

R48-3200

DC Power
for Business-Critical Continuity™

Rectifier -48 V DC, 3200 W

Features and Benefits

- Optimized depth-reduced footprint allows installation in short-depth racks and cabinets
- DSP (Digital Signaling Processor)-means fewer components, optimized operation and active load sharing for increased reliability
- Compliant with global standards-delivers quality, performance and reliability no matter what the application or location demands
- High efficiency, up to 92%-reduces power consumption for lower operating costs
- Hot pluggable-facilitates future extensions
- Wide input voltage range-operates in the most demanding environments where input voltage changes
- Wide temperature operating range (-40°C / -40 °F to +75°C / 167°F) -meets the harshest climatic environment requirements

Description

The R48-3200 rectifier converts standard AC supply voltages into stable nominal -48V DC voltage adjustable to the needs of the application. The R48-3200 is a constant power rectifier designed with the latest patented switch-mode technology using DSP (Digital Signaling Processor) functionality for efficient operation.

For a higher load capacity, rectifiers can be connected in parallel and intelligent control can be added with the help of a separate controller.



R48-3200

R48-3200

Technical Specifications, R48-3200

AC Input

Input voltage, nominal	200 to 250 VAC
Input voltage, permitted variation	85 to 290 VAC
Line frequency	45 to 55 Hz
Max input current	20A
Power factor	0.99
THD, Total harmonic distortion	<5% from 50 to 100% of rated load

DC Output

Output voltage, adjustment range	-42 to -58 V DC
Output power	3200 W @ Vout >48 V DC
Output power, derated for input voltage	See diagram
Output current	67 A
Output current limit set point	0 to 67 A
Efficiency	92%
Psophometric noise (system)	<1mV
	<32 dBnc
Temperature derating	See diagram

Control and Monitoring

Rectifier Alarm and Signaling	Alarm and status reported via CAN bus to system Controller
Visual Indications	Green LED: Normal Operation Yellow LED: Alarm Red LED: Failure Flashing Red LED: Fan Failure

Environmental

Temperature Range, Operating	-40 to +75°C, -40 to +167°F
Temperature Range, Storage	-40 to +75°C, -40 to +167°F
Relative Humidity	0 to 95%
Altitude	2000 m, 6560 ft at full power
EMC	ETSI EN 300 386 class B, FCC CFR 47 Part 15 class B, Telcordia GR-1089-CORE class B
Safety	IEC 60950, EN 60950, UL 60950

Mechanics

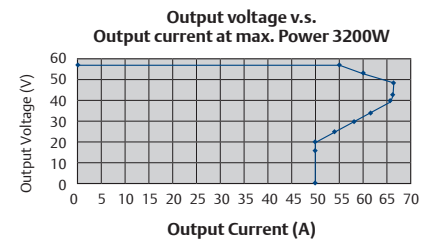
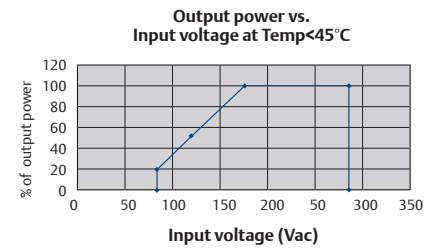
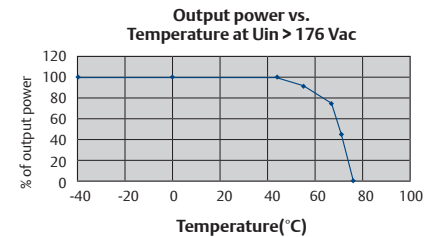
Dimensions (H × W × D)	132 × 85.3 × 287mm, 5.20 × 3.36 × 11.3 inches
Weight	3.5kg, 7.7lbs

Other parts

Controller Units	See separate ACU, SCU, ACU+ and SCU+ datasheets
------------------	---

Ordering information

Product Name	Product Code
Rectifier 48V,3200W	1R483200XXX



Emerson Network Power.
The global leader in enabling
Business-Critical Continuity™.

■ AC Power
■ Connectivity
■ DC Power
■ Embedded Computing

■ Embedded Power
■ Infrastructure Management & Monitoring
■ Outside Plant
■ Power Switching & Controls

■ Precision Cooling
■ Racks & Integrated Cabinets
■ Services
■ Surge Protection

www.emersonnetworkpower.com
www.emersonnetworkpower.com/energysystems
www.DCpowerefficiency.com

Business-Critical Continuity, Emerson Network Power and the Emerson Network Power logo are trademarks and service marks of Emerson Electric Co.
©2010 Emerson Electric Co.