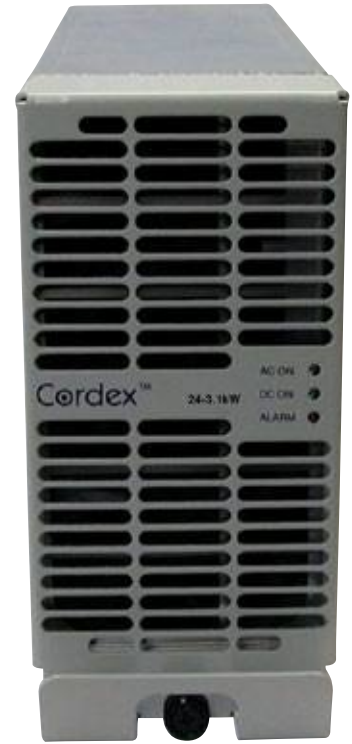


# Cordex™ 3.1kW

24Vdc Modular Switched Mode Rectifier



CXRF 24-3.1KW

- › Available in 130A @ 24Vdc
- › High power density, over 21kW per 23" shelf
- › Power limiting and wide range AC input
- › Compliant with the stringent EMI immunity requirements for power station and substation environments
- › High 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.

The 24Vdc Cordex 3.1kW 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 network web browser.

# Cordex™ 3.1kW 24Vdc Modular Switched Mode Rectifier

Part Number:010-572-20

## Electrical

### > 3.1kW Rectifier Module(s)

Input voltage:  
 Nominal: .....208 to 277Vac  
 Operating: .....176 to 312Vac  
 Extended: .....176 to 90Vac (de-rated power)

Input frequency: .....45 to 70Hz  
 Power factor: .....>0.99 (50 to 100% load)  
 THD: .....<5%  
 Efficiency: .....>90%  
 Output voltage: .....21 to 29Vdc  
 Output power: .....3100W continuous/module  
 Output current: .....115A @ 27Vdc (130A max. 24V)  
 Load regulation: .....<±0.5% (static)  
 Line regulation: .....<±0.1% (static)  
 Transient response: .....±2% for 50 to 100% load step,  
 2ms recovery time

Noise:  
 Voice band: .....<32dBnC  
 Wide band: .....<30mV RMS (10kHz to 10MHz)  
 <150mVp-p (10kHz to 100MHz)

Psophometric: .....<1.0mV  
 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 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

## Mechanical

Dimensions:  
 mm: .....160H x 87W x 300D  
 inches: .....6.3H x 3.4W x 11.8D  
 Weight: .....4.6kg (10lbs)



Typical 15.5kW 19" Shelf

## Environmental

Temperature:  
 Standard: .....-40 to 65°C (-40 to 149°F)  
 Storage: .....-40 to 85°C (-40 to 185°F)  
 Humidity: .....0 to 95% RH non-condensing  
 Elevation: .....-500 to 4000m (-1640 to 13120ft)  
 Heat dissipation: .....<1176 per hour

## Shelves

### > 19/23" shelf (5 modules)

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  
 Fits 23" rack center mount only

### > 23" shelf (6 modules)

Dimensions:  
 mm: .....177H x 530W x 389D  
 inches: .....6.9H x 20.8W x 15.3D  
 Weight: .....9.5kg (21lbs)  
 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: .....RJ 12 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: .....ETSI 300 386  
 Emissions: .....CFR47 (FCC) Part 15 Class B  
 ICES-03 Class B  
 EN55022 (CISPR 22) Class B  
 C-Tick (Australia)  
 EN 61000-3-2  
 EN 61000-3-3  
 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  
 IEC TS 61000-6-5 Immunity for power station  
 and substation environments  
 NEBS: .....GR-1089 CORE  
 GR-69 CORE