

# R48-5800

DC Power  
for Business-Critical Continuity™

## Rectifier -48VDC, 5800W

### Features and Benefits

- Optimized size for best cabinet rack space utilization
- 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 93% 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 +65°C / 149°F) - meets the harshest climatic environment requirements

### Description

The R48-5800 rectifier converts 380~480 Vac 3-phase AC supply voltages into stable nominal -48 VDC voltage adjustable to the needs of the application. The R48-5800 is a constant power rectifier designed with the latest patented switch-mode technology using DSP (Digital Signal Processor) functionality for efficient operation. For a larger load capacity, rectifiers can be connected in parallel and intelligent control can be added with the help of a separate controller.



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## Technical specifications, R48-5800

### AC Input

Input voltage, nominal	380 to 480 V AC
Input voltage, permitted variation	260 to 530 VAC
Line frequency	45 to 65 Hz
Max input current	12A
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	5800 W @ Vout >48 V DC
Output power, derated for input voltage	See diagram
Output current	120 A
Output current limit set point	0 to 120 A
Efficiency	93%
Psophometric noise (system)	1mV; 32dBmC
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
Current Indicator	A 10-segment green LED is located on the front panel to represent output current, each segment represents 10A.

### Environmental

Temperature Range, Operating	-40 to +65°C, -40 to +149°F
Temperature Range, Storage	-40 to +80°C, -40 to +176°F
Relative Humidity	0 to 95%
Altitude	2000 m, 6560 ft at full power
EMC	EN 300 386: class B
Safety	IEC 60950, EN 60950, UL 60950

### Mechanics

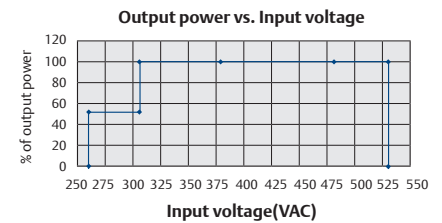
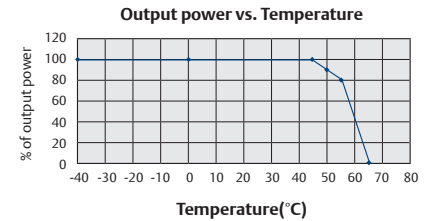
Dimensions (H × W × D)	88 × 244 × 380mm (3.46 × 9.61 × 14.96inches)
Weight	<10kg (2.2lbs)

### Other parts

Controller Units	ACU+, SCU+, ACU and SCU(M501D)
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### Ordering information

<b>Product Name</b>	<b>Product Code</b>
Rectifier R48-5800	1R485800XXX



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