



an EnerSys company

# Cordex® HP 1.2kW

## 48Vdc Modular Switched Mode Rectifier



- High performance compact 25A rectifier for 48Vdc telecom application
- 93.9% efficiency for reduced OPEX and carbon footprint
- Extended temperature range (-40 to 80°C) enabling to deliver full rated output power up to 65°C for installation in harsh outdoor and indoor environments
- 1RU x 2RU footprint for multiple mounting options
- High power density (21.8W/in<sup>3</sup>) yields more space for revenue generating equipment
- Wide AC input range for a variety of global installation requirements

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### **Cordex High-Performance rectifiers make a proven, reliable platform even better, with significant advancements in efficiency and performance.**

In a compact, fan-cooled design, HP rectifiers open the possibility to wider ranges of applications and immediate OPEX/CAPEX savings, reducing total cost of ownership and impact on the environment.

The Cordex HP 1.2kW is a perfect solution for small 48Vdc power applications such as customer premise, xDSL, FTTx, distributed node B, and microwave. With a high operating efficiency and high temperature operation, CXC HP series rectifiers are also ideal for harsh outside plant enclosure installations.

Local and remote setup, adjustment and control is a simple single-step process with Cordex CXC HP system controllers. By utilizing TCP/IP technology, complete configuration and monitoring of power equipment is possible through a network web browser.

# Cordex® CXRF-HP 1.2kW Modular Switched Mode Rectifier

07/2020

P/N: 010-619-20

Electrical	
<b>Input Voltage:</b>	<b>Nominal:</b> 176 to 276Vac <b>Extended (high):</b> 277 to 300Vac (de-rated power factor) <b>Extended (low):</b> 90 to 175Vac (de-rated output power)
<b>Input Current:</b>	<b>Nominal:</b> 7.4A max <b>90 to 132Vac:</b> 6A max <b>Input frequency:</b> 45 to 70Hz
<b>Power Factor:</b>	>99%
<b>THD:</b>	<5% @ nominal input voltage
<b>Efficiency:</b>	93.9%
<b>Output Voltage:</b>	42 to 58Vdc
<b>Output Power:</b>	<b>Nominal AC Input:</b> 1200W <b>110 to 132Vac:</b> 600W (de-rated linearly to 491W @ 90Vac)
<b>Output Current:</b>	<b>Nominal AC Input:</b> 22.2A @ 54V (25A max @ 48V) <b>110 to 132Vac:</b> 12.5A max (de-rated linearly to 10.2A @ 90Vac)
<b>Load Regulation:</b>	<b>Static:</b> <±0.5% <b>Dynamic:</b> <±1% for 40 to 90 to 40% load step, 2ms recovery time
<b>Line Regulation:</b>	<b>Static:</b> <±0.1% <b>Dynamic:</b> <±1% for any change within rated limits
<b>Wide Band Noise:</b>	<30mVrms <150mVp-p
<b>Psophometric Noise:</b>	<2mV
Performance / Features	
<b>Indicators:</b>	<ul style="list-style-type: none"> <li>AC mains OK — green LED</li> <li>DC output OK — green LED</li> <li>Module alarm — red LED</li> </ul>
<b>Cooling:</b>	Fan cooled
<b>Adjustments (Via CXC 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 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> 41.4H x 84.8W x 256.8D <b>inches:</b> 1.63H x 3.34W x 10.11D
<b>Weight:</b>	1.23kg (2.7lbs)
Environmental	
<b>Temperature:</b>	<b>Operating:</b> -40 to 80°C (-40 to 176°F); full rated output 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>	<308 BTU per hour/90 Watts
Agency Compliance	
<b>Safety:</b>	<ul style="list-style-type: none"> <li>CSA C22.2 No 60950-1-03</li> <li>CE marked</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, 3-3</li> </ul> <b>Immunity:</b> <ul style="list-style-type: none"> <li>EN 61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-11</li> <li>ANSI/IEEE C62.41 Cat B3</li> </ul>
<b>NEBS/Telcordia:</b>	<ul style="list-style-type: none"> <li>GR-1089-CORE</li> <li>GR-63-CORE</li> </ul>



## Worldwide Corporate Offices

### Headquarter Germany

Hansastraße 8  
D-91126 Schwabach  
Tel: +49 9122 79889 0  
Fax: +49 9122 79889 21  
Mail: info@alpha-outback-energy.com

### Eastern Europe

ee@alpha-outback-energy.com

### Middle East

me@alpha-outback-energy.com

### France and Benelux

fbnl@alpha-outback-energy.com

### Spain

spain@alpha-outback-energy.com

### Russia

russia@alpha-outback-energy.com

### Africa

africa@alpha-outback-energy.com

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