

# DPS Series 240W to 300W AC-DC DIN Rail Power Supplies



Technical Datasheet

## Key Features

- 24 & 48 VDC
- Universal Input: 90-264VAC / 120-375VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated



## Technical Specification - 240W & 300W Output

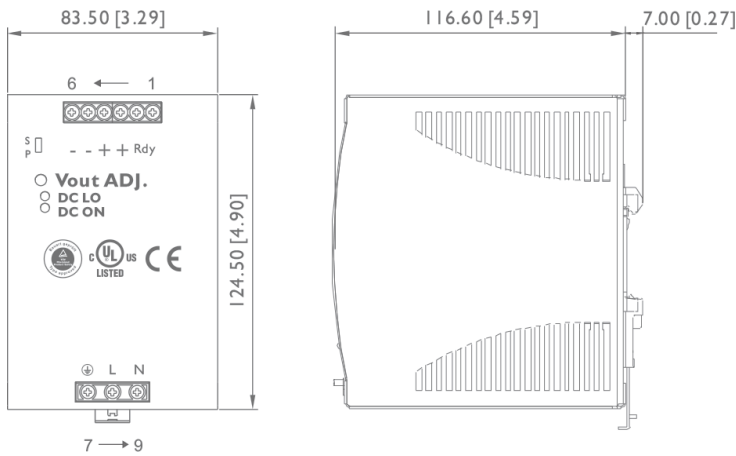
Model	DPS-1-240-24DC	DPS-1-300-24DC*	DPS-1-240-48DC	DPS-1-300-48DC*
Input Voltage	90-264VAC / 120-375VDC			
Output Wattage	240W	300W	240W	300W
Output Voltage / Power Dissipation	24VDC / 35W	24VDC / 42W	48VDC / 32W	48VDC / 40W
Output Current	10A	12.5A	5A	6.5A
Efficiency (min/typ)	87/89%	87/89%	88/90%	88/90%
<b>General Specification</b>				
Approval	cURus			
Isolation Voltage	3000VAC/4242VDC			
Isolation Resistance	100MΩ @ 500VDC			
Ambient Temperature	-40 to +71°C	-30 to +71°C	-40 to +71°C	-30 to +71°C
Derating	(61 to 71°C) 2.5%/°C			
Storage Temperature	-40 to +85°C			
Relative Humidity	20 to 95% RH			
Cooling	Free air convection			
Dimensions	L124.5 x W83.5 x D123.6 mm			
Weight	1380g	1400g	1380g	1400g
Case Material	Metal			
<b>Input Specifications</b>				
Rated Input Voltage	115 ~ 230VAC			
Input Voltage Range	90 to 264VAC, 210 to 375VDC			
Line Frequency	47 ~ 63Hz			
Power Factor @ 115VAC	0.6 Typical (0.61 Measured)			
Power Factor @ 230VAC	0.75 Typical (0.77 Measured)			
Inrush Current (115 / 230VAC)	30 / 60A	35 / 65A	30 / 60A	35 / 65A
<b>Output Specifications</b>				
Output Voltage Accuracy	+1%			
Minimum Load	0%			
Line Regulation	±0.5%			
Load Regulation	±1%			
Turn On Time	1000ms after AC applied to input at full resistive load			
Voltage Fall Time	150ms			
Voltage Rise Time	150ms			
Hold Up Time (115 / 230VAC)	25 / 30ms			
Temperature Coefficient	±0.03%/°C			
Ripple & Noise	100mV			
Voltage Trim Range	22.5 ~ 28.5VDC		47 ~ 56VDC	
DC ON & LOW Indicator (Green & Red LED)	17.6 ~ 19.4VDC		37 ~ 43VDC	
<b>Control &amp; Protection</b>				
Rated Overload Protection	120 ~ 145%			
Over Voltage Protection	30 ~ 33VDC		60 ~ 66VDC	
Output Short Circuit	Fold Forward			

# DPS Series 240W to 300W AC-DC DIN Rail Power Supplies



Technical Datasheet

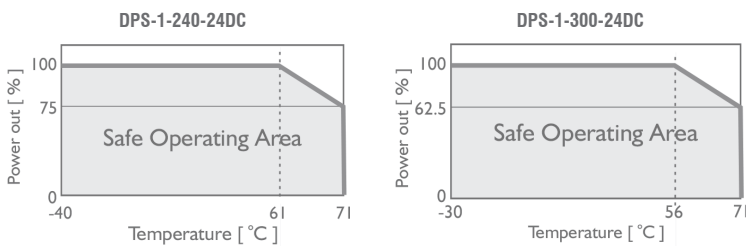
## Dimensions (mm)



## Pin Connections

Key		Description
1, 2	RDY	DC OK output for relay (24V model only)
3,4	V+	Positive output terminal
5,6	V-	Negative output terminal
7		Ground this terminal to minimise high-frequency emissions
8	L	Input terminals (phase conductor, no polarity at DC input)
9	N	Input terminals (neutral conductor, no polarity at DC input)
	DC ON	Operation indicator LED
	DC LO	DC LOW voltage indicator LED
	Vout ADJ.	Trimmer potentiometer for Vout adjustment
	S / P	Single / Parallel select switch

## Derating



## Installation

### Ventilation / Cooling

Normal convection  
All sides 25mm free space  
For cooling recommended

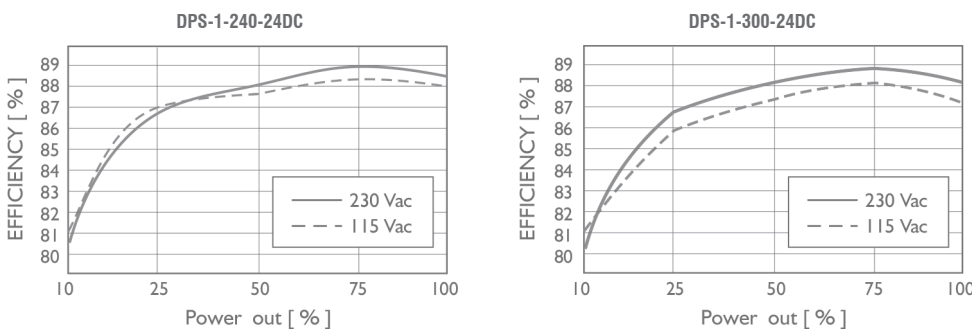
### Connector Size Range

AWG24-10 (0.2 ~ 4mm<sup>2</sup>) flexible / solid cable,  
- Input connector can withstand torque at maximum 9 pound-inches  
- Output connector can withstand torque at maximum 5.5 pound-inches  
8 m/m stripping cable end recommends  
Use copper conductors only, 60 / 75°C

## Construction

Easy snap-on mounting onto the DIN-Rail (TS35/7.5 or TS35/15), unit sits safely and firmly on the rail.

## Typ. Efficiency Curve



## Circuit Schematic

