

# CORDEX<sup>®</sup> HP 3.0KW

## MODULAR SWITCHED MODE RECTIFIER

### OVERVIEW

High performance compact 62.5A rectifier for 48V telecom applications

High efficiency, approaching 96.9% for reduced OPEX and carbon footprint

Extended operating temperature range up to 75°C for deployment in the harshest outdoor environments

Multiple configurations delivering up to 15kW in a compact 23" 1RU shelf

High power density (35W/in<sup>3</sup>) yields more space for revenue generating equipment

Wide AC input operating range for global installation requirements



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

In 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 Cordex HP 3.0kW is a perfect solution for various small to large 48Vdc capacity applications including DAS, central office, headend, backhaul and wireless base stations. It is particularly suitable for high density telecom applications and able to deliver 312A or 15kW per compact 1RU shelf.

Unlike other rectifiers in its category, the Cordex HP 3.0kW provides 100% nominal power up to 55°C ambient and at least 2,400W up to 65°C. With a high operating efficiency, high power density and broad temperature operation, HP series rectifiers are also ideal for harsh outside plant enclosure installations.

Local and remote setup, adjustment and control are a simple, single-step process with the Cordex CXC HP system controller. Complete configuration and monitoring of power equipment is possible through a network web browser or via a local display.

# CORDEX® HP 3.0KW 48VDC MODULAR SWITCHED MODE RECTIFIER

## ELECTRICAL

Input Voltage:	Nominal: 208 to 277Vac Operating: 90 to 305Vac Extended: 90 to 187Vac (de-rated power)
Input Frequency:	45 to 66Hz
Power:	3,000W continuous (1,700W output @ 120Vac input)
Power Factor:	>0.98 (50 to 100% load)
THD:	<8% (50 to 100% load)
Efficiency:	>96.9%
Output Voltage:	42 to 58Vdc
Output Current:	55A @ 54Vdc (62.5A max @ 48Vdc) (~36AA @ 48Vdc at 120Vac input)
Load Regulation:	<±0.5% (static)
Line Regulation:	<±0.1% (static)
Transient Response:	<±3% for 40 to 90% load step
Wide Band Noise:	Voice Band: <53dBmC Wide Band: <260mV RMS (10kHz to 10 MHz) <180mV pk to pk (10kHz to 100 MHz)
Psophometric Noise:	<2mV RMS
Acoustic	<60dBa @ 1m (3ft), 30°C

## MECHANICAL

Dimensions (H x W x D)	41 x 104 x 333mm 1.6 x 4.1 x 13.1in
Weight:	1.83kg (4.04lbs)

## ENVIRONMENTAL

Temperature:	Operation: -40 to 75°C (-40 to 176°F) full rated output up to 55°C (131°F) >2,400W @ 65°C (149°F) Storage: -40 to 85°C (-40 to 185°F)
Humidity:	0 to 95% RH non-condensing
Elevation:	60 to 3,000m (197 to 9,842ft)
Heat dissipation:	<585 BTU per hour (worst case)/171W

## STANDARDS AND CERTIFICATION

Safety:	CSA/UL/IEC/EN 60950-1 CE marked
EMC	ETSI 300 386 Emissions: CFR47 (FCC) Part 15 Class A EN 61000-3-2, EN 61000-3-3 Immunity: 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
NEBS/Telcordia	GR-1089-CORE (pending) GR-63-CORE (pending) GR-3108-CORE (pending)

## CORDEX® 48-3.0KW RECTIFIER SHELVES

**23in 1RU universal mount 15,000W**  
**P/N 0300216-001**



Rectifiers:	5 x CXRF HP 48-3.0kW
Distribution:	Bulk power for external distribution
Dimensions (H x W x D):	44 x 438 x 420mm 1.75 x 17.3 x 16.6in
Weight:	5.7kg (12.6lbs)

**19in 1RU universal mount 12,000W**  
**P/N 0300228-001**



Rectifiers:	4 x CXRF HP 48-3.0kW
Distribution:	Bulk power for external distribution
Dimensions (H x W x D):	44 x 438 x 420mm 1.75 x 17.3 x 16.6in
Weight:	4.5kg (9.9lbs)
Communications Ports:	CAN: interface on shelf to CXC HP controller

## PRODUCT NUMBER

0100037-001



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