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Cordex® HP 12kW

Modular Switched Mode Three-Phase Rectifier

Distributed in Australia by:

Alpha
Power Systems



- High performance -48V high capacity rectifier for CO, MSC, Data Center and Cable Headend facilities
- High efficiency for decreased OPEX and reduced carbon footprint
- True three-phase, three wire 480VAC input
- Legacy power system upgrade ready, with Cordex® HP controller

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

In a compact, fan-cooled design, Alpha® HP rectifiers open the possibility for immediate OPEX/CAPEX savings, reducing total cost of ownership and impact on the environment, and are useable under a wider range of applications.

The Cordex® HP 12kW is a perfect solution for various 48VDC high capacity applications including Central Office, MTSO's and Data Centers.

Cordex® HP 12kW is a true three-phase, three wire, 480VAC input rectifier which meets the critical requirements of current high density telecommunications environments. It combines the latest DSP controlled power conversion technology, to provide a flexible, efficient and highly reliable DC power source. 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® HP 12kW Modular Switched Mode Three-Phase Rectifier

P/N: 0100020-001

Electrical	
Input Voltage:	Nominal: 480VAC (3Ø – 3 Wire + PE) Nominal Range: 430 to 530VAC
Input Frequency:	47 to 63Hz
Current:	17A max
Power:	12,000W
Power Factor:	>0.96% from 50 to 100% load
THD:	<5% from 70 to 100% load
Efficiency:	94.6% Peak
Output Voltage:	42 to 58VDC
Output Current:	220A max
Load Regulation:	Static: <±0.5% Dynamic: <±4% for 40% - 90% load step
Line Regulation:	Static <±0.1%
Noise:	Voice band: <42dBmC Wide band: <20mV RMS (to 10MHz) <150mV pk to pk (to 100MHz)
Psophometric:	<4mV RMS
Acoustic:	<65dBa @ 1m (3ft), 30°C (86°F)
Mechanical	
Dimensions:	mm: 160H x 261W x 326D incl. front panel & handle: 175H x 261W x 364D inches: 6.3H x 10.3W x 11.8D incl. front panel & handle: 7H x 10.3W x 14.4D
Weight:	12.8kg (28lbs)
Shelves	
23" Shelf (2 Modules) P/N: 0300167-001	
Dimensions:	mm: 177H x 530W x 388D inches: 7H x 21.8W x 15.3D
Weight:	11.3kg (25lbs)
Mounting:	Fits 23" racks only flush/center mount
Connections:	Input: Box type terminal block, 3 to 16mm ² (14 to 6AWG) Output: Bus adapters with 3/8" studs on 1" centers Chassis ground: Compression lug, 6 to 16mm ² (10 to 6AWG) CAN communication: RJ 12 offset

Environmental	
Temperature:	Operation: -10 to 65°C (14 to 149°F) full rated power output from 0 to 40°C (32 to 104°F) Storage: -40 to 70°C (-40 to 185°F)
Humidity:	0 to 90% RH non-condensing
Altitude:	-100 to 2000m (-330 to 6560ft)
Heat Dissipation:	<2800 BTU per hour @ 480VAC
Performance / Features	
Indicators:	<ul style="list-style-type: none"> AC mains OK — green LED DC output OK — green LED Module fail — red LED
Controls:	<ul style="list-style-type: none"> CAN interface to CXC-HP Controller
Adjustments (via CXC HP Controller):	<ul style="list-style-type: none"> Float voltage Equalize voltage High voltage alarm Low voltage alarm High voltage shutdown Current limit Slope Start delay timers
Protection:	<ul style="list-style-type: none"> Current limit/short circuit Start delay Input/output fuses Output high voltage shutdown Power limiting
Agency Compliance	
Safety:	CSA C22.2 No 60950-1 UL 60950-1 CE marked IEC/EN 60950-1 CE Marked
EMC:	ETSI 300 386
Emissions:	CFR47 (FCC) Part 15 Class A EN 55022 (CISPR 22) Class A
Immunity:	EN 61000-4-2, 4-3, 4-5, 4-6, 4-11 ANSI / IEEE C62.41 CatB3
NEBS Level 3:	GR-1089 CORE GR-63 CORE



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