

# LPS Series Three Phase AC-DC DIN Rail Power Supplies



## Key Features

- 24 VDC
- 3 Phase Input: 340-550VAC / 480-780VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated



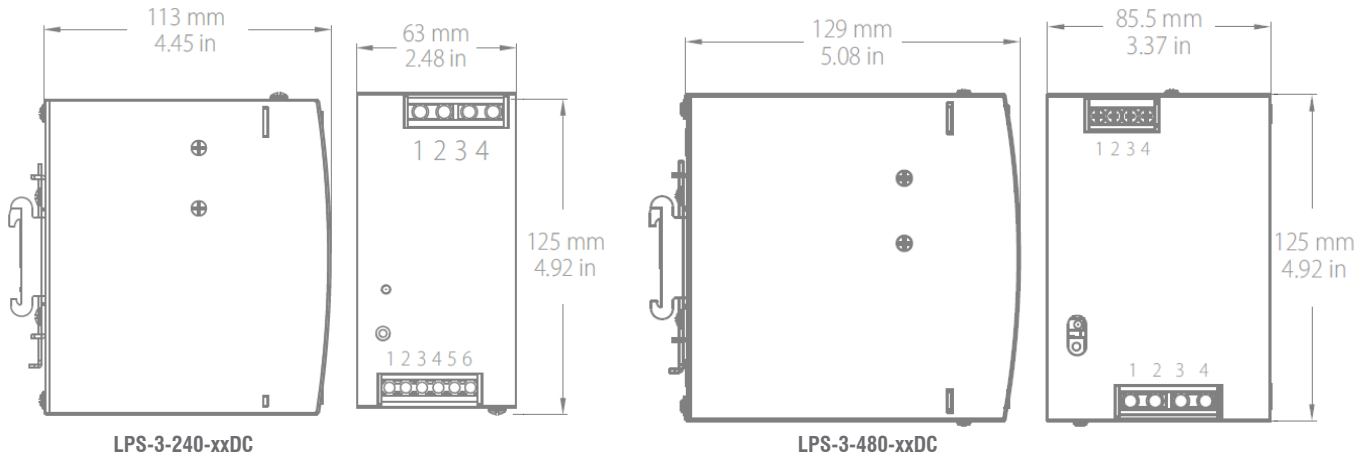
## Technical Specification

Model	LPS-3-240-24DC	LPS-3-480-24DC
Input Voltage	340-550VAC / 480-780VDC	
Output Wattage	240W	480W
Output Voltage	24VDC	24VDC
Output Current	10A	20A
Efficiency	90%	92%
<b>General Specification</b>		
Isolation Voltage	3000VAC/4242VDC	
Isolation Resistance	100MΩ @ 500VDC	
Ambient Temperature	-30 to +70°C	
Derating	(60 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 W63 x D113 (126.5 inc. DIN rail mount) mm	L124 x W85 x D129 (142.5 inc. DIN rail mount) mm
Weight	1000g	1510g
Case Material	Metal	
<b>Input Specifications</b>		
Rated Input Voltage	115 - 230VAC (auto select)	
Input Voltage Range	340-550VAC, 480-780VDC	
Line Frequency	50/60Hz	
Power Factor @ 400VAC	0.53 Typical	
Power Factor @ 500VAC	0.52 Typical	
Inrush Current (400VAC)	Cold Start 50A	
<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 (400VAC)	20ms	
Temperature Coefficient	±0.03%/°C	
Ripple & Noise	100mV	
Voltage Trim Range	22.5-28.5VDC	
DC ON & LOW Indicator (Green & Red LED)	17.6-19.4VDC	
<b>Control &amp; Protection</b>		
Rated Overload Protection	105-130%	
Over Voltage Protection	30-36VDC	
Output Short Circuit	Hiccup Mode	Fold Forward

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## Dimensions (mm)



## Terminal Assignment

	Pin No.	LPS-3-240-xxDC	LPS-3-480-xxDC
Input	1	AC / L1	PE (⊖)
	2	AC / L2 or DC-	AC / L3
	3	AC / L3 or DC+	AC / L2
	4	FG (⊕)	AC / L1
Output	1, 2	DC OUTPUT V+	DC OUTPUT V+
	3, 4	DC OUTPUT V-	DC OUTPUT V-
	5,6	DC OK Relay Contact	

## 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 striping cable end recommends  
 Use copper conductors only, 60 / 75°C

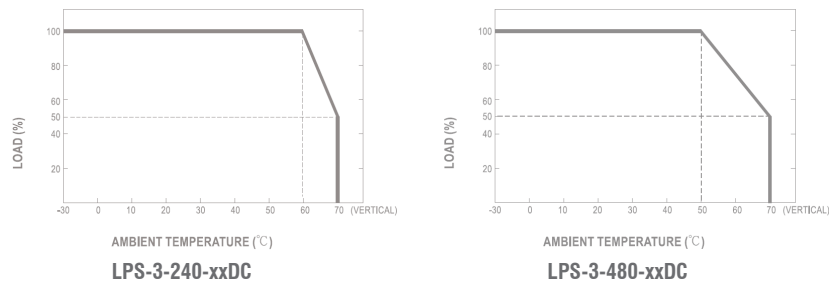
## DC OK Relay Contact (optional for LPS-3-480)

<b>Contact Close</b>	PSU turns on / DC OK
<b>Contact Open</b>	PSU turns off / DC Fail
<b>Contact Ratings (max.)</b>	60VDC / 0.3A, 30VDC / 1A, 30VAC / 0.5A resistive load

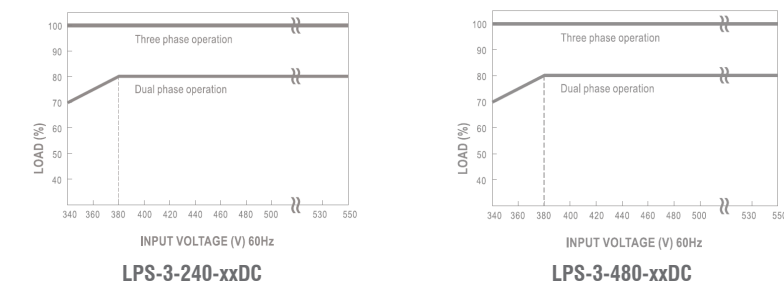
## Construction

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



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## Circuit Schematic

