

### an EnerSys company

# Cordex® 4.4kW

## Modular Switched Mode Rectifier





- 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.

125V P/N: 010-589-20-040 220V P/N: 010-588-20-040

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:	4400W continuous/module
Power Factor:	>0.99 (50 to 100% load)
THD:	<5%
Efficiency:	>92% Peak
Output Voltage:	<b>125V Module:</b> 90 to 160Vdc <b>220V Module:</b> 180 to 320Vdc
Output Current:	<b>125Vdc Module:</b> 35A@ 125Vdc <b>220Vdc Module:</b> 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)
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 voltage Equalize voltage High & low voltage alarms 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:	4.65kg (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 2800m (-1640 to 9186ft)
Heat dissipation:	<1080 BTU per hour/317 Watts
Shelves	
125V 19" 5-module P/N: 030-769-20-040 220V 19" 5-module P/N: 030-768-20-040	
Dimensions:	mm: 177H x 442W x 389D inches: 7H x 17.4W x 15.3D
Weight:	8.5kg (18.7lbs)
Mounting:	Fits 19" rack flush/center mount (5 modules) Fits 23" rack center mount only
Connections:	Input: Box type terminal block 6 to 16mm² (10 to 6AWG) Output: Bus adapters with ¾" studs on 1" centers Chassis Ground: Compression lug 6 to 16mm² (10 to 6AWG) CAN Communication: R112 offset
Agency Compliance	
Safety:	CSA C22.2 No 60950-1-03     UL 60950-1 1st edition     CE marked     IEC/EN 60950-1
	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
EMC:	Immunity:  • EN 61000-4-2  • EN 61000-4-3  • EN 61000-4-4  • EN 61000-4-5  • EN 61000-4-11  • ANSI/IEEE C62.41 Cat B3  • IEC TS 61000-6-5 Immunity for power station and substation environments



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