



an EnerSys company

# Cordex<sup>®</sup> 650W

## 48Vdc Modular Switched Mode Rectifier



- Available in 13.5A @ 48Vdc (at nominal input voltage)
- Universal 120V/208 to 240V single phase AC input
- Power limiting and wide range AC input
- 91% efficiency and power factor correction
- Convection cooled
- Hot swappable, 2RU 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.**

The Cordex 650W rectifier is available in a choice of 19" or 23" shelf configurations. Either power system option comes complete with distribution, controller, and rectifier slots. With a maximum of 2.6kW total output per shelf, it is an ideal solution to meet the needs of applications requiring lower power.

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® 650W 48Vdc Modular Switched Mode Rectifier

07/2020

Universal 120/240 model P/N: 010-570-20-04

Electrical	
<b>Input Voltage (Universal 100 to 240Vac model):</b>	<b>Nominal:</b> 176 to 320Vac (output power 650W) <b>Extended:</b> 90 to 176Vac (de-rated output power) <b>Power Output:</b> 650W at nominal 208 to 240Vac & 500W at nominal 120Vac
<b>Input Frequency:</b>	45 to 70Hz
<b>Power Factor:</b>	>99%
<b>THD:</b>	<5%
<b>Efficiency:</b>	>91%
<b>Output Voltage:</b>	42 to 58Vdc
<b>Output Current:</b>	12A @ 54Vdc (13.5A max)
<b>Load Regulation:</b>	Static <±0.5% Dynamic <±2% for 50 to 100% load step 2ms recovery time
<b>Line Regulation:</b>	Static <±0.1% Dynamic <±1% for any change within rated limits
<b>Wide Band Noise:</b>	<30mVrms <150mVp-p
<b>Psophometric Noise:</b>	<1mV
Performance / Features	
<b>Indicators:</b>	AC mains OK — green LED Module alarm — red LED
<b>Cooling:</b>	Natural convection
<b>Adjustments (via CXCI HP controller):</b>	<ul style="list-style-type: none"> <li>• Float and equalize voltage</li> <li>• Battery test voltage</li> <li>• High and low voltage alarms</li> <li>• High voltage shutdown</li> <li>• Current limit</li> <li>• Start delay time</li> <li>• Slope %</li> </ul>
<b>Protection:</b>	<ul style="list-style-type: none"> <li>• Current limit/short circuit</li> <li>• Input/output fuses</li> <li>• Output high voltage shutdown</li> <li>• Output power limiting</li> <li>• Thermal foldback/shutdown</li> <li>• Input transient</li> <li>• AC low line foldback/shutdown</li> <li>• AC high voltage shutdown</li> </ul>
Mechanical	
<b>Dimensions:</b>	<b>mm:</b> 88.4H x 71.6W x 242D <b>inches:</b> 3.4H x 2.8W x 9.5D
<b>Weight:</b>	1.4kg (3lbs)

Environmental	
<b>Temperature:</b>	<b>Operation:</b> -40 to 50°C (-40 to 122°F) (power de-rated up to 65°C/149°F) <b>Storage:</b> -40 to 85°C (-40 to 185°F)
<b>Humidity:</b>	0 to 95% RH non-condensing
<b>Elevation:</b>	-500 to 3000m (-1640 to 9840ft)
<b>Heat Dissipation:</b>	<94 BTU per hour/28 Watts
Agency Compliance	
The Cordex™ 650W is designed to meet the following:	
<b>Safety:</b>	<ul style="list-style-type: none"> <li>• CSA C22.2 No 60950-1-03</li> <li>• UL 60950-1 1st edition</li> <li>• CE marked</li> <li>• IEC/EN 60950-1</li> </ul>
<b>EMC:</b>	ETSI 300 386 <b>Emissions:</b> <ul style="list-style-type: none"> <li>• CFR47 (FCC) Part 15 Class B</li> <li>• ICES-03 Class B</li> <li>• EN55022 (CISPR 22) Class B</li> <li>• C-Tick (Australia)</li> <li>• EN 61000-3-2</li> <li>• EN 61000-3-3</li> </ul> <b>Immunity:</b> <ul style="list-style-type: none"> <li>• EN 61000-4-2</li> <li>• EN 61000-4-3</li> <li>• EN 61000-4-4</li> <li>• EN 61000-4-5</li> <li>• EN 61000-4-6</li> <li>• EN 61000-4-11</li> <li>• ANSI/IEEE C62.41 Cat B3</li> </ul>



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