

AC-DC DIN rail mountable power supply

Features

- UL / cUL / UV / CE
- Universal input 90÷265 VAC
- High efficiency up to 84%
- Short circuit protection
- Internal input filter



Model							
	Code	Input voltage	Output wattage	Output voltage	Output current	Efficiency	
						min.	typ.
Single Output							
GSA SWD02/24	002302	90÷265 VAC	60 W	24 VDC	2500 mA	84%	86%

All specifications typical at nominal line, full load, 25°C unless otherwise stated.

General Specifications						
Characteristics	Conditions	Value				
		min.	typ.	max.	unit	
Switching frequency	Vi nom, Io nom	50			KHz	
Isolation voltage	Input/Output	3000			VAC	
Isolation resistance	Input/Output, @500 VDC	100			MΩ	
Ambient temperature	@ Vi nom	-25		+71	°C	
Derating - see curve)	Vi nom, +61°C ÷ +71°C			2.5	% / °C	
Storage temperature		-25		+85	°C	
Relative humidity	Vi nom, Io nom			90	% RH	
Dimension		L90 x W40.5 x D115			mm	
Cooling	Free air convection					

Input Specifications						
Characteristics	Conditions		Value			
			min.	typ.	max.	unit
Rated input voltage	Io nom		100		240	VAC
Input voltage range	Ta min...Ta max, Io nom	AC DC	90 120		265 370	VAC VDC
Line frequency	Vi nom, Io nom		47		63	Hz
Inrush current	Vi: 115 / 230 VAC, Io nom				21/42	A
Output Specifications						
Output voltage accuracy	Vi nom, Io min ... Io nom				±2	%
Minimum load	Vi nom		0			%
Line regulation	Io nom, Vi nom...Vi max				±1	%
Load regulation	Vi nom, Io min...Io nom				±2	%
Transient recovery time	50% load, step changed			300		µs
Temperature coefficient	Vi nom, Io min				±0.02	% / °C
Ripple and noise	Vi nom, Io nom, BW = 20 MHz				50	mV
Hold up time	Vi: 115 / 230 VAC, Io nom		20 / 75			ms
Voltage trim range	Vi nom, Io nom	24 V model	24		28	VDC
DC ON indicator	Vi nom, Io nom		Green LED			
Efficiency	Vi nom, Io nom, Po / Pi		max. 86%			
Control and Protection						
Input fuse			T2A / 250 VAC internal			
Rated over load protection	Vi nom		105		125	%
Power Rdy*	Soglia - Threshold		20	22	24	VDC
Output short circuit	Vi nom, Io nom		Hiccup mode			

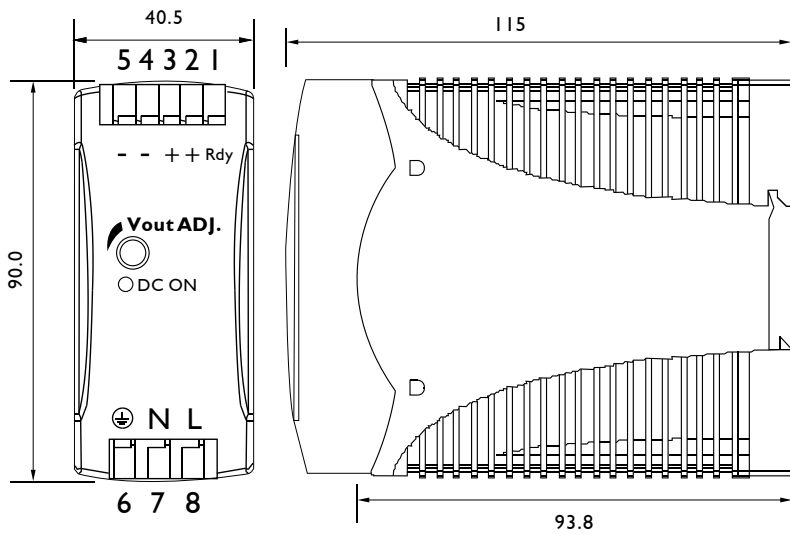
* - See circuit schematic for RDY connection.

Approvals and Standards

UL / cUL	UL 508 Listed UL 1310 Class 2 Power Supply (only 5V w/o Class 2), UL1950 Recognized
TUV	EN 60950-1
CE	EN 61000-6-3, EN 55022 Class B, EN 61000-3-2, EN 61000-3-3 EN 61000-6-2, EN 55024

Physical Characteristics

Case size [mm]	90 x 40.5 x 115
Case material	Plastic
Weight	360 g



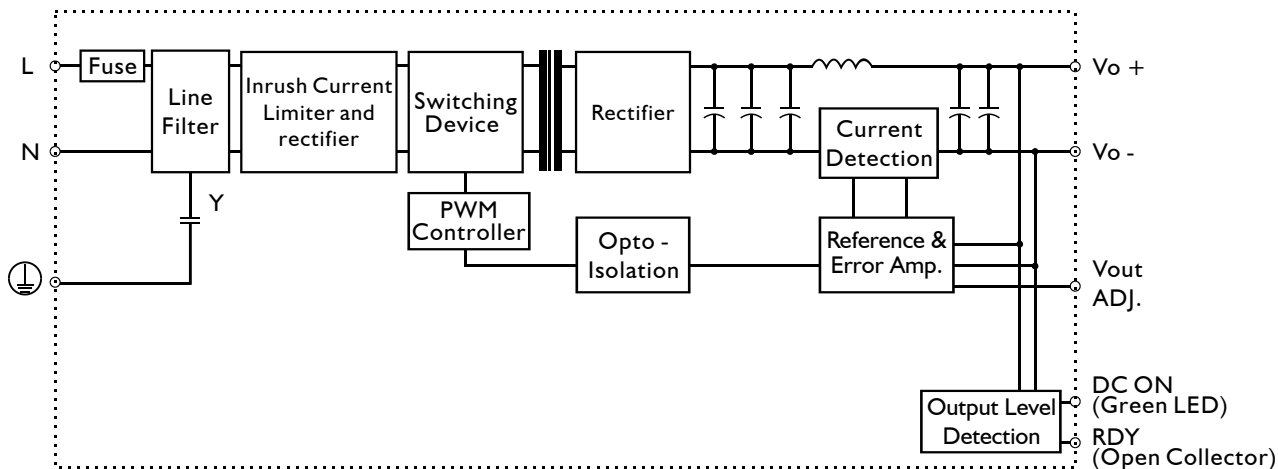
Construction
Easy snap-on mounting on to the DIN-Rail (TS35/7.5 or TS35/15), unit sits safety and firmly on the rail; no tools required even to remove.

Installation
Ventilation / Cooling
Normal convection
All sides 25 mm free space for cooling recommended
Connector size range
AWG24-14 (0.2~2 mm²) solid cable
Use copper conductors only

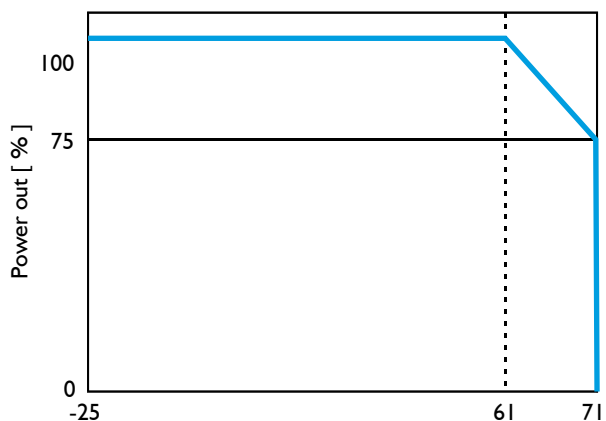
Pin assignment

Number	Designation	Description
1	RDY	DC OK static output for relay
2	+	Positive output terminal
3	+	Positive output terminal
4	-	Negative output terminal
5	-	Negative output terminal
6	⊕	Ground terminal to minimize high-frequency emissions
7	N	Input terminal (neutral conductor, no polarity at DC input)
8	L	Input terminal (phase conductor, no polarity at DC input)
	Vout ADJ.	Trimmer for Vout adjustment
	DC ON	Operation indication LED

Circuit Schematic



Derating Curve



* Rdy connection

