

an EnerSys company



- Switch mode rectifier provides 8.8A output @ 125Vdc or 5A @ 220Vdc
- Power limiting and wide range AC input
- 93% peak efficiency with power factor correction
- Convection cooled

Cordex<sup>™</sup> 1.1kW

Modular Switched Mode Rectifier

• 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 Cordex 1.1 kW is a compact 4RU allowing six rectifiers per 19" shelf. In addition to a range of standard features, the convection cooling will maintain ideal operating temperatures in the often dusty environments of utility applications.

Local and remote setup, adjustment and control is a simple, singlestep 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<sup>™</sup> 1.1kW Modular Switched Mode Rectifier

125V AMERICAS P/N: 010-579-20-041, EMEA P/N: 1000032523 220V AMERICAS P/N: 010-569-20-041, EMEA P/N: 1000032508

| Electrical                        |   |
|-----------------------------------|---|
| Input Voltage:                    | Nominal: 208 to 240Vac<br>Operating: 85 to 320Vac<br>Extended: 150 to 176Vac (de-rated to 75%)  |
| Input Frequency:                  | 45 to 70Hz  |
| Power Output:                     | 1100W continuous/module   |
| Power Factor:                     | >0.99 (input current)   |
| THD:                              | <5%   |
| Efficiency:                       | >93% peak nominal conditions  |
| Output Voltage:                   | 125V: 90 to 160Vdc<br>220V:180 to 320Vdc  |
| Output Current:                   | 125V: 8.8A @ 125Vdc (11A max)<br>220V: 5A @ 220Vdc (5.5A max)   |
| Load Regulation:                  | Static <±0.7%   |
| Line Regulation:                  | Static <±0.1%   |
| Transient Response:               | ${<}{\pm}2\%$ for 40 to 90% load step, 20ms recovery time   |
| Wide Band Noise:                  | • <30mVrms<br>• <150mVp-p   |
| Insulation:                       | <ul> <li>2.5kVac input-earth</li> <li>3kVac input-output</li> <li>2kVac output-earth</li> <li>0.5kVac signals-earth</li> </ul>  |
| Performance / Features            |   |
| Indicators:                       | AC mains OK — green LED<br>Module OK — green LED<br>Module alarm — red LED  |
| Cooling:                          | Natural convection  |
| Adjustments (via CXC controller): | <ul> <li>Float and equalize voltage</li> <li>Battery test voltage</li> <li>High and low voltage alarms</li> <li>Current limit</li> <li>Start delay time</li> </ul>  |
| Protection:                       | <ul> <li>Current limit/short circuit</li> <li>Input 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> <li>Earth leakage alarm</li> </ul> |

| Mechanical   |      |   |
|--|------|---|
| Dimensions:  |      | mm: 177H x 71W x 250D<br>inches: 6.9H x 2.8W x 9.8D   |
| Weight:  |      | 125V: 3.2kg (7.1lbs)<br>220V: 2.9kg (6.4lbs)  |
| Environmental  |      |   |
| Temperature:<br>(Based on 3 modules installed)       | 125V | Operation: -40 to 42°C (-40 to 107.6°F)<br>Extended: 65°C/149°F 600W<br>Storage: -50 to 85°C (-58 to 185°F)   |
|  | 220V | $\begin{array}{l} \textbf{Operation:} -40 \ to \ 48 ^{\circ} C \ (-40 \ to \ 118.4 ^{\circ} F) \\ \textbf{Extended:} \ 65 ^{\circ} C/149 ^{\circ} F \ 600W \\ \textbf{Storage:} \ -50 \ to \ 85 ^{\circ} C \ (-58 \ to \ 185 ^{\circ} F) \end{array}$   |
| Humidity:  |      | 0 to 95% RH non-condensing  |
| Elevation:   |      | -500 to 4000m (-1640 to 13120ft)  |
| Heat dissipation:                                    |      | 125V: <400 BTU per hour (max)/117 Watts<br>220V: <282 BTU per hour (max)/83 Watts   |
| Shelves  |      |   |
| P/N: 030-740-20                                      |      |   |
| 19" shelf (6 module)                                 |      |   |
| Dimensions:  |      | mm: 177H x 444W x 303D<br>inches: 6.9H x 17.5W x 11.9D  |
| Weight:  |      | 7.3kg (16lbs)   |
| Mounting:  |      | Fits 19" rack flush mount     Fits 19" or 23" center mount  |
| Connections:   |      | Input: Terminal blocks for 3 feeds 4 - 6mm <sup>2</sup> (12 - 10AWG)<br>Output: ¼" studs on ½" centers<br>Chassis Ground: ¼" stud<br>CAN Communication: RJ 12 offset  |
| Agency Compliance                                    |      |   |
| The Cordex™ 1.1kW is designed to meet the following: |      |   |
| Safety:  |      | CSA (22.2 No 60950-1-03     UL 60950-1 1st edition     CE marked     IEC/EN 60950-1   |
| EMC:   |      | ETSI 300 386<br>Emissions:<br>• CFR47 (FCC) Part 15 Class A<br>• ICES-03 Class A<br>• EN55022 (CISPR 22) Class A<br>• C-Tick (Australia)<br>• EN 61000-3-2<br>• EN 61000-3-3<br>Immunity:<br>• EN 61000-4-3<br>• EN 61000-4-4<br>• EN 61000-4-5<br>• EN 61000-4-5<br>• EN 61000-4-11<br>• ANSI/IEEE C62.41 Cat B3 |



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