

# DRP BN1PH Series

60 - 480 WATTS AC / DC DIN RAIL

## FEATURES

- 24VDC 60W - 480W
- 1Ph AC/DC Power Supply
- DIN Rail Mountable
- Power will not de-rate for the entire input voltage range
- Power Boost of 150% for 3 seconds
- Conformal coating on PCBAs
- To protect against common dust and chemical pollutants
- Operating Temp -25C to 80C
- MTBF DRP60W & 120W > 800 000hrs
- MTBF DRP240W & 480W > 500 000hrs
- Overvoltage / Overcurrent / Over Temperature / Protection



## SPECIFICATIONS

OUTPUT	
Output Voltage	24Vdc, 48Vdc
Output Voltage Range	24V - 28Vdc, 48V-56Vdc
Output Current	See Selection Table
Indicator	Green LED (DC OK)
Output Power	60W - 480W, See Selection Table
Line Regulation	< 0.5% typ. (@ 85-264Vac input, 100% load)
Load Regulation	< 1% typ. (@ 85-264Vac input, 0-100% load)
PARD (20MHz)	< 200mVpp
Hold-up Time	> 20ms @ 115Vac & 230Vac
INPUT	
Input Voltage Range	85-264VAC 120-375 VDC
Input Frequency	47-63Hz
Input Current	DRP60: <0.8A @ 230Vac DRP120: < 1.2A @ 230Vac DRP240: < 1.3A @ 230Vac DRP480: <3A @ 230Vac
Efficiency at 100% Load	> 91.0% @ 115VAC >93.0% @ 230VAC
Leakage Current	< 1mA @ 240VAC
PROTECTIONS	
Overvoltage	32V, +/-10% SELV Ouput, Hiccup Mode, Non-Latching (Auto-Recovery)
Overload/Overcurrent	> 150% of rated load current, Hiccup Mode, Non-Latching (Auto-Recovery)
Over Temperature	< 80C Surrounding Air Temperature @ 100% load, Non-Latching (Auto Recovery)
Short Circuit	Hiccup Mode, Non-Latching (Auto-Recovery) when the fault is removed)
Degree of Protection	IP20
Protection against shock	Class 1 with PE (Primary Earth) connection
Galvanic Isolation	Input to Output: 4.0KVAC Input to Ground: 1.5KVAC Output to Ground: 1.5KVAC
RELIABILITY	
MTBF	DRP60W & DRP20W: 800,000 hrs as per Telcordia SR-332 I/P: 115Vac, O/P: 100% load, Ta 25C DRP240W & DRP480W: 500,000 hrs as per Telcordia SR-332 I/P: 115Vac, O/P: 100% load, Ta 25C
Expected Life Time	10 years (230Vac 50% load @ 40C)

ENVIRONMENTAL	
Operating Temperature	-25°C to +80°C
Storage Temperature	-25°C to +85°C
Power De-rating	> 50°C (2.5% / °C)
Operating Humidity	< 95% RH (Non-Condensing)
Operating Altitude	2,500m
MECHANICAL	
Case Cover	Aluminium
Dimensions / Weight	DRP60: 121 x 32 x 119.3mm, 0.33Kg DRP120: 121 x 32 x 123.1mm, 0.72kg DRP240: 121 x 85 x 124.1mm, 1.1kg DRP480: 121 x 144 x 118.6mm, 1.37kg
Indicator	Green LED (DC OK)
Input Terminal	3 Pins (Rated 300V/30A)
Output Terminal	4 Pins (Rated 300V/30A)
Input Wire	DRP60: AWG 22-12 DRP120: AWG 20-12 DRP240: AWG 16-14 DRP480, AWG 18-10
Output Wire	DRP60: AWG 22-12 DRP120: AWG 20-12 DRP240: AWG 16-14 DRP480: AWG 18-10
Mounting Rail	TS35 DIN Rail in accordance with EN60715
IEC AC Input	See PBB1P Series for IEC Input option
Drip Hood Cover	See PBB1P Series for Drip Hood Cover option
STANDARDS	
C-Tick	AS/NZS CISPR11 Group 1 Class A.
Electronic Equipment	EN50718 / IEC62103 in Power Installations
Electrical Safety	SIQ to EN60950-1, UL/cUL recognized to UL60950-1, CSA C22.2 No. 60950-1, CB scheme to IEC60950-1
Industrial Control	UL/cUL listed to UL508 and CSA C22.2 No. 107.1-01, CSA to CSA C22.2 No. 107.1-01 (File No. 181564)
CE	In conformance with EMC Directive 2004/108/EC and Low Voltage Directive 2006/95/EC
Materials & Parts	RoHS Directive 2011/65/EU Compliant

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## SELECTION TABLE

MODEL NUMBER	OUTPUT VOLTAGE	OUTPUT CURRENT	POWER BOOST (5 SECS)	OUTPUT POWER
DRP024V060W1BN	24Vdc	2.5A	3.75A	60W
DRP024V120W1BN	24Vdc	5A	7.5A	120W
DRP024V240W1BN	24Vdc	10A	15A	240W
DRP024V480W1BN	24Vdc	20A	30A	480W
DRP048V060W1BN	48Vdc	1.25A	1.8A	60W
DRP048V120W1BN	48Vdc	2.5A	3.75A	120W
DRP048V240W1BN	48Vdc	5A	7.5A	240W
DRP048V480W1BN	48Vdc	10A	15A	480W

## TECHNICAL ILLUSTRATIONS

