

15-100W, 5-48V Output DIN Rail Mount Power Supplies

Features

- ◆ Low Cost
- ◆ Universal Input
- ◆ NEC NFPA70 Class 2⁽²⁾
- ◆ UL508 Listed
- ◆ Class 1, Division 2 (ISA 12.12)⁽³⁾
- ◆ -10 to +71°C Operation



Key Market Segments & Applications



Industrial



RoHS

Specifications		DPP15	DPP25/30	DPP50	DPP100
AC Input Voltage range	VAC	85 - 264VAC			85 - 132VAC 176 - 264VAC
Input Frequency	Hz	47 - 63Hz			
DC Input Voltage range	-	90 - 375VDC*			210 - 375VDC*
Inrush Current (115 / 230VAC)	A	<35A	35 / 45A	35 / 50A	35 / 55A
Power Factor	-	Meets EN61000-3-2 Class A			
Input Current (230VAC)	A	0.25	0.4	0.7	1.2
Leakage Current	mA	<0.75mA, 265VAC, 63Hz			
Output Voltage Accuracy	%	±1% (24V outputs preset at 24.5V)			
Line Regulation	%	< 0.5%			
Load Regulation	%	< 0.5%			
Ripple and Noise	mV	50mV			
Overcurrent Protection (Typ)	-	>110% (fold forward type)			
Overvoltage Protection	V	120 - 137.5%			
Hold Up Time (115VAC input)	ms	> 20ms			
Parallel switch	-	No			Yes
LED Indicator	-	Green LED = On			
Operating Temperature	°C	-10* to +71°C (Derate linearly 5%/°C from 61 to 71°C) * -25°C start up, DPP25-50 only			
Storage Temperature	°C	-25 to +85°C			
Operating Humidity	-	20 - 90% RH (non condensing)			
Cooling (1)	-	Convection			
Withstand Voltage	-	Input to Output 3kVAC for 1 min.			
Shock	-	Half sine wave, 4G, 22ms, 3 times per face, X, Y, Z			
Vibration	-	10-500Hz (20 min sweep) 0.002G ² /Hz, 1 Grms acceleration X, Y, Z, 1 hour			
Isolation Resistance	-	>100M at 25C & 70%RH, Output to Ground 500VDC			
Safety Agency Approvals	-	IEC/UL/CSA/EN62368-1, 60950-1, UL508, NEC Class 2(2), ISA 12.12(3), CE Mark			
Emissions	-	EN55011, EN55032 class B Radiated & Conducted, EN61000-6-3			
Immunity	-	EN61000-6-2, EN61000-4-2 Level 4, EN61000-4-3, EN61000-4-6 Level 3, EN61000-4-4 Level 4 (I/P) Level 3 (O/P), EN61000-4-5 Level 3 L-N, Level 4 L/N-PE, EN61000-4-8, EN61000-4-11			
Weight (Typ)	g	130	260	390	
Size (LxWxH)	mm	96.8 x 22.9 x 75mm	91 x 45 x 75mm	96.8 x 72.6 x 75mm	
Size (LxWxH)	in	3.81 x 0.9 x 2.95"	3.58 x 1.77 x 2.95"	3.81 x 2.86 x 2.95"	
Case material	-	Flame Retardant Polycarbonate (UL94 V-0)			
MTBF (MIL-HDBK-217F, GF25)	Hours	287,000	>288,000	269,000	239,000
Warranty	yrs	Three years			

(1) Recommend 1" clearance on all sides.

(2) See model selector. Evaluated to NEC NFPA70 Class 2 output per UL1310.

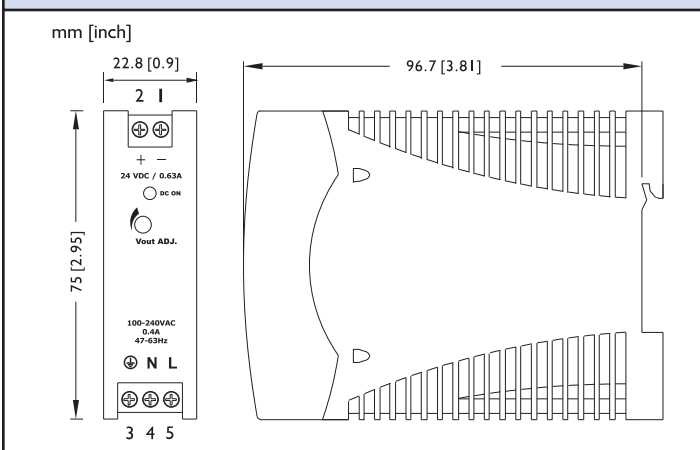
(3) See model selector.

*Safety certified for AC input only

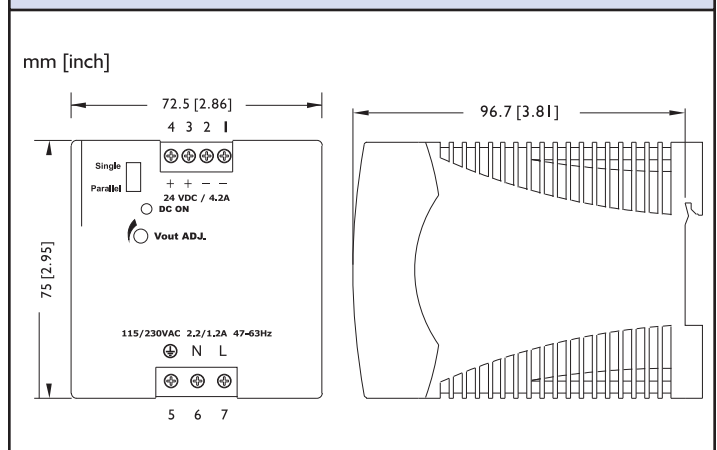
Model Selector

Model	Voltage (V)	Voltage Adjust (V)	Current (A)	Power (W)	Effic. (typ) %	UL1310 Class 2	ISA12.12 Class 1 Div 2
DPP25-5	5	5-6	5.0	25	78	-	Yes
DPP30-12	12	9.9-12.1	2.5	30	83	Yes	Yes
DPP50-15	15	11.9-15.1	3.4	50	85	Yes	Yes
DPP15-24	24	22.5-28.5	0.63	15	81	Yes	-
DPP30-24	24	22.5-28.5	1.3	30	84	Yes	Yes
DPP50-24	24	22.5-28.5	2.1	50	86	Yes	Yes
DPP100-24	24	22.5-28.5	4.2	100	87	-	-
DPP50-48	48	48-56	1.05	50	87	Yes	Yes

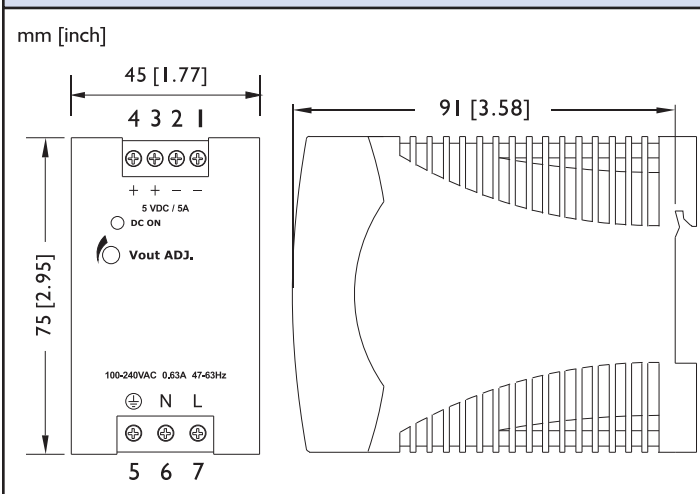
DPP15 Outline



DPP100 Outline



DPP25-DPP50 Outline



Installation:

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

Cooling - Normal Convection

Clearance - 25mm all sides

Connection - Use copper wire 0.5-2.5mm² (AWG24-12)

Other DIN Rail Products

DSP/DPP	10W to 480W power supplies
DLP	75W to 240W power supplies
DLP-PU	Redundancy Module (20A)
R Series	3A to 30A single & three phase EMI Filters

For additional information, please visit
<https://product.tdk.com/en/power/>

