



The MCS 3000-48V Rectifier



Description:

The MCS 3000-48V rectifier is a single phase, hot-pluggable, fan-cooled rectifier. The constant output current rectifier supplies the specified power over the full output voltage range. The benefit is a highly compact rectifier module that can be equipped up to 300 Amps in one shelf. The MCS rectifier is the cornerstone of the MCS-48 High Power System, when paralleled, can provide up to 4800 Amps.

Features

- Efficiency 90 %
- Compact (5.4 W / in³) and light (7kg)
- Hot swappable, no system shutdown for maintenance
- Wide input voltage range: 90 - 300 V_{rms}
- Power factor correction

Specification

General

Product name	ESR 48 V - 50 A - C
Efficiency, at 220V _{rms}	90 %
Safety	IEC 60950 EN 60950 UL 60950 CAN/CSA-C22.2 No. 60950
EMI, radiated compliant with	FCC Part 15 class A EN 55022 class A
Cooling	Fan cooled
Power density	5.4 W / in ³ , 330 W / l
MTBF	150k hours

Input

Voltage range	90 ... 275 V _{rms} (300 V _{rms} , no damage)
Volt. range, red. power	90 ... 176 V _{rms}
Current maximum	19 A _{rms}
Power factor	> 0.99
THD	5 %
EMI, conducted compliant with	FCC Part 15 class A EN 55022 class A

Output

Voltage, nominal	54 V _{dc}
Voltage adjust range	40 ... 59.5 V _{dc}
Output current	50A, fixed
Load sharing	< ± 5%
Power limit	2800W

Mechanics

Width, overall	3.4" / 87 mm
Depth, overall	14.8" / 377 mm
Height, overall	10.5" / 266 mm
Weight	15.2 lb / 7 kg

Environment

Operating temperature	- 5 ... + 55 °C
Relative humidity	95 % max, non condensing
Altitude	- 500 ~ 10000 feet

*Specifications are subject to change

