



The Sol Series 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 Sol Series 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 Sol Series Cordex CXC System Controller. By utilizing TCP/IP technology, complete configuration and monitoring of power equipment is possible through a network web browser.

- + 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

3.1kW

24Vdc Modular Switched Mode Rectifier

Electrical

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)

Mechanical

Dimensions:

mm: 160H x 87W x 300D

inches: 6.3H x 3.4W x 11.8D

Weight: 4.6kg (10lbs)

Agency Compliance

Safety: CSA C22.2 No 60950-1-03

UL 60950-1 1st 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, 3-3

Immunity: EN 61000-4-2, 4-3, 4-4, 4-5, 4-6, 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

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

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

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 16mm² (10 to 6AWG)

Output: Bus adapters with 3/8" studs on 1" centers

Chassis ground: Compression lug

6 to 16mm² (10 to 6AWG)

CAN communication: RJ 12 offset

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THE SOL SERIES

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