



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

AD1120FR Series

120Watts, Single Output, Rdy

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
- Redundant & Rdy Function

Safety Standards



EN 60950 (Marking)



UL 508 (Certificate)
CSA 22.2 (Certificate)

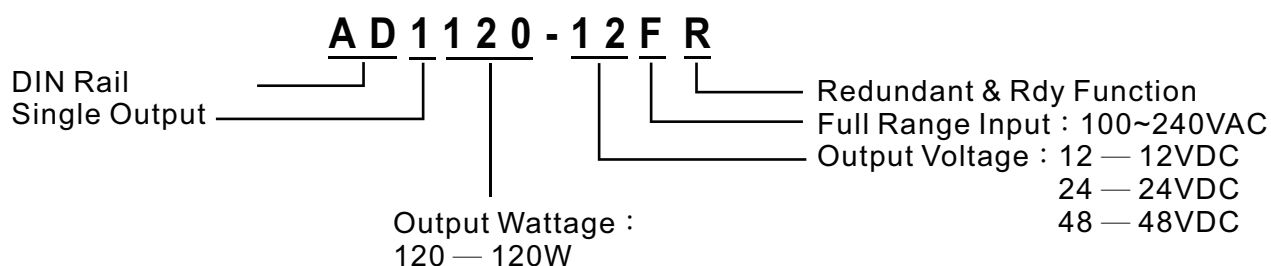
EMC Standards

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	Min.	Loading Rated	Max.	Ripple Noise	Load Reg.	Efficiency	Over Voltage Protection
AD1120-12FR	+12VDC $\pm$ 10%	0A	10A	10A	100mVp-p	2%	80%	15~17VDC
AD1120-24FR	+24VDC $\pm$ 10%	0A	5A	5A	150mVp-p	1%	81%	27~30VDC
AD1120-48FR	+48VDC $\pm$ 10%	0A	2.5A	2.5A	250mVp-p	1%	83%	52~56VDC

Model Encoding



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~40°C ambient
Derating		2.5% per degree from 40°C to 60°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
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		2.5A Max., Vi=100~240VAC
Leakage Current		Input-output 0.25mA, Input-FG 3.5mA, Vi=250VAC
Output		
Output Voltage accuracy		±1%
Minimun Load		0%
Line Regulation		±1%, measuring from low line to high line rated load
Load Regulation		See model list, measuring from 20% to 100% of rated load at 230VAC input
Voltage Trim Range		±10%
Rated Continuous Loading		10A@12VDC, 5A@24VDC, 2.5A@48VDC
Hold Up Time		35mS Min., Full load@230VAC.
Turn On Time		1300mS
Rise Time		13mS
Fall Time		25mS

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ENGINEERING INC.

Specification

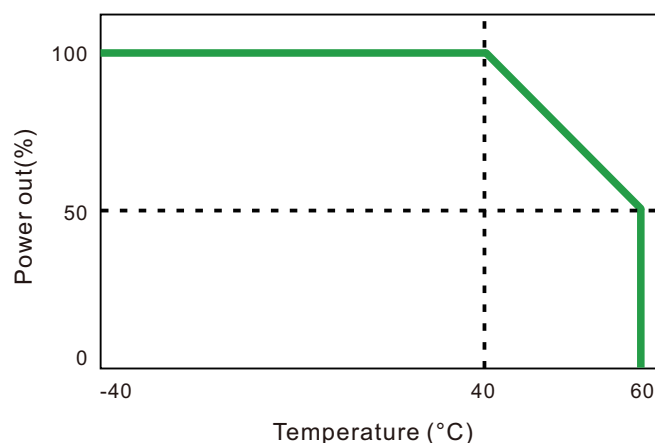
Output

Transient Response	Recovery Time	2mS, Load change 50% to 100%
	Voltage Deviation	5%, Load change 50% to 100%
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.

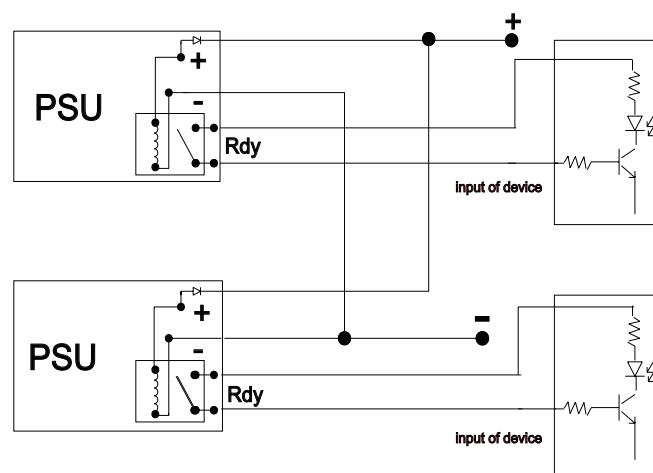
Protection

Input Fuse	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	160~200%
Overload protection	Power limited

Derating Curve

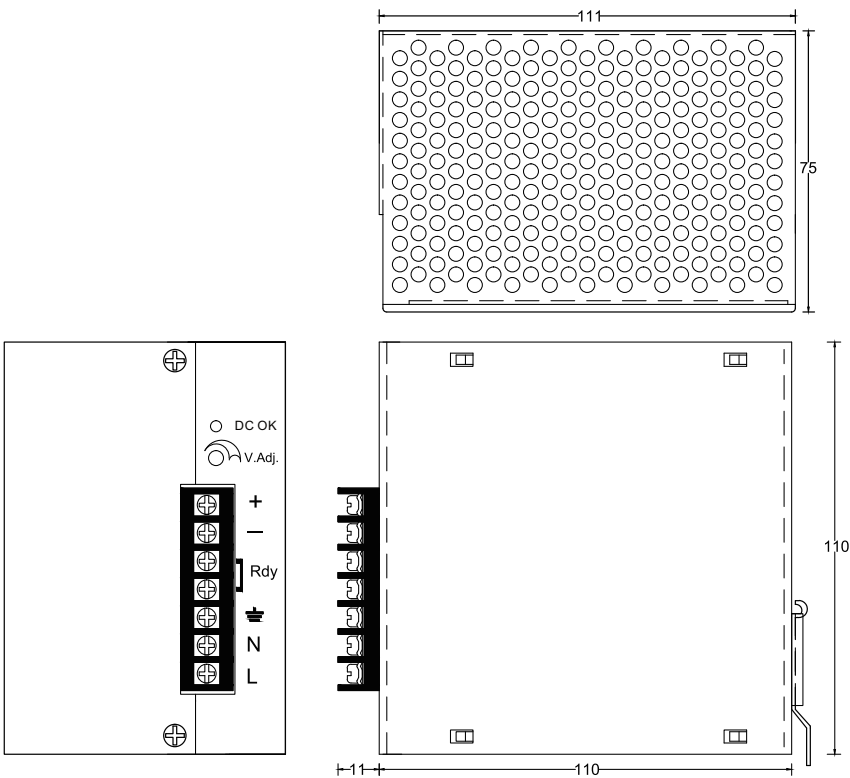


Rdy & Redundant connection



P.S. Please adjust output voltage of each unit as close as possible to balance the loading.

Mechanical Details

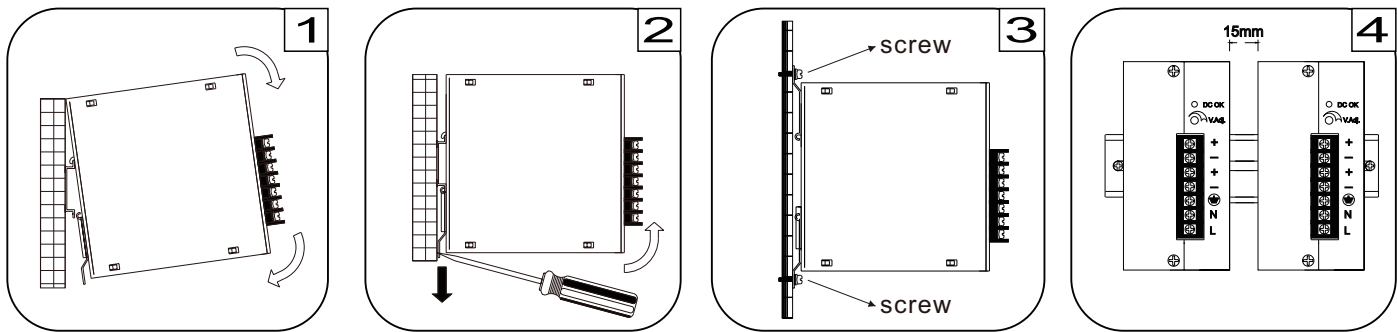


Case No.		AD120
Dimensions		121(D)x75(W)x110(H)mm
Case Material		Metal
Weight	AD1120-12FR	687.4 g
	AD1120-24FR	681 g
	AD1120-48FR	674.1 g

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 AD1120FR rail mount over the top of the DIN rail. Tilt the bottom of the AD1120F toward the DIN rail until it snaps into place.

To remove the AD1120FR 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 AD1120FR 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 AD1120FR is designed as a heat sink, please keeping a minimum distance of 15mm from each other.