

Power

Cordex™ 1.8kW

Modular Switched Mode Rectifier



CXRF 48-1.8kW

- Available in 37.5A @ 48VDC
- 1.8kW power output
- High power density
- Power limiting and wide range AC input
- High efficiency and power factor correction
- Hot swappable, 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.

With more than 9kW per 23" shelf, the fan cooled Cordex 1.8kW rectifier has extremely high density providing the most power in the least amount of space. A compact 2RU design accommodates five rectifiers per 23" shelf and four rectifiers per 19" shelf with integrated CXCI controller. An optional CXCM2 controller with touch screen display is available.

Local and remote setup, adjustment, and control is a simple single-step 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 1.8kW Modular Switched Mode Rectifier

Rectifier Module(s)

Electrical

Input voltage	
Nominal:	208/220/240VAC
Operating:	176–312VAC
Extended:	90–176VAC (derated)
Input frequency:	45–70Hz
Power:	1800W continuous/module
Power factor:	>0.99 (50–100% load)
THD:	<5%
Efficiency:	>92%
Output voltage:	40–58VDC
Output current:	51.8A @ 54VDC (37.5A max. 48V)
Regulation:	-0.2% ±25mV, line and load at 0% slope (static)
Transient response:	±1% for 10–100% load step, 2ms recovery time
Noise	
Voice band:	<32dBmC
Wide band:	<10mV RMS (10kHz–10MHz) <100mV pk to pk (10kHz–100MHz)
Psophometric:	<1.0mV
Acoustic:	<55dBa @ 1m (3ft)

Mechanical

Dimensions	
mm:	84H x 100W x 235D
inches:	3.3H x 3.94W x 9.25D
Weight:	2.8kg (6.2lb)

Features

Indicators:	AC mains OK—green LED Module OK—green LED Module fail—red LED
Controls:	CAN interface to CXC Controller
Adjustments: (via CXC Controller)	Float voltage Equalize voltage High voltage alarm Low voltage alarm High voltage shutdown Current limit Slope Start delay
Protection:	Current limit/short circuit Start delay Input/output fuses Output high voltage shutdown Power limiting Thermal foldback/shutdown Input transient AC low line foldback



23" Cordex 1.8kW Shelf

Environmental

Temperature	
Standard:	-40–65°C (-40–149°F)
Extended:	-40–75°C (-40–167°F)
Storage:	-40–85°C (-40–185°F)
Humidity:	0–95% RH non-condensing
Elevation:	-500–2800m (-1640–9186ft)
Heat dissipation:	<350BTU per hour

Shelves

Mechanical

19"/23" shelf:

Dimensions	
mm:	86.3H x 442W x 304.8D
inches:	3.4H x 17.4W x 12D
Weight:	6.7kg (14.7lb)
Mounting:	Fits 19" rack flush/center mount Fits 23" rack center mount only

23" shelf:

Dimensions	
mm:	86.3H x 530W x 304.8D
inches:	3.4H x 20.8W x 12D
Weight:	8.2kg (18.1lb)
Mounting:	Fits 23" racks only flush/center mount

Connections

Input:	Molex mini-fit type 8mm ² (8AWG)
Output:	Bus adapters with 3/8" studs on 1" centers
Chassis ground:	Compression lug 6–16mm ² (10–6AWG)
CAN communication:	RJ 12 offset

Standards

The Cordex 1.8kW is designed to meet the following:

Safety:	CSA C22.2 No 60950-1-03 UL 60950-1 1 st Edition CE marked IEC/EN 60950-1
EMC:	ETSI 300 386
Emissions:	CFR47 (FCC) Part 15 Class B ICES-03 Class B EN55022 (CISPR 22) Class B C-tick (Australia) EN 61000-3-2 EN 61000-3-3 EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 EN 61000-4-11 ANSI/IEEE C62.41 Cat B3
Immunity:	

For contact information visit www.AGIPower.com

The Alpha Group >	Europe, Middle East & Africa	Asia Pacific	North America	Latin & South America
	Cyprus Tel: +357 25 375 675 Fax: +357 25 359 595 South Africa Tel: +27 11 450 4076 Fax: +27 11 450 4078	Germany Tel: +49 9122 79889 0 Fax: +49 9122 79889 21 United Kingdom Tel: +44 1279 422110 Fax: +44 1279 423355	Russia Tel: +7 095 925 9844 Fax: +7 095 916 1349 P.R. China Tel: +86 769 533 2600 Fax: +86 769 532 6603	Canada Tel: +1 604 436 5900 Fax: +1 604 436 1233 USA Tel: +1 360 671 7054 Fax: +1 360 671 7096
				Mexico Tel: +52 55 5280 6990 Fax: +52 55 5280 6585