APR48-3G Rectifier Module



The Eaton® APR48-3G

Power Rectifier is designed specifically for network access applications such as cellular base stations, customer premises equipment and road-side cabinet installations.

The architecture is reliable, power dense and compact. The high power density allows as little as 1U of rack space to be occupied by power, therefore, maximizing space available for telco equipment.

The APR48-3G rectifier incorporates a combination of lead-ng-edge high frequency switch mode technology for a flexible and efficient DC power source, with high reliability fan cooling which further contributes to its high overall reliability.

The APR48-3G is a high powered rectifier with 1800W output. It is designed for operation at up to 70°C (158°F) and under a wide range of AC power conditions.

These features make the APR48-3G perfectly suited to the wide variety of equipment and demanding environmental conditions found in network access applications.

The APR48-3G also has power factor correction and is up to 92% efficient, with optimum performance available at typical load currents. Together these give the APR48-3G some of the lowest running costs for any DC powersystem of its type available.

Operating with the Eaton SC300 system controller, the APR48-3G rectifier modules will provide years of costeffective, and trouble free service for your 48V network access equipment.

Features

- · Fast on-line expansion of rectifiers (hot-swap)
- · Automatic set-up from system controller
- Intelligent microprocessor controlled
- · Industry leading power density
- · High efficiency and unity power factor
- Wide AC supply conditions
- · Wide output voltage ranges
- Constant power output
- · Compliance with international standards



Technical Specifications

Input

AC Supply	220/240V, 50/60Hz (nominal) 175 – 275V full output power up to 50°C [122°F]
Power Factor	>0.99 (50 – 100% Output Current)
Efficiency	92% (50 – 100% Output Current)

Output

DC Output Voltage Range	48V: 43 – 57.5V
DC Output (maximum)	1800W @ 48V

Environmental

Operating Temperature Range	$-40^\circ\text{C} - +70^\circ\text{C}$ [-40°F $-$ +158°F] Output current is derated above 50°C [122°F] and below -10°C [14°F]
Cooling	Temperature controlled, high reliability fans

Mechanical

	3U: 133mm [5.25"], 42mm [1.65"], 266mm [10.45"] overall
Weight	1.7kg [3.7 lb]

Certifications

North America	UL, FCC Verification, CSA, IC
Europe	CE
Australia / New Zealand	C-tick, Telepermit

In the interests of continual product improvement all specifications are subject to change without notice. Performance ratings are valid with all other variables at Nominal. Specifications guaranteed over rated operating range.

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