

120W, 240W, 480W & 960W 3 Phase DIN Rail Mount Power Supplies

Features

- ◆ Low Cost
- ◆ 12V, 24V or 48V Outputs
- ◆ Wide Range 340 to 575VAC Input
- ◆ Parallel Function Switch (240 & 480W)
- ◆ Current Share (960W)
- ◆ -40⁽³⁾ to +71°C Operation



Key Market Segments & Applications



Industrial



RoHS

Specifications			DPP120-xx-3	DPP240-xx-3	DPP480-xx-3	DPP960-xx-3
AC Input Voltage range (1)	VAC		340 - 575VAC, three phase			
Input Frequency	Hz		47 - 63Hz			
DC Input Voltage range	VDC		480 - 820VDC*			
Inrush Current (380-480VAC)	A		10A	20A	20A	30A
Power Factor (2)	-		0.55	0.55	0.65	0.8
Input Current (400VAC) (typ)	A		0.36A	0.65A	1.1A	1.72A
Output Voltage Accuracy	%		-0, +1% of Nominal			
Line Regulation	%		±1%			
Load Regulation	%		±1% (±5% when set in parallel mode)			
Ripple and Noise (20MHz BW)	mV		100mV	100mV	100mV	80mV
Overcurrent Protection (Typ)	-		115 - 135%	120 - 140%	110 - 135%	110 - 130%
Overvoltage Protection	V		See model selector			
Overtemperature Protection	-		Yes, auto recovery			
Hold Up Time (380-480VAC)	ms		> 20ms	> 20ms	> 20ms	> 15ms
Parallel operation (up to 90% load)	-		Set in parallel (droop) mode - up to 2 units			
LED Indicators	-		Green LED = On, Red LED = DC Output Low			
DC Good Relay (24V models only)	-		0.3A rated normally open relay contacts, closes when output is above 17.6 - 19.4V			
Operating Temperature	-		-40 ⁽³⁾ to +71°C (Derate linearly 2.5%/°C from 61 to 71°C, 3.5%/°C for DPP960) ³			
Storage Temperature	-		-40 to +85°C			
Operating Humidity (non condensing)	-		20 - 95% RH			
Cooling	-		Convection. Recommend 1" clearance on all sides			
Withstand Voltage	-		Input to Output 3kVAC, Input to Ground 1.5kVAC for 1 min.			
Isolation Resistance	-		>100M at 25°C & 70%RH, Output to Ground 500VDC			
Vibration	-		IEC 60068-2-6. 10- 500Hz, 2G on X, Y & Z axes			
Shock	-		IEC 60068-2-27. Half sinewave, 4G, 22ms, 3 times each face			
Vibration (Operating)	-		IEC 60068-2-6 (Mounting by rail: Random wave, 10-500 Hz, 2G, ea. along X, Y, Z axes 10 min/cycle, 60 min)			
Shock (Operating)	-		IEC 60068-2-27 (Half sine wave, 4G, 22ms, 3 axes, 6 Faces, 3 times for each face)			
Safety Agency Approvals	-		UL508 Listed, UL60950-1, EN60950-1, CE			
Conducted & Radiated EMI	-		EN55022 class B			
Immunity	-		IEC 61000-4-2, -3, 4, -5, -6, -8, -11			
Weight (Typ)	g		800g	1100g	1720g	3400g
Size (LxWxH)	mm		112 x 74 x 124mm	112 x 89 x 124mm	112 x 150 x 124mm	112 x 275.8 x 126.2
Size (LxWxH)	in		4.41 x 2.91 x 4.88"	4.41 x 3.5 x 4.88"	4.41 x 5.91 x 4.88"	4.41 x 10.86 x 4.97"
Switching Frequency	kHz		70kHz	25kHz	80kHz	52kHz
MTBF (Bellcore Issue 6 @40°C, GB)	Hours		527,000	488,000	411,000	352,000
Case material	-		Metal			
Warranty	yrs		Three years			

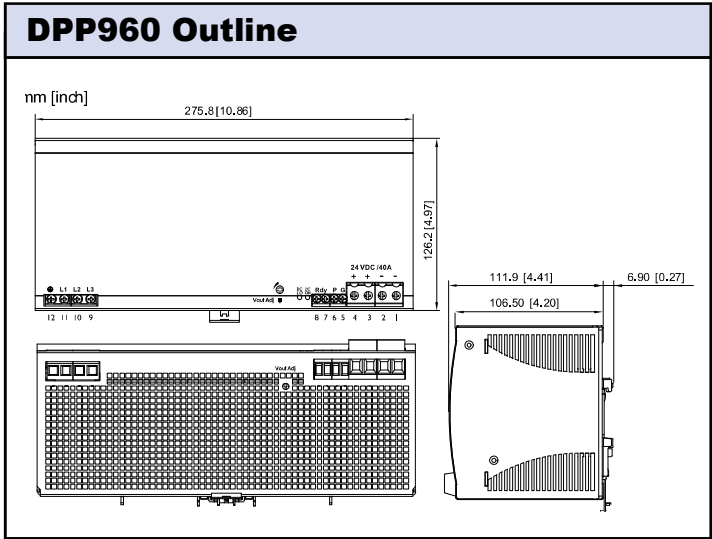
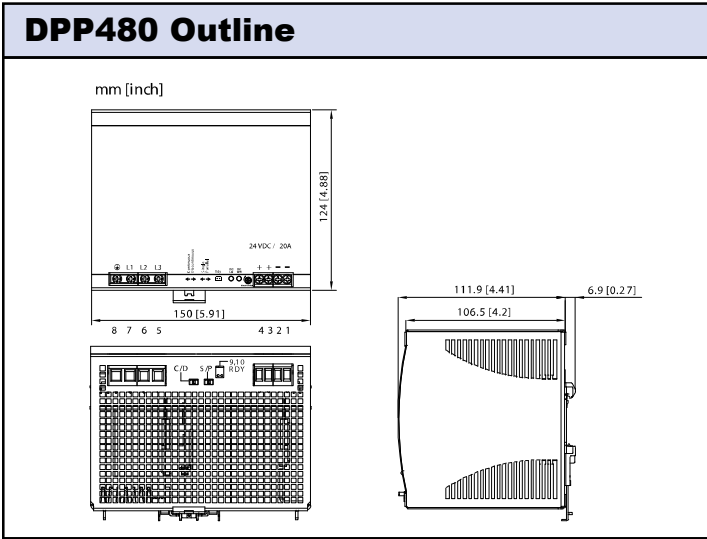
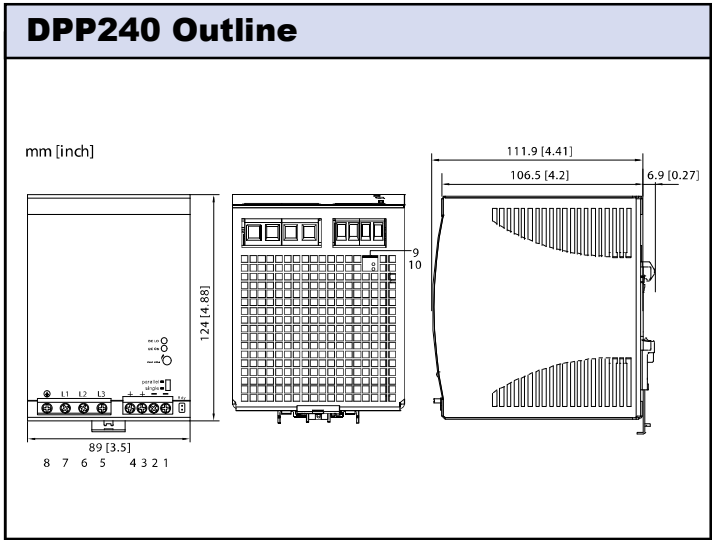
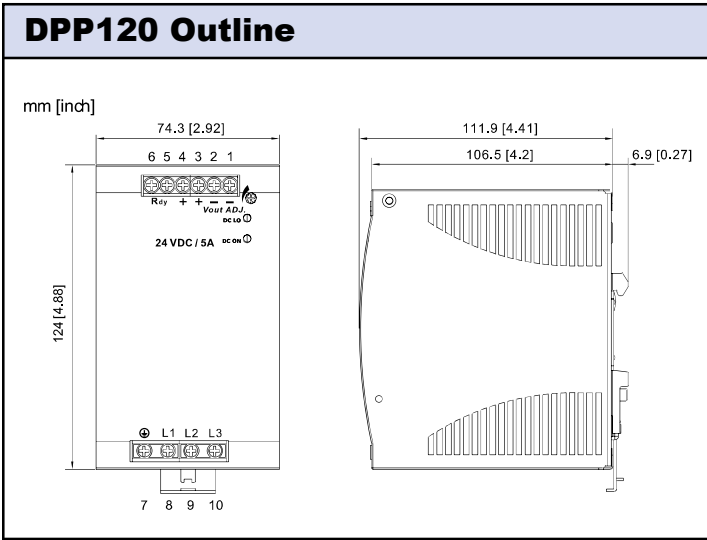
(1) Bi-phase input is permissible, but output load must be derated to 75% load

(2) Passive, meets EN61000-3-2

(3) DPP480 -30°C

*Safety certified for AC input only

Model Selector					
Model	Voltage (V)	Adjust Range (V)	Output Current (A)	Overvoltage (V)	Efficiency (%)
DPP120-12-3	12V	11.4 - 14.5V	10A	14.5 - 17.4V	87%
DPP120-24-3	24V	22.5 - 28.5V	5A	30 - 33V	89%
DPP240-24-3	24V	22.5 - 28.5V	10A	30 - 33V	90%
DPP480-24-3	24V	22.5 - 28.5V	20A	30 - 33V	90%
DPP960-24-3	24V	22.5 - 28.5V	40A	30 - 33V	92%
DPP240-48-3	48V	47 - 56V	5A	60 - 68V	91%
DPP480-48-3	48V	47 - 56V	10A	60 - 68V	91%
DPP960-48-3	48V	47 - 56V	20A	60 - 68V	93%



Other DIN Rail Products

DPP	15W to 480W
DSP	10W to 100W low profile
DLP	75W to 240W single phase

Snap-on Mounting: snap onto DIN Rail TS35/7.5 or TS35/15. (no tools required)

For Additional Information, please visit
<https://product.tdk.com/info/en/products/power/index.html>

