

## FEATURES

- Output voltage of 12 V dc
- Output current of 3 A
- Power rating of 36 W
- One output
- Input voltage of 88 to 264 V ac
- Chassis mounted
- Dimensions of (L) 78 mm x (W) 51 mm x (D) 28 mm
- Weight of 180 g
- Efficiency of 86%
- Maximum temperature of +71°C
- Minimum temperature of -40°C

## RS PRO, 36W Embedded Switch Mode Power Supply SMPS, 12V dc, Enclosed

RS Stock No.: 711-2614



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

Part of our EDA100 series, the RS PRO 36 W embedded 36 W (watt) Switch Mode Power Supply (SMPS) functions as a single output AC/DC converter. It's used in commercial and domestic settings. This includes factory automation, off-site testing and within communication equipment. Struggling for space? This plastic-cased SMPS is compact in size, with dimensions of (L) 78 mm, (W) 51 mm, (D) 28 mm. It comes with a universal input, so it can be used with a wide variety of electronic equipment. There's also an internal input filter to protect against interference.

## General Specifications

<b>Mounting Type</b>	Chassis Mount
<b>Package Type</b>	Enclosed
<b>MTBF</b>	695000 h
<b>Applications</b>	Industrial control system, Mechanical and electrical equipment

## Electrical Specifications

Input Specification	
<b>Voltage Range</b>	88Vac to 264Vac
<b>Frequency</b>	47Hz to 63Hz
<b>Power Dissipation</b>	7W @12Vdc output
<b>AC Current Rating</b>	620mA/115Vac, 400A/230Vac
<b>Inrush Current</b>	40A/230Vac
<b>Leakage Current (max.)</b>	3.5mA
<b>Input Protection</b>	T2A / 250V ac internal fuse in line

Output Specification	
Output Number	1
DC Voltage	12Vdc
Ripple & Noise (max.)	100mVp-p
Rated Current	3A
Rated Power	36W
Voltage Tolerance	±1%
Line Regulation	±0.5%
Load Regulation	±1%

Voltage Adj. Rang	10.8V to 13.2V	
Rise Time	150ms/230V ac	
Fall Time	150ms/230V ac	
Hold Up Time	50ms/230V ac, 10ms / 115V ac at full load	
Transient Recovery Time	2ms/230V ac	
No Load Power Consumption	0.3W	
Capacitor Load	3500µF	
Overload Protection	110% to 170%	
Over Voltage Protection	13.8Vdc to 16.2Vdc	
Short Circuit Protection	Yes	
Switching Frequency	65KHz	
Isolation Resistance	100MΩ@500Vdc	
Voltage Isolation	Input-Output	3000V ac
	Input-Ground	1500V ac

## Mechanical Specifications

Housing Material	Metal
Overall Dimensions	78mm x 51mm x 28mm
Overall Length	78mm
Overall Depth	51mm
Overall Width	28mm
Weight	180g

## Operation Environment Specifications

<b>Operating Humidity</b>	20% to 90% RH non-condensing
<b>Cooling</b>	Natural convection
<b>Operating Temperature Range</b>	-40°C to 71°C
<b>Storage Temperature Range</b>	-40°C to 85°C
<b>Temperature Coefficient</b>	± 0.03% / C
<b>Altitude During Operation</b>	4850m
<b>Vibration Resistance</b>	10-500Hz, 2G, along X, Y,Z each Axis, 60 min for each Axis
<b>Shock Resistance</b>	15G, 11ms, 3 Axis, 6 Faces, 3 times for each Face

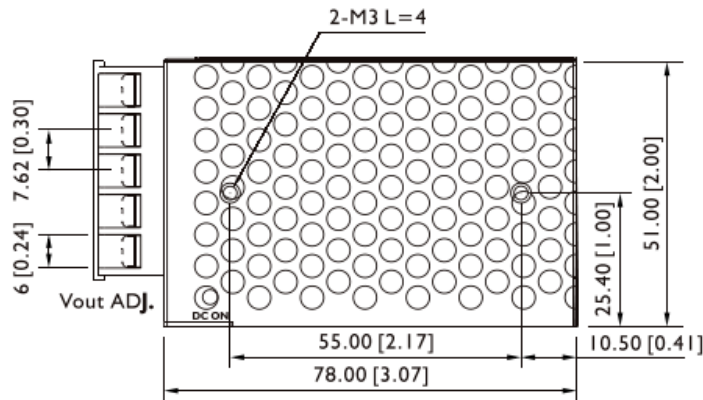
## Approvals

<b>Safety Standard</b>	UL60950, TUV: EN60950 approved
<b>EMC Emission</b>	Compliance to EN55022 Class B, EN55024, EN61000-6-3, EN61000-3-2



## MECHANISM & PIN CONFIGURATION

mm [inch]

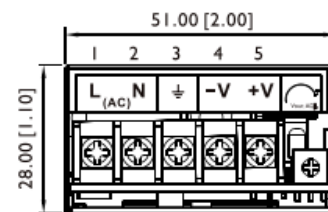
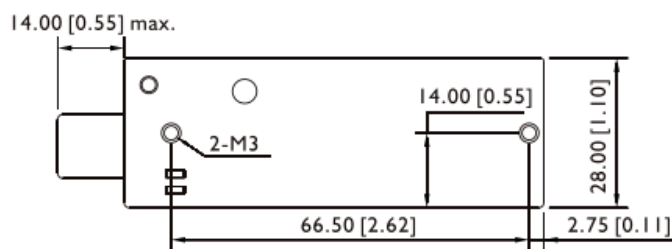


### INSTALLATION

Ventilation / Cooling  
Normal convection  
Connector size range  
AWG22-14 (0.2~2mm<sup>2</sup>) flexible / solid cable,  
connector can withstand torque at maximum  
8 pound-inches.

### GENERAL TOLERANCE

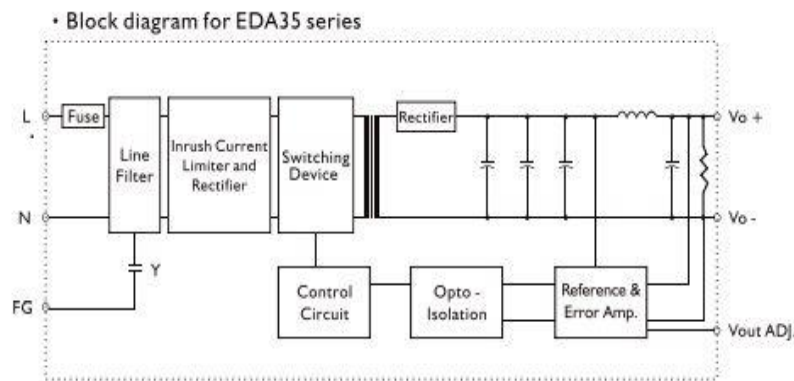
0.00[0.00] - 30.00[1.18]	±0.30[0.01]
30.00[1.18] - 120.00[4.72]	±0.50[0.02]



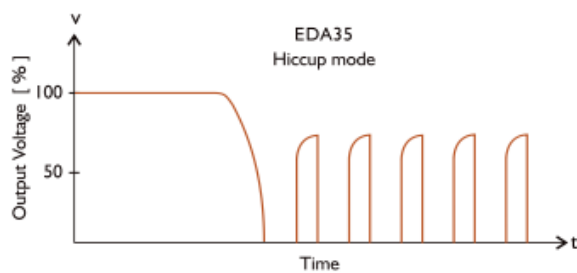
## PIN ASSIGNMENT

PIN NO.	Designation	Description
1	IN	L
2		N
3		⊕
4	OUT	-
5		+
		Vout ADJ.
		DC ON

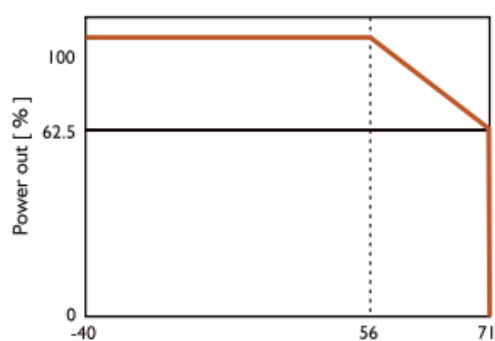
## CIRCUIT SCHEMATIC



## TYP. CURRENT LIMITED CURVE



## DERATING CURVE



## TYP. EFFICIENCY CURVE

