

RECTIFIER MODULES & SHELVES

DESCRIPTION

Our series of rectifiers are hot-swappable, modular rectifiers which produce 25 or 50 amperes at 54.4VDC (48V versions), 50 or 100 amperes at 27.2VDC (24V versions) or 100 amperes at 13.6VDC (12V version). These switching rectifier modules are compact with up to 11 watts/cu.inch power density, taking up only 3.5 inches (two rack spaces) of height. They are ideally suited for both wireless and wireline applications.

Three VTC485067-69 rectifier modules in a companion 19-inch shelf produce up to 75A at 54.4VDC, 150A at 27.2VDC or 300A at 13.6VDC; four VTC485067-69 modules in a 23-inch shelf produce up to 100A at 54.4VDC, 200A at 27.2VDC or 400A at 13.6VDC.

Three VTC485060 & 66 rectifier modules in a 19-inch shelf produce up to 150A at 54.4VDC or 300A at 27.2VDC; four VTC485060 & 66 modules in a 23-inch shelf produce up to 200A at 54.4VDC or 400A at 27.2VDC.

The rectifier modules have automatic load sharing and ORing diodes, so they can be added or replaced while the system is operating. The output voltage of each rectifier module can be adjusted over 45-58, 22.5-29 or 11.25-14.5VDC from a pot on the front panel, or all modules can be adjusted simultaneously from a remote analog input.

SAFETY CERTIFICATIONS

UL60950
CSA22.2, No. 60950
EN60950

TWO-YEAR WARRANTY



RECTIFIER MODULES

MODEL	NOMINAL OUTPUT	FACTORY SET OUTPUT	MAX. OUTPUT CURRENT	INPUT VAC
VTC485067	48VDC	54.4V	25A	85-264
VTC485068	24VDC	27.2V	50A	85-264
VTC485069	12VDC	13.6V	100A	85-264
VTC485066	48VDC	54.4V	50A	170-264
VTC485060	24VDC	27.2V	100A	170-264

SHELVES

MODEL	WIDTH	HEIGHT	NO. MODULES
VTC485062	19" (483MM)	3.5" (89MM)	3
VTC485065	23" (584MM)	3.5" (89MM)	4

FEATURES

- ◆ Two Mounting Positions High: 3.5"
- ◆ 85-264 or 170-264VAC Input Range
- ◆ Low Energy Cost: 0.99 Power Factor
- ◆ Active Load Sharing
- ◆ Output Voltage Range:
45-58, 22.5-29 or 11.25-14.5VDC
- ◆ Group or Individual Remote Output Adjustment*
- ◆ Battery Temp. Compensated Charge Regulation*
- ◆ 87% Efficiency
- ◆ Up to 11W/Cu. Inch Power Density
- ◆ Hot Swappable
- ◆ Integral ORing Diodes
- ◆ Class B EMI Filter

* With external controller

SPECIFICATIONS ON MODULES

Typical at Nominal Line, Full Load and 25°C Unless Otherwise Noted.

INPUT

Voltage Range	85-264 or 170-264VAC
Power Factor	0.98
Total Harmonic Distortion, Max.	5%
Frequency	47-63Hz
Inrush Current Limiting	25A Peak
Input Current, Full Load, VTC485067-69.....	13.4A@120VAC
VTC485060 & 66.....	14.0A@230VAC
EMI Filter, Conducted	FCC20780 pt. 15J Curve B
.....	EN55022 Curve B
Input Immunity, Conducted	
Fast Transients, Line-Line	±2kV (EN61000-4-4 Level 3)
Surges, Line-Line	±1kV (EN61000-4-5 Level 2)
Surges, Line-Ground	±2kV (EN61000-4-5 Level 3)
Analog Voltage Adjust	0 to +5V

OUTPUT

Current & Voltage ¹	25 or 50A@54.4VDC
.....	50 or 100A@27.2VDC
.....	100A @13.6VDC
Voltage Adjustment Range, 48V Nominal	45-58VDC
24V Nominal	22.5-29VDC
12V Nominal	11.25-14.5VDC
Total Regulation, Max.	1.0%
Holdup Time	20msec.
Overvoltage Protection, 48V Out	59V
24V Out	29V
12V Out	15V
Filtering: Wideband Noise, 20MHz BW	
48V Out, P-P	500mV
24V Out, P-P	250mV
12V Out, P-P	125mV

Voice Band Noise	<32dBmC
Current Limit	105% Rated Current
Efficiency	87%

SAFETY STANDARDS UL60950, CSA22.2 No.60950, EN60950

STATUS INDICATORS

AC Good	Logic LO Output
DC Good	Logic LO Output
Thermal Alarm	Logic LO Output

ENVIRONMENTAL

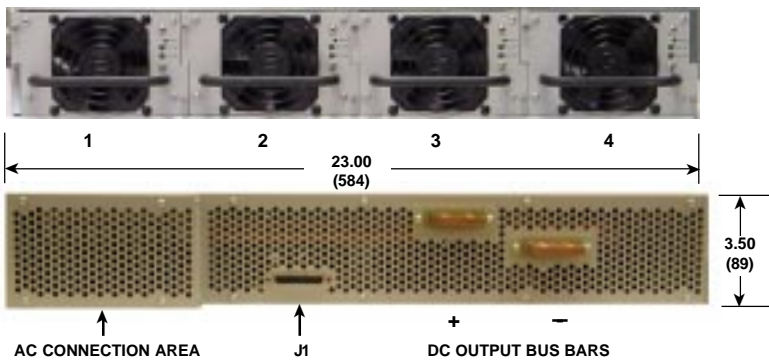
Operating Temp. Range	-20°C to +70°C
Output Current Derating	2.5%/°C, 50°C to 70°C
Storage Temp. Range	-40°C to + 85°C
Humidity	0% to 95%, Non-Condensing
ESD	Bellcore GR-1089-Core and EN61000-4-2
Cooling	Internal Fans

PHYSICAL SPECIFICATIONS

Case Material, Rectifier Module	Aluminum
Finish, Shelf	Powder Coat Gray
Dimensions, Inches (mm)	
Rectifier Module	3.3 H x 4.9 W x 13.1 D (84 x 124 x 333)
19" Shelf	3.50 H x 19.00 W x 19.88 D (89 x 483 x 505)
23" Shelf	3.50 H x 23.00 W x 19.88 D (89 x 584 x 505)
Weight, Rectifier Module	10.15 lbs. (4.60 kg.)

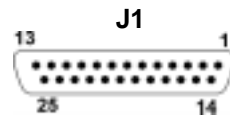
NOTE: 1. Voltage set at factory.

Brackets are available for mounting the 19-inch shelf in a 23-inch rack. Order No. 775-1437-0000 (set of two).



J1 SIGNAL CONNECTOR			
PIN	FUNCTION	PIN	FUNCTION
1	Inhibit	14	AC Good-1
2	Thermal Alarm-1	15	DC Good-1
3	Current Monitor-1	16	AC Good-2
4	Thermal Alarm-2	17	DC Good-2
5	Current Monitor-2	18	AC Good-3
6	Thermal Alarm-3	19	DC Good-3
7	Current Monitor-3	20	AC Good-4*
8	Thermal Alarm-4*	21	DC Good-4*
9	Current Monitor-4*	22	N.C.
10	Current Share	23	-Sense
11	+ Sense	24	Remote Adjust-1
12	Remote Adjust-2	25	Remote Adjust-3
13	Remote Adjust-4*		

* These pins are No Connection on 19-inch shelf



Connector: AMP747846-4
Mate: AMP747912-2

MATING CONNECTOR KIT
Order Kit No. 775-1441-0000

ALL DIMENSIONS IN INCHES (mm).
All specifications subject to change without notice.

