12VDC/24VDC Single Output Industrial DIN Rail Power Supply



Model: PSDR12V7A / PSDR24V4A





Overview

The PSDR series consists of 12VDC and 24VDC Class II DIN rail mount switching power supplies. Designed with a fully isolated plastic case to prevent user contact and the risk of shock.

Other standard features include its no load power consumption to save energy, short circuit, over load, over voltage and over temperature protections.

Product Highlights

- 12VDC 7.5A / 24VDC 4.2A Power output
- Integrated protection against line overvoltage / overload / short circuit
- Integrate to protect IT & security in home, office and retail environments
- Designed for installation on DIN rail TS-35/7.5 or 15

Specifications

	Model	PSDR12V7A	PSDR24V4A
	Output Voltage	12VDC	24VDC
Output			
	Current	7.5A	4.2A
	Current Range	0 ~ 7.5A	0 ~ 4.2A
	Rated Power	90W	100W
	Ripple and Noise (max.)	120mVp-p	150mVp-p
	Voltage Adj. Range	12 ~ 15V	24 ~ 29V
	Voltage Tolerance	±2.0%	±1.0%
	Line Regulation	±1.0%	
	Load Regulation	±1.0%	
	Setup, Rise Time	2700ms, 80ms/230VAC	
	Setup, Rise Tille	2700ms, 80ms/115VAC at full load	
	Hold IIn Time	50ms/230VAC	
	Hold Up Time	18ms/115VAC at full load	
	Voltage Range	88 ~ 264VAC / 124 ~ 370VDC	
	Frequency Range	47 ~	63Hz
Input	Efficiency	87%	89%
=	AC Current	3A/115VAC /	1.6A/230VAC
	In-rush Current	Cold Start - 30A/115VAC	
		Normal - 45A/230VAC	
	Overload	105 ~ 135% rated output power	
		Type: Constant current limiting, recovers	
e o		automatically after fault condition is removed	
ŧ	Overvoltage	16 ~ 20V	30 ~ 35V
Protection		Type: Shut down O/P vo	oltage, restart to recover
Ą	Overheat	90°C ±15°C (RTH2) detect on heatsink of power	
		transistor	
		Type: Shut down o/p voltage, restart to recover	
	Working Temperature	-20 ∼ +60°C	
Environment	Working Humidity	20 ~ 90% RH non-condensing	
	Storage Temp., Humidity	-40 ~ +85°C , 10 ~ 95% RH	
	Temp Coefficient	±0.03%/0C (0 ~ 50°C)	
	Vibration	Component:10 ~ 500Hz, 2G 10min./1cycle,	
占		60min. each along X, Y, Z axes	
		Mounting: Compliance to IEC60068-2-6	
	c c . c . l . l	UL60950-1, TUV EN60950-1 approved, Design	
	Safety Standards	refer to EN50178	
ں	Withstand Voltage		P:3KVAC
Ž	Isolation Resistance	7	
8	EMI Conduction &		
Safety & EMC	Radiation	Compliance to EN61204-3	
Saf	Harmonic Current	Compliance to EN61000-3-2,-3	
		Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11,	
	EMS Immunity	ENV50204, EN55024, EN61000-6-2, EN61204-3,	
		heavy industry level, criteria A	
	•	heavy industry	level, criteria A
er	MTBF		/ level, criteria A IL-HDBK-217F (25°C)
Other	MTBF Dimensions	486K hrs min. MI	

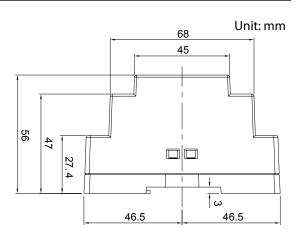
- Prevents overheating with free air convection
- Isolation class II
- LED indicator for power on
- No load power consumption<1W
- 100% full load burn-in test



Diagram Details

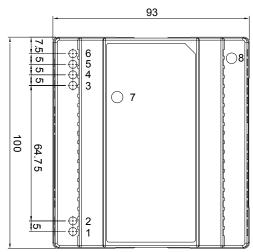
Admissible DIN-Rail: TS35/7.5 or TS35/15



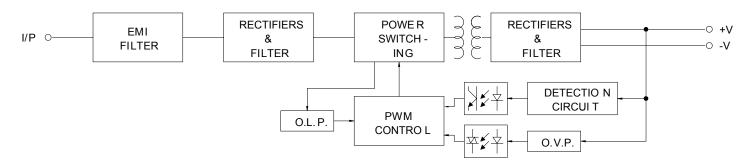


Terminal Pin No. Assignment

Pin No.	Assignment
1	12
2	7.5
3,4	90W
5,6	88-264VAC
7	87%
8	100 x 93 x 56mm



Block Diagram



Derating Curve vs Ambient Temperature

230V 80 80 40 20 110V 40 20 40 40 20 Ambient Temperature (°C)

Output Derating vs Input Voltage

