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REC-500-230-48-K1

AC/DC Rectifier

Description

This compact rectifier has been designed to work with -48Vdc battery supported Telecom Systems. Measuring only 19" x 1U x 244mm (WxDxH) the unit incorporates 2 x 250W plug-in rectifiers. Each rectifier has a "power supply ok" green LED and will operate up to 50°C without derating. The high efficiency rectifiers >90% mean that the full rack only weighs 4.3kgs. With a greater than eight year life and a MTBF in excess of 50 Years this range will provide a reliable and trouble free power source for your application.



- Redundant DC output
- 24 months warranty
- Hot swap modules
- 19" x 1U x 244mm
- Battery "ok" signal
- Output 52-58Vdc

Selection Table

Part Number	Power	Output Voltage	Current	Dimensions (Width x Height x Depth)	Weight
REC-500-230-48-K1	500W	-52-58VDC	8.6A	19" x 1U x 244mm	4.3kgs
REC-250-230-48-K1	250W	-52-58VDC	4.3A	19" x 1U x 244mm	2.8kgs



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AC/DC Rectifier

Technical Data

General

Electrical Safety	EN 60950
Protection Class	1
Isolation Group	Pollution Degree 2
Inflammability	Compliant with UL 94V0

Input

Mains Voltage	230VAC
Voltage Range	197 - 265VAC
Frequency Range	45 - 66Hz (sinewave)
Mains Connection	IEC Inlet EN-60320

Mechanical Data

Casing	19" rack mount (Sheet steel, zinc plated)
Protection	IP 20
Cable Access	Rear Side
Cooling	Forced ventilation, temperature controlled fan in each 250W module

Output

DC Voltage	-54DC, positive pin is connected to chassis/protective earth
Output Current	4.3A per 250W module
Output Power	Up to 500W, module power size = 250W, without derating up to 50°C
Overload	1.2 x I _{NOM}
Efficiency	> 90%
Mains hum at full load	=100mVpp at 197VAC input
Ripple at full load	=200mVpp (20MHz)
Mains Regulation	?0.1 (197/264VAC)
Load Regulation	=1% (10/90% load change)
Recovery Time	=1ms (10/90% load change)
OVP Threshold	75VDC
TK Output Voltage	=0.05%/C
Current Limitation	Constant current, short circuit proof
Parallelling Function	2 x 250W module in one module rack
Connection Terminals	Pluggable screw clamp. Type Phoenix COMBI connection

Environmental Conditions

During Operation	-5°C to +50°C (non condensing)
During Transport/Storage	-40°C to +85°C (in original packaging)
Relative Air Humidity	0% to 95% (relative humidity)
Maximum Operation Altitude	2000 metres

EMC

Emission	EN 50081-1/2, EN 55022B
Immunity	EN 55024, EN 61000-6-2 (Industrial Areas)
Burst (EFT)	4kV, 50 , direct coupled
Surge	2kV
ESD	15kV air, 8kV conducted

Other

Reliability	Unit life = 8 years, MTBF = 50 y
Alarm Contact/Terminal	Potential free, general alarm, battery ok/Phoenix MC1.5/8-G3 5/1.5mm ²
Visual	Each 250W module: LED (green) power supply ok
Warranty	2 Years

Every effort is made to ensure that the information provided within this technical summary is accurate. However, ET must reserve the right to make changes to the published specifications without prior notice. Where certain operating parameters are critical for your application we advise that they be confirmed at the time of order. ET specialises in modifying its proven platforms to suit your needs. Please contact our office if your requirement is non-standard. The photograph illustrates a modified EAC with timer functions. Your chosen unit may differ from that shown.