# CXPS-E101

## 48VDC Power Systems

an EnerSys® company



- Integrated -48V power system packages in 225A or 100A configurations

- Ultra compact, high density design utilizing standard plug-in circuit breakers

- High efficiency design for reduced operating expenses

- High temperature rated, fan-cooled design for harsh outdoor installations

- Wide range AC input and IEC line cords for multiple AC services

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

Featuring 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 CXPS-E101 power system is the ideal solution for small to medium 48VDC applications, with configurations of 225A or 100A capacity. With universal 19/23" mounting, high temperature operation, compact height and 15" depth, it is a perfect solution for a wide variety of installation scenarios including those in harsh, outdoor environments.

The CXDM-E1 distribution center provides (10) plug-in breaker positions for load distribution, (2) battery breaker positions, integrated shunt and low voltage battery disconnect (LVBD). With the shunt positioned to measure battery current, a higher accuracy of battery float current is achieved while the system is able to report load current by calculation.

The CXPS-E101 power system can be easily integrated into customer provided relay racks or enclosures or can be ordered factory-installed into various Alpha relay rack configurations, including systems with pre-wired battery trays.

# CXPS-E101 48VDC Power Systems

225A System Configuration P/N: 0540570-401
100A System Configuration P/N: 0540569-401

| Features | |
|---|---|
| **CXPS-E101 225A:** | Up to 9x 48V-1.2kW rectifier positions |
| **CXPS-E101 100A:** | Up to 4x 48V-1.2kW rectifier positions |
| **Distribution:** | • 10x load breaker positions (plug-in style breaker)<br>• 2x battery breaker positions (plug-in style breaker)<br>• 225A Low voltage disconnect<br>• 200A Battery shunt |
| **Controller:** | CXCM1 Modular controller (included) |

| Electrical | |
|---|---|
| **Input** | |
| **Voltage:** | 176 to 312VAC (nominal)<br>90 to 176VAC (de-rated O/P power) |
| **Current:** | 7.5A max (176 to 300VAC) per module<br>6.0A max (90 to 176VAC) per module |
| **Frequency:** | 45 to 66Hz |
| **Efficiency:** | >93% (50-100% load @ nominal voltage) |
| **Power factor:** | >.99 |
| **Output** | |
| **CXPS-E101 225A Capacity System:** | 225A max @ 48VDC (nominal I/P)<br>112.5A max @ 48VDC (115VAC input) |
| **CXPS-E101 100A Capacity System:** | 100A max @ 48VDC (nominal I/P)<br>50A max @ 48VDC (115VAC input) |
| **Rectifier:** | 25A max @ 48VDC (nominal I/P)<br>12.5A max @ 48VDC (115VAC) (subject to de-rating below 110VAC) |
| **Power** | |
| **CXPS-E101 225A Capacity System:** | 10800W max @ 48VDC (nominal input)<br>5400W max @ 48VDC (115VAC input) |
| **CXPS-E101 100A Capacity System:** | 4800W max @ 48VDC (nominal input)<br>2400W max @ 48VDC (115VAC input) |

| Mechanical | |
|---|---|
| **CXPS-E101 225A Capacity System** | |
| **Dimensions:** | **mm:** 133H x 438W x 381D<br>**inches:** 5.25H x 17.24W x 15D |
| **Weight:** | **System:** 21.3kg (47lbs)<br>**Rectifier:** 1.2kg (2.7lbs) each |
| **CXPS-E101 100A Capacity System** | |
| **Dimensions:** | **mm:** 90H x 438W x 381D<br>**inches:** 3.5H x 17.24W x 15D |
| **Weight:** | **System:** 18.3kg (40.4lbs)<br>**Rectifier:** 1.2kg (2.7lbs) each |
| **Connnections** | |
| **Load Breaker:** | 10x sets, ¼" studs on ⅝" centers |
| **Battery Breaker:** | 2x sets, ¼" studs on ⅝" centers |
| **Return Bar:** | 13x sets, ¼" studs on ⅝" centers |
| **Alarm:** | Screw terminal 1.31mm² to 0.128mm² (#16 to #26 AWG) |

| Environmental | |
|---|---|
| **Temperature:** | -40 to 65°C (-40 to 149°F)<br>-40 to 75°C (-40 to 167°F) de-rated output |
| **Humidity:** | 0 to 95% RH non-condensing |
| **Elevation:** | -500 to 2800m; to 4000m with temperature de-rated to 40°C<br>(-1640 feet to 9186 feet; to 13124 feet with temperature de-rated to 104°F) with de-rated output |

| Related Components |
|---|
| **Cordex CXRF 48-1.2kW Rectifier Module:** 010-619-20-041 |
| **5-15P (120V) Line Cord, 2.5M:** 877-690-19 |
| **Universal Line Cord, Flying Leads, 3.5M:** 877-790-19 |
| **Temperature Sensor Assembly 12 ft, ¼" lug:** 747-028-20-072 |
| **Temperature Sensor Assembly 12 ft, ⅜" lug:** 747-082-20-072 |
| **Cordex CXCM1-HP:** 0180054-001 |

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