



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

### Features

- Dry contact alarm signal
- Convection cooled
- RoHS compliance
- 3 year warranty
- Great reliability
- DIN rail / Wall bracket mounting solution
- Over voltage protection
- Over current protection
- Short circuit protection
- Reverse polarity protection

### Safety Standards



EN 60950 (Marking)

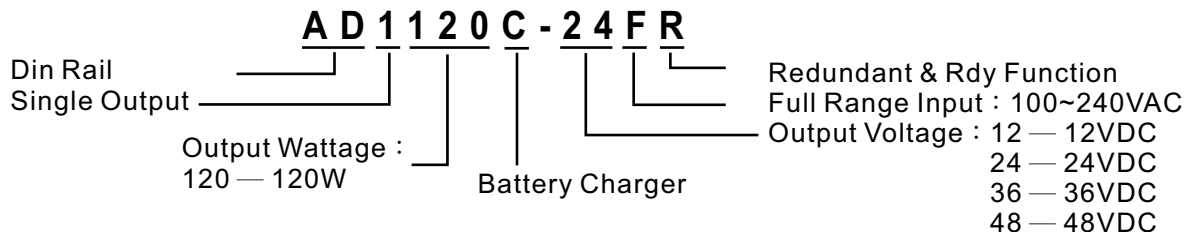
### EMC Standards

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	Charging Voltage		Charging current	Efficiency	Over Voltage Protection
	Boost	Float			
AD1120C-12FR	14.7VDC	13.8VDC	8.0A Max.	81%	18~22VDC
AD1120C-24FR	29.6VDC	27.6 VDC	4.0A Max.	85%	33~37VDC
AD1120C-36FR	44.1 VDC	41.4 VDC	2.5 A Max.	84%	47~51VDC
AD1120C-48FR	58.8 VDC	55.2 VDC	2.0 A Max.	84%	63~67VDC

### Model Encoding

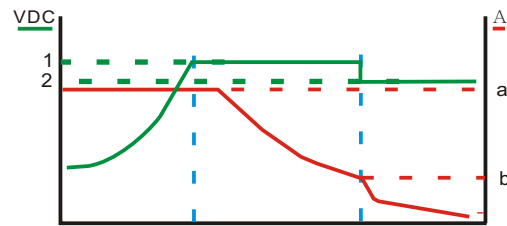


### Specification

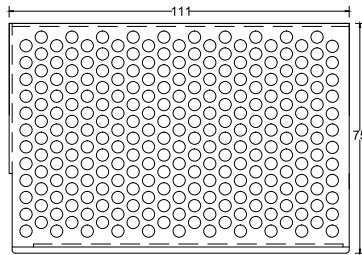
General		
<b>Switching Frequency</b>		85k Hz
<b>Isolation Voltage</b>	Input-Output	3000 VAC/4242 VDC
	Input-FG	1500 VAC/2121 VDC
	Output-FG	500 VAC/710 VDC
<b>Isolation Resistance</b>		100MΩ when Input-Output @500VDC
<b>Operating Temperature</b>		-40°C~50°C ambient
<b>Storage Temperature</b>		-40°C to +85°C
<b>Relative Humidity</b>		5%~95% RH, Non-condensing.
<b>Temperature Coefficient</b>		±0.04% of output voltage per °C
<b>MTBF</b>		60,000hrs Min. Per MIL-HDBK-217F, 25°C GB
<b>Altitude During Operation</b>		2000m
<b>Installation position</b>		Vertical
<b>Vibration</b>		Random vibration, 10~500Hz, 3 axis
Input		
<b>Input Voltage</b>		100~240VAC/120~370VDC
<b>Input Frequency</b>		47~63 Hz
<b>Inrush Current (cold start)</b>		22A/115VAC 44A/230VAC
<b>Rated Input Current</b>		2.7A Max., Vi=100~240VAC
<b>Leakage Current</b>		Input-output 0.37mA, Input-FG 4.0mA
Output		
<b>Line Current Regulation</b>		±1%, measuring from low line to high line at rated load.
<b>Load Current Regulation</b>		±1%, measuring from 20% to 100% of rated load at 230VAC input.
<b>Rated Continuous Loading</b>		8A@12VDC, 4A@24VDC, 2.5A@36VDC, 2A@48VDC
<b>Turn On Time</b>		1500ms
<b>Efficiency</b>		See model list, measuring at rated load and 230VAC input.
Protection		
<b>Input Fuse</b>		3.15A/250V
<b>Internal Surge Load Protection</b>		Varistor, IEC 61000-4-5
<b>Degree of Protection</b>		IP20
<b>Short Circuit Protection</b>		Auto recovery
<b>Over Voltage Protection</b>		Auto recovery
<b>Rated Over Load Protection</b>		100%
<b>Overload protection</b>		Power limited

### Charging Curve

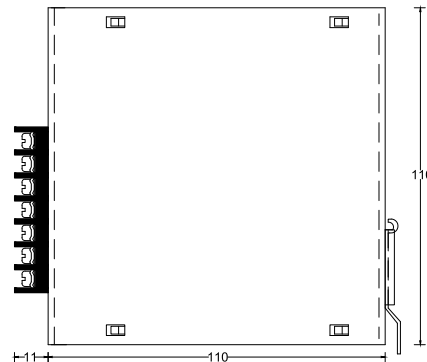
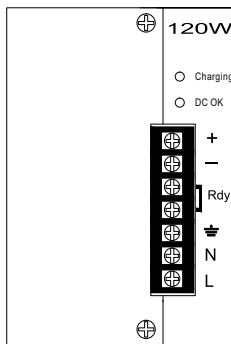
Code	Type	12V	24V	36V	48V
a (A)		8.0	4.0	2.5	2.5
b (A)		0.6	0.6	0.6	0.6
1 (VDC)		14.7	29.6	44.1	58.8
2 (VDC)		13.8	27.6	41.4	55.2



### Mechanical Details



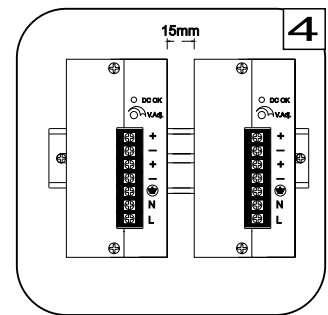
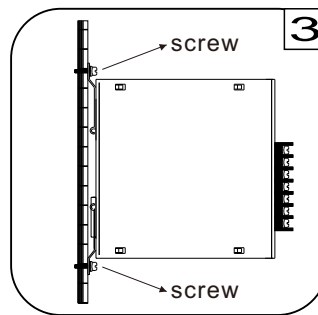
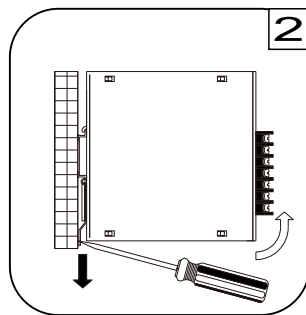
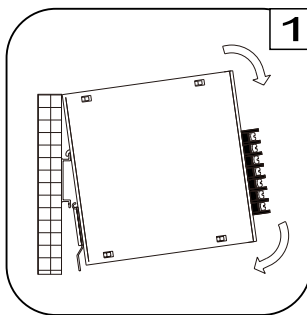
Case No.	AD120
Dimensions	121(D)x75(W)x110(H)mm
Case Material	Metal



### Terminal Allocation

Designation	Description
DC OK	Green LED Indicator
V Adj.	O/P Voltage adjustment
+	Output Positive
-	Output Negative
Rdy	DC OK signal(Short)
⊕	Earth
N	Input Neutral
L	Input Line

### Installation instruction



Place the top of the AD1120CFR rail mount over the top of the DIN rail. Tilt the bottom of the AD1120CFR toward the DIN rail until it snaps into place.

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

To install 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 AD1120CFR is designed as a heat sink, please keeping a minimum distance of 15mm from each other.