

DPDN75 SERIES | METAL CASE

75.6 W~ 76.8 W DIN Rail AC-DC Power Supply

MODEL: DPDN75 | CATEGORY: AC-DC | RATED POWER: 75.6 W~ 76.8 W | FORM: DIN Rail

PRODUCT OVERVIEW



Key Product Features

- 75.6 W~ 76.8 W output power with stable DC output
- Wide AC input range for global industrial applications
- Class I isolation
- Compact DIN rail design for control cabinets and industrial panels
- High efficiency switching architecture
- Hiccup mode protection that automatically recovers after fault conditions
- Integrated EMI filtering for stable operation in industrial environments

PRODUCT DESCRIPTION







The DPDN75 Series is a compact 75.6 W~ 76.8 W DIN rail AC-DC power supply designed for reliable power delivery in industrial automation, control systems, and distributed power applications. Its slim mechanical profile enables easy installation in standard DIN rail cabinets while providing stable output and built-in protection features for long-term operation in demanding environments.

SAFETY CERTIFICATES



- UL508 safety certified
- CE Marked to meet European safety and EMC requirements
- RoHS Compliant for environmentally friendly manufacturing
- Designed to meet international industrial safety standards

Applications

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|  Industrial automation and control systems |  Telecommunications/networking equipment |
|  PLCs and control panels |  Security and surveillance systems |
|  Building automation and HVAC systems |  Power distribution cabinets and DIN rail installations |

ELECTRICAL SPECIFICATIONS

Model Information

Model	Output Voltage	Rated Current (Max.)	Rated Power	Voltage Adjust Range
DPDN75-12	12 V	6.3 A	75.6 W	12 – 14 V
DPDN75-24	24 V	3.2 A	76.8 W	24 – 28 V
DPDN75-48	48 V	1.6 A	76.8 W	48 – 55 V

Input Specifications

Parameter	Specification
RATED INPUT (Certified Voltage)	100 ~ 240VAC
NOMINAL INPUT VOLTAGE RANGE	90 ~ 264VAC or 127-370VDC DC input by connecting AC/L(+), AC/N(-)
FREQUENCY RANGE	47~63Hz
EFFICIENCY (Typ.)	DPDN75-12 85.50%
	DPDN75-24 88.00%
	DPDN75-48 88.00%
AC CURRENT (Typ.)	1.45A / 115VAC
	0.9A / 230VAC
INRUSH CURRENT (Typ.)	20A / 115VAC
	35A / 230VAC
LEAKAGE CURRENT	<1mA / 240VAC

Output Specifications

Parameter	Specification
RIPPLE & NOISE (max.)	80mVp-p DPDN75-12
	120mVp-p DPDN75-24
	150mVp-p DPDN75-48
VOLTAGE TOLERANCE	±2.0%
LINE REGULATION	±0.5%
LOAD REGULATION	±1.0%
SETUP, RISE TIME	1200ms, 60ms / 230VAC at full load
	2000ms, 60ms / 115VAC at full load
HOLD UP TIME (Typ.)	60ms / 230VAC at full load
	12ms / 115VAC at full load

For quotes and customization requests, contact Digital Power sales at (877) 634-0982 or sales@digipwr.com.

ELECTRICAL SPECIFICATIONS

Protection

Parameter	Specification
OVER LOAD	105 – 130% rated output power
	Protection type: Hiccup Mode
	recovers automatically after fault condition is removed
OVER VOLTAGE	14 – 17V YSDN75-12
OVER VOLTAGE	29 – 33V YSDN75-24
OVER VOLTAGE	56 – 65V YSDN75-48
OVER VOLTAGE	Protection type: Shut down o/p voltage re-power on to recover
OVER TEMPERATURE	Protection type: Shut down o/p voltage re-power on to recover

Environment

Parameter	Specification
WORKING TEMP.	-20 ~ +70°C Refer to “Derating Curve”
WORKING HUMIDITY	20 ~ 95% RH non-condensing
STORAGE TEMP.	-40 ~ +85°C 10 ~ 95% RH
STORAGE HUMIDITY	10 ~ 95% RH
MTBF	450K hrs min. MIL-HDBK-217F (25°C)

Safety&EMC

Parameter	Specification
SAFETY STANDARDS	UL508
WITHSTAND VOLTAGE	I/P-O/P: 3KVAC I/P-FG: 2KVAC, O/P-FG: 0.5KVAC
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG >100M Ohms / 500VDC / 25°C / 70% RH
EMC EMISSION	Compliance to BS EN/EN55032 BS EN/EN61000-3-2,-3
EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11 BS EN/EN55035, BS EN/EN61000-6-2 (BS EN/EN50082-2)

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ELECTRICAL SPECIFICATIONS

Dimensions and Weight, Packing

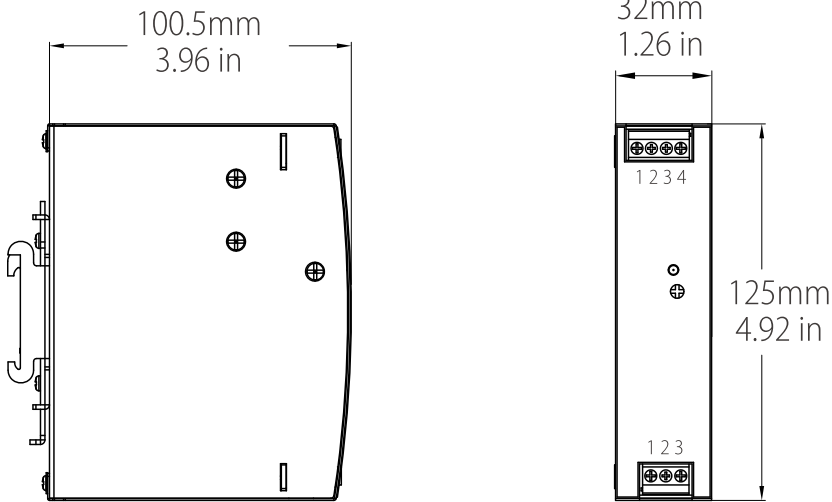
Parameter	Specification
Width	32mm / 1.26in
Height	125mm / 4.92in
Depth	100.5mm / 3.96in
Weight	0.51kg
Carton Size	31.5 × 30 × 30 CM
Carton Size	12.4 × 11.8 × 11.81 in
Master Carton Quantities	20pcs / Carton

Note

1. All parameters NOT specially mentioned at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured from peak to peak with bandwidth limit of 20MHz. 0.1uF and 47uF/50V parallel capacitor under DC output full load, AC nominal input 25°C ambient temperature.
3. Installation clearances: top with 40mm, bottom with 20mm, left and right with 5mm. Increase the space to 10~15mm when the adjacent device is heat source.
4. Derating may be needed under low input voltage. Please check the derating curve for more details.
5. Efficiency test after 30 minutes of burn-in.
6. The ambient temperature derating of 3.5°C/1000m for operating altitude higher than 2000m (6500ft).

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MECHANICAL SPECIFICATIONS



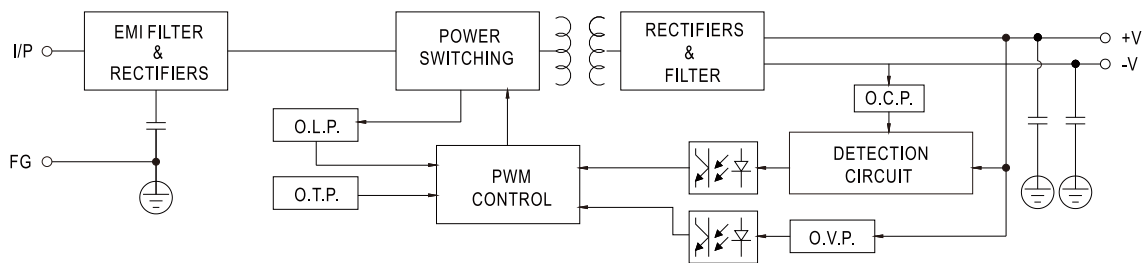
Input

No.	Description
1	FG Ⓧ
2	AC/N or DC -
3	AC/L or DC +

Output

No.	Description
1,2	DC OUTPUT -V
3,4	DC OUTPUT +V

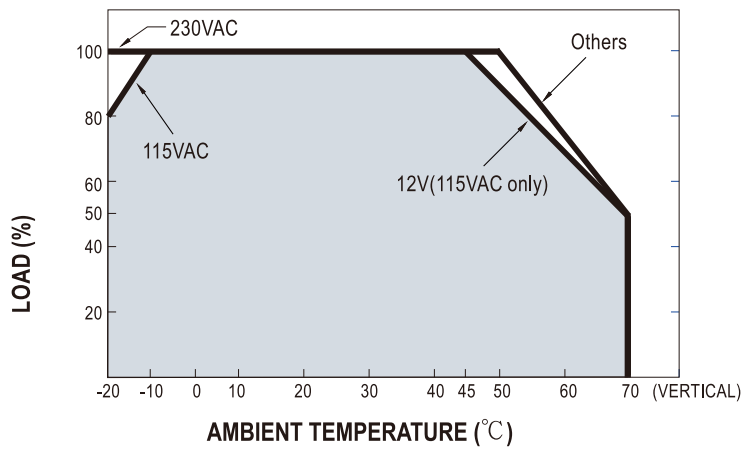
Block Diagram



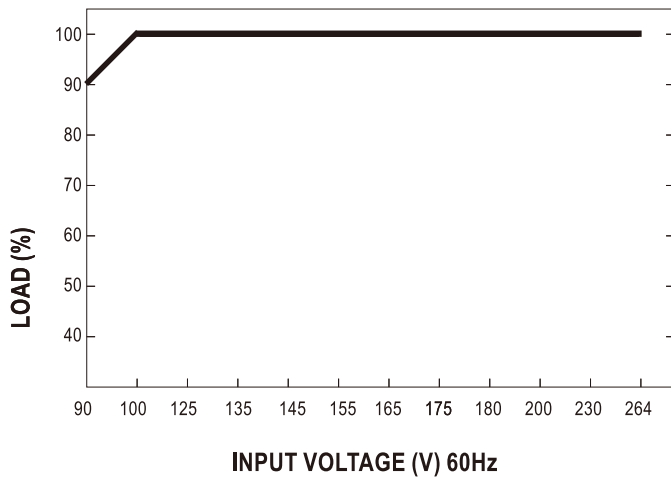
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MECHANICAL SPECIFICATIONS

Deduction Curve and Temperature



Minus Output and Input Voltage Curves



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