

# C&D TECHNOLOGIES

Power Solutions

## MODULAR RECTIFIERS

For telecommunications applications  
48 Vdc, 50 Adc per Rectifier or 200 Adc per shelf



- Switched-mode
- Active power factor correction, 0.99 PF
- Shelf-mounted
- Automatic load sharing
- Nominal output voltage 48 Vdc
- High efficiency (90 percent)

### Two types of operation

The modular rectifiers can be used in redundant or non-redundant modes. The modules are shelf-mounted and can be installed or removed while the system is operational. Modules include front panel indicator LEDs, input and output circuit breakers and a 3.5-digit ammeter. The unit incorporates an insert/extract handle which makes connections/disconnects trouble-free, and a field-replaceable cooling fan.

### Shelf mounting

The modules are housed in a shelf, which is designed to mount in a 23-inch relay rack. Each shelf houses up to four modules.

Dc output connections are made on the side of the shelf; ac input connections are made inside the shelf.

### Load sharing

Forced or passive load sharing between modules of the same operating voltage is provided in order to offer equal power distribution from no load to full load between modules in parallel applications. Designed for all applicable international safety requirements, including EMI filtering to FCC and VDE-0875, Class N limits.

### High-voltage shutdown (HVSD)

The rectifier has a built-in, HVSD function. No single component failure (short or open) will result in an output voltage greater than 60 volts. After a remote HVSD signal is received or an internal shutdown occurs, the rectifier may be reset locally or remotely.

## SPECIFICATIONS

### INPUT

<b>Voltage</b>	208/220/240 Vac, single-phase; Operating range 176 to 264 Vac, no taps required
<b>Frequency</b>	45 to 65 Hz
<b>Protection</b>	2-pole circuit breaker

### OUTPUT

<b>Voltage</b>	Float voltage is adjustable from 48 to 60 volts dc Equalize voltage is adjustable from 48 to 60 volts dc
<b>Current</b>	Current limit: adjustable from 0 to 50 amps
<b>Regulation</b>	± 0.5 percent for 0 to 100 percent load, within the specified input voltage and frequency range
<b>Filtering</b>	Voice band — less than 32 dBnC Wide band noise — less than 350mV, peak-to-peak, over a 10 Hz to 14MHz range
<b>Protection</b>	Circuit breaker
<b>Overvoltage shutdown</b>	Adjustable up to 60 Vdc
<b>Turn-on</b>	Soft start
<b>Load current</b>	Modules share within ±10 percent from 10 to 100 percent rating

### ENVIRONMENT

<b>Operating temperature</b>	-40 F (-40C) to 149 F (65C)
<b>Storage temperature</b>	- 58 F (-50C) to +185 F (85C)
<b>Humidity</b>	0-95 percent relative humidity, non condensing
<b>Altitude</b>	0 to 7,000 feet (0 to 2,133 meters)
<b>EMI</b>	FCC Part 15, Subpart J for Class A equipment; VDE0875, Class N
<b>Audible noise</b>	Less than 55 dBA, five feet from any vertical surface
<b>Module weight</b>	25 lbs (11.4 Kgs)
<b>Module height</b>	12.25" (31.75cm) when mounted in shelf
<b>Shelf depth</b>	14.5" (37cm) maximum

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