

LPS Series Three Phase AC-DC DIN Rail Power Supplies

IMO

Technical Datasheet

Key Features

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



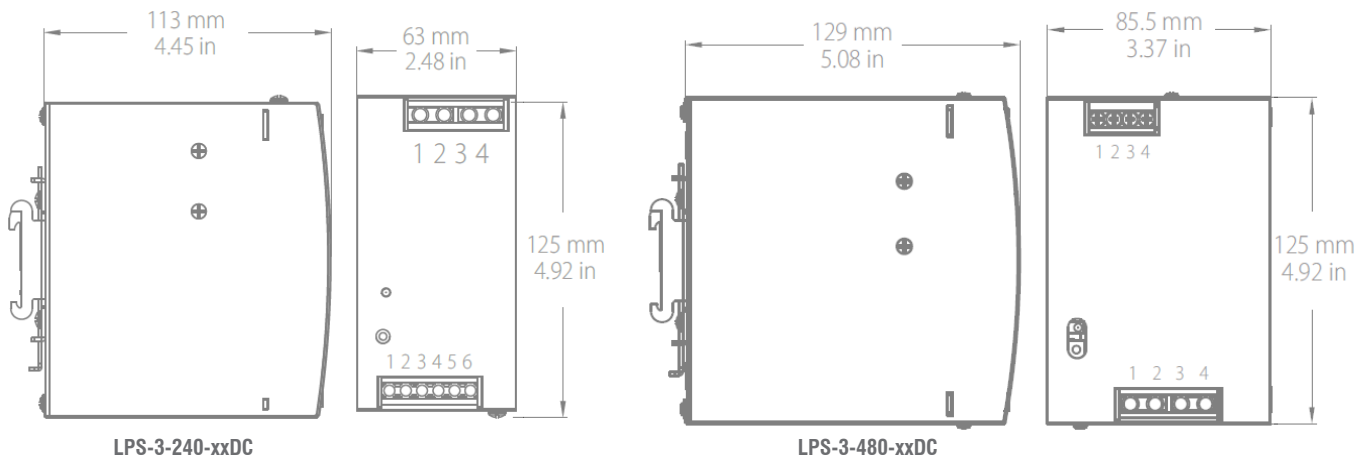
Technical Specification

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%	
General Specification				
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			
Input Specifications				
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			
Output Specifications				
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			
Control & Protection				
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 ~ 4mm²) 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

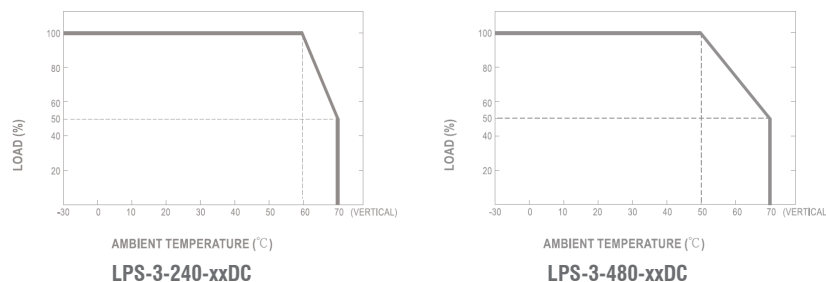
DC OK Relay Contact (optional for LPS-3-480)

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

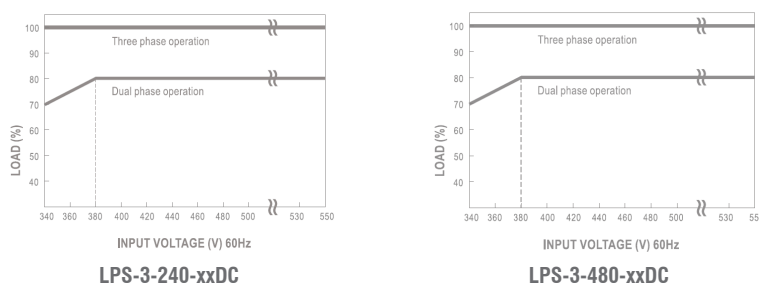
Construction

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

