



Size: 4.69in x 1.77in x 4.88in (119mm x 45mm x 124mm)

FEATURES

- Universal Input Voltage Range of 85~264VAC (127~375VDC)
- High Efficiency
- Excellent Partial Load Efficiency
- Built-In Current Sharing Function and Limiting Current
- Supports 1+1 or N+1 Redundant System (Suggested to Use Redundancy Models)
- Built-In Active PFC
- Built-In DC OK Relay Contact
- Can be Installed on TS-32/7.5 or TS-35/15
- Easy Fuse Tripping due to High Overload Current
- Over Load, Over Voltage, Over Temperature and Short Circuit Protection
- 150% (360W) Peak Load Capacity
- Suitable for Critical Application
- 100% Full Load Burn-In Test
- Ultra Slim
- UL508, UL60950 and EN60950 Safety Approvals

DESCRIPTION

The PSDG-240 series of DIN rail power supplies offers up to 240 watts of output power (360 watts peak load capacity) in an ultra-slim 4.69" x 1.77" x 4.88" package. This series consists of single output models with a universal input voltage range of 85~264VAC and high efficiency. Each model in this series features built-in current sharing function and limiting current, built-in DC OK relay contact, easy fuse tripping, as well as over load, over voltage, over temperature and short circuit protection. This series can be installed on TS-32/7.5 or TS-35/15, has UL508, UL60950, and EN60950 safety approvals, and has been 100% full load burn-in tested. Please contact factory for ordering information.

MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage	Output Current		Ripple & Noise ⁽¹⁾		Voltage ADJ. Range	Output Power		Efficiency
			Min Load	Max Load	0~70°C	-25°C		Typical	Peak Load	
PSDG-240-24	85~264VAC	24V	0A	10A	≤240mV	≤480mV	24~28V	240W	360W	94%
PSDG-240-48	(127~375VDC)	48V	0A	5A	≤480mV	≤480mV	48~56V	240W	360W	93%

SPECIFICATIONS

All specifications are based on 25°C Ambient Temp, Rated Input, and Rated Load unless otherwise noted.
We reserve the right to change specifications based on technological advances.

SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
INPUT SPECIFICATIONS					
Input Voltage Range		85		264	VAC
		127		375	VDC
Frequency Range		47		65	Hz
Inrush Current	@110VAC, Cold Start @230VAC, Cold Start		<20 <40		A
AC Current	@100VAC @230VAC			3.0 1.5	A
Power Factor	@110VAC @230VAC		0.99 0.95		
OUTPUT SPECIFICATIONS					
Output Voltage		See Table			
Voltage Accuracy			±3.0		%
Line Regulation			±0.5		%
Load Regulation			±1.0		%
Voltage Adjustment Range	24V Model 48V Model	24 48		28 56	%
Output Power		See Table			
Output Current		See Table			
Ripple & Noise ⁽¹⁾		See Table			
Set-Up Time	@230VAC			3	S
Hold Up Time	@230VAC, Full Input		≥20		mS
Overshoot and Undershoot				5.0	%
Temperature Coefficient			±0.03		%/°C

SPECIFICATIONS

All specifications are based on 25°C Ambient Temp, Rated Input, and Rated Load unless otherwise noted.
 We reserve the right to change specifications based on technological advances.

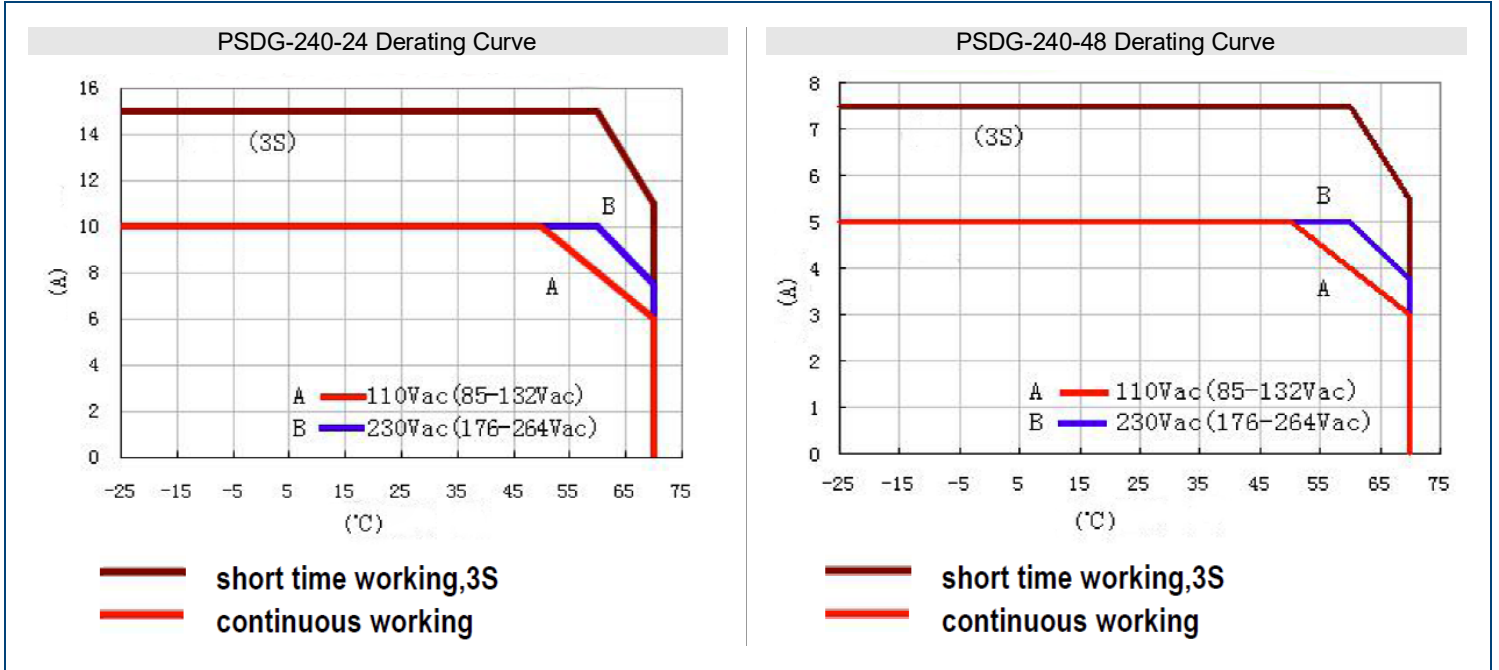
SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
PROTECTION					
Short Circuit Protection	Long-Term Mode	Automatic Recovery			
Over Load Protection	Constant current limiting for some time (150% of rated current, lasts for 3S), PS will stop working for 7S. After 7S, if the load is ≤ rated current, PS will work normally. Automatic recovery.	110		150	% Rated Current
Over Voltage Protection	24V Model, Constant Voltage, Automatic Recovery	29		33	V
	48V Model, Constant Voltage, Automatic Recovery	58		63	
Over Temperature Protection	Detect on heatsink of power transistor; shut down O/P, Automatic Recovery after temperature goes down	105±5°C			
ENVIRONMENTAL SPECIFICATIONS					
Operating Ambient Temperature		-25		70	°C
Storage Temperature		-40		85	°C
Operating Humidity	Non-Condensing	20		90	%RH
Storage Humidity	Non-Condensing	5		95	%RH
MTBF	MIL-HDBK-217F, 25°C, Full Load	300,000			Hours
GENERAL SPECIFICATIONS					
Efficiency		See Table			
Withstand Voltage	Primary-Secondary	3.0KVac, ≤10mA			
	Primary-PG	2.5KVac, ≤10mA			
	Secondary-PG	0.5KVac, ≤20mA			
Isolation Resistance			≥100		MΩ
Leakage Current	Input-Output			0.25	mA
	Input-PG			3.5	
Power Boost	% of Rated Current		150		%
Parallel Function		Supported			
DC-OK	V ON	When output voltage is up to 90% of rated output voltage			
	V OFF	When output voltage is down to 80% of rated output voltage			
DC-OK Relay Contact Rating		Max 30V/1A or 60V/0.3A or 30VAC/0.3A Resistive Load			
PHYSICAL SPECIFICATIONS					
Weight		30.86oz (875g)			
Dimensions (L x W x H)		4.69in x 1.77in x 4.88in (119mm x 45mm x 124mm)			
Packing		24pcs/CTN, 21Kg/CTN, 0.045cbm			
Cooling		Free Air Convection			
SAFETY CHARACTERISTICS					
Safety Approvals		UL508 ⁽³⁾ , UL60950 ⁽³⁾ , EN60950			
EMC Emission		EN55022			
		EN55024			
		FCC Part 15			
EMC Immunity		Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; heavy industry level			
Harmonic Current		Compliance to EN61000-3-2			

NOTES

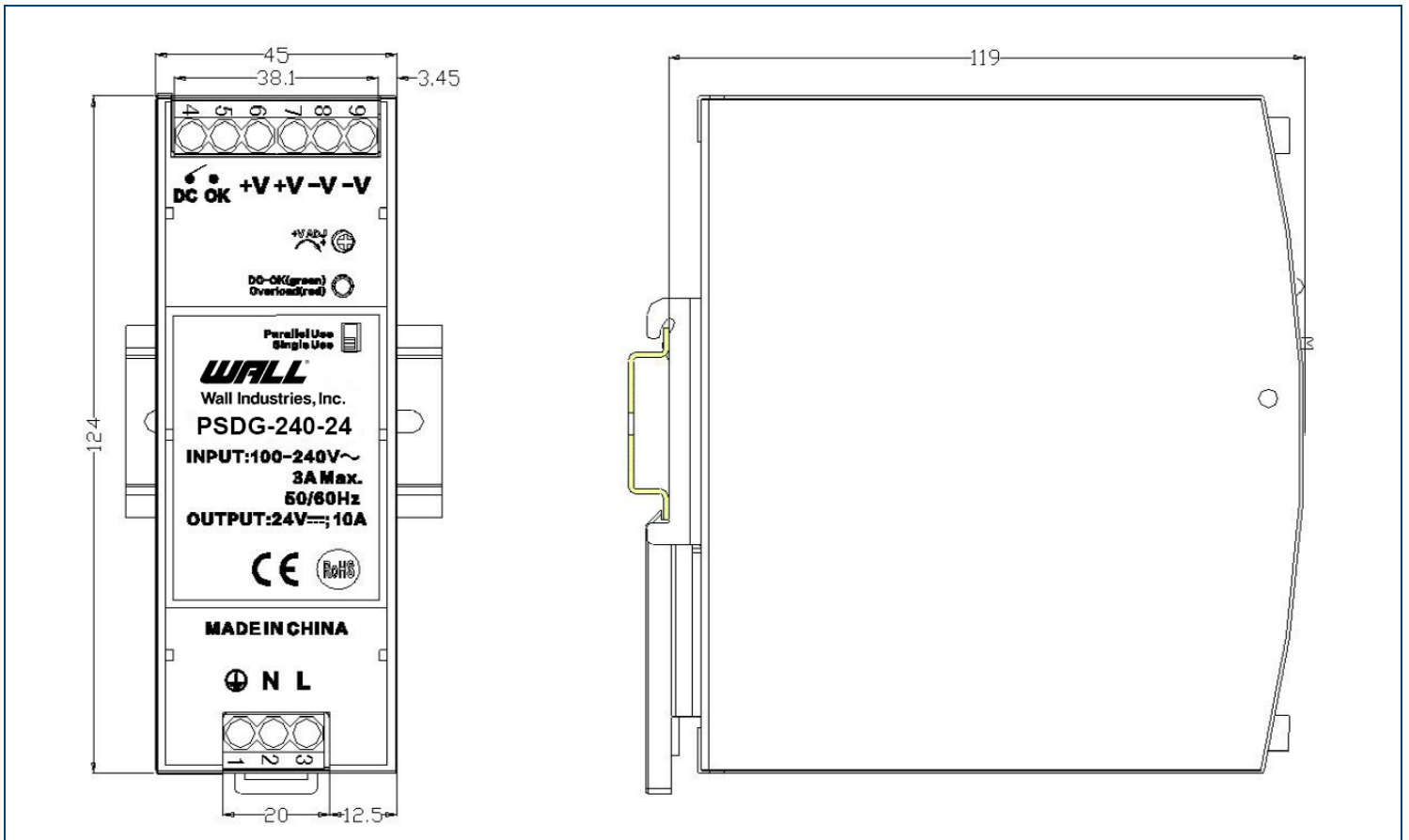
1. Measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 10uF parallel capacitor.
2. The power supply is considered as a component that will be installed into final equipment. The final equipment must be re-confirmed that it still meets EMC directives. Contact factory for more information.
3. This product is Listed to applicable standards and requirements by UL.

**Due to advances in technology, specifications subject to change without notice.*

DERATING CURVES



MECHANICAL DRAWINGS



BLOCK INSTALLATION

AC Terminal Blocks Installation Information

Terminal No.	Function	Wire Spec.	Recommended Torque
1	PG	20~10AWG	5Nm
2	N		
3	L		

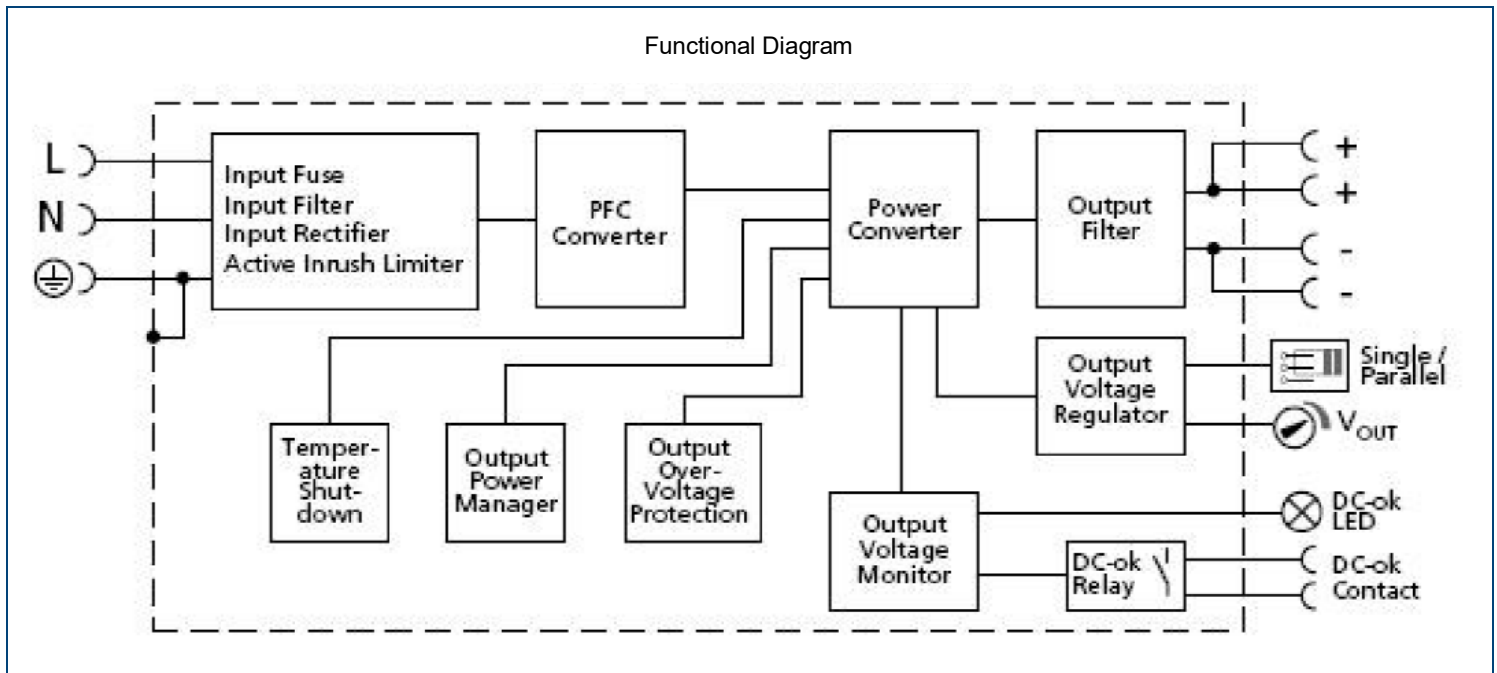
DC Terminal Blocks Installation Information

Terminal No.	Function	Wire Spec.	Recommended Torque
4 & 5	DC OK Relay Contact	20~10AWG	5Nm
6 & 7	+V		
8 & 9	-V		

AC/DC Terminal	
Type	Screw Terminal Blocks
Solid Wire	0.5-6mm ²
Strand Wire	0.5-4mm ²
Wire Spec	AWG-10 (PG Wire>18AWG)
Max Wire Diameter	2.8mm
Recommended Stripping Length	7mm
Screwdriver	3.5mm Straight or Cross Screwdriver
Recommended Torque	5NM

BLOCK DIAGRAM

Functional Diagram



COMPANY INFORMATION

Wall Industries, Inc. has created custom and modified units for over 50 years. Our in-house research and development engineers will provide a solution that exceeds your performance requirements on-time and on budget. Our ISO9001: 2015 certification is just one example of our commitment to producing a high quality, well-documented product for our customers.

Our past projects demonstrate our commitment to you, our customer. Wall Industries, Inc. has a reputation for working closely with its customers to ensure each solution meets or exceeds form, fit and function requirements. We will continue to provide ongoing support for your project above and beyond the design and production phases. Give us a call today to discuss your future projects.

Contact **Wall Industries** for further information:

Phone: ☎ (603)778-2300
Toll Free: ☎ (888)597-9255
Fax: ☎ (603)778-9797
E-mail: sales@wallindustries.com
Web: www.wallindustries.com
Address: 37 Industrial Drive
Exeter, NH 03833

©2019 Wall Industries, Inc. Specifications subject to change without notice. Wall Industries is not responsible for typographical errors. The information contained herein is for informational purposes only. This information is provided by Wall Industries and we make no representations or warranties of any kind, express or implied, about the completeness, accuracy, reliability, suitability or availability with respect to the information contained in this document for any purpose. All product and manufacturer names are trademarks or registered trademarks of their respective companies.