

# Power

## Cordex™ 4.4kW

Modular Switched Mode Rectifier



CXRF 125-4.4kW

- Available in 35A @ 125VDC or 20A @ 220VDC
- High power density, over 26kW per 23" 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 the DC power industry.** 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 large utility, petrochemical, and industrial uses.

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 technology, complete configuration and monitoring of power equipment is possible through a Windows Internet Explorer browser.

## Cordex 4.4kW Modular Switched Mode Rectifier

### Rectifier Module(s)

#### Electrical

Input voltage	
Nominal:	208 to 240VAC
Operating:	187 to 312VAC
Extended:	187 to 90VAC (derated)
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
220VDC Module:	20A @ 220VDC
Load regulation:	Static $\pm 0.5\%$
Line regulation:	Static $\pm 0.1\%$
Transient response:	$\pm 5\%$ 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)

#### Mechanical

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

#### Features

Indicators:	AC mains OK—green LED Module OK—green LED Module fail—red LED CAN interface to CXC Controller
Controls:	
Adjustments: (via CXC Controller)	Float voltage Equalize voltage High voltage alarm Low voltage alarm 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



Typical 26.4kW Shelf

### 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

#### Mechanical

##### 19"/23" shelf

Dimensions	
mm:	177H x 442W x 389D
inches:	6.9H x 17.4W x 15.3D
Weight:	8.5kg (19lb)
Mounting:	Fits 19" rack flush/center mount Fits 23" rack center mount only

##### 23" shelf

Dimensions	
mm:	177H x 530W x 389D
inches:	6.9H x 20.8W x 15.3D
Weight:	9.5kg (21lb)
Mounting:	Fits 23" racks only flush/center mount

#### Connections

Input:	Box type terminal block 6 to 16mm <sup>2</sup> (10 to 6AWG)
Output:	Bus adapters with 3/8" studs on 1" centers
Chassis ground:	Compression lug 6 to 16mm <sup>2</sup> (10 to 6AWG)
CAN communication:	RJ12 offset

### Standards

The Cordex 4.4kW is designed to meet the following:

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

For more information visit [www.argusdcpower.com](http://www.argusdcpower.com)

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