

Rectifier DPR 300B-48

The Power behind.



Main features

- Very high power density 7 W/in³
- High efficiency $\geq 91.5\%$
- Hot pluggable, all connectors at the rear
- Fan cooled with air flow monitoring
- Very low acoustic noise < 45dB(A)
- Universal input voltage range: 80 - 300 V_{rms}
- Power factor ~ 1.0 (sinusoidal input current)
- Constant output power characteristic
- Very short depth
- System bus: analogue / digital
- Operating temperature range up to 75°C

Applications

- Digital subscriber line (DSL)
- Fiber in the loop
- Transmission
- PBX

Description

The rectifier DPR 300B-48 is a single phase, hot-pluggable, fan-cooled rectifier. The outstanding power density of this product offers the optimum 1U or 2U shelf solution for space critical applications. The constant output power characteristic as well as the extended temperature range, wide input voltage range and advanced technology are the key factors of the success of this rectifier and it offers a cost effective and reliable solution.

The typical applications for this rectifier are both in indoor and outdoor environments, which is a perfect solution for digital subscriber line (DSL), Fiber in the loop, transmission, PBX, network components in the telecommunication networks and data networks.



Rectifier DPR 300B-48

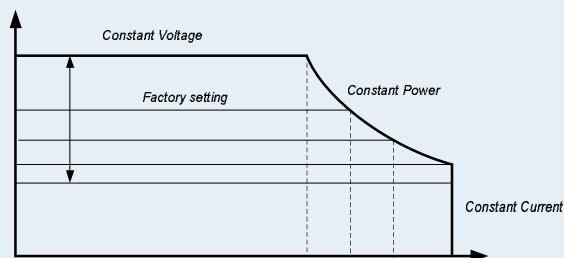
Technical Specifications

General	
Efficiency	≥ 91.5 %
Losses, max.	45 W
Safety	EN 60 950, class I UL 60 950 CAN / CSA – C22.2
EMI, radiated	EN 55022, class B
Compliant with	EN 300386-2
Cooling	Fan cooled
Power density	7 W / inch ³
Acoustic noise	45 dB(A)

Input	
Voltage range	80 ... 300 V _{rms}
Inrush current	20 A _{peak}
Current maximum	4.4 A _{rms}
Line current	IEC 1000-3-2
Harmonic distort. THD	< 5 %
Power factor	~ 1.0
EMI, conducted	EN 55022, class B
Mains connector	Rear side
Input protection	Internal fuse 2 x 8 A
Input switch	None

Output	
Voltage, nominal	53.5 V _{dc}
Voltage adjust range	42 ... 58 V _{dc}
Voltage regulation	± 250 mV _{dc}
Overvoltage protection	59 ± 1 V _{dc}
Ripple + spikes	≤ 100 mV _{pp}
Psophometric noise	≤ 1 mV _{rms} (weighted)
EMI, conducted	EN 55022, class A
Current limit, nominal	7 A _{dc}
Limit adjustment range	0 ... 7 A _{dc}
Load sharing	≤ ± 1 A _{dc}
Power limit	300 W
Output connector	Rear side
Output protection	Internal fuse 20 A

Output characteristic:



User interface	
Output current display	LED bar
Status indication	LED «ok» LED «OVP» LED «Overtemp» LED «Fan failure» Indications in LED bar

Power system controller	
PSC 1 / PSC 1000	Voltage programming Rectifier fail alarm
PSC 3	Voltage programming Current limit programming Power limit programming Rectifier fail alarm Rectifier start up Rectifier on/off

Mechanics	
Width, overall	40.5 mm / 1.59 inch (1 U)
Height, overall	86.4 mm / 3.40 inch (2 U)
Depth, overall	231.9 mm / 9.13 inch
Weight	0.9 kg / 2.0 lb

Environment	
Operating temperature	-25 ... + 75 °C / -13 ... + 167 °F
Power derating	> +65°C / > +149 °F
Relative humidity	95 % max, non condensing

Accessories	
Backplane	D0115256
Blank panel	D0117507

Subject to change due to technical progress.