

Power

Cordex™ 1kW

48Vdc Modular Switched Mode Rectifier

- › Available in 20.8A @ 48Vdc
- › Power limiting and wide range AC input
- › 92% efficiency and power factor correction
- › Convection cooled
- › Hot swappable, 4RU ultra compact design



CXRC 48-1kW

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 Cordex 1kW integrated 19" or 23" shelf systems with distribution is ideal for applications with lower power requirements. A compact 4RU design allows five rectifiers plus controller or six rectifiers per 19" shelf for bulk power needs.

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™ 1kW 48Vdc Modular Switched Mode Rectifier

Part Number: 010-566-20

Electrical

Input voltage:
 Nominal: 208 to 277Vac
 Operating: 150 to 320Vac
 Extended: 150 to 90Vac (de-rated power)
Input frequency: 45 to 66Hz
Power factor: >0.99
Efficiency: >92%
Power output: 1000W continuous/module
Output voltage: 42 to 60Vdc
Output current: 18.5A @ 54Vdc (20.8A max)
Load regulation: <±0.5% (static)
Line regulation: <±0.1% (static)
Transient response: ±1% for 50 to 100% load step,
 2ms recovery time

Noise:
 Voice band: <32dBnC
 Wide band: <5mVrms
 <100mVp-p
Psophometric: <1mV

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 timers
 Slope %

Protection: Current limit/short circuit
 Start delay
 Input/output fuses
 Output high voltage shutdown
 Output power limiting
 Thermal foldback/shutdown
 Input transient
 AC low line foldback/shutdown
 AC high voltage shutdown

Shelves

19"/23" shelf dimensions:
 mm: 177H x 544W x 303D
 inches: 6.9H x 21.4W x 11.9D
Weight: 10.2kg (22.5lb)
Mounting: Fits 19" or 23" rack center mount

19" shelf dimensions:
 mm: 177H x 444W x 303D
 inches: 6.9H x 17.5W x 11.9D
Weight: 7.3kg (16lb)
Mounting: Fits 19" rack flush mount
 Note: Consult factory for other shelf configurations.

Connections:

Input: Dual feed terminal blocks
 4 to 6mm² (12 to 10AWG)
 Output: ¼" studs on ½" centers
 Chassis ground: ¼" stud
 CAN communication: RJ 12 offset

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)
 (with short periods up to 70°C/158°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: <295 BTU per hour

Agency Compliance

The Cordex™ 1kW is designed to meet the following:

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
 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
 EN 61000-4-11
 ANSI/IEEE C62.41 Cat B3