

FEATURES

- Embedded switch mode power supply (SMPS)
- Output voltage of 24 V DC
- Output current of 1.5
- Power rating of 36 W
- Single output
- Input voltage of 88 to 264 V AC
- Chassis mounted
- Enclosed package type
- Dimensions of 78 mm (L) x 51 mm (W) x 28 mm (D)
- Weight of 180 g
- Efficiency of 87%

RS PRO, 36W Embedded Switch Mode Power Supply SMPS, 24V dc, Enclosed

RS Stock No.: 711-2627



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

This embedded switch mode power supply (or SMPS for short) is part of RS PRO's quality EDA100 series of single output AC/DC converters. And that's exactly what it does – used in both commercial and residential environments including factory automation and communication equipment, it converts output between alternating current (AC) and direct current (DC).

General Specifications

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

Electrical Specifications

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



Output Specification	
Output Number	1
DC Voltage	24Vdc
Ripple & Noise (max.)	100mVp-p
Rated Current	1.5A
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	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



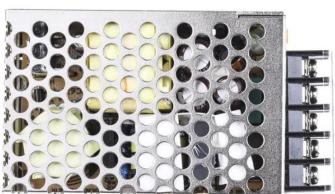
Operation Environment Specifications

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

Approvals

Safety Standard	EN 60950-1 and UL 60950-1approved
EMC Emission	Compliance to EN55022 Class B, EN55024, EN61000-6-3, EN61000-3-2

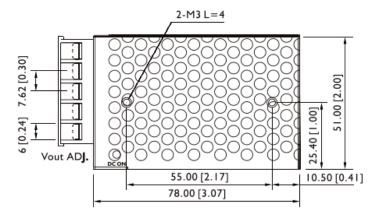






MECHANISM & PIN CONFIGURATION

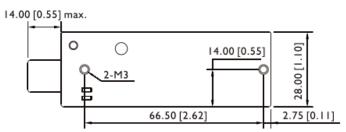
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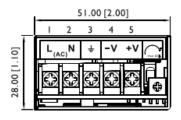


INSTALLATION

Ventilation / Cooling Normal convection Connector size range AWG22-14 (0.2~2mm²) 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]	

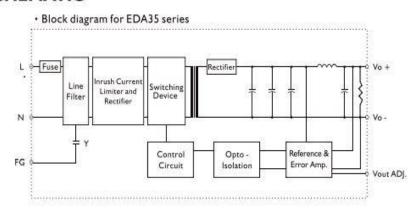




PIN ASSIGNMENT

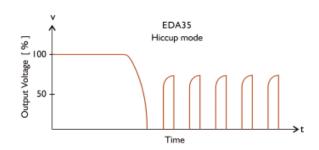
PIN NO. Designation		esignation	Description	
1		L	Input terminals (phase conductor, no polarity at DC input)	
2		N	Input terminals (neutral conductor, no polarity at DC input)	
3		.	Ground this terminal to minimize high-frequency emissions	
4		<u> </u>	Negative output terminal	
5	ō	+	Positive output terminal	
		Vout ADJ.	Trimmer-potentiometer for Vout adjustment	
	OTHER	DC ON	Operation indicator LED	

CIRCUIT SCHEMATIC

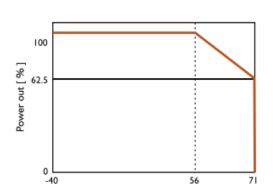




TYP. CURRENT LIMITED CURVE



DERATING CURVE



TYP. EFFICIENCY CURVE-

