

C&D TECHNOLOGIES

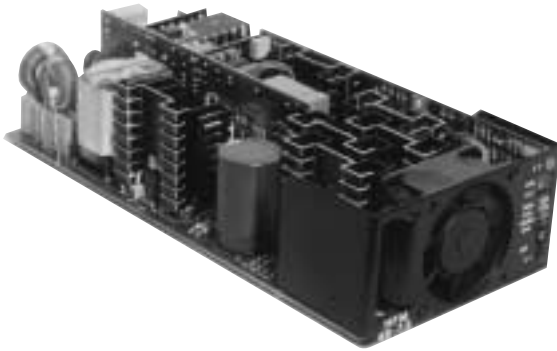
Power Solutions

MODULAR RECTIFIERS

For telecommunications applications

HFM 48AC 7.5

48/7.5A MODULAR SWITCHED-MODE RECTIFIER



- Switched-mode
- Active power factor correction, >.99 PF
- Shelf-mounted
- Automatic load sharing
- Nominal output voltage 48 VDC
- High efficiency (85%)

C&D TECHNOLOGIES' 450W 48V/7.5 MODULAR SWITCHED-MODE RECTIFIER is the latest member of the switched-mode rectifier family designed for use in modular power plants. The 48V/7.5A modular switched-mode rectifier will function in parallel with any C&D Technologies or non-C&D Technologies rectifier with similar current sharing capacities. This latest addition to the C&D Technologies line of modular rectifiers for telecommunications applications combines advanced technology and the same high quality found in all C&D Technologies products to create a compact, versatile and efficient unit. Its small size is ideally suited for economical growth and use in customer premises, fiber optic, microwave and outside plant applications where space is at a premium.

PRODUCT FEATURES

- **Compact size:** 48 volts at 7.5 amperes in 2 rack spaces for 3 units, making our rectifiers ideal for confined areas. Up to 8 units will fit in a single 3 rack space shelf, mountable in a 23" rack.
- **Low cost growth:** The compact unit size allows for system expansion at a minimum cost. Units may be paralleled for redundancy or increased capacity.
- **Hot-swappable modules:** The light weight modules are shelf-mounted and can be easily installed or removed while the system is operational without harm or power interruption.
- **Low energy costs:** Active power factor correction of >.99 and high efficiency of 85% means less AC power consumption and less heat dissipation, saving dollars in operating costs. This also means less disturbance placed back on the AC line.
- **Automatic load sharing:** Forced load sharing offers equal power distribution from no load to full load between modules in parallel applications.
- **High-voltage shutdown (HVSD):** The rectifier has a built-in, High-Voltage Shutdown Signal permanently set at 60V. No single component failure (short or open) will result in an output voltage greater than 60 volts. If an internal shutdown occurs, the rectifier may be locally restarted via a switch or restarted via a remote HVSD Restart signal.
- **Safety compliance:** Designed for all applicable international safety requirements, including EMI filtering to FCC Class A limits. Rectifiers and shelves comply with U.L.1950.
- **Panel indicator LED:** Module front-panel indicators include: Green Normal Operation (diagnostic code when flashing); Float-equalize Status, Red Rectifier Failure Alarm.
- **Surge protection:** Rectifiers will withstand lightning or input surges of 6000V/3000A per ANSI/IEEE C62.41-1991 standards. Surge protection assures performance under adverse conditions.

RECTIFIER SPECIFICATIONS

450W 48V/7.5A MODULAR SWITCHED-MODE RECTIFIER

INPUT

Voltage	106-264 VAC, single-phase, no taps required
Current	4.6/2.55/2.12 amps AC nominal
Frequency	45 to 65 Hz
Protection	Rectifier AC source is protected by a fuse within the rectifier
Connections	AC input connections are made inside the shelf

OUTPUT

Voltage	Float voltage is adjustable from 48 to 56 volts DC. Equalize voltage is adjustable from 48 to 60 volts DC
Protection	Diode
Regulation	±0.5% from 0 to 100 percent load, within the specified input voltage and frequency range
Filtering	Voice band: less than 32 dBrc Wide band noise: less than 250 mV, peak-to-peak, over a 10 Hz to 14 MHz range
Over Voltage Shutdown	Fixed at 60VDC
Turn-On	Soft start
Load Current	Modules share within ±10% from 10 to 100 percent rating
Connections	DC output connections are made in the shelf and are front accessible

ENVIRONMENT

Temperature	-40 to 149° F (-40 to +65° C)
Storage Temperature	-58 to 185° F (-50 to 85° C)
Humidity	0 to 95 percent non-condensing
Rectifier Heat Dissipation	244 Btu/hr @54V
Power Factor	>.99
Efficiency	>85%
EMI	FCC Part 15, Subpart J for class A equipment VDE-0875, Class N
Audible Noise	Less than 55 dBa, five feet from any vertical surface
Altitude	0 to 7000 feet (0 to 2133 m)
Module Weight	2 lbs.

For ordering information, please refer to the
C&D Technologies Electronics 48V Power Plant Brochures.



POWERCOM DIVISION

1400 UNION MEETING ROAD
P.O. BOX 3053
BLUE BELL, PA 19422-0858
(215) 619-2700 • FAX (215) 619-7899
(800) 543-8630
www.cdpowercom.com

Specifications are subject to change without notice. Contact your nearest C&D sales office for the latest specifications. All statements, information and data given herein are believed to be accurate and reliable but are presented without guaranty, warranty, or responsibility of any kind, express or implied. Statements or suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement, and are not recommendations to infringe any patent. The user should not assume that all safety measures are indicated, or that other measures may not be required. Unless made explicitly in writing to the customer, C&D makes no representations or warranties regarding whether any product/technology purchased and/or specifications and/or literature regarding same are the most current or advanced version thereof; and C&D assumes no obligation to inform its customers of any revisions and/or improvements to such product, technology, specifications, and/or literature.

Copyright 1997 C&D TECHNOLOGIES, INC.

C&D TECHNOLOGIES, INC.