



Dimensions: 121(D)x40(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
- Optional alarm signal / Redundant function
- Over voltage protection
- Overload protection
- Short circuit protection

## Safety Standards



EN 60950 (Marking)



UL 508 (Certificate)  
CSA 22.2 (Certificate)

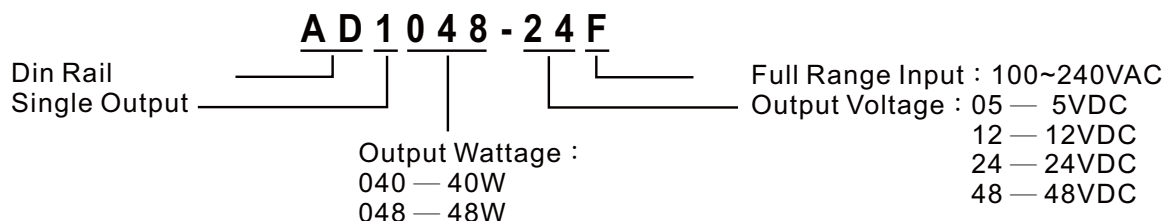
## EMC Standards

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	Loading			Ripple Noise	Efficiency	Over Voltage Protection
		Min.	Rated	Max.			
AD1040-05F	+5VDC±10%	0A	8A	8A	50mVp-p	78%	6~7VDC
AD1048-12F	+12VDC±10%	0A	4A	4A	100mVp-p	80%	15~17VDC
AD1048-24F	+24VDC±10%	0A	2A	2A	150mVp-p	82%	27~30VDC
AD1048-48F	+48VDC±10%	0A	1A	1A	250mVp-p	82%	52~57VDC

## Model Encoding

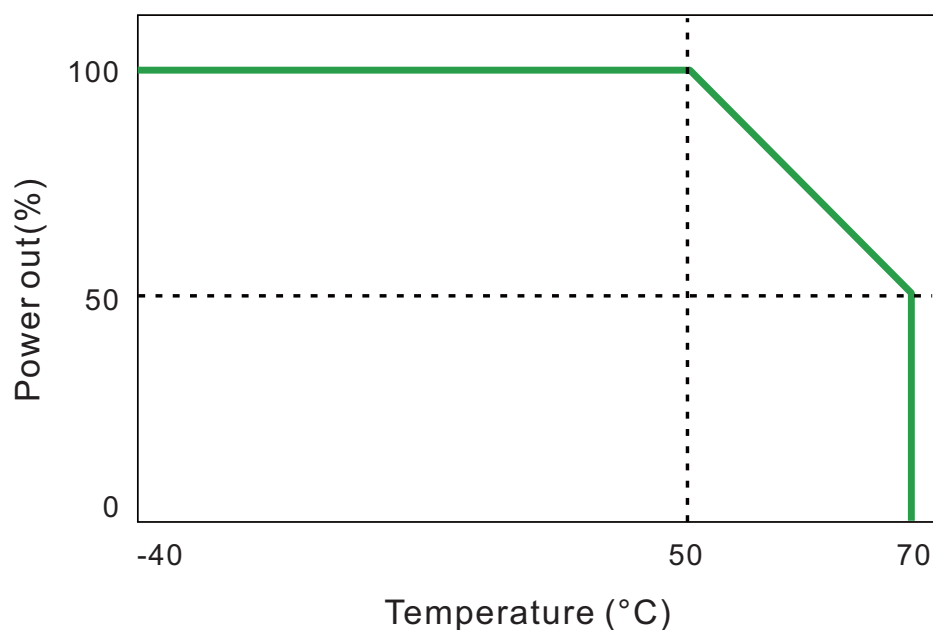


**Specification**

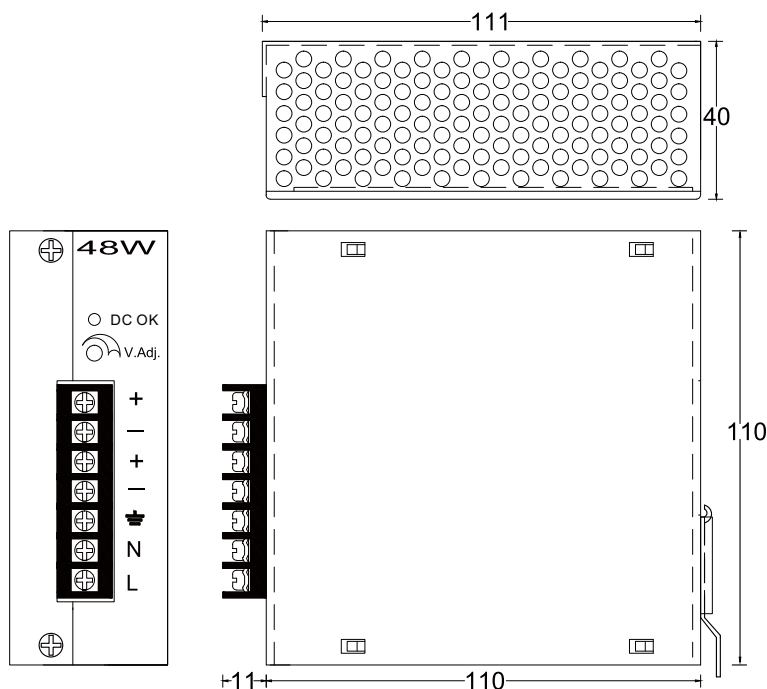
General		
Switching Frequency		70k Hz
Isolation Voltage	Input-Output	3000 VAC/4242 VDC
	Input-FG	1500 VAC/2121 VDC
	Output-FG	500 VAC/710 VDC
Isolation Resistance		100M $\Omega$ when Input-Output @500VDC
Operating Temperature		-40°C ~50°C ambient
Derating		2.5% per degree from 50°C to 70°C
Storage Temperature		-40°C to +85°C
Relative Humidity		5%~95% RH, Non-condensing.
Temperature Coefficient		$\pm 0.04\%$ 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		1A Max., Vi=100~240VAC
Leakage Current		Input-output 0.3mA, Input-FG 3.5mA
Output		
Output Voltage accuracy		$\pm 1\%$
Minimum Load		0%
Line Regulation		$\pm 1\%$ , measuring from low line to high line at rated load.
Load Regulation		$\pm 1\%$ , measuring from 20% to 100% of rated load at 230VAC input.
Voltage Trim Range		$\pm 10\%$ (Min.)
Rated Continuous Loading		8A@5VDC, 4A@12VDC, 2A@24VDC, 1A@48VDC
Hold Up Time		35mS Min., Full load@230VAC.
Turn On Time		1200mS
Rise Time		10mS
Fall Time		30mS

**Specification**

Output		
<b>Transient Response</b>	Recovery Time	2mS, Load change 50% to 100%
	Voltage Deviation	5%, Load change 50% to 100%
<b>Efficiency</b>		See model list, measuring at rated load and 230VAC input.
<b>Ripple and Noise</b>		See model list, measuring by using a 0.1 $\mu$ F/630V metalize capacitor and a 47 $\mu$ F electrolytic capacitor parallel on the test point, at rated load and 230VAC input.
Protection		
<b>Input Fuse</b>		2A/250V
<b>Internal Surge Load Protection</b>		Varistor, IEC 61000-4-5
<b>Degree of Protection</b>		IP20
<b>Short Circuit Protection</b>		Autorecovery
<b>Over Voltage Protection</b>		Autorecovery
<b>Rated Over Load Protection</b>		150~200%
<b>Overload protection</b>		Power limited

**Derating Curve**

### Mechanical Details

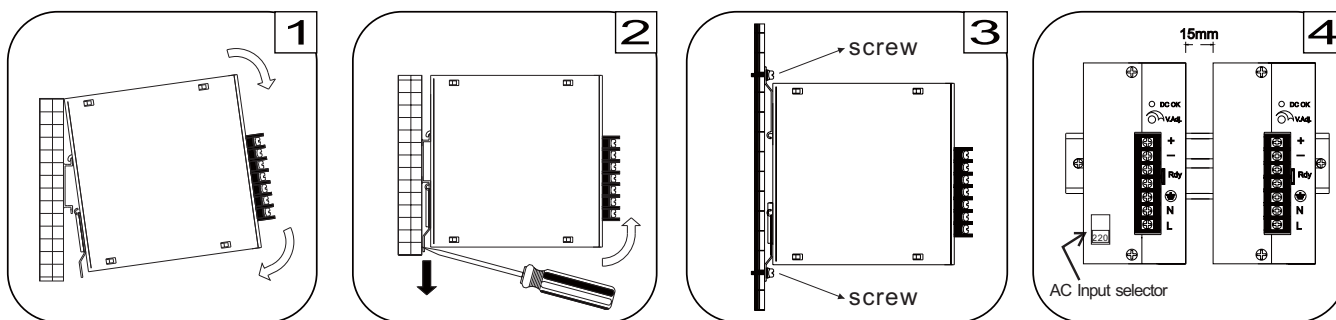


Case No.		AD048
Dimensions		121(D)x40(W)x110(H)mm
Case Material		Metal
Weight	AD1040-05F	478.2 g
	AD1048-12F	496.4 g
	AD1048-24F	492.8 g
	AD1048-48F	501 g

### Terminal Allocation

Designation	Description
DC OK	Green LED Indicator
V Adj.	O/P Voltage adjustment
+	Output Positive
-	Output Negative
⏏	Earth
N	Input Neutral
L	Input Line

### Installation instruction



Place the top of the AD1048F rail mount over the top of the DIN rail. Tilt the bottom of the AD1048F toward the DIN rail until it snaps into place.

To remove the AD1048F 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 AD1048F 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 AD1048F is designed as a heat sink, please keeping a minimum distance of 15mm from each other.