



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
- Reverse polarity protection
- 3-stage charging control

### Safety Standards



EN 60950 (Marking)

### EMC Standards

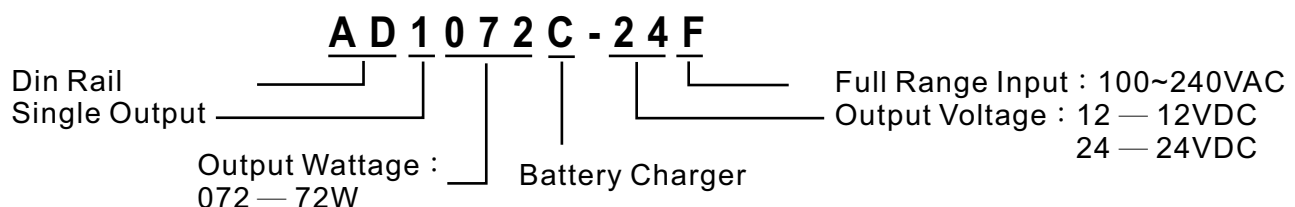
EN55011	Class B
EN55022	Class B
EN61000-4-2	Level 3
EN61000-4-3	Level 3
EN61000-4-4	Level 3
EN61000-4-5	Level 3
EN61000-4-6	Level 3
EN61000-4-8	Level 3
EN61000-4-11	Level 3

### Model List

Model	Charging Voltage Boost	Charging Voltage Float	Charging Current	Line Reg.	Load Reg.	Efficiency	Over Voltage Protection
AD1072C-12F	14.7VDC	13.6VDC	6.0A Max.	±1%	±1%	81%	18~22VDC
AD1072C-24F	29.4VDC	27.2VDC	3.0A Max.	±1%	±1%	82%	33~37VDC

- **NOTE:** 1. Line regulation is measured from low line to high line at rated load.  
 2. Load regulation is measured from 20% to 100% of rated load at 230VAC input.  
 3. Efficiency is measured at rated load and 230VAC input.

### Model Encoding



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



### Specification

#### General

Switching Frequency	85kHz
Isolation Voltage	Input-Output 3000VAC /4242VDC
	Input-FG 1500VAC/2121VDC
	Output-FG 500VAC/ 710VDC
Isolation Resistance	100MΩ when Input-Output @500VDC
Operating Temperature	-40°C~50°C ambient
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
Attitude During Operation	2000m
Installation position	Vertical
Vibration	Random vibration, 10~500Hz. 3 axise

#### Input

Input Voltage	100~240VAC/120~370VDC
Input Frequency	47~63Hz
Inrush Current (cold start)	22A/115VAC 44A/230VAC
Rated Input Current	2.0A Max., Vi=100~240VAC
Leakage Current	Input-output 0.25mA, Inout-FG 3.5mA

#### Output

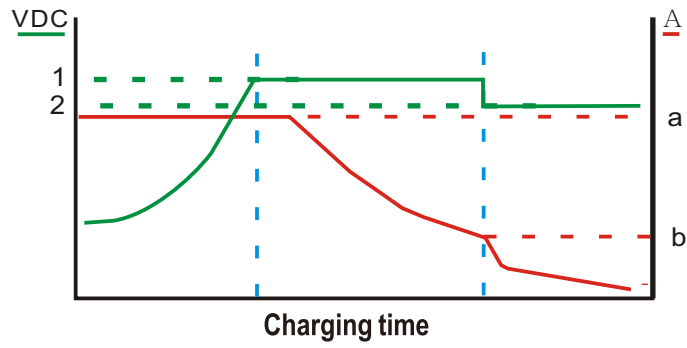
Line Regulation	±1%, measuring from low line to high line rated load
Load Regulation	±1%, measuring from 20% to 100% of rated load 230VAC input
Rated Continuous Loading	6A@12VDC,34A@24VDC
Turn On Time	1500mS
Efficiency	See model list, measuring at rated load and 230VAC input.

#### Protection

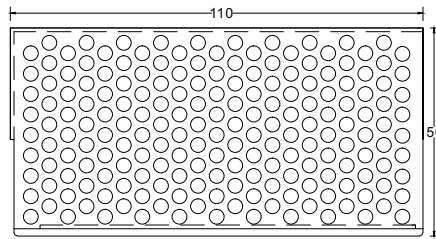
Input Fuse	3.15A/250V
Internal Surge Load Protection	Varistor, IEC6100-4-5
Degree of Protection	IP20
Short Circuit Protection	Autorecovery
Over Voltage Protection	Autorecovery
Rated Over Load Protection	100%
Overload protection	Power limited

## Charging Curve

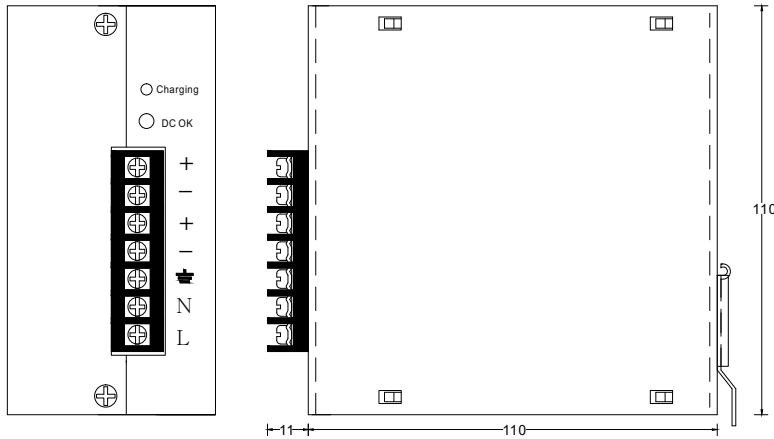
Code	Type	12V	24V
a (A)		6.0	3.0
b (A)		0.6	0.6
1 (VDC)		14.7	29.4
2 (VDC)		13.6	27.2



## Mechanical Details



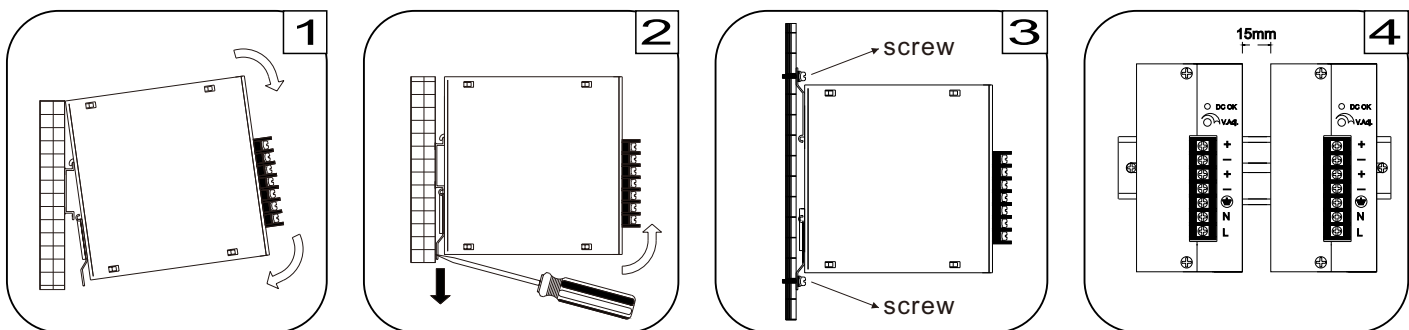
Case No.	AD072
Dimensions	121(D)x56(W)x110(H)mm
Case Material	Metal



## Terminal Allocation

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

## Installation instruction



Place the top of the AD1072CF rail mount from the DIN rail, use a flathead screwdriver to pull down the bottom of the AD1072CF toward the rail mount and tilt it into place.

To remove the AD1072CF on wall/plate, loosening screws on mounting brackets and pull both brackets out first. Then re-screwing the two brackets with screws onto wall/plate.

The left housing of AD1072CF is designed as a heat sink, please keeping a minimum distance of 15mm from each other.