

Cordex HP[™] 1.2kW

48Vdc Modular Switched Mode Rectifier

an EnerSys company



- High performance compact 25A rectifier for 48Vdc telecom application
- 93.9% efficiency for reduced OPEX and carbon footprint
- Extended temperature range (-40 to 80°C) enabling to deliver full rated output power up to 65°C for installation in harsh outdoor and indoor environments
- 1RU x 2RU footprint for multiple mounting options
- High power density (21.8W/in³) yields more space for revenue generating equipment
- Wide AC input range for a variety of global installation requirements

Cordex High-Performance 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 1.2kW is a perfect solution for small 48Vdc power applications such as customer premise, xDSL, FTTx, distributed node B, and microwave. With a high operating efficiency and high temperature operation, CXC HP series rectifiers are also ideal for harsh outside plant enclosure installations.

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[™] CXRF-HP 1.2kW Modular Switched Mode Rectifier

P/N: 010-619-20

Electrical	
Input Voltage:	Nominal: 176 to 276Vac Extended (high): 277 to 300Vac (de-rated power factor) Extended (low): 90 to 175Vac (de-rated output power)
Input Current:	Nominal: 7.4A max 90 to 132Vac: 6A max Input frequency: 45 to 70Hz
Power Factor:	>99%
THD:	<5% @ nominal input voltage
Efficiency:	93.9%
Output Voltage:	42 to 58Vdc
Output Power:	Nominal AC Input: 1200W 110 to 132Vac: 600W (de-rated linearly to 491W @ 90Vac)
Output Current:	Nominal AC Input: 22.2A @ 54V (25A max @ 48V) 110 to 132Yac: 12.5A max (de-rated linearly to 10.2A @ 90Vac)
Load Regulation:	$\label{eq:static:} \begin{array}{l} \mbox{Static:} <\pm 0.5\% \\ \mbox{Dynamic:} <\pm 1\% \mbox{ for 40 to 90 to 40\% load step, 2ms recovery time} \end{array}$
Line Regulation:	Static: $\leq \pm 0.1\%$ Dynamic: $\leq \pm 1\%$ for any change within rated limits
Wide Band Noise:	<30mVrms <150mVp-p
Psophometric Noise:	<2mV
Performance / Features	
Indicators:	AC mains OK — green LED DC output OK – green LED Module alarm — red LED
Cooling:	Fan cooled
Adjustments (Via CXC HP Controller):	Float and equalize voltage Battery test voltage High and low voltage alarms high voltage shutdown Current limit Start delay time Slope %
Protection:	Current limit/short circuit Input/output fuses Output high voltage shutdown Output power limiting Thermal foldback/shutdown Input transient AC low line foldback/shutdown AC high voltage shutdown

M	
Mechanical Dimensions:	mm: 41.4H x 84.8W x 256.8D inches: 1.63H x 3.34W x 10.11D
Weight:	1.23kg (2.7lbs)
Environmental	
Temperature:	Operating: -40 to 80°C (-40 to 176°F); full rated output up to 65°C (149°F) Storage: -40 to 85°C (-40 to 185°F)
Humidity:	0 to 95% RH non-condensing
Elevation:	-500 to 3000m (-1640 to 9840ft)
Heat Dissipation:	<308 BTU per hour
Agency Compliance	
Safety:	 CSA C22.2 No 60950-1-03 CE marked
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, 3-3
Immunity:	• EN 61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-11 • ANSI/IEEE C62.41 Cat B3
NEBS/Telcordia:	• GR-1089-CORE • GR-63-CORE



2