

# Cordex™ 1.1kW

220Vdc Modular Switched Mode Rectifier



*Your Power Solutions Partner*

- Switch mode rectifier provides 5A output @ 220Vdc
- Power limiting and wide range AC input
- Compliant with the stringent EMI immunity requirements for power station and substation environments
- 93% efficiency with power factor correction
- Convection cooled
- 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 Cordex 1.1kW is a compact 4RU allowing six rectifiers per 19" shelf. In addition to a range of standard features, the convection cooling will maintain ideal operating temperatures in the often dusty environments of utility applications.

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™ 1.1kW 220Vdc Modular Switched Mode Rectifier

Part Number: 010-569-20

## ELECTRICAL

### Input voltage:

Nominal: .....208 to 277Vac  
 Operating: .....176 to 320Vac  
 Extended: .....176 to 150Vac (de-rated to 75%)

Input frequency: .....45 to 66Hz

Power output: .....1100W continuous/module

Power factor: .....>0.99 (input current)

THD: .....<5%

Efficiency: .....>93%

Output voltage: .....180 to 320Vdc

Output current: .....5A @ 220Vdc (5.5A max)

Load regulation: .....Static <±0.5%

Line regulation: .....Static <±0.1%

Transient response: .....<±2% for 50 to 100% load step,  
 10ms recovery time

Wide band noise: .....<30mVrms

<150mVp-p

Insulation: .....2.5kVac input-earth

3kVac input-output

2kVac output-earth

0.5kVac signals-earth

## PERFORMANCE / FEATURES

Indicators: .....AC mains OK — green LED  
 .....Module OK — green LED  
 .....Module alarm — red LED

Cooling: .....Natural convection

Adjustments: .....Float and equalize voltage  
 (via CXC controller) .....Battery test voltage  
 .....High and low voltage alarms  
 .....High voltage shutdown  
 .....Current limit  
 .....Start delay time  
 .....Slope %

Protection: .....Current limit/short circuit  
 .....Input/output fuses  
 .....Output high voltage shutdown  
 .....Output power limiting  
 .....Thermal foldback/shutdown  
 .....Input transient  
 .....AC low line foldback/shutdown  
 .....AC high voltage shutdown  
 .....Earth leakage alarm

## MECHANICAL

### Dimensions:

mm: .....177H x 71W x 250D

inches: .....6.9H x 2.8W x 9.8D

Weight: .....2.9kg (6.4lbs)

## ENVIRONMENTAL

### Temperature:

Operation: .....-40 to 50°C (-40 to 122°F)  
 (up to 70°C/158°F power de-rated)

Storage: .....-50 to 85°C (-58 to 185°F)

Humidity: .....0 to 95% RH non-condensing

Elevation: .....-500 to 4000m (-1640 to 13120ft)

Heat dissipation: .....<282 BTU per hour (max)

## SHELVES

P/N: 030-718-20

### > 19" shelf (6 module)

### Dimensions:

mm: .....177H x 444W x 303D

inches: .....6.9H x 17.5W x 11.9D

Weight: .....7.3kg (16lbs)

Mounting: .....Fits 19" rack flush mount

Fits 19" or 23" center mount

### Connections:

Input: .....Terminal blocks for 3 feeds  
 4–6mm<sup>2</sup> (12–10AWG)

Output: .....1/4" studs on 5/8" centers

Chassis ground: .....1/4" stud

CAN communication: .....RJ 12 offset

## AGENCY COMPLIANCE

The Cordex™ 1.1kW 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: .....ETSI 300 386

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

IEC TS 61000-6-5 Immunity for power station  
 and substation environments

Alpha Technologies Ltd.

For more information visit [www.alpha.ca](http://www.alpha.ca)

Canada: Burnaby, British Columbia T: 604.436.5900 F: 604.436.1233

United States: Bellingham, Washington T: 360.647.2360 F: 360.671.4936

#0480028-00 Rev E (07/2016)

Alpha Technologies reserves the right to make changes to the products and information contained in this document without notice.

Copyright © 2016 Alpha Technologies. All Rights Reserved. Alpha® is a registered trademark of Alpha Technologies.

member of The Alpha Group™ is a trademark of Alpha Technologies.

member of The  Group™