

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.

Cordex® 4.4kW Modular Switched Mode Rectifier

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:	125V Module: 90 to 160VDC 220V Module: 180 to 320VDC
Output Current:	125VDC Module: 35A@ 125VDC 220VDC 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. SkVAC 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:	O 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: RJ12 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 61000-4-1 • EN 61000-4-11 • ANS//EEE C62.41 Cat B3 • IEC TS 61000-6-5 Immunity for power station and substation environments

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