AD2240MS is designed as a heat sink, please keeping a minimum distance of 15mm from each other.