

AD1100MF Series

100Watts, Single Output



Dimensions: 121(D)x56(W)x110(H) mm

Features

- High power density
- Universal input range
- Convection cooled
- 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
- High peak current (2 times of rated current)

Safety Standards



EN 60950 (Marking)

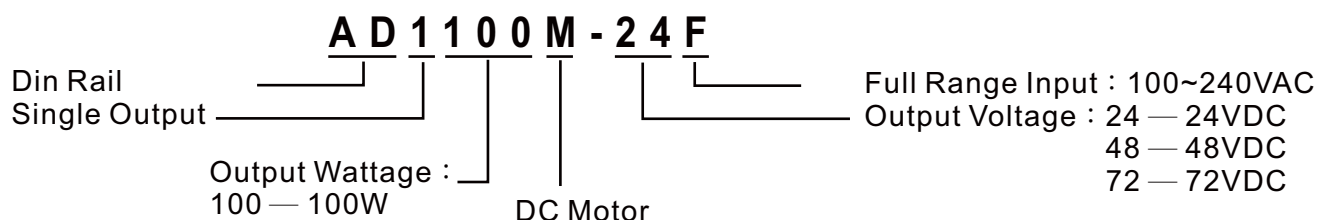
EMC Standards

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
AD1100M-24F	+24VDC±10%	0A	4.0A	8.0A	150mVp-p	80%	27~30VDC
AD1100M-48F	+48VDC±10%	0A	2.0A	4.0A	250mVp-p	80%	52~57VDC
AD1100M-72F	+72VDC±10%	0A	1.4A	2.8A	500mVp-p	80%	85~95VDC

Model Encoding



Website: <http://www.acro-powers.com/>
E-mail: service@acro-powers.com.tw
Tel: +886-2-22675015 Fax: +886-2-22674939

ACRO
ENGINEERING INC.

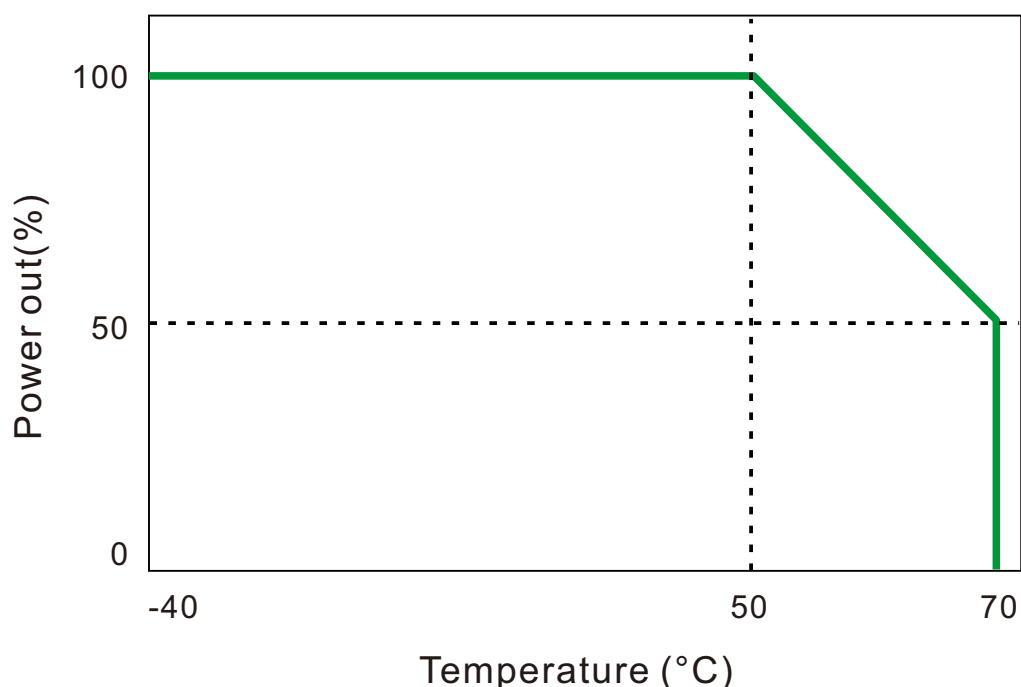
Specification

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	60,000hrs 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	100~240VAC/120~370VDC	
Input Frequency	47~63 Hz	
Inrush Current (cold start)	22A/115VAC 44A/230VAC	
Rated Input Current	2.5A Max., Vi=100~240VAC	
Leakage Current	Input-output 0.25mA, Input-FG 3.5mA	
Output		
Output Voltage accuracy	±1%	
Minimum Load	0%	
Line Regulation	±1%, measuring from low line to high line at rated load.	
Load Regulation	±3%, measuring from 20% to 100% of rated load at 230VAC input.	
Voltage Trim Range	±10%	
Rated Continuous Loading	4A@12VDC, 2A@24VDC, 1.4A@48VDC	
Hold Up Time	20mS Min., Full load@230VAC.	
Turn On Time	1300mS	
Rise Time	13mS	
Fall Time	25mS	

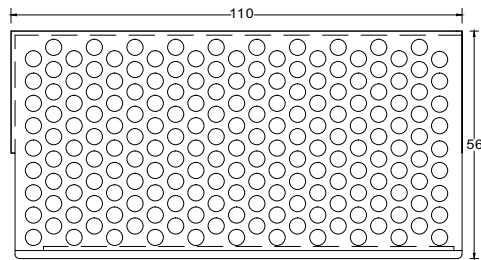
Specification

Output		
Transient Response	Recovery Time	2mS, Load change 50% to 100%
	Voltage Deviation	5%, Load change 50% to 100%
Capacitor Load		10000uF
Efficiency		See model list, measuring at rated load and 230VAC input.
Ripple and Noise		See model list, measuring by using a 0.1μF/630V metalize capacitor and a 47μF electrolytic capacitor parallel on the test point, at rated load and 230VAC input.
Protection		
Input Fuse		3.15A/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

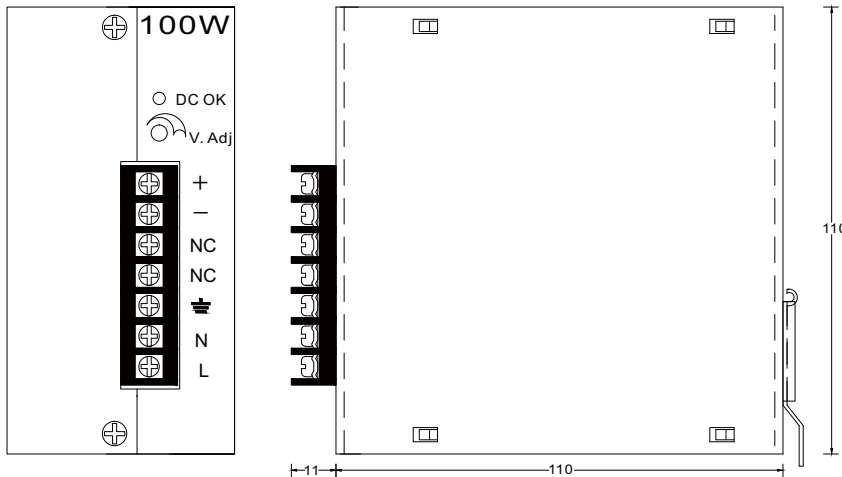
Derating Curve



Mechanical Details



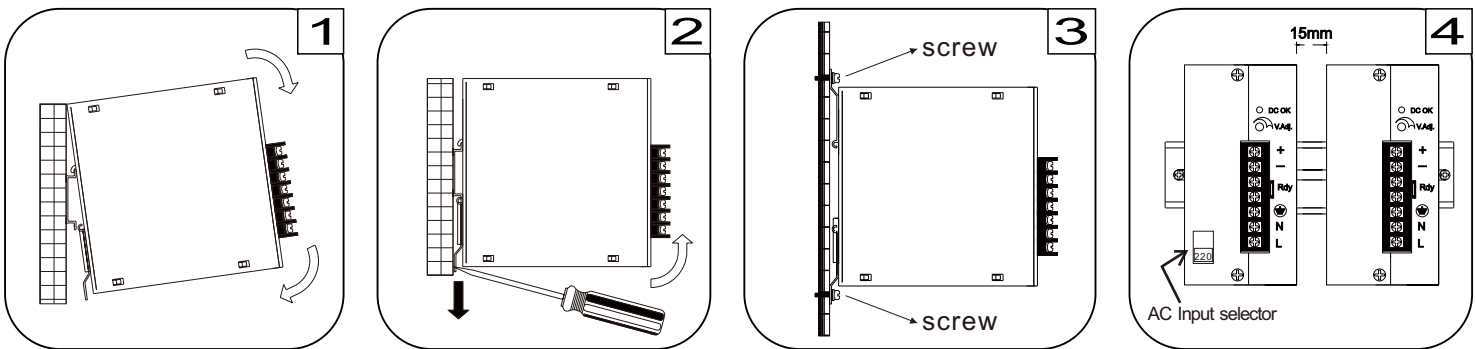
Case No.	AD072
Dimensions	121(D)x56(W)x110(H)mm
Case Material	Metal



Terminal Allocation

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

Installation instruction



Place the top of the AD1100MF rail mount over the top of the DIN rail. Tilt the bottom of the AD1100MF toward the DIN rail until it snaps into place.

To remove AD1100MF 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 AD1100MF 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 AD1100MF is designed as a heat sink, please keeping a minimum distance of 15mm from each other.