CXPS-E101 48Vdc Power Systems



Your Power Solutions Partner

- > 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 series 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 modular CXCM1 controller includes a web server, providing easy setup via local or remote IP access, using a standard Internet browser. The CXCM1 also includes LED indicators and an LCD screen for voltage and current display.

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



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225A System Configuration P/N: 0540570-401 100A System Configuration P/N: 0540569-001

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)
- 2x battery breaker positions (plug-in style breaker)
- 225A Low voltage disconnect
- 200A Battery shunt

Controller:CXCM1 Modular controller (included)

ELECTRICAL

Input:

| Voltage: | 176 to 312Vac (nominal) |
|---------------|---------------------------------------|
| | 90 to 176Vac (de-rated O/P power) |
| Current: | 7.5A max (176 to 300Vac) per module |
| | 6.0A max (90 to 176Vac) per module |
| Frequency: | 45 to 66Hz |
| Efficiency: | >93% (50-100% load @ nominal voltage) |
| Power factor: | >.99 |

Output:

Current:

- CXPS-E101 225A Capacity System:
- 225A max @ 48Vdc (nominal I/P)
- 112.5A max @ 48Vdc (115Vac input)
- CXPS-E101 100A Capacity System:
 - 100A max @ 48Vdc (nominal I/P)
- 50A max @ 48Vdc (115Vac input)

Rectifier:

- 25A max @ 48Vdc (nominal I/P)
- 12.5A max @ 48Vdc (115Vac) (subject to de-rating below 110Vac)

Power:

- CXPS-E101 225A Capacity System:
 - 10800W max @ 48Vdc (nominal input)
- 5400W max @ 48Vdc (115Vac input)
- CXPS-E101 100A Capacity System:
 - 4800W max @ 48Vdc (nominal input)
 - 2400W max @ 48Vdc (115Vac input)



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MECHANICAL

CXPS-E101 225A Capacity System

| Dimensions: | |
|-------------|----------------------|
| mm: | 133H x 438W x 381D |
| inches: | 5.25H x 17.24W x 15D |
| Weight: | |
| System: | 21.3kg (47lbs) |

| Rectifier:1 | 1.2kg (2 | .7lbs) each |
|-------------|----------|-------------|
|-------------|----------|-------------|

CXPS-E101 100A Capacity System

Dimensions:

| mm: | |
|------------|---------------------|
| inches: | |
| Weight: | |
| System: | 18.3kg (40.4lbs) |
| Rectifier: | 1.2kg (2.7lbs) each |

Mounting: 19/23" universal mount (center)

Connnections:

| Load breaker: | 10x sets, ¼"-20 studs on %" centers |
|------------------|--|
| Battery breaker: | 2x sets, ¼"-20 studs on 5⁄8" centers |
| Return bar: | 13x sets, 10-32 studs on 5⁄8" centers |
| Alarm: | Screw terminal 1.31mm ² to 0.128mm ² |
| | (#16 to #26 AWG) |
| Access: | Front access for operation and maintenance |

ENVIRONMENTAL

| Temperature:40 to 65°C (-40 to 149°F) |
|--|
| -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 (-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, 1/4" lug: 747-028-20-071 Temperature sensor assembly 12 ft, 3%" lug: 747-082-20-072 Cordex CXCM1-HP: 0180054-001

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