

# DRP 240W Series

➔ 240Watts single output industrial DIN-Rail power supply

## Features

- Universal AC input voltage
- Power will not de-rate for the entire input voltage range
- Power Boost of 150% for 5 seconds
- Full corrosion resistant aluminum chassis
- Conformal coating on PCBA to protect against chemical and dust pollutants
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Can be installed on DIN rail TS-35
- UL 508(industrial control equipment)approved
- LED indicator for power on
- 100% full load burn-in test
- 3 years warranty

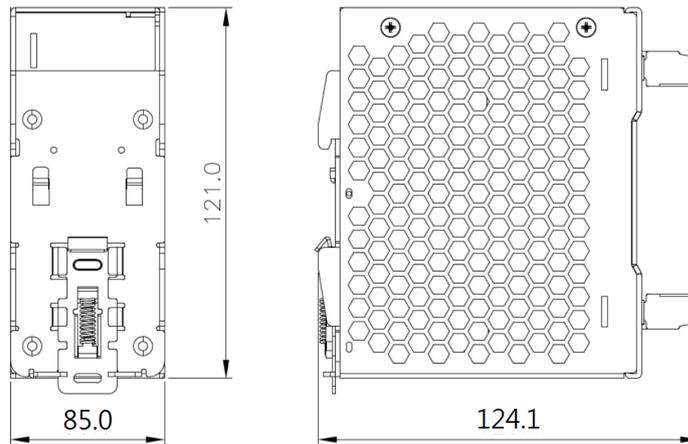


## Specifications

Characteristics		Model Name	
		DRP024V240W1BN	DRP048V240W1BN
Output	DC Voltage	24V	48V
	Rated Current	10A	5A
	Current Range	0 ~ 10A	0 ~ 5A
	Rated Power	240 watts	240 Watts
	Peak Current	15A	7.5A
	Peak Power	360W (5sec.)	
	Ripple & Noise (max.)	150mVp-p	200mVp-p
	Voltage ADJ. Range	24 ~ 28V	48 ~ 56V
	Voltage Tolerance	±2.0%	±1.0%
	Line Regulation	±0.5%	±0.5%
	Load Regulation	±1.0%	±1.0%
	Setup, Rise Time	1000ms, 100ms at full load	1000ms, 200ms at full load
Hold Up Time (Typ.)	20ms/115VAC & 230VAC at full load	20ms/115VAC & 230VAC at full load	
Input	Voltage Range	85 ~ 264VAC 120 ~ 375VDC	
	Frequency Range	47 ~ 63Hz	
	Efficiency (Typ.)	90%	
	AC Current (Typ.)	<2.5A/115VAC <1.3A/230VAC	
	Inrush Current (Typ.)	35A/230VAC & 115VAC	
	Leakage Current	<1mA/240VAC	

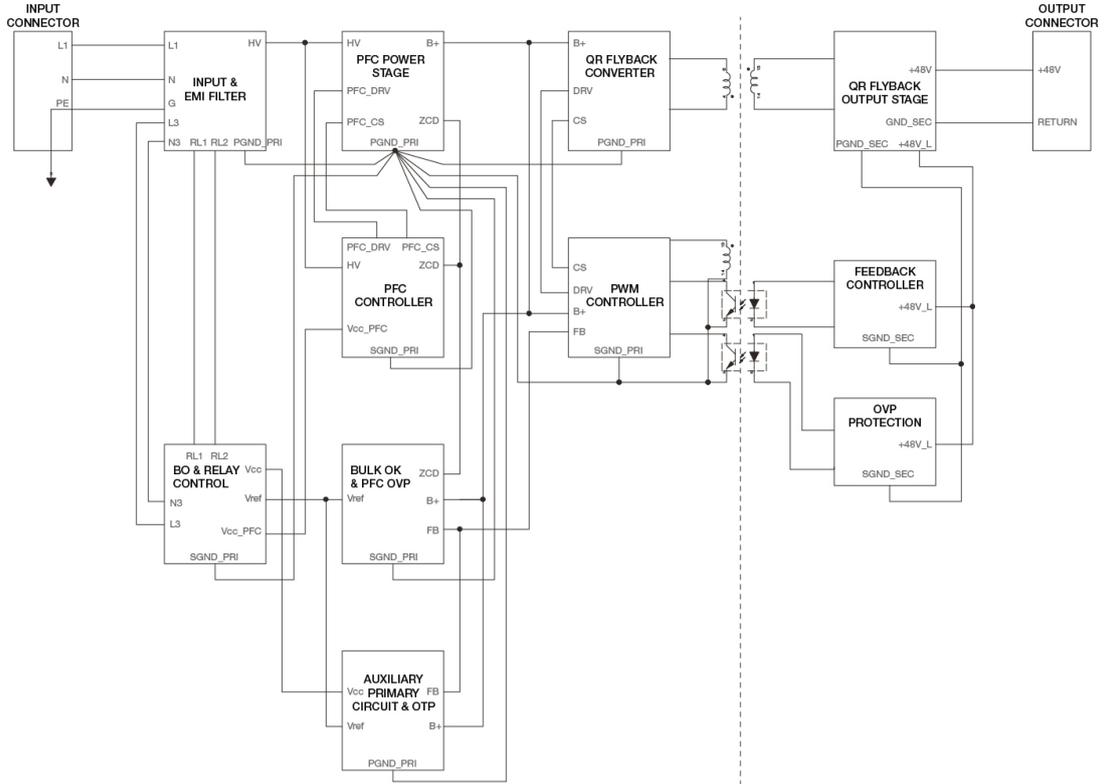
Protection	Overload	For more than 150% rated output power, will enter Hicc-up mode with auto-recovery	
	Over Voltage	32V	57V
		Protection type : Hicc-up mode with auto-recovery	
	Over Temperature	80°C (Surround air temperature with full load)	
Protection type : Shut down o/p voltage, recovers automatically after temperature goes down			
Short Circuit	When short circuit occurred, enter Hicc-up mode with auto-recovery		
Environment	Working Temp.	-25 ~ +80°C (with -40°C cold start. Also refer to output load derating curve)	
	Working Humidity	5 ~ 95% RH (non-condensing)	
	Storage Temp., Humidity	-40 ~ 85°C, 10 ~ 95% RH	
	Working Altitude	0 ~ 2,500m	
	Shock	IEC60068-2-27, 30G (300m/S <sup>2</sup> ) for a duration of 18ms	
	Vibration	IEC60068-2-6, 10Hz to 500Hz @ 30m/S <sup>2</sup> (3G peak); 60 min per axis for all X, Y, Z direction	
Safety & EMC	Withstand Voltage	I/P-O/P:4KVAC I/P-FG:1.5KVAC O/P-FG:1.5KVAC	
	Safety Standards	UL/cUL508, UL/cUL60950-1, EN60950-1, CB scheme	
	EMI conduction & Radiation	Compliance to EN55022 (CISPR22) and FCC Class B	
	Harmonic Current	Compliance to EN61000-3-2,-3	
	EMS Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11,12, EN55024, EN61000-6-2	
Others	MTBF	500khrs min. Telcordia SR-332 (25°C)	
	Dimension	85*121*124.1mm (W*H*D)	
	Packing	1.1Kg	0.96Kg
Note	All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25oC of ambient temperature.		

### Dimensions

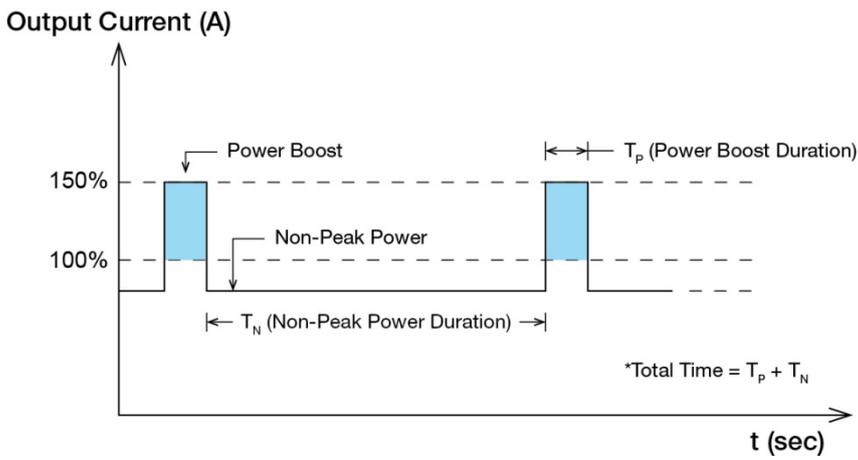


unit = mm

**BLOCK DIAGRAM**



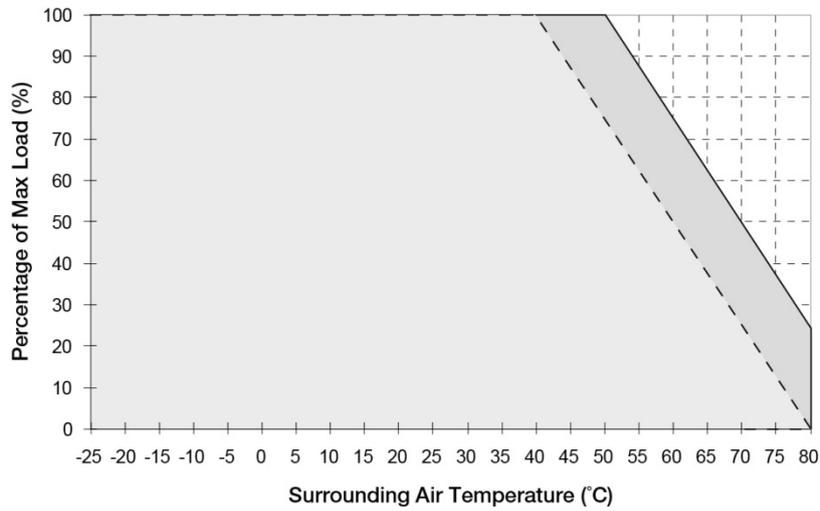
**PEAK LOADING**



$$\text{Duty cycle (\%)} = \frac{T_p}{T_p + T_N}$$

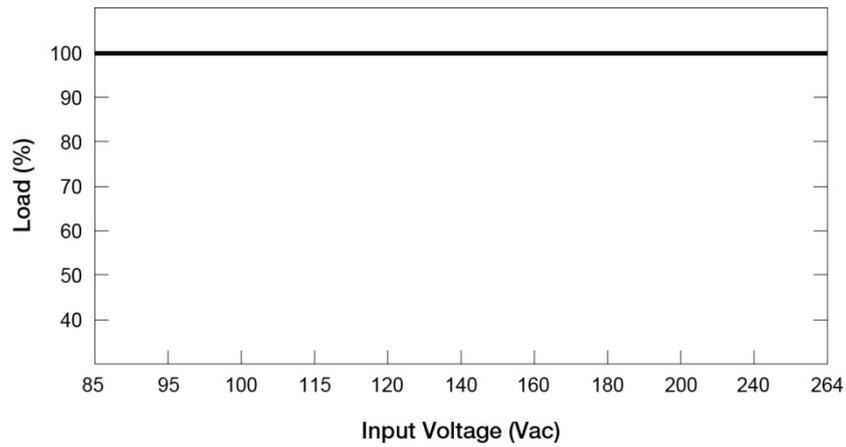
$$\text{Average Output Power (P}_{Avg}\text{)} = \frac{(\text{Power Boost} \times T_p) + (\text{Non-Peak Power} \times T_N)}{T_p + T_N}$$

### DERATING CURVE



### OUTPUT DERATING VS INPUT VOLTAGE

No derating.



### Ordering Information

Available Model	Model Name	Description
	DRP024V240W1BN	240W DIN-Rail 24VDC/10A Power Supply with universal 100 to 240VAC input, extended type, -25~80°C
	DRP048V240W1BN	240W DIN-Rail 48VDC/5A Power Supply with universal 100 to 240VAC input, extended type, -25~80°C