



an EnerSys® company

# Cordex® CXPS-C

## High Capacity Centralized Power System



CXPS-C Plant with (8) x 4.6kW rectifier shelves (48 modules) next to a distribution bay

- -48 V centralized power solution for central office, mobile switching center, data center, and cable headend facilities
- Standalone -48VDC rectifier bay option providing up to 5,000A
- High efficiency Cordex® HP rectifier modules reduce operating costs
- Flexible circuit breaker, TPS and TPL fuse options designed to feed equipment or remote distribution systems
- Compact footprint dramatically reduces floor space requirements
- Expandable power and distribution bays allow for easy and cost effective modular growth
- With external buswork the system is capable of 12,000 A using the 4.6 kW rectifier module

### The Cordex® CXPS-C centralized power system provides high capacity DC power for large communications applications.

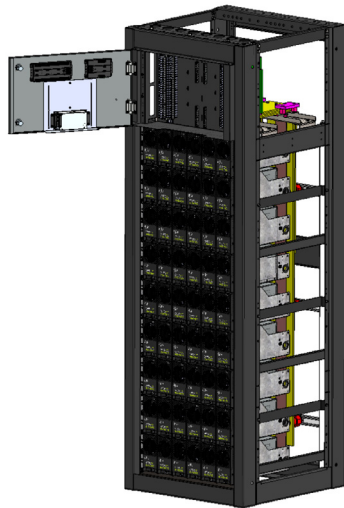
This system combines the capabilities of installation friendly distribution, advanced microprocessor based supervision, and rectifier modules in a seamless integrated package. Shunt monitoring provide single point monitoring of branch distribution with data logging features.

The Cordex® CXPS-C centralized power system is cost effective due to the internal copper buswork, and is delivered ready to assemble with factory tested components. Cable access is from the top; for standard installations and bottom; (load circuits) for computer floor applications. Hot swappable Cordex® HP power modules and internal buswork provides a safe work environment with easy installation and maintenance.

# Cordex® CXPS-C High Capacity Centralized Power System

Consult your Alpha® product representative for PN configurations.

Electrical	
<b>4.6 kW AC Input*</b>	208 to 277 VAC single phase, up to 54 × 30 A feeds per rectifier bay
	208 to 277 VAC 3 phase, 8 × 100 A feeds per rectifier bay or 16 × 50 A feeds per rectifier bay**
	480/277 VAC 3 phase, 8 × 50 A feeds per rectifier bay or 16 × 30 A feeds per rectifier bay***
<b>Rectifier Voltage</b>	208 or 480 VAC (with neutral)
<b>12kW AC Input Voltage</b>	480 VAC 3 phase, 8 × 50 A feeds per rectifier bay or 16 × 30 A feeds per rectifier bay
<b>Rectifier Voltage</b>	480 VAC (without neutral)
<b>Internal Bus Capacity</b>	4,000 A, 4,600 A, 5,000 A
<b>Rectifier Bay Capacity</b>	<ul style="list-style-type: none"> <li>Up to 5,000 A at -48 VDC</li> <li>Up to 4,600 A at -54 VDC</li> </ul>
<b>Distribution Bay Capacity</b>	6,000 A
Distribution Bay	
Each distribution bay can be equipped with a variety of different fuse/circuit breaker panels.	
<b>TPL Fuses</b>	<ul style="list-style-type: none"> <li>61 to 800 A</li> <li>4 fuse holders per panel</li> <li>6 fuse panels per bay</li> </ul>
<b>TPS/TLS Fuses</b>	<ul style="list-style-type: none"> <li>Up to 125 A</li> <li>18 fuse holders per panel</li> <li>12 fuse panels per bay</li> </ul>
<b>Bolt-in Breakers</b>	<ul style="list-style-type: none"> <li>1 pole up to 250 A</li> <li>2 pole 275 to 400 A</li> <li>3 pole 450 to 600 A</li> <li>4 pole 650 to 800 A</li> <li>5 pole 850 to 1,000 A</li> <li>6 pole 1,050 to 1,200 A</li> <li>12 breaker poles per panel</li> <li>6 fuse panels per bay</li> </ul>
<b>Plug-in Bullet Breakers</b>	<ul style="list-style-type: none"> <li>1 pole up to 125 A</li> <li>2 pole 125 to 200 A</li> <li>3 pole 200 to 250 A</li> <li>18 breaker poles per panel</li> <li>12 panels per bay</li> </ul>



CXPS-W Plant with (9) x 4.6W rectifier shelves (54 modules)

Mechanical	
<b>Enclosure</b>	14 gauge (1.095 mm) steel
<b>Dimensions H × W × D</b>	84 × 28 × 28 in. (213 × 71 × 71 mm)
<b>Net Weight</b>	<b>Rectifier bay:</b> Approximately 600 lb (272 kg) per bay (no modules) <b>Distribution bay:</b> Approximately 1,000 lb (454 kg) per bay
<b>Mounting</b>	Standard 23 inch relay rack (flush rack mount) in box bay
Environmental	
<b>Operating Temperature</b>	32 to 122 °F (0 to 40 °C)
<b>Storage Temperature</b>	-40 to 185 °F (-40 to 85 °C)
<b>Relative Humidity</b>	0 to 95% non-condensing
<b>Elevation</b>	Up to 6,562 ft (2,000 m)
Related Components	
<b>Cordex® HP 48V 4.6 kW Rectifier Module</b>	See datasheet #0480046-00 and the rectifier documentation for more detailed information.
<b>Cordex® HP 48V 12 kW Rectifier Module</b>	See datasheet #047-0259-00 and the rectifier documentation for more detailed information.
<b>Cordex® CXC HP System Controller</b>	See data sheet #0470170-00 and the controller documentation for detailed information on alarms and controls.
<b>Load Disconnect</b>	<ul style="list-style-type: none"> <li>Fuse/circuit breaker panel mounted option</li> <li>TPL + bolt-in panel 2,000 A rated</li> <li>Bullet breaker panel 600 A rated</li> </ul>
Smart Peripherals	
<b>Cordex® Shunt Multiplexer Module</b>	Shunt monitoring; 18 shunt inputs or 36 shunt inputs
<b>Cordex® HP L-ADIO Low Voltage Smart Peripheral</b>	Provides analog and digital inputs and 12 Form C alarm output relays. See datasheet #047-0331-00 for more detailed information.
<b>Cordex® HP 6i-ADIO Six Input Smart Peripheral</b>	Provides six isolated shunt inputs. See datasheet #0470318-00 for more detailed information.
<b>Cordex® HP Redundant Input Power Module</b>	Provides multiple power inputs to power the system controller and I/O peripherals.
<b>Cordex® HP Shelf/Bay ID Peripheral</b>	Provides bay and shelf location of rectifier modules in the system.
Remote Return Bar	
<b>Mounting</b>	2 inch auxiliary framing (customer supplied)
<b>Termination</b>	124 sets of 2 hole ½ inch diameter on 1¾ inch centers or ¾ inch diameter on 1 inch centers
<b>Unit Capacity</b>	4,000 A per bar
<b>Ultimate Capacity</b>	3 bar limit (12,000 A)
System Level Alarms and Controls	
<b>LEDs</b>	System status and alarms
<b>Alarm Connections</b>	14 to 22 AWG (0.34 to 2.5 mm <sup>2</sup> )
<b>System Controller</b>	Alarms/control parameters are user-programmable through built-in system controller.
Regulatory Compliance	
<b>Safety</b>	CSA C22.2 No. 62368-1
	CSA/UL 62368-1
<b>Network Equipment-Building Systems (NEBS)</b>	NEBS Level 3 Certified

\* Backwards compatible with 4.0kW rectifier

\*\* 48 rectifier modules maximum per power bay

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