

# LPS Series 480W

## AC-DC DIN Rail Power Supplies



### Key Features

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



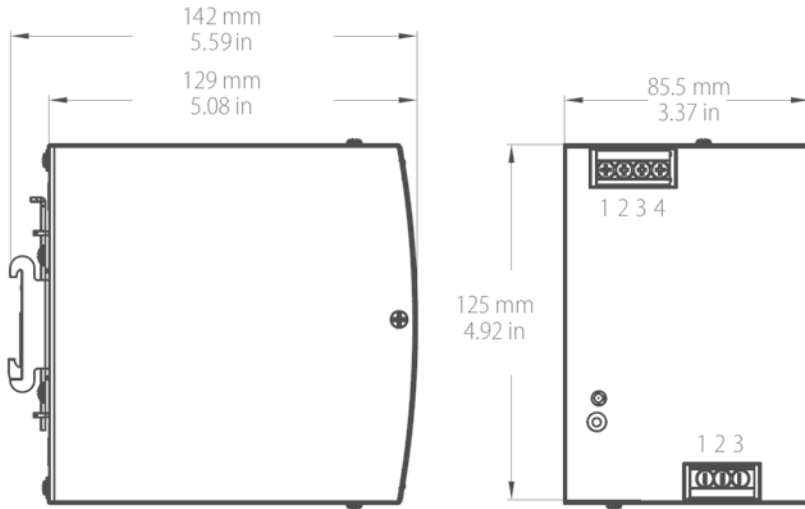
### Technical Specification - 480W Output

Model	LPS-1-480-24DC
Input Voltage	90-264VAC / 120-375VDC
Output Wattage	480W
Output Voltage / Power Dissipation	24VDC / 63W
Output Current	20A
Efficiency	92%
<b>General Specification</b>	
Approval	cURus
Isolation Voltage	3000VAC/4242VDC
Isolation Resistance	100MΩ @ 500VDC
Ambient Temperature	-20 to +70°C
Derating	(55 to 70°C) 2.5%/°C
Storage Temperature	-40 to +85°C
Relative Humidity	10 to 95% RH
Cooling	Free air convection
Dimensions	L125 x W85.5 x D129 (142 inc. DIN rail mount) mm
Weight	1500g
Case Material	Metal
<b>Input Specifications</b>	
Rated Input Voltage	115 ~ 230VAC
Input Voltage Range	90 to 264VAC, 127 to 375VDC
Line Frequency	50/60Hz
Power Factor @ 115VAC	0.99 Typical (0.99 Measured)
Power Factor @ 230VAC	0.97 Typical (0.97 Measured)
Inrush Current (115 / 230VAC)	20 / 35A
<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	150mVp-p
Voltage Trim Range	22.5-28.5VDC
<b>Control &amp; Protection</b>	
Rated Overload Protection	105-130%
Over Voltage Protection	29-33VDC
Output Short Circuit	Shutdown Output Voltage with Auto Recovery

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## Dimensions (mm)



## Pin Connections

Input		Output	
Pin No.	Description	Pin No.	Description
1	FG (⊕)	1, 2	DC OUTPUT V-
2	AC / N or DC-	3, 4	DC OUTPUT V+
3	AC / L or DC+		

## Installation

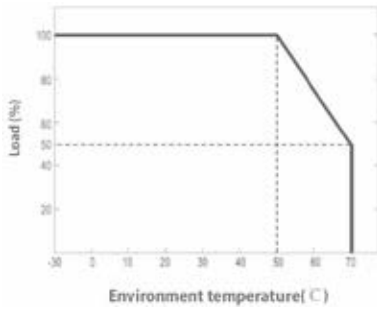
**Ventilation / Cooling**  
Normal convection  
All sides 25mm free space  
For cooling recommended

**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

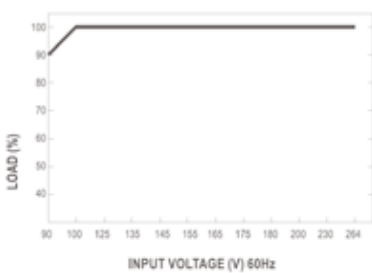
## Construction

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

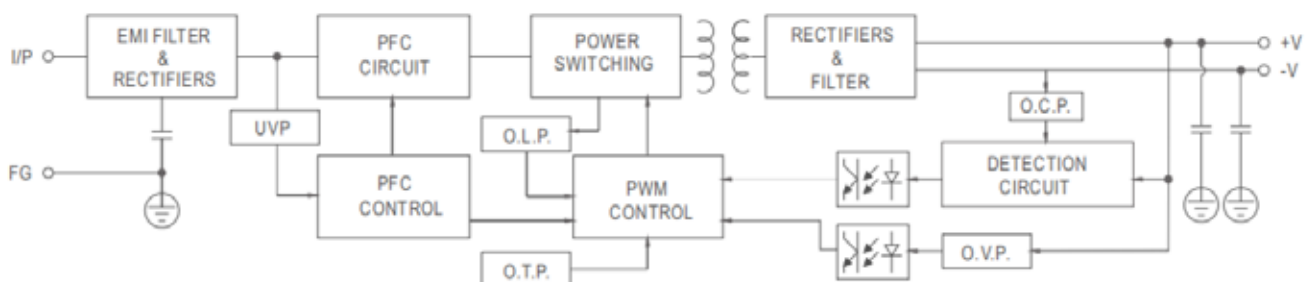
## Derating Curve



## Minus Output & Input Voltage Curves



## Circuit Schematic



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## Wire Gauge Template Selector

A Cross-Section of a Copper Conductor (Electric Wire)	Current-Carrying Capability	Voltage 230V	Rated Current	Current Limiting
1.5	19	4.1	10	16
2.5	27	5.9	16	25
4.0	38	8.9	25	32
6.0	46	10.1	32	40
10.0	70	15.4	50	63