MicroMate®

DIN Rail Mounting Power Supplies

For Industrial Application

INNOVATION
FIDELITY
INITIATIVE

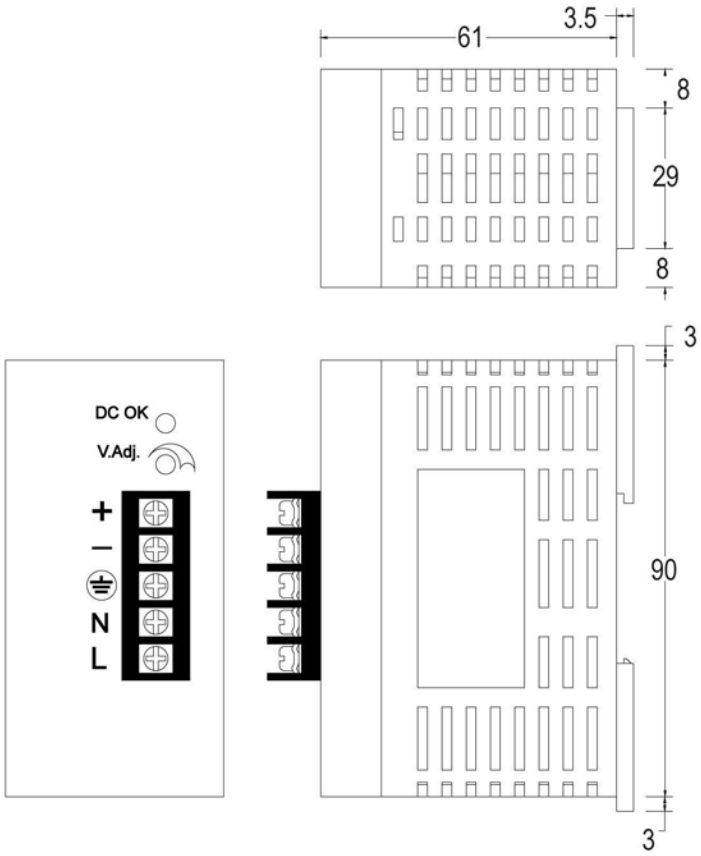
c UL us LISTED

CE

RoHS

DIN Rail Mounting Power Supply

Lead-Acid Battery Charger



Dimensions:75(D)x96(H)x45(W)mm

INPUT

Input voltage .....100~240VAC/120~370VDC
Input frequency.....47~63Hz
Inrush current 22A/115VAC
(Cold start) 44A/230VAC

OUTPUT

Hold-up time (Full load@230VAC) .....20mS Min.
Over voltage protection .....Autorecovery
Overload protection .....Power limited
Short circuit protection .....Autorecovery

AD1024F Series — Single output

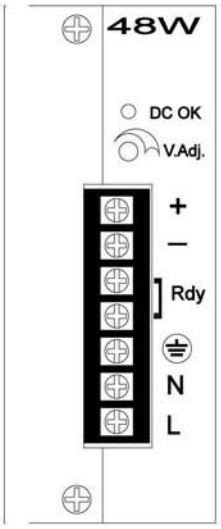
Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD1020-05F	5VDC±15%	0A	4A	4A	50mVp-p	±1%	±1%	78%	7VDC Max.	None	Yes	Yes	Yes
AD1024-12F	12VDC±15%	0A	2A	2A	100mVp-p	±1%	±1%	80%	20VDC Max.	None	Yes	Yes	Yes
AD1024-24F	24VDC±15%	0A	1A	1A	150mVp-p	±1%	±1%	83%	40VDC Max.	None	Yes	Yes	Yes

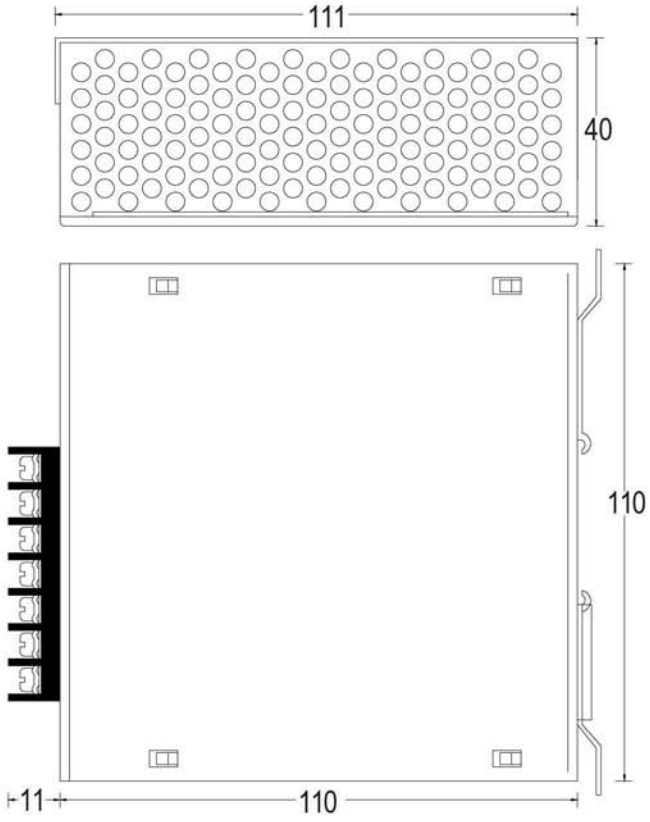
AD1048FS Series — Single output

Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD1048-12FS	12VDC±15%	0A	4A	4A	100mVp-p	± 1%	± 1%	80%	20VDC Max.	None	Yes	Yes	Yes
AD1048-15FS	15VDC±15%	0A	3A	3A	150mVp-p	± 1%	± 1%	80%	20VDC Max.	None	Yes	Yes	Yes
AD1048-24FS	24VDC±15%	0A	2A	2A	150mVp-p	± 1%	± 1%	83%	40VDC Max.	None	Yes	Yes	Yes

NOTE:

1. Each output can supply up to maximum current, but total loading can not exceed rated output wattage.
2. Line regulation is measured from low line to high line at rated load.
3. Load regulation is measured from 20% to 100% of rated load at 230VAC input.
4. Ripple & Noise is measured by using a 0.1uF/630V metalized capacitor & a 47uF electrolytic capacitor parallel on the test point, at rated load and 230VAC input.
5. Efficiency is measured at rated load and 230VAC input.





Dimensions:121(D)x110(H)x40(W)mm

INPUT

Input voltage .....100~240VAC/120~370VDC
Input frequency.....47~63Hz
Inrush current 22A/115VAC
(Cold start) 44A/230VAC

OUTPUT

Hold-up time (Full load@230VAC) .....20mS Min.
Over voltage protection .....Autorecovery
Overload protection .....Power limited
Short circuit protection .....Autorecovery

AD1048F Series — Single output

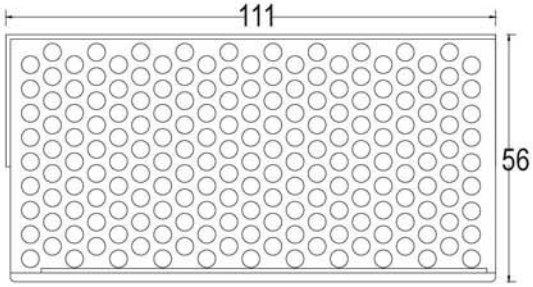
Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD1040-05F	5VDC±15%	0A	8A	8A	50mVp-p	±1%	±1%	78%	7VDC Max.	Option	Yes	None	None
AD1048-12F	12VDC±15%	0A	4A	4A	100mVp-p	±1%	±1%	80%	17VDC Max.	Option	Yes	Yes	None
AD1048-24F	24VDC±15%	0A	2A	2A	150mVp-p	±1%	±1%	83%	30VDC Max.	Option	Yes	Yes	None

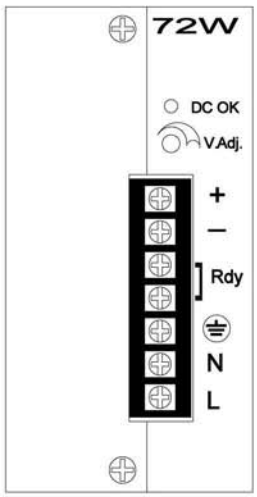
AD1060F Series — Single output

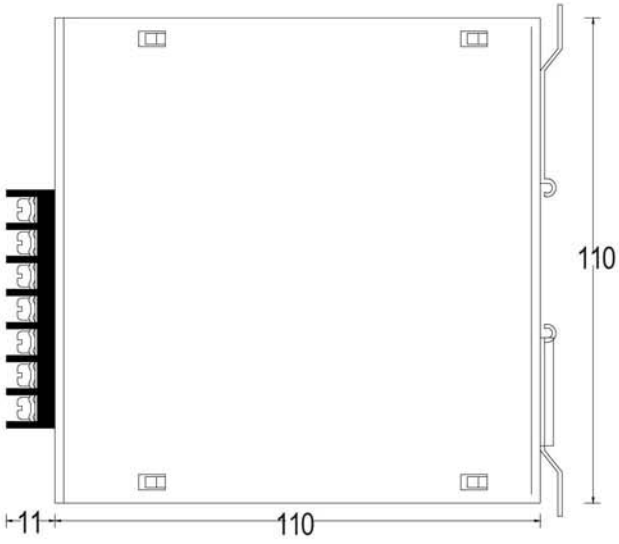
Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD1060-24F	24VDC±15%	0A	2..5A	2.5A	150mVp-p	±1%	±1%	83%	30VDC Max.	Option	None	None	None

AD2060F Series — Dual output

Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD20601F	5VDC ±15%	0A	4A	5A	60mVp-p	± 2%	± 2%	77%	7VDC Max.	None	None	None	None
	12VDC ------	0A	3A	3A	150mVp-p	± 6%	± 6%		-------.				
AD20602F	5VDC ±15%	0A	2A	5A	60mVp-p	± 2%	± 2%	80%	7VDC Max.	None	None	None	None
	24VDC ------	0A	2A	2A	150mVp-p	± 6%	± 6%		-------.				
AD20603F	12VDC ±15%	0A	2A	4A	100mVp-p	± 2%	± 2%	81%	17VDC Max.	None	None	None	None
	24VDC ------	0A	1.5A	2A	150mVp-p	± 6%	± 6%		-------.				







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

INPUT

Input voltage .....100~240VAC/120~370VDC
Input frequency.....47~63Hz
Inrush current 22A/115VAC
(Cold start) 44A/230VAC

OUTPUT

Hold-up time (Full load@230VAC) .....20mS Min.
Over voltage protection .....Autorecovery
Overload protection .....Power limited
Short circuit protection .....Autorecovery

AD1072F Series — Single output

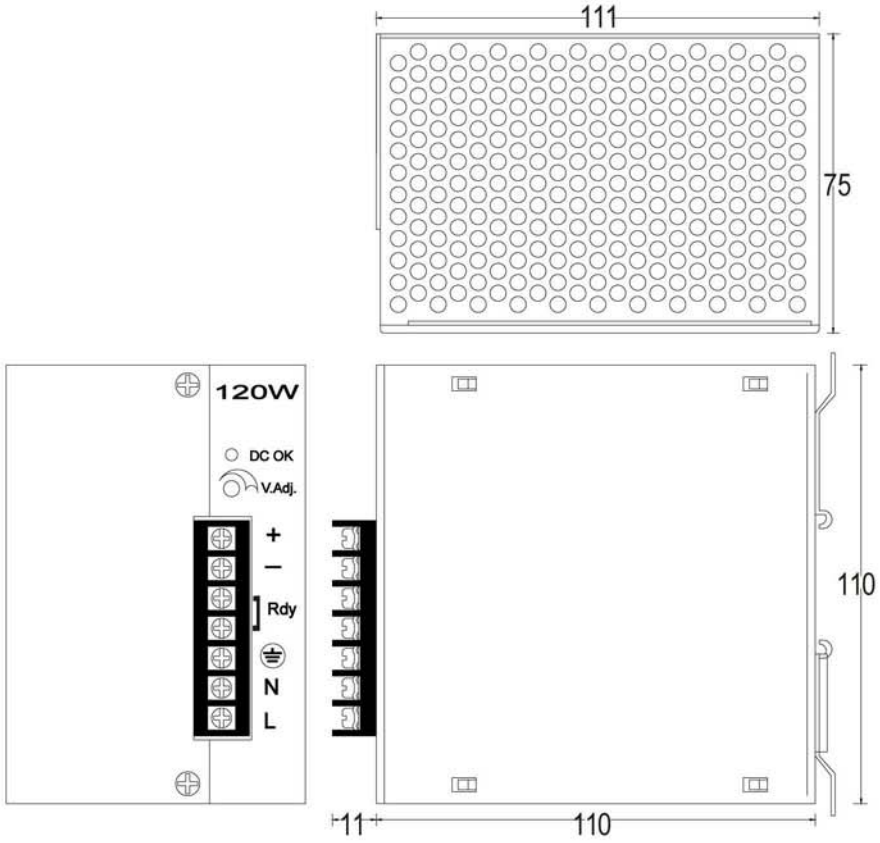
Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD1072-12F	12VDC±15%	0A	6A	6A	100mVp-p	±1%	±1%	78%	17VDC Max.	Option	Yes	Yes	None
AD1072-24F	24VDC±15%	0A	3A	3A	150mVp-p	±1%	±1%	81%	30VDC Max.	Option	Yes	Yes	None
AD1072-48F	48VDC±15%	0A	1.5A	1.5A	250mVp-p	±1%	±1%	82%	56VDC Max.	Option	Yes	None	None

AD1100F Series — Single output

Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD1100-12F	12VDC±15%	0A	8A	8A	100mVp-p	±1%	±1%	78%	17VDC Max.	Option	Yes	Yes	None
AD1100-24F	24VDC±15%	0A	4A	4A	150mVp-p	±1%	±1%	81%	30VDC Max.	Option	Yes	Yes	None
AD1100-48F	48VDC±15%	0A	2A	2A	250mVp-p	±1%	±1%	82%	56VDC Max.	Option	Yes	None	None

AD2100F Series — Dual output

Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD21001F	12VDC ±15%	0A	7A	7A	100mVp-p	± 1%	± 2%	77%	17VDC Max.	None	None	None	None
	5VDC ------	0A	3A	3A	60mVp-p	± 2%	± 2%		-------.				
AD21002F	24VDC ±15%	0A	3.5A	3.5A	150mVp-p	± 1%	± 2%	80%	30VDC Max.	None	None	None	None
	5VDC ------	0A	3A	3A	60mVp-p	± 2%	± 2%		-------.				



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

INPUT

Input voltage .....100~240VAC/120~370VDC
Input frequency.....47~63Hz
Inrush current 22A/115VAC
(Cold start) 44A/230VAC

OUTPUT

Hold-up time (Full load@230VAC) .....20mS Min.
Over voltage protection .....Autorecovery
Overload protection .....Power limited
Short circuit protection .....Autorecovery

AD1120F Series — Single output

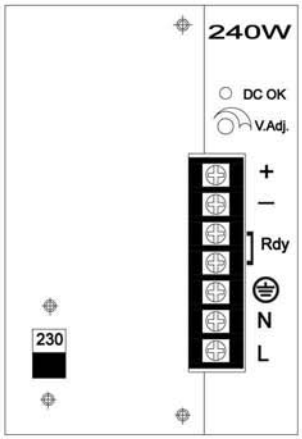
Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD1120-12F	12VDC±15%	0A	10A	10A	100mVp-p	±1%	±1%	78%	17VDC Max.	Option	Yes	Yes	None
AD1120-24F	24VDC±15%	0A	5A	5A	150mVp-p	±1%	±1%	81%	30VDC Max.	Option	Yes	Yes	None
AD1120-48F	48VDC±15%	0A	2.5A	2.5A	250mVp-p	±1%	±1%	82%	56VDC Max.	Option	Yes	Yes	None

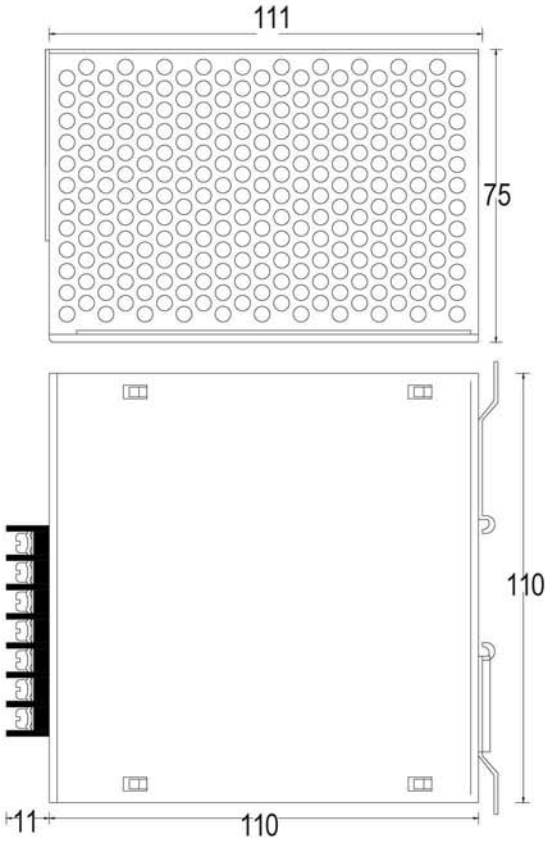
AD1150F Series — Single output

Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD1150-12F	12VDC±15%	0A	12.5A	12.5A	100mVp-p	±1%	±1%	78%	17VDC Max.	Option	Yes	Yes	None
AD1150-24F	24VDC±15%	0A	6.3A	6.3A	150mVp-p	±1%	±1%	81%	30VDC Max.	Option	Yes	Yes	None
AD1150-48F	48VDC±15%	0A	3.2A	3.2A	250mVp-p	±1%	±1%	82%	56VDC Max.	Option	Yes	Yes	None

AD2150F Series — Dual output

Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD21501F	12VDC ±15%	0A	11A	11A	100mVp-p	± 1%	± 2%	78%	17VDC Max.	None	None	None	None
	5VDC ------	0A	3A	3A	60mVp-p	± 2%	± 2%		-------				
AD21502F	24VDC ±15%	0A	5.5A	5.5A	150mVp-p	± 1%	± 2%	80%	30VDC Max.	None	None	None	None
	5VDC ------	0A	3A	3A	60mVp-p	± 2%	± 2%		-------				





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

INPUT

Input voltage .....115/230VAC selectable
Input frequency.....47~63Hz
Inrush current 22A/115VAC
(Cold start) 44A/230VAC

OUTPUT

Hold-up time (Full load@230VAC) .....20mS Min.
Over voltage protection .....Autorecovery
Overload protection .....Power limited
Short circuit protection .....Autorecovery

AD1240S Series — Single output

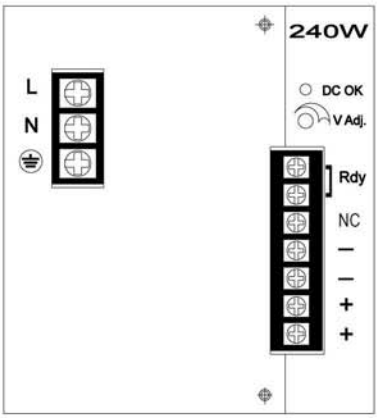
Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD1240-12S	12VDC±15%	0A	20A	20A	100mVp-p	± 1%	± 1%	80%	17VDC Max.	Option	Yes	Yes	None
AD1240-24S	24VDC±15%	0A	10A	10A	150mVp-p	± 1%	± 1%	82%	30VDC Max.	Option	Yes	Yes	None
AD1240-48S	48VDC±15%	0A	5A	5A	250mVp-p	± 1%	± 1%	82%	56VDC Max.	Option	Yes	Yes	None

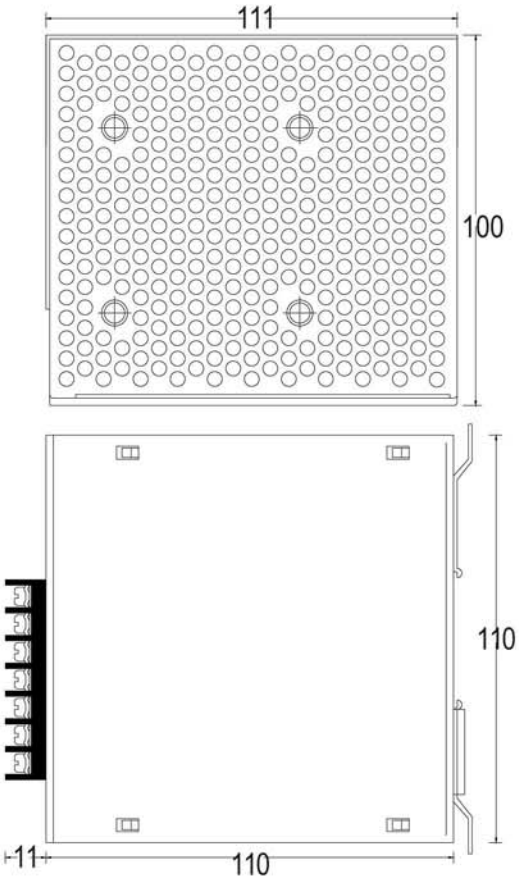
AD1360S Series — Single output

Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD1360-24S	24VDC±15%	0A	15A	15A	100mVp-p	± 1%	± 1%	82%	30VDC Max.	Option	Yes	Yes	None

AD2240S Series — Dual output

Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD22402S	24VDC ±15%	0A	9A	9A	150mVp-p	± 1%	± 2%	82%	30VDC Max.	None	None	None	None
	5VDC ------	0A	3A	3A	60mVp-p	± 2%	± 2%		-------				
AD22403S	48VDC ±15%	0A	4.5A	4.5A	250mVp-p	± 1%	± 2%	82%	56VDC Max.	None	None	None	None
	5VDC ------	0A	3A	3A	60mVp-p	± 2%	± 2%		-------				





Dimensions:121(D)x110(H)x100(W)mm

INPUT

Input voltage .....100~240VAC/120~370VDC
Input frequency.....47~63Hz
Inrush current 22A/115VAC
(Cold start) 44A/230VAC
Active PFC .....PF>0.94

OUTPUT

Hold-up time (Full load@230VAC) .....20mS Min.
Over voltage protection .....Autorecovery
Overload protection .....Power limited
Short circuit protection .....Autorecovery

AD1240C Series — Single output

Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD1240-12C	12VDC±15%	0A	20A	20A	100mVp-p	± 1%	± 1%	80%	17VDC Max.	Option	Yes	Yes	None
AD1240-24C	24VDC±15%	0A	10A	10A	150mVp-p	± 1%	± 1%	82%	30VDC Max.	Option	Yes	Yes	None
AD1240-48C	48VDC±15%	0A	5A	5A	250mVp-p	± 1%	± 1%	82%	56VDC Max.	Option	Yes	Yes	None

AD1360C Series — Single output

Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD1360-12C	12VDC±15%	0A	30A	30A	100mVp-p	± 1%	± 1%	80%	17VDC Max.	Option	Yes	Yes	None
AD1360-24C	24VDC 15%	0A	15A	15A	150mVp-p	± 1%	± 1%	82%	30VDC Max.	Option	Yes	Yes	None
AD1360-48C	48VDC 15%	0A	7.5A	7.5A	250mVp-p	± 1%	± 1%	82%	56VDC Max.	Option	Yes	Yes	None

AD2240C Series — Dual output

Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD22402C	24VDC ±15%	0A	9A	9A	150mVp-p	± 1%	± 2%	82%	30VDC Max.	None	None	None	None
	5VDC ------	0A	3A	3A	60mVp-p	± 2%	± 2%		-------				
AD22403C	48VDC ±15%	0A	4.5A	4.5A	250mVp-p	± 1%	± 2%	82%	56VDC Max.	None	None	None	None
	5VDC ------	0A	3A	3A	60mVp-p	± 2%	± 2%		-------				

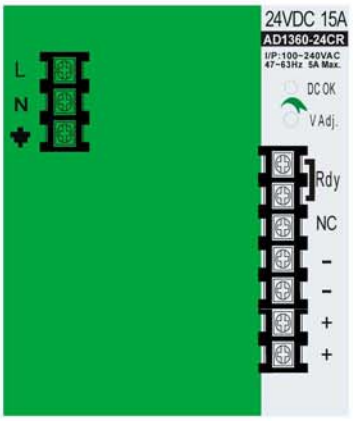
AD2360C Series — Dual output

Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD23602C	24VDC ±15%	0A	14A	14A	150mVp-p	± 1%	± 2%	82%	30VDC Max.	None	None	None	None
	5VDC ------	0A	3A	3A	60mVp-p	± 2%	± 2%		-------				
AD23603C	48VDC ±15%	0A	7A	7A	250mVp-p	± 1%	± 2%	82%	56VDC Max.	None	None	None	None
	5VDC ------	0A	3A	3A	60mVp-p	± 2%	± 2%		-------				

■ Product description

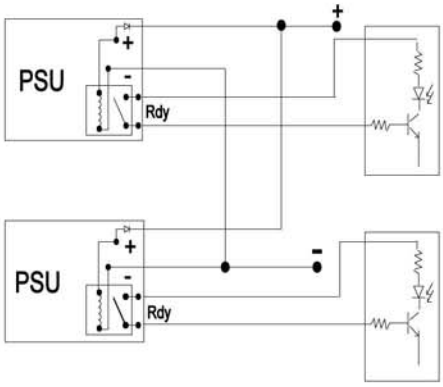
The DIN rail power supplies are designed to snap-on TS-35 DIN rail and wall bracket mounting. They are idea for use in control system, factory automation, industrial control, instrumentation, electromagnetic drivers and other DC load. The models are designed according to the latest requirement and standard that CE marking and RoHS compliance. Built-in dry contact rela and O-ring diode to offer Rdy (Alarm) signal and redundant application. Complete protection include over voltage, overload and short circuit to avoid damage.

■ Terminal allocation



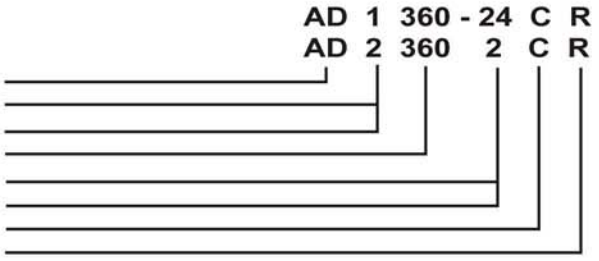
Designation	Description
DC OK	Green LED Indicator
V Adj.	O/P Voltage adjustment
NC	No connection
+	Output Positive
-	Output Negative
Rdy	DC OK signal (Short)
⏚	Earth
N	Input Neutral
L	Input Line

■ Rdy & Redundant connection



■ Model No. Description

Family	AD	(DIN rail)
Number of Output	1	(Single)
	2	(Dual)
Rated Output Wattage	360	(360W)
Rated Output Voltage	24	(24VDC)
Developing sequency	2	(2nd model)
Input Voltage Range	C	(100~240VAC)
Redundant & Rdy function	R	(with function)



■ Installation Instruction

1. Making sure wire connection of the designations before turn on AC source. The connector can withstand 8 lb-in torque maximum and use copper connectors only, 60/75°C and installation in Pollution Degree 2 environment. Max. surrounding air temperature 40°C.
2. Snap power unit on TS35 DIN rail, please remove upper mounting bracket and operate as Fig. 2. Using a "-" screw driver to pull down underside mounting bracket to release power unit from TS35 DIN rail.
3. The left housing of power unit is design as heatsink, please keep 15mm Min. for dissipating heating. (Fig. 1)
4. For mounting power unit by mounting bracket, please loosen screws on mounting bracket and pull both brackets outer. And then re-screw the mounting brackets to get easier operation of mounting on wall/plate. (Fig. 3)
5. Output voltage adjustable range is +/-10% of rated voltage, over +10% might cause over voltage protection, under 10% might cause output flicking at lower loading.

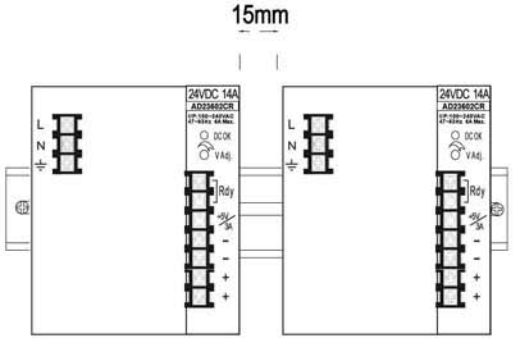


Fig. 1

Fig. 3

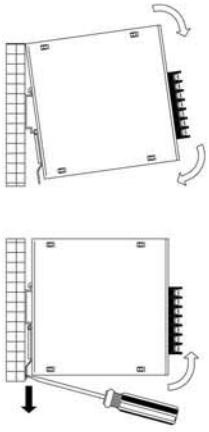
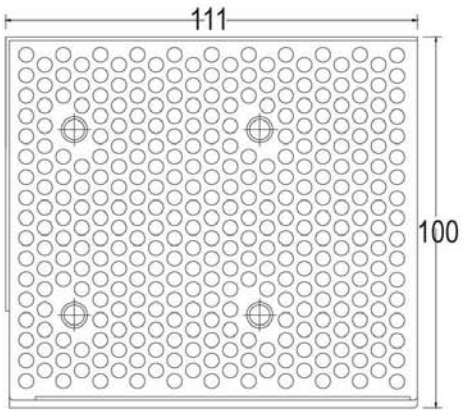
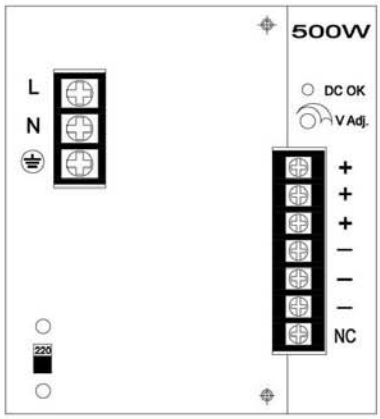
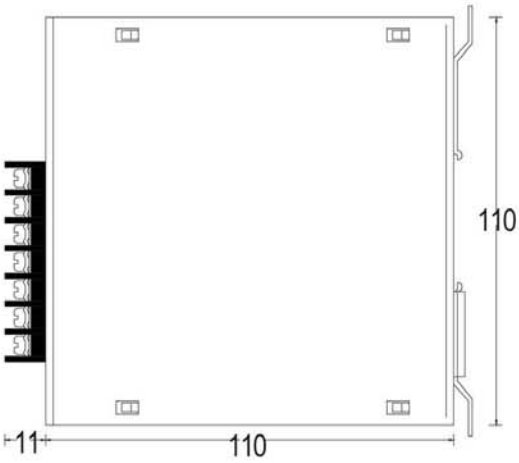


Fig. 2







Dimensions:121(D)x110(H)x100(W)mm

INPUT

Input voltage .....115/230VAC selectable
Input frequency.....47~63Hz
Inrush current 22A/115VAC
(Cold start) 44A/230VAC

OUTPUT

Hold-up time (Full load@230VAC) .....20mS Min.
Over voltage protection .....Autorecovery
Overload protection .....Power limited
Short circuit protection .....Autorecovery

AD1500S Series — Single output

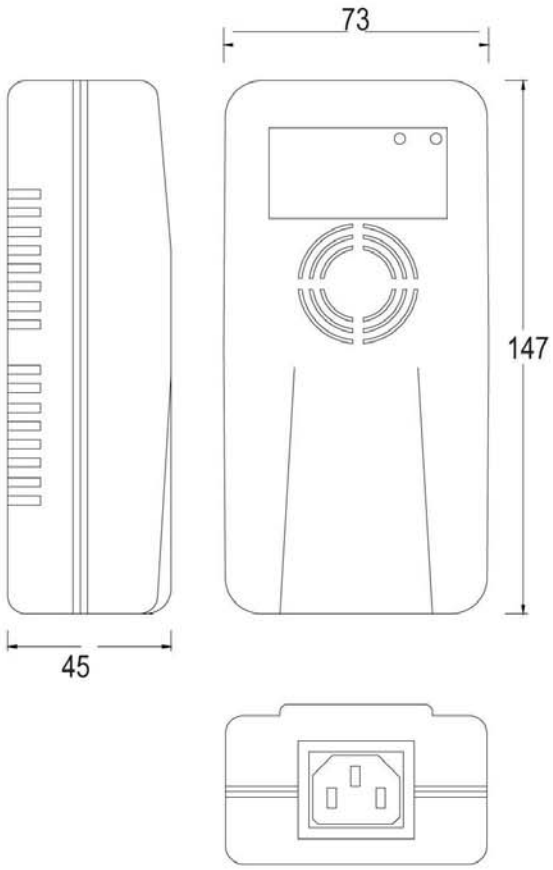
Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD1500-24S	24VDC±15%	0A	21A	21A	150mVp-p	± 1%	± 1%	85%	30VDC Max.	Option	Yes	Yes	None
AD1500-48S	48VDC±15%	0A	10.5A	10.5A	250mVp-p	± 1%	± 1%	85%	56VDC Max.	Option	Yes	Yes	None

AD2500S Series — Dual output

Model	O/P voltage Adjustment	Loading (A) Min.	Rated	Max.	Ripple Noise	Line Reg.	Load Reg.	Eff.	O.V.P.	Redundant Function	CB	UL	TUV
AD25002S	24VDC ±15%	0A	20A	20A	150mVp-p	± 1%	± 2%	85%	30VDC Max.	None	None	None	None
	5VDC ------	0A	3A	3A	60mVp-p	± 2%	± 2%		-------				
AD25003S	48VDC ±15%	0A	10A	10A	250mVp-p	± 1%	± 2%	85%	56VDC Max.	None	None	None	None
	5VDC ------	0A	3A	3A	60mVp-p	± 2%	± 2%		-------				

NOTE:

1. Each output can supply up to maximum current, but total loading can not exceed rated output wattage.
2. Line regulation is measured from low line to high line at rated load.
3. Load regulation is measured from 20% to 100% of rated load at 230VAC input.
4. Ripple & Noise is measured by using a 0.1uF/630V metalized capacitor & a 47uF electrolytic capacitor parallel on the test point, at rated load and 230VAC input.
5. Efficiency is measured at rated load and 230VAC input.



Dimensions:147(L)x73(W)x45(H)mm

INPUT

Input voltage .....100~240VAC/120~370VDC
Input frequency.....47~63Hz
Inrush current 22A/115VAC
(Cold start) 44A/230VAC

OUTPUT

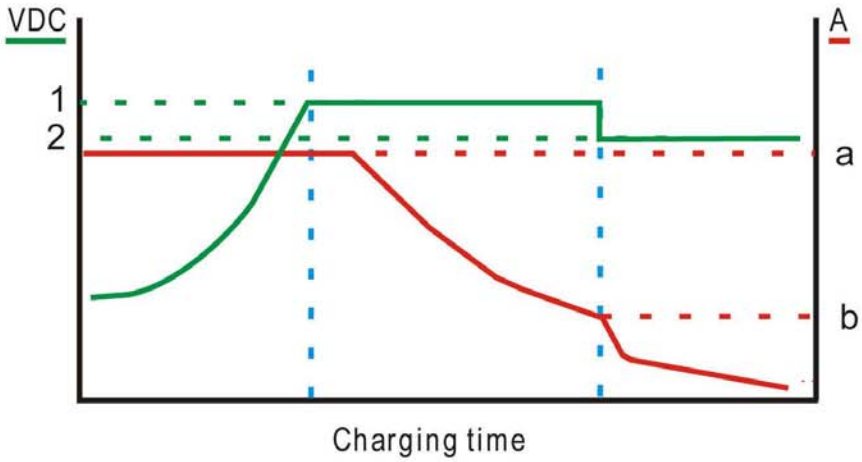
Hold-up time (Full load@230VAC) .....20mS Min.
Over voltage protection .....Autorecovery
Overload protection .....Power limited
Short circuit protection .....Autorecovery
Reverse polarity protection .....Autorecovery

AE1060CF Series

Model	Charging voltage Boost	Float	Charging current (A)	Line Reg.	Load Reg.	Efficiency	O.V.P.	CB	UL	TUV
AE1060C-12F	14.7VDC	+13.8VDC	5.0A Max.	± 1%	± 2%	83%	17VDC Max.	None	None	None
AE1060C-24F	29.4VDC	+27.6VDC	2.5A Max.	± 1%	± 2%	84%	35VDC Max.	None	None	None

Charging curve

Type / Code	12V	24V
a (A)	5	2.5
b (A)	0.6	0.6
1 (VDC)	14.7	29.4
2 (VDC)	13.8	27.6



Input : IEC320 C14 socket
DC output : 1.2m, 18AWG x2 + alligator clip

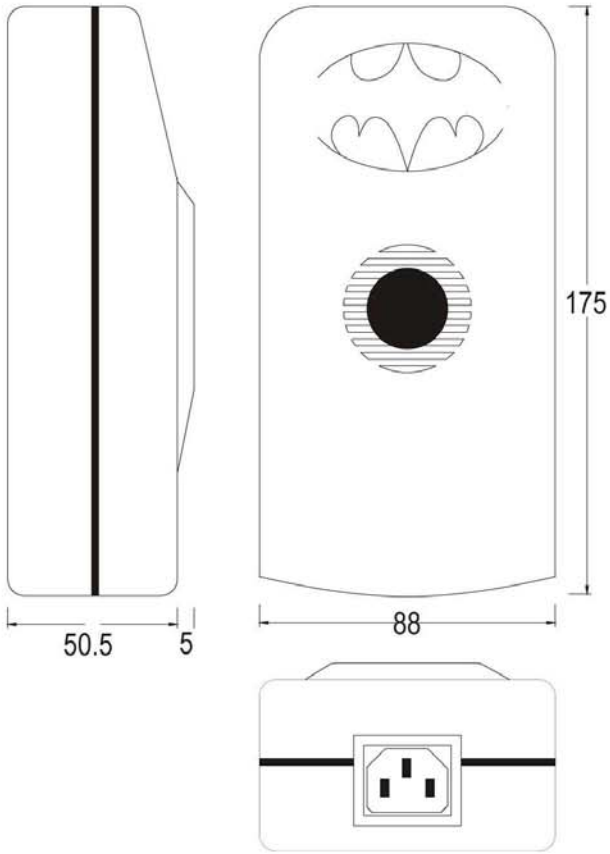
CE

INPUT

Input voltage .....100~240VAC/120~370VDC
Input frequency.....47~63Hz
Inrush current 22A/115VAC
(Cold start) 44A/230VAC

OUTPUT

Hold-up time (Full load@230VAC) .....20mS Min.
Over voltage protection .....Autorecovery
Overload protection .....Power limited
Short circuit protection .....Autorecovery
Reverse polarity protection .....Autorecovery
Over temperature protection .....Shutdown



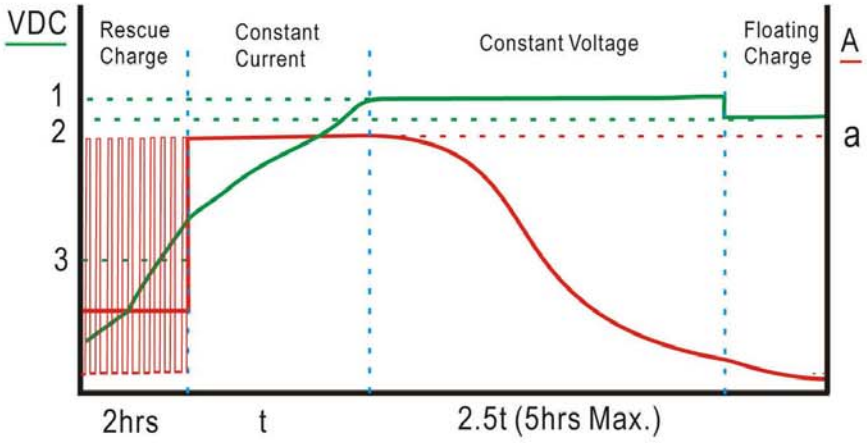
Dimensions:175(L)x88(W)x55.5(H)mm

AE1090CF Series

Model	Charging voltage Boost	Float	Charging current (A)	Line Reg.	Load Reg.	Efficiency	O.V.P.	CB	UL	TUV
AE1090C-12F	14.7VDC	+13.8VDC	7.5A Max.	± 1%	± 2%	83%	17VDC Max.	None	None	None
AE1090C-24F	29.4VDC	+27.6VDC	3.5A Max.	± 1%	± 2%	84%	35VDC Max.	None	None	None
AE1090C-48F	58.8VDC	+54.4VDC	1.8A Max.	± 1%	± 2%	84%	67VDC Max.	None	None	None

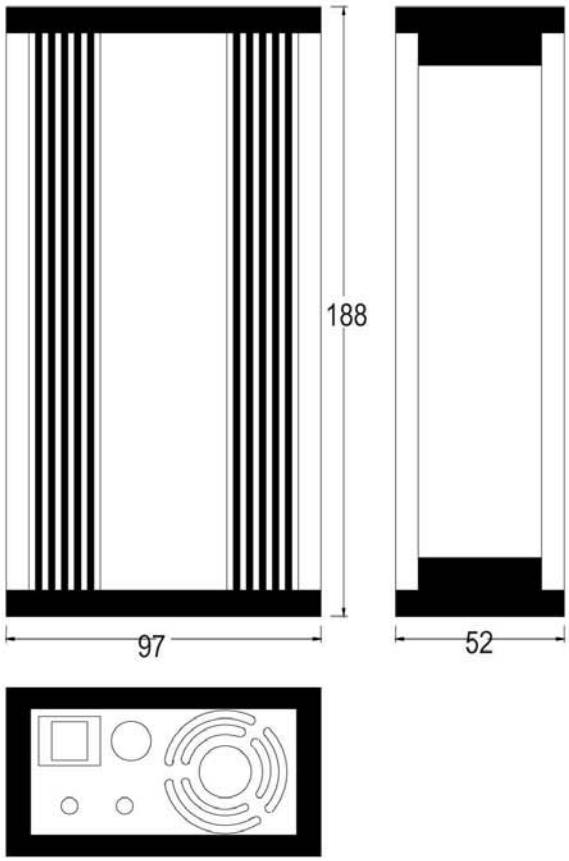
Charging curve

Type / Code	12V	24V	48V
a (A)	7.5	3.5	1.8
1 (VDC)	14.7	29.4	58.8
2 (VDC)	13.8	27.6	54.4
3 (VDC)	8	16	32



Input connection: IEC320 C14 socket
DC output: 1.2m, 16AWG x2 + alligator clip

CE



Dimensions:188(L)x97(W)x52(H)mm

INPUT

Input voltage .....100~240VAC/120~370VDC
Input frequency.....47~63Hz
Inrush current 22A/115VAC
(Cold start) 44A/230VAC

OUTPUT

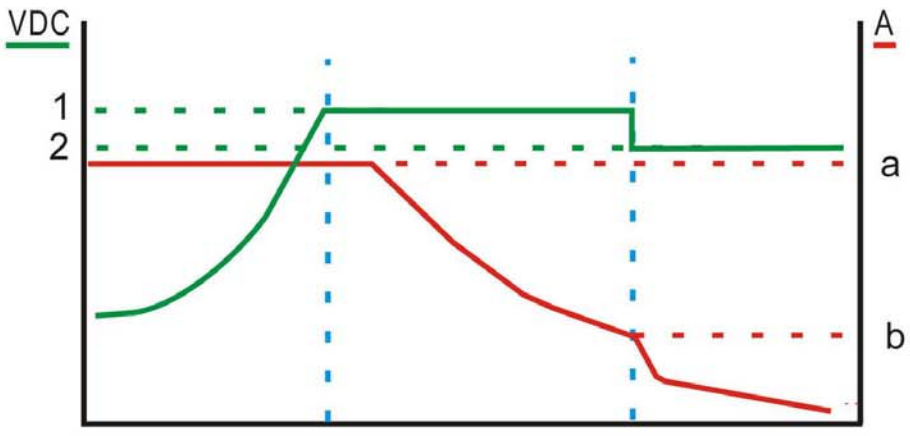
Hold-up time (Full load@230VAC) .....20mS Min.
Over voltage protection .....Autorecovery
Overload protection .....Power limited
Short circuit protection .....Autorecovery
Reverse polarity protection .....Autorecovery

AE1150CFA Series

Model	Charging voltage Boost	Float	Charging current (A)	Line Reg.	Load Reg.	Efficiency	O.V.P.	CB	UL	TUV
AE1150C-12FA	14.7VDC	+13.8VDC	12.5A Max.	± 1%	± 2%	83%	17VDC Max.	None	None	None
AE1150C-24FA	29.4VDC	+27.6VDC	6.5A Max.	± 1%	± 2%	84%	35VDC Max.	None	None	None
AE1150C-48FA	58.8VDC	+55.2VDC	3.2A Max.	± 1%	± 2%	84%	67VDC Max.	None	None	None

Charging curve

Type / Code	12V	24V	48V
a (A)	12.5	6.5	3.2
b (A)	0.6	0.6	0.6
1 (VDC)	14.7	29.4	58.8
2 (VDC)	13.8	27.6	55.2



Input : IEC320 C14 socket
DC output : 1.2m, 16AWG x2 + alligator clip

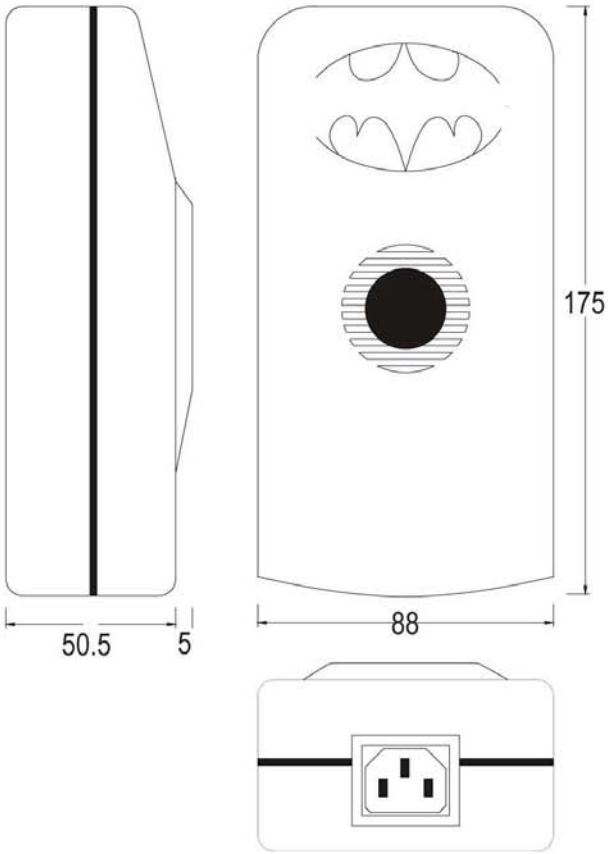
CE

INPUT

Input voltage .....100~240VAC/120~370VDC
Input frequency.....47~63Hz
Inrush current 22A/115VAC
(Cold start) 44A/230VAC

OUTPUT

Hold-up time (Full load@230VAC) .....20mS Min.
Over voltage protection .....Autorecovery
Overload protection .....Power limited
Short circuit protection .....Autorecovery
Reverse polarity protection .....Autorecovery
Over temperature protection .....Shutdown



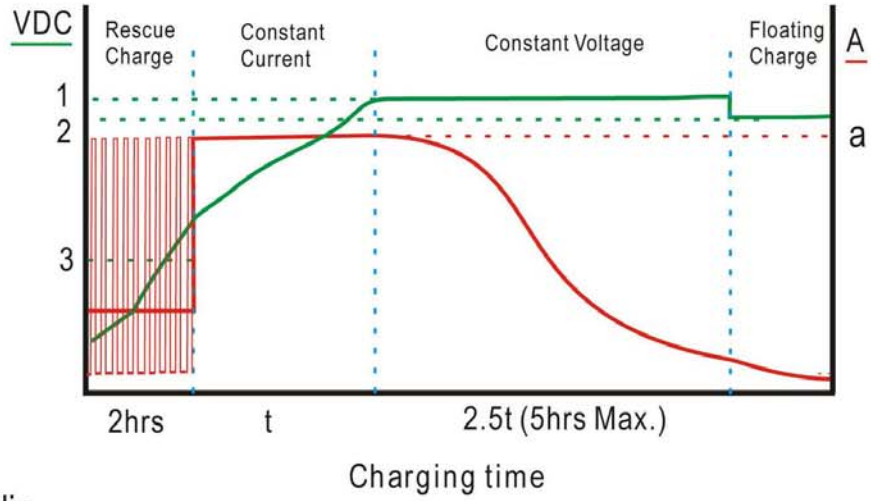
Dimensions:175(L)x88(W)x55.5(H)mm

AE1150CFC Series

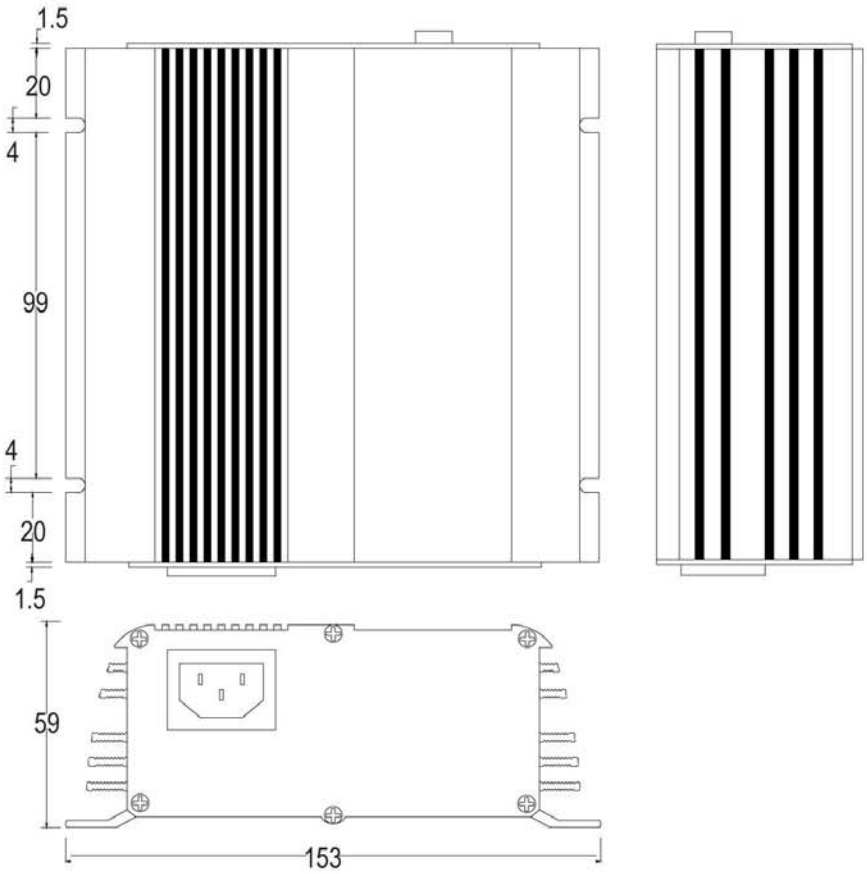
Model	Charging voltage Boost	Float	Charging current (A)	Line Reg.	Load Reg.	Efficiency	O.V.P.	CB	UL	TUV
AE1150C-12FB	14.7VDC	+13.8VDC	12.5A Max.	± 1%	± 2%	83%	17VDC Max.	None	None	None
AE1150C-24FB	29.4VDC	+27.6VDC	6.5A Max.	± 1%	± 2%	84%	35VDC Max.	None	None	None
AE1150C-48FB	58.8VDC	+54.4VDC	3.2A Max.	± 1%	± 2%	84%	67VDC Max.	None	None	None

Charging curve

Type / Code	12V	24V	48V
a (A)	12.5	6.5	3.2
1 (VDC)	14.7	29.4	58.8
2 (VDC)	13.8	27.6	54.4
3 (VDC)	8	16	32



Input connection: IEC320 C14 socket
DC output: 1.2m, 16AWG x2 + alligator clip



Dimensions:150(L)x153(W)x59(H)mm

INPUT

Input voltage .....100~240VAC/120~370VDC
Input frequency.....47~63Hz
Inrush current 22A/115VAC
(Cold start) 44A/230VAC

OUTPUT

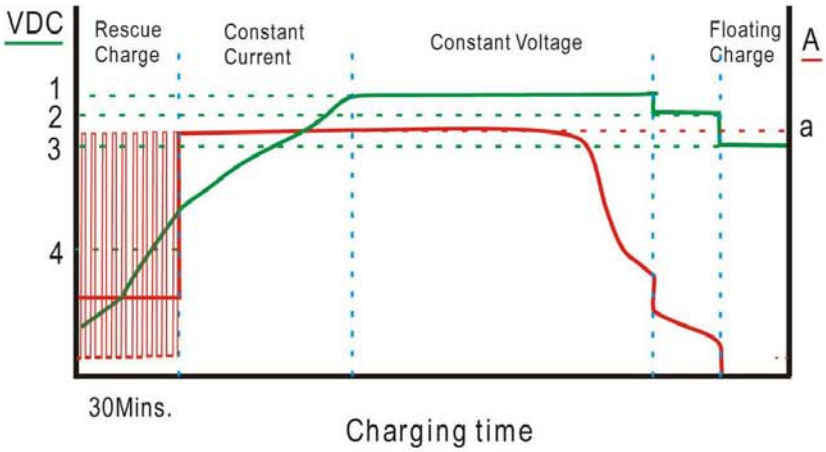
Hold-up time (Full load@230VAC) .....20mS Min.
Over voltage protection .....Autorecovery
Overload protection .....Power limited
Short circuit protection .....Autorecovery
Reverse Polarity protection .....Autorecovery
Over temperature protection .....Power limited

EPS 150W Series

Model	Charging voltage Boost	Float	Charging current (A)	Line Reg.	Load Reg.	Efficiency	O.V.P.	CB	UL	TUV
EPS 1210	14.7VDC	+13.8VDC	10.0A Max.	± 1%	± 2%	83%	17VDC Max.	None	None	None
EPS 2405	29.4VDC	+27.6VDC	5.0A Max.	± 1%	± 2%	84%	35VDC Max.	None	None	None

Charging curve

Code \ Type	12V	24V
a (A)	10.0	5.0
1 (VDC)	14.7	29.4
2 (VDC)	13.8	27.6
3 (VDC)	8.0	16.0



Input connection: IEC320 C14 socket
DC output: 1.2m, 16AWG x2 + alligator clip

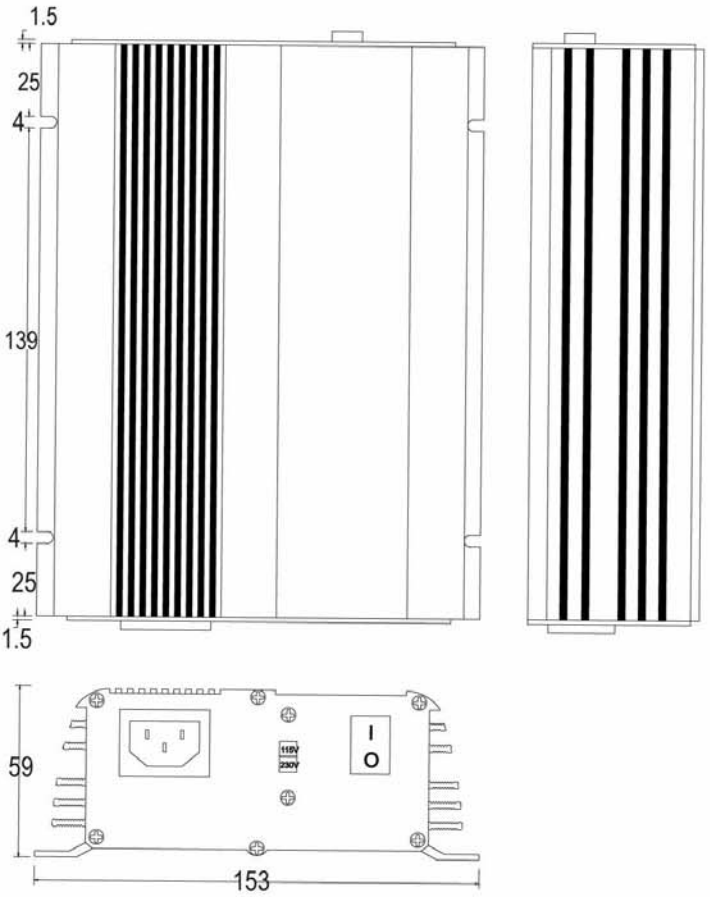
CE

INPUT

Input voltage .....115/230VAC selectable
Input frequency.....47~63Hz
Inrush current 22A/115VAC
(Cold start) 44A/230VAC

OUTPUT

Hold-up time (Full load@230VAC) .....20mS Min.
Over voltage protection .....Autorecovery
Overload protection .....Power limited
Short circuit protection .....Autorecovery
Reverse Polarity protection .....Autorecovery
Over temperature protection .....Power limited



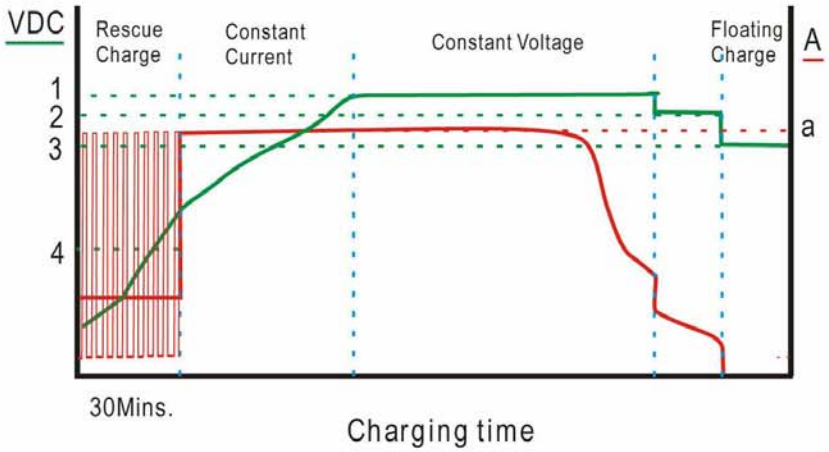
Dimensions:200(L)x153(W)x59(H)mm

EPS 240W Series

Model	Charging voltage Boost	Float	Charging current (A)	Line Reg.	Load Reg.	Efficiency	O.V.P.	CB	UL	TUV
EPS 1220	14.7VDC	+13.8VDC	20A Max.	±1%	±2%	84%	17VDC Max.	None	None	None
EPS 2410	29.4VDC	+27.6VDC	10A Max.	±1%	±2%	86%	35VDC Max.	None	None	None

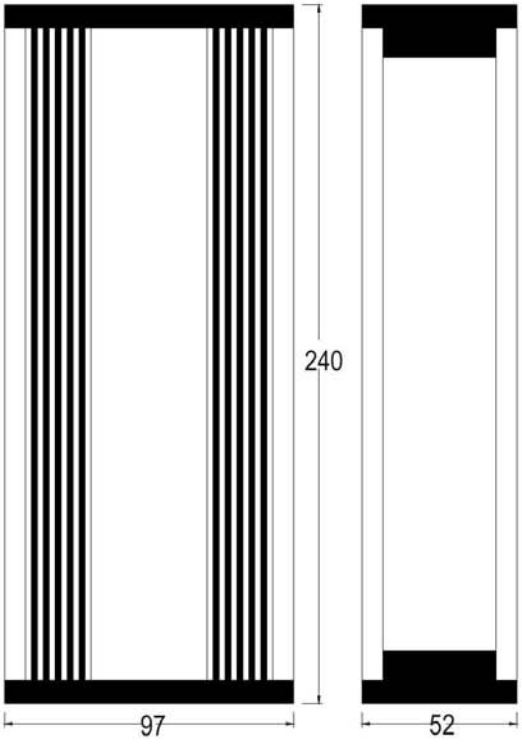
Charging curve

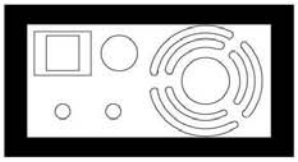
Code \ Type	12V	24V
a (A)	20.0	10.0
1 (VDC)	14.7	29.4
2 (VDC)	13.8	27.6
3 (VDC)	8.0	16.0



Input connection: IEC320 C14 socket
DC output: 1.2m, 14AWG x2 + alligator clip

CE





Dimensions:240(L)x97(W)x52(H)mm

INPUT

Input voltage .....115/230VAC selectable
Input frequency.....47~63Hz
Inrush current 22A/115VAC
(Cold start) 44A/230VAC

OUTPUT

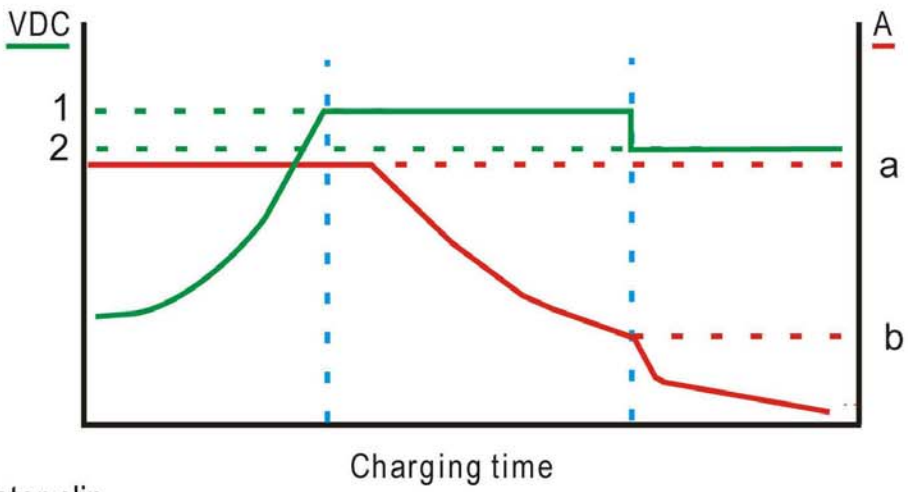
Hold-up time (Full load@230VAC) .....20mS Min.
Over voltage protection .....Autorecovery
Overload protection .....Power limited
Short circuit protection .....Autorecovery
Reverse polarity protection .....Autorecovery

AE1300CS Series

Model	Charging voltage Boost	Float	Charging current (A)	Line Reg.	Load Reg.	Efficiency	O.V.P.	CB	UL	TUV
AE1300C-12S	14.7VDC	+13.8VDC	25A Max.	± 1%	± 2%	83%	17VDC Max.	None	None	None
AE1300C-24S	29.4VDC	+27.6VDC	12.5A Max.	± 1%	± 2%	84%	35VDC Max.	None	None	None
AE1300C-48S	58.8VDC	+55.2VDC	6.3A Max.	± 1%	± 2%	84%	67VDC Max.	None	None	None

Charging curve

Type / Code	12V	24V	48V
a (A)	25	12.5	6.3
b (A)	0.6	0.6	0.6
1 (VDC)	14.7	29.4	55.8
2 (VDC)	13.8	27.6	55.2



Input : IEC320 C14 socket
DC output : 1.2m, 14AWG x2 + alligator clip

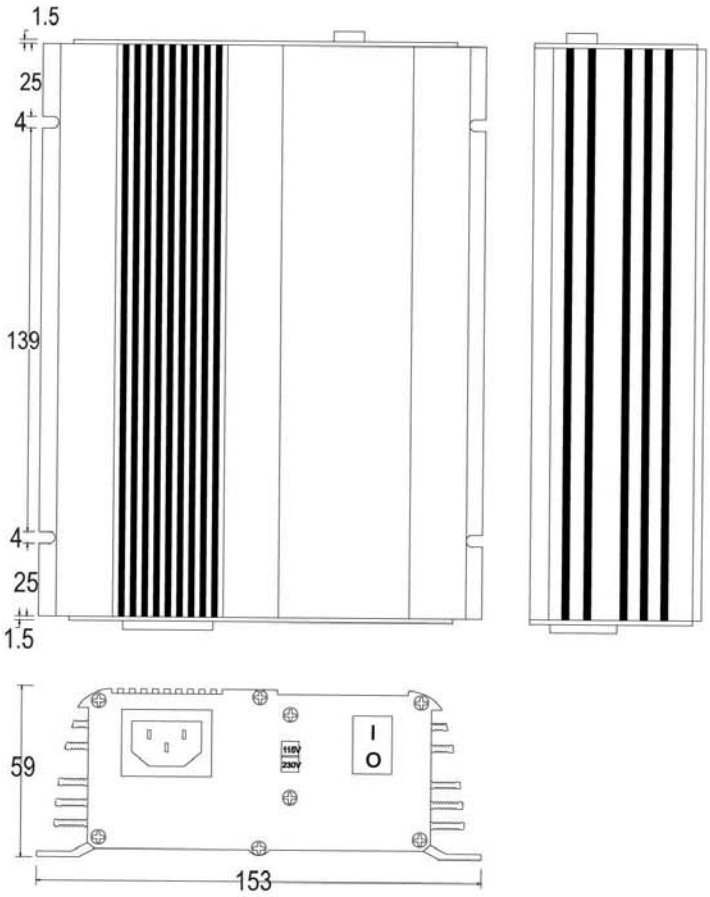
CE

INPUT

Input voltage .....115/230VAC selectable
Input frequency.....47~63Hz
Inrush current 22A/115VAC
(Cold start) 44A/230VAC

OUTPUT

Hold-up time (Full load@230VAC) .....20mS Min.
Over voltage protection .....Autorecovery
Overload protection .....Power limited
Short circuit protection .....Autorecovery
Reverse Polarity protection .....Autorecovery
Over temperature protection .....Power limited



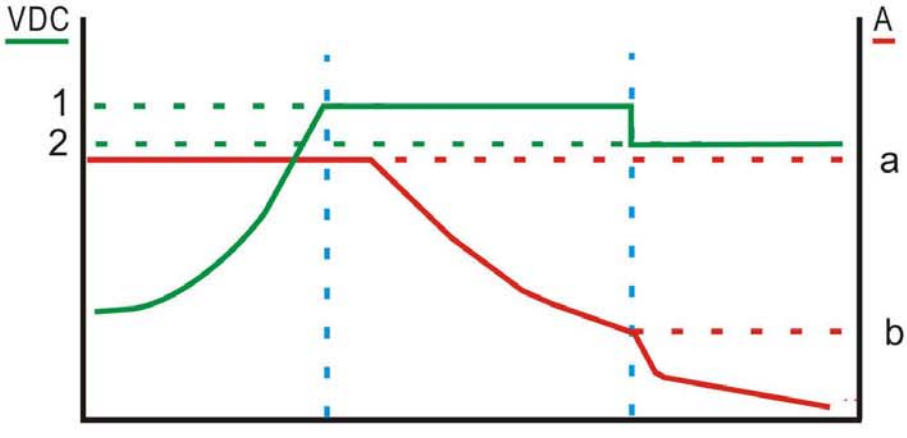
Dimensions:200(L)x153(W)x59(H)mm

AE1360CS Series

Model	Charging voltage Boost	Float	Charging current (A)	Line Reg.	Load Reg.	Efficiency	O.V.P.	CB	UL	TUV
AE1360C-12S	14.7VDC	+13.8VDC	30A Max.	± 1%	± 2%	83%	17VDC Max.	None	None	None
AE1360C-24S	29.4VDC	+27.6VDC	15A Max.	± 1%	± 2%	84%	35VDC Max.	None	None	None
AE1360C-48S	58.8VDC	+55.2VDC	7.5A Max.	± 1%	± 2%	84%	67VDC Max.	None	None	None

Charging curve

Type / Code	12V	24V	48V
a (A)	30	15	7.5
b (A)	0.6	0.6	0.6
1 (VDC)	14.7	29.4	55.8
2 (VDC)	13.8	27.6	55.2



Input : IEC320 C14 socket
DC output : 1.2m, 14AWG x2 + alligator clip