# CORDEX® 4.4KW MODULAR SWITCHED MODE RECTIFIER



# **OVERVIEW**

Switched mode rectifier available in 35A @ 125Vdc or 20A @ 220Vdc

High power density, over 22kW per 19" shelf

Power limiting and wide range AC input

Compliant with the stringent EMI immunity requirements for power station and substation environments

92% peak 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 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 modem.



## **CORDEX® 4.4KW MODULAR SWITCHED MODE RECTIFIER**

ELECTRICAL	
Input Voltage:	Nominal: 208 to 277Vac Operating: 187 to 312Vac Extended: 90 to 187Vac (de-rated to 40%)
Input Frequency:	45 to 70Hz
Power Output:	4,400W continuous/module
Power Factor:	>0.99 (50 to 100% load)
THD:	<5%
Efficiency:	>92% peak
Output Voltage:	125V Module: 90 to 160Vdc 220V Module:180 to 320Vdc
Output Current:	125V Module: 35A @ 125Vdc 220V Module: 20A @ 220Vdc
Load Regulation:	Static <±0.5%
Line Regulation:	Static <±0.1%
Transient Response:	<±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)

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PERFORMANCE / FEATURES		
Indicators:	AC mains OK – green LED Module OK – green LED Module fail – red LED	
Controls:	CAN interface to CXC	
Adjustments (via CXC HP Controller):	Float and equalize voltage High and low voltage alarms High voltage shutdown Current limit Slope Start delay time	
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	

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MECHANICAL	
Dimensions (H x W x D)	160 x 87 x 300mm 6.3 x 3.4 x 11.8in
Weight:	4.65kg (10.25lbs)

ENVIRONMENTAL		
Temperature:	Standard: -40 to 50°C (-40 to 130°F) Extended: -50 to 75°C (-122 to 167°F) (de-rated output power) Storage: -40 to 85°C (-40 to 185°F)	
Humidity:	0 to 95% RH non-condensing	
Elevation:	-500 to 2,800m (-1,640 to 9,186ft)	
Heat dissipation:	<1080 BTU per hour/317W	
CHEIVEC		

### SHELVES

Product Number: 125V 19" 5-Module: 030-769-20-040 220V 19" 5-Module: 030-768-20-040

19" shelf (5 module)	
Dimensions (H x W x D):	177 x 442 x 389mm 7 x 17.4 x 15.3in
Weight:	8.5kg (18.7lbs)
Mounting:	Fits 19" rack flush/center mount (5 modules) Fits 23" center mount only
Connections:	Input: Box type terminal block 6-16mm² (10 - 6AWG) Output: Bus adapters with ¾" studs on 1" centers Chassis Ground: Compression lug 6-16mm² (10 - 6AWG) CAN Communication: RJ 12 offset

# STANDARDS AND CERTIFICATION

The Cordex	<sup>™</sup> 4.4kW is designed to meet the	following:
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Safety:	CSA C22.2 No 60950-1-03 UL 60950-1 1st edition CE marked IEC/EN 60950-1
EMC	Emissions: CFR47 (FCC) Part 15 Class A,

# **PRODUCT NUMBER**

125V: 010-589-20-040 220V: 010-588-20-040



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