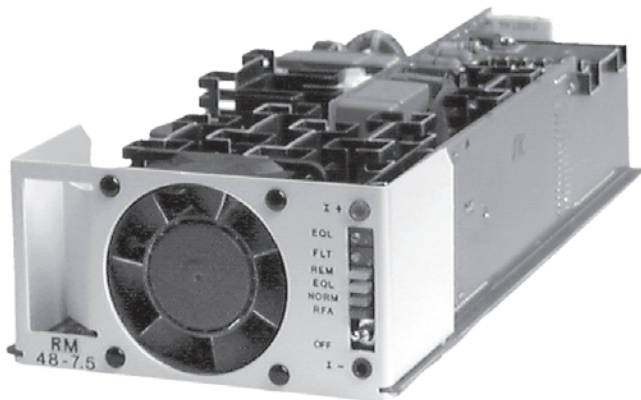


## 7.5 AMP MODULAR SWITCH MODE RECTIFIER

### RM487.5



#### FEATURES

- SWITCH MODE
- >.99 PFC
- >84% EFFICIENCY
- AUTOMATIC LOAD SHARING
- HOT-SWAP CAPABLE
- COMPACT SIZE
- SHELF MOUNTED
- SOFT STARTTURN-ON
- TELECOM BULK POWER RATED
- BELLCORE COMPLIANT
- $\mu$ PROCESSOR INTELLIGENCE ALLOWS EXPANSION TO REMOTE CONTROL FEATURES
- INFINITE, FULL CURRENT SHORT CIRCUIT CAPABLE
- THD <5%

#### DESCRIPTION

The RM487.5 Modular Switch-Mode Rectifier is one of C&D Technologies' family of rectifiers that may be used in modular power plants. This unit will function in parallel with any rectifier with similar current sharing capacities. This compact, versatile and efficient unit is ideal for use in advanced telecommunications applications. Its small size allows the user to plan economically for system expansion at minimum cost and makes it ideal for use in fiber optic, microwave and other applications where space is at a premium.

AGENCY APPROVALS PENDING



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# Input Specifications

Parameter	Conditions	Min	Typ	Max	Units
Operating Range	45 - 65 Hz, single phase, no taps required	106		264	VAC
Current	106 VAC		4.6		A
	208 VAC		2.55		A
	240 VAC		2.12		A
Efficiency			84		%
Power Factor Correction (PFC)				>.99	

MEASUREMENTS OF RM4875		
<b>Module</b>	Weight	2.88 lbs.
	Height	2.4"
	Depth	11.0"
	Width	4.75"
<b>Shelf*</b>	Weight	15.5 lbs.
	Height	3.5" with rectifiers mounted in shelf
	Depth	12" maximum
	Width	23" rack mount

\* These measurements are specifically for the AGM25 List 1 up to 8 quantity RM 487.5.  
Please contact factory for other shelf and power plant options.

## GENERAL FEATURES

### Hot Swappable Modules

These shelf-mounted modules are easy and safe to install or remove while system is operational without affecting the overall system's performance.

### Parallel Operation and Automatic Load Sharing

Forced share connection is made via a hard wire. Sharing is within  $\pm 10\%$  of the average current for the load applied.

### Remote Control Enable Signal

The rectifier's output voltage control may be changed from internal float and equalize pots to external remote control through a digital ground signal.

### Current Limit

Upon reaching 110% of rated current, the rectifier will automatically limit the current down to short circuit conditions with no fold back.

### Safety

UL/CUL Approved: UL 1950/CSA 950.  
File Number: E131694

### Status Indicator

RFA  
Remote Control  
Equalize  
Front Panel Current Test Jacks  
Normal

## Output Specifications

Parameter	Conditions	Min	Typ	Max	Units
Voltage Adjustment Range	float voltage	48		56	Vdc
	equalize voltage	52		60	Vdc
Regulation	0-100% load within specified input voltage and frequency range		± .5		%
Load Current	within a 10 - 100% rating		±10		%
Hold-Up Time	nominal AC line	>16			mS
Filtering					
Voice band		<32			dBmc
Wide band noise	@ 20 MHz	<250			mV p-p
<b>ENVIRONMENTAL</b>					
Temperature					
Operating		-40		+65	°C
		-40		149	°F
Storage		-50		+85	°C
		-58		185	°F
Humidity	non-condensing	0		95	%
Altitude		0		7000	ft.
		0		2133	m
Heat Dissipation	@54V		264		Btu/hr
Audible Noise	5 ft. from any vertical surface	<55			dBa

## PROTECTION, ALARM AND CONTROL SYSTEMS

### Rectifier Failure Alarm (RFA)

Problems occurring because of an unacceptable relationship between the output power and load conditions will cause a Rectifier Failure Alarm (RFA). This alarm consists of a red LED and a flashing green OK LED. Conditions which may lead to an RFA are:

**Low Current** - Output current has decreased to below 5% of its rated value.

**Unit Shutdown** - Any shutdown occurrence due to overvoltage, external shutdown command, unacceptable ambient temperature conditions or low AC input voltage.

**Load Sharing Terminal Pin Out Of Range** - The terminal pin is out of range.

**Remote Control Terminal Out Of Range** - The remote control terminal pins are out of range.

**Line Sag** - This condition occurs when the nominal voltage decreases below 180V. Normal range is 208-240V.

**Fan Malfunction** - The fan has stopped operating or is not providing the airflow needed to cool the unit.

**Over Temperature** - The ambient temperature has exceeded 65°C.

### High Voltage Shutdown (HVSD)

The unit's built-in high voltage limit is permanently set at 60V. When internal shutdown occurs, the unit may be restarted by a local switch or by a remote signal.

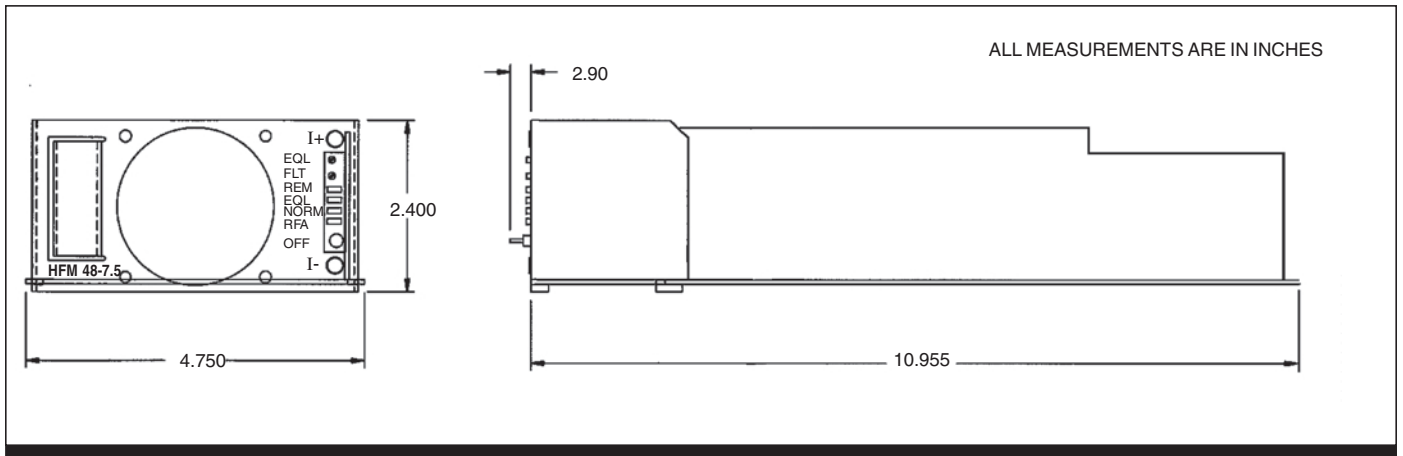
### Surge Protection

The unit will withstand lightning and input surges of 6000V/3000A.

### Under Voltage Protection

When input voltage is below 105 VAC, the rectifier's operation is automatically power limited.

# Mechanical



Standard Options are shown, consult factory for other available options.

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