

The EPS series of AC-DC Switch mode power supplies from Essen are intended for the process control and automation needs of industry. These are rugged power supplies having over-voltage, over-current, over-temperature and short-circuit protections. The metallic housing is rugged yet attractive and corrosion resistant. The AC input voltage is either switchable from 110V to 230V or is Universal range (90-270V, 50-60 Hz). Output Voltage is industry standard at 5V or 12V or 24V DC. Load and line regulation are better than 1% and efficiency is also very high. The supplies are intended for high reliability applications of industry.



FEATURES:

- Voltage and load regulation better than 1 %
- PWM technology
- No audible noise
- 150mV output voltage ripple @20MHz bandwidth
- Either universal input voltage (85-270 VAC) OR switch selectable from 85-130V AC to 190-270VAC
- Inbuilt EMI filter complying with EN55022- class B emissions
- Overvoltage, overload and short circuit protected
- Robust construction using latest high reliability solid state electronic components
- Mounting using M3 or M4 screws
- High reliability using 105degree C rated electrolytic capacitors

CE

SPECIFICATIONS:

Input voltage	: 90-130V AC /190- 270VAC (50 -60 Hz)(selectable by inbuilt switch).
Output Voltage	: 5V or 12V or 24V DC, adjustable up to +/- 10% with inbuilt Potentiometer
Line regulation	: Better than 1% from low line to high line
Load regulation	: Within 1% of output from 0% to 100% rated load.
Efficiency	: About 82% at full load (24V dc only)
Protection	: Over-Load protection 110-135%. Short circuit protected, automatic recovery when short circuit removed.
Leakage current	: Less than 3.5 mA at 230V AC input for all models
Inrush Current:	: 25A at 110V, 50A at 230V
Isolation	: 1500VAC for 1 minute between Input and output 1500VAC for 1 minute between Input and Safety Earth 500VAC for 1 minute between output and Safety Earth
Insulation Resistance	: Tested for 100 Mohm at 500 VDC
Wire Connections	: 12-22 AWG cable connections on 9.5 mm pitch Terminal Block
EMI/EMC	: Tested according to EN55022 Class B
Enclosure Material	: Chassis -Aluminium. Cover - Steel with corrosion resistant plating
Hold Time	: At least 20 msec at rated load
Mounting	: 3 M3 screws (Side Mounting), 4 M3 screws (Bottom Mounting)
Temperature	: Storage temperature : -20 to 95 oC. Working temperature –10 to 60°C (20-95% humidity (non-condensing))
Warranty	: 18 months from date of purchase.

All dimensions are in mm.

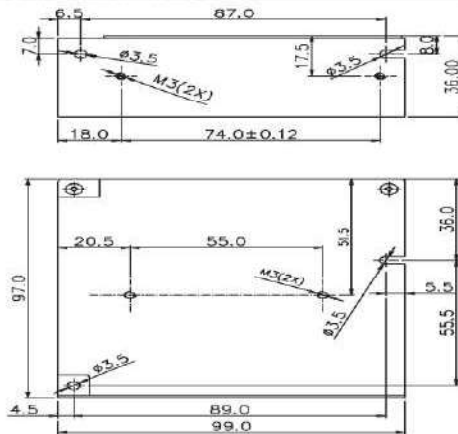
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Specifications EPS-15-xx:

Input Voltage Range	90-130 VAC/ 190 – 270VAC (50 -60Hz) (Selectable by internal switch) 210 – 370VDC with switch at 220VAC position
Inrush Current	15A/ 115VAC, 30A at 230VAC input
Overload protection	105- 150% (hiccup mode, automatic recovery when overload removed)
Dimensions	99(L) x 97(W) x 36(H) mm
Mounting	2 x M3 screws (bottom / side mounting)
Cooling	Natural convection cooling
Connection	5 Pole terminal strip (9.5 mm pitch) max wire 12AWG
Weight	320 g

Part No.	Output voltage (adjustable range)	Output current range	Ripple	Efficiency
EPS-15-5	5VDC (4.2 – 6V)	0 – 3A	50mV	65%
EPS-15-12	12 VDC (10 – 14V)	0-1.3A	100 mV	68%
EPS-15-24	24 VDC (21.6 – 26.4 VDC)	0 – 0.7A	100 mV	73%

Dimensions:
(EPS -15-xx)

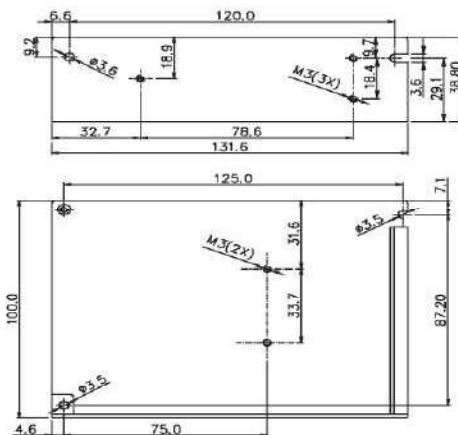


Specifications EPS-40-xx:

Input Voltage Range	90-130 VAC/ 190 – 270VAC (50 -60Hz) (Selectable by internal switch) 210 – 370VDC with switch at 220VAC position
Inrush Current	25A/ 115VAC, 50A at 230VAC input
Overload protection	105- 135% (hiccup mode, automatic recovery when overload removed)
Dimensions	129(L) x 98(W) x 38(H) mm
Mounting	2 x M3 screws (bottom / side mounting)
Cooling	Natural convection cooling
Connection	5 Pole terminal strip (9.5 mm pitch) max wire 12AWG
Weight	440 g

Part No.	Output voltage (adjustable range)	Output current range	Ripple	Efficiency
EPS-40-5	5VDC (4.2 – 6V)	0 – 8A	75mV	72%
EPS-40-12	12 VDC (10 – 14V)	0-3.5A	100 mV	76%
EPS-40-24	24 VDC (21.6 – 26.4 VDC)	0 – 1.8A	100 mV	78%

Dimensions:
(EPS -40-xx)

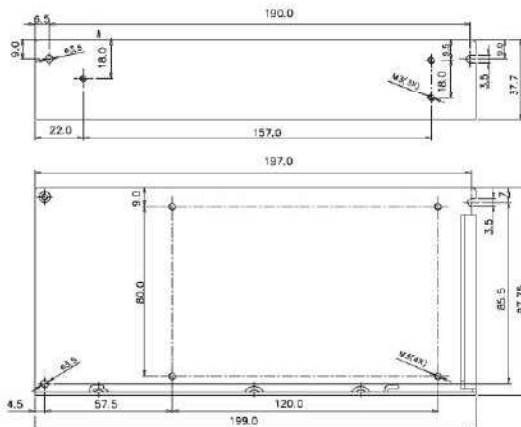


Specifications EPS-100-xx:

Input Voltage Range	90-130 VAC/ 190 – 270VAC (50 -60Hz) (Selectable by internal switch) 210 – 370VDC with switch at 220VAC position
Inrush Current	25A/ 115VAC, 50A at 230VAC input
Overload protection	105- 125% (hiccup mode, automatic recovery when overload removed)
Dimensions	199(L) x 98(W) x 38(H) mm
Mounting	4 x M3 screws (bottom mounting), 3 x M3 screws (side mounting)
Cooling	Natural convection cooling
Weight	620 g

Part No.	Output voltage (adjustable range)	Output current range	Ripple	Efficiency
EPS-100-5	5VDC (4.2 – 6V)	0 – 20A	100mV	76%
EPS-100-12	12 VDC (10 – 14V)	0 8.5A	100 mV	80%
EPS-100-24	24 VDC (21.6 – 26.4 VDC)	0 – 4.5A	100 mV	83%

Dimensions: (EPS -100-xx)

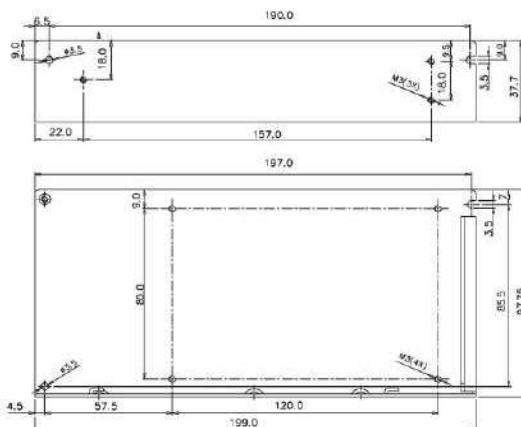


Specifications EPS-145-xx:

Input Voltage Range	90-130 VAC/ 190 – 270VAC (50 -60Hz) (Selectable by internal switch) 210 – 370VDC with switch at 220VAC position
Inrush Current	25A/ 115VAC, 50A at 230VAC input
Overload protection	105- 125% (hiccup mode, automatic recovery when overload removed)
Dimensions	199(L) x 98(W) x 38(H) mm
Mounting	4 x M3 screws (bottom mounting), 3 x M3 screws (side mounting)
Cooling	Natural convection cooling
Weight	710 g

Part No.	Output voltage (adjustable range)	Output current range	Ripple	Efficiency
EPS-145-12	12 VDC (10 – 14V)	0-12A	150 mV	81%
EPS-145-24	24 VDC (21.6 – 26.4 VDC)	0 – 6A	150 mV	83%

Dimensions: (EPS -145-xx)

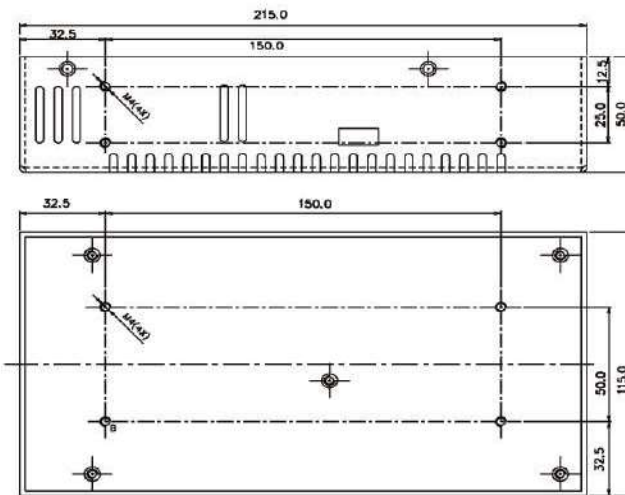


Specifications EPS-200-xx:

Input Voltage Range	90-130 VAC/ 190 – 270VAC (50 -60Hz) (Selectable by internal switch) 210 – 370VDC with switch at 220VAC position
Inrush Current	25A/ 115VAC , 50A at 230VAC input
Overload protection	105- 125% (hiccup mode, automatic recovery when overload removed)
Dimensions	215(L) x 115(W) x 50(H) mm
Mounting	4 x M4 screws (bottom / side mounting)
Cooling	Natural convection cooling
Weight	930 g

Part No.	Output voltage (adjustable range)	Output current range	Ripple	Efficiency
EPS-200-12	12 VDC (10 – 14V)	0-16.5A	150 mV	79%
EPS-200-24	24 VDC (21.6 – 26.4 VDC)	0 – 8.3A	150 mV	82%

Dimensions: (EPS -200-xx)

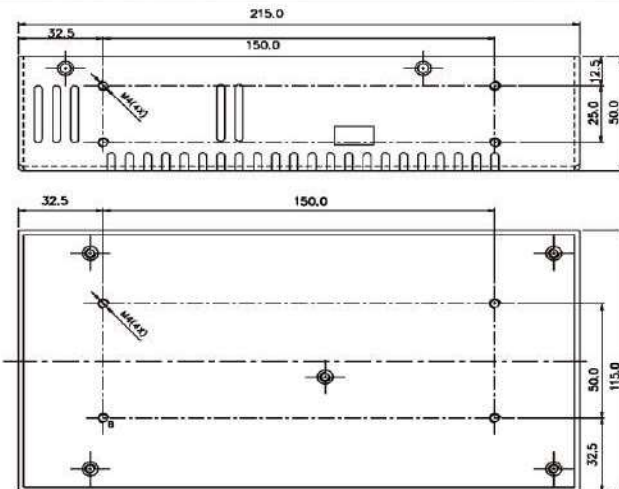


Specifications EPS-240-xx:

Input Voltage Range	90-130 VAC/ 190 – 270VAC (50 -60Hz) (Selectable by internal switch) 210 – 370VDC with switch at 220VAC position
Inrush Current	25A/ 115VAC , 50A at 230VAC input
Overload protection	105- 125% (hiccup mode, automatic recovery when overload removed)
Dimensions	215(L) x 115(W) x 50(H) mm
Mounting	4 x M4 screws (bottom / side mounting)
Cooling	Forced fan cooling (inbuilt fan)
Weight	930 g

Part No.	Output voltage (adjustable range)	Output current range	Ripple	Efficiency
EPS-240-12	12 VDC (10 – 14V)	0-20A	150 mV	79%
EPS-240-24	24 VDC (21.6 – 26.4 VDC)	0 – 10A	150 mV	83%

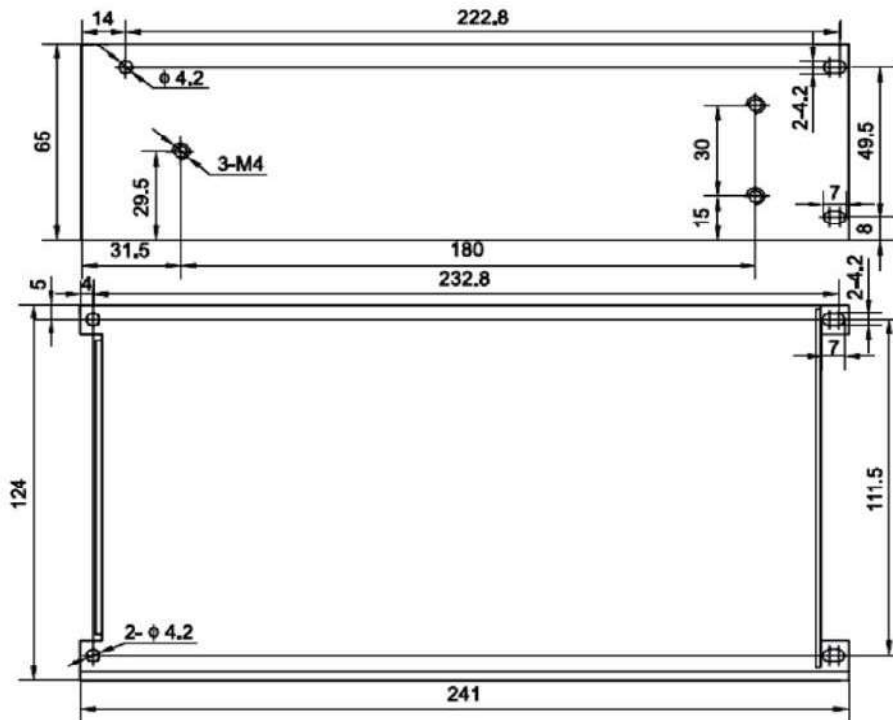
Dimensions: (EPS -240-xx)



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Input Voltage Range	190 – 270VAC only (50 -60Hz) 210 – 370VDC
Inrush Current	65A at 230VAC input
Overload protection	115- 135% (hiccup mode, automatic recovery when overload removed)
Dimensions	241(L) x 124(W) x 65(H) mm
Mounting	3 x M4 screws (bottom mounting), 4 x M4 screws (side mounting)
Cooling	Forced fan cooling (inbuilt fan)
Weight	1300 g

Part No.	Output voltage (adjustable range)	Output current range	Ripple	Efficiency
EPS-500-24	24 VDC (21.6 – 26.4 VDC)	0 – 21A	150 mV	82%

Dimensions:


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