

# Power

## Cordex™ 4.4kW Modular Switched Mode Rectifier



CXRF 125-4.4kW

- > Switched mode rectifier available in 35A @ 125Vdc or 20A @ 220Vdc
- > High power density, over 22kW per 19" shelf
- > Power limiting and wide range AC input
- > 92% efficiency and power factor correction
- > Hot swappable, 4RU ultra compact design

Cordex rectifiers bring advanced technology to your DC power supply systems. Innovative engineering combines the best in efficiency and reliability meeting the power requirements for a variety of system applications. This rectifier is specifically designed to recharge all types of stationary batteries for data centres, broadband headends, large utility, industrial uses and large telecommunication switch sites. High DC voltages enable remote powering for telecom applications with reduced voltage drop on the feeding cables.

The fan cooled Cordex 4.4kW rectifier has extremely high density providing the most power in the least amount of space. A compact 4RU shelf accommodates six rectifiers per 23" shelf and five rectifiers per 19" shelf.

Local and remote setup, adjustment and control is a simple, single-step process with the Cordex CXC System Controller. By utilizing TCP/IP internet technology, complete configuration and monitoring of power equipment is possible through a Windows Internet Explorer browser.

## Cordex™ 4.4kW Modular Switched Mode Rectifier

125V P/N: 010-589/609-20, 220V P/N: 010-588/608-20

### Electrical

Input voltage:	
Nominal: .....	208 to 240Vac
Operating: .....	187 to 312Vac
Extended: .....	187 to 90Vac (de-rated)
Input frequency: ..... 45 to 70Hz	
Power: .....	4400W continuous/module
Power factor: .....	>0.99 (50 to 100% load)
THD: .....	<5%
Efficiency: .....	>92%
Output voltage:	
125V module: .....	90 to 160Vdc
220V module: .....	180 to 320Vdc
Output current:	
125Vdc module: .....	35A@ 125Vdc (40A @ 110Vdc max)
220Vdc module: .....	20A @ 220Vdc
Load regulation: .....	Static <±0.5%
Line regulation: .....	Static <±0.1%
Transient response: .....	<±5% for 40 to 90% load step, 30ms recovery time
Wide band noise: .....	
220Vdc module: .....	<30mVrms
	<300mVp-p
125Vdc module: .....	<90mVrms
	<700mVp-p
Insulation: .....	
	2.5kVac input-earth
	3kVac input-output
	2kVac output-earth
	0.5kVac signals-earth
Acoustic: .....	<60dBa @ 1m (3ft)

### Performance / Features

Indicators: .....	AC mains OK — green LED
	Module OK — green LED
	Module fail — red LED
Controls: .....	CAN interface to CXC
Adjustments: .....	Float voltage
(via CXC controller)	Equalize voltage
	High & low voltage alarms
	High voltage shutdown
	Current limit
	Slope
	Start delay
Protection: .....	Current limit/short circuit
	Start delay
	Input/output fuses
	Output high voltage shutdown
	Power limiting
	Thermal foldback/shutdown
	Input transient
	AC low line foldback shutdown

### Mechanical

Dimensions:	
mm: .....	160H x 87W x 300D
inches: .....	6.3H x 3.4W x 11.8D
Weight: .....	4.65kg (10.57lbs)

### Environmental

Temperature:	
Standard: .....	-40 to 50°C (-40 to 130°F)
Extended: .....	-40 to 75°C (-40 to 167°F)
Storage: .....	-40 to 85°C (-40 to 185°F)
Humidity: .....	0 to 95% RH non-condensing
Elevation: .....	-500 to 2800m (-1640 to 9186ft)
Heat dissipation: .....	<1080 BTU per hour

### Shelves

125V 19" 5-module P/N: 030-769/814-20  
220V 19" 5-module P/N: 030-768/813-20

Dimensions:	
mm: .....	177H x 442W x 389D
inches: .....	6.9H x 17.4W x 15.3D
Weight: .....	8.5kg (19lbs)
Mounting: .....	
	Fits 19" rack flush/center mount (5 modules)
	Fits 23" rack center mount only
Connections:	
Input: .....	Box type terminal block
	6 to 16mm <sup>2</sup> (10 to 6AWG)
Output: .....	Bus adapters with " studs on 1" centers
Chassis ground: .....	Compression lug
	6 to 16mm <sup>2</sup> (10 to 6AWG)
CAN communication: .....	RJ12 offset

### Agency Compliance

Safety: .....	CSA C22.2 No 60950-1-03
	UL 60950-1 1 <sup>st</sup> edition
	CE marked
	IEC/EN 60950-1
EMC:	
Emissions: .....	CFR47 (FCC) Part 15 Class A
	ICES-03 Class A
	EN55022 (CISPR 22) Class A
	C-Tick (Australia)
	EN 61000-3-2
	EN 61000-3-3
Immunity: .....	EN 61000-4-2
	EN 61000-4-3
	EN 61000-4-4
	EN 61000-4-5
	EN 61000-4-6
	EN 61000-4-11
	ANSI/IEEE C62.41 Cat B3



Typical 26.4kW Shelf