

DPS Series 3 Phase 120W AC-DC DIN Rail Power Supplies



Key Features

- 12 & 24 VDC
- 3 Phase Input: 340-575VAC / 480-820VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated



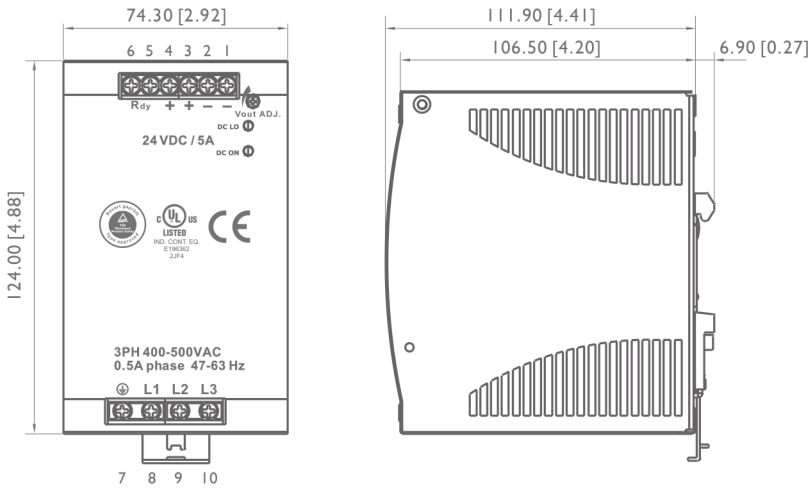
Technical Specification - 120W Output

Model	DPS-3-120-12DC	DPS-3-120-24DC
Input Voltage	340-575VAC / 480-820VDC	
Output Wattage	120W	
Output Voltage	12VDC	24VDC
Output Current	10A	5A
Efficiency (min/typ)	85/87%	87/89%
General Specification		
Approval	cURus	
Isolation Voltage	3000VAC/4242VDC	
Isolation Resistance	100MΩ @ 500VDC	
Ambient Temperature	-40 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 x W74.3 x D118.8 mm	
Weight	800g	
Case Material	Metal	
Input Specifications		
Rated Input Voltage	400 ~ 500VAC	
Input Voltage Range	340 to 575VAC, 480 to 820VDC	
Line Frequency	47 ~ 63Hz	
Inrush Current (400VAC)	typ. 10A, max. 12A	
Output Specifications		
Output Voltage Accuracy	+1%	
Minimum Load	0%	
Line Regulation	±1%	
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)	20ms	
Temperature Coefficient	±0.03%/°C	
Ripple & Noise	100mV	
Voltage Trim Range	11.4 ~ 14.5VDC	22.5 ~ 28.5VDC
DC ON & LOW Indicator (Green & Red LED)	10 ~ 11.2VDC	17.6 ~ 19.4VDC
Control & Protection		
Rated Overload Protection	115 ~ 135%	
Over Voltage Protection	15 ~ 16.5VDC	30 ~ 33VDC
Output Short Circuit	Hiccup Mode	

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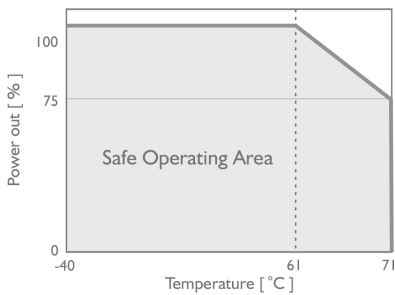
Dimensions (mm)



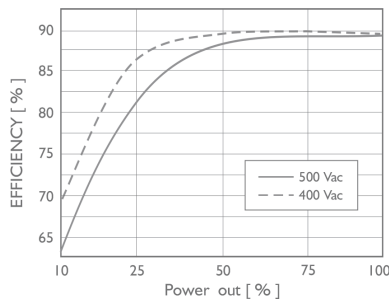
Pin Connections

Key		Description
1, 2	V -	Negative output terminal
3, 4	V +	Positive output terminal
5, 6	RDY	DC OK output for relay (24V model only)
7		Ground this terminal to minimise high-frequency emissions
8	L1	Input terminals
9	L2	Input terminals
10	L3	Input terminals
	DC ON	Operation indication LED
	DC LO	DC LOW voltage indicator LED
	Vout ADJ.	Trimmer-potentiometer for Vout adjustment

Derating



Typ. Efficiency Curve



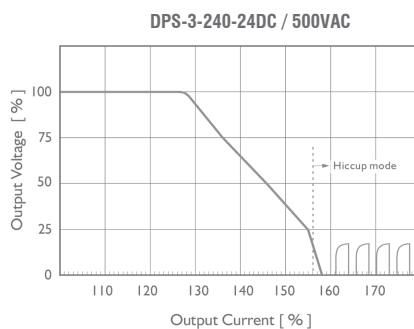
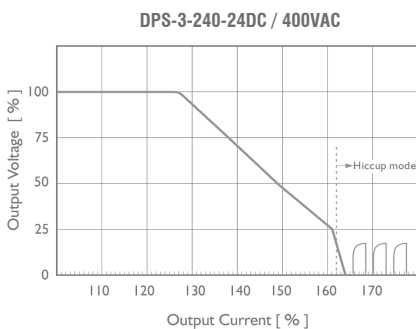
Installation

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

Connector Size Range

Input and RDY, P, G Control: AWG24-10 (0.2 ~ 4mm²) flexible / solid cable
- Input connector can withstand torque at maximum 9 lb/in
- Output connector can withstand torque at max. 5.5 lb/in
8 m/m stripping cable end recommends
Use copper conductors only, 60 / 75°C

Typ. Current Limited Curve



Construction

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

Circuit Schematic

