

Rectifier

BULLETIN: 01.140/a
MARCH 2001

-48 VDC 200 AMP CONTROLLED FERRORESONANT



Model No.	Spec. No.
PEC 3874B-L21	6064228P
PEC 3874B-L22	6064229
PEC 3874B-L60	6060057P

- COMPLIES WITH BELL STANDARDS
- COMPLIES WITH GTE STANDARDS
- UL LISTED AND CSA CERTIFIED
- STAND ALONE OR PLANT CONTROLS
- ANALOG VOLT/AMP METERING
- 220 OR 480 VAC INPUT VOLTAGE
- POSITIVE/NEGATIVE LOAD SHARING
- REMOTE/LOCAL CONTROL
- FRONT ACCESS DESIGN
- SLIM LINE FREE STANDING

DESCRIPTION: This Rectifier is designed to float or equalize lead-acid battery strings of 23 or 24 cells of either the wet cell or sealed cell design. The reduced overall size of the unit allows more rectifiers to be installed in a given space. The controlled ferroresonant design of this unit provides an efficient and cost effective approach to power conversion with the benefits of enhanced reliability, reduced TIF and RFI, improved power factor, and high immunity to transients.

TECHNICAL SPECIFICATIONS ELECTRICAL

OUTPUT

Voltage:	-52.08 VDC	(factory)
	-48.00 VDC	(minimum)
	-54.00 VDC	(maximum)
Regulation:	±0.5% (static)	±5% (dynamic)
Current:	200 Amp DC	(nominal)
	220 Amp DC	(limit)
Parallel Operation:	Yes	
Heat:	4595 BTU/hr	
Breaker:	250 Amp	
Recommended Cable Size:	200 Amp 4/0 2-600 MCM Lug Range	

NOISE

C Message:	26	dbm
Wide Band:	200	mv
Acoustic:	55	dBa

METERING

Output Voltage:	75 VDC (maximum)	
Accuracy:	±2% Analog	±5% Digital
Output Current:	300 Amp DC (maximum)	
Accuracy:	±2% Analog	±5% Digital

VISUAL INDICATORS/ALARMS

Input Power On:	green
Output Capacitor Charged:	red (until charged)
Equalize Mode:	yellow
Test Mode:	yellow
Input Device Closed:	circuit breaker
Output Device Closed:	circuit breaker
Rectifier Fail Alarm:	red
Contacts:	1 form A (GRD SIG)
Low Output Current:	
Contacts:	1 form A
Setting:	2 Amp DC
Rectifier Fail/Low Current (PMN):	
Contacts:	2 form A

INPUT	L21	L22
Voltage: (nominal) VAC	220	466
(minimum) VAC	187	424
(maximum) VAC	254	508
Current: (nominal) AAC	32	16
(maximum) AAC	38	19
Efficiency:	88.5%	88.5%
TIF:	450	225
Contractor:	50 Amp	50 Amp
Recommended Input Fuse Per Phase (slow blow)	45 Amp	25 Amp
Power Factor:	98%	98%
Frequency:	60±3Hz	60±3Hz
Power:	12,000W	12,000W
Phases:	3	3
Recommended Cable Size:	6-8Ga.	6-8Ga.

CLICK TO EXIT



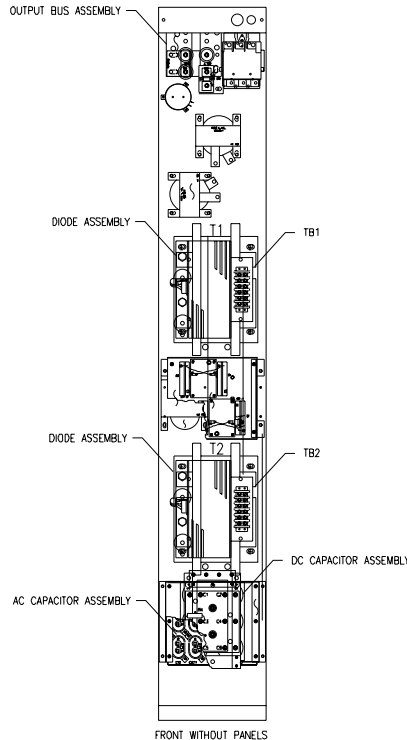
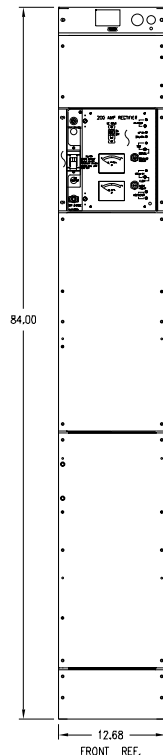
CONTROLS

Remote Sense Voltage Control: yes
Output Capacitor Precharge Switch: yes
Test Mode Switch: yes
Float Adjust Range: 48–56 VDC
 Setting: 52.08 VDC
Equalize Adjust Range: 50–57 VDC
 Setting: 54.00 VDC
Load Sharing: 0.25 VDC @ no load, 8 VDC @ full load
 (neg.), or 10 VDC @ no load, 2 VDC @
 full load (pos.), or 0.5% (slope)
Internal High Voltage Shutdown: yes
 Setting: 55.00 VDC
 Lockout: yes
External High Voltage Shutdown: yes, (when above low
 current level)
Remote On: yes
Remote Off: yes
Remote Restart: yes, loop
Over Temperature Shutdown: yes
 Setting: 187°C (internal to ferro)

ENVIRONMENTAL TEMPERATURE

	MINIMUM	MAXIMUM
Storage Ambient:	-40°F (-40°C)	185°F (85°C)
Operating Ambient :		
Sea Level to 4800 ft.	32°F (0°C)	122°F (50°C)
4800 ft. to 7000 ft.	32°F (0°C)	113°F (45°C)
7000 ft. to 10,000 ft.	32°F (0°C)	104°F (40°C)

OUTLINE DRAWING



Cooling Positions: 2 (above)
 NR (below)

Humidity: 95% noncondensing (maximum)

MECHANICAL

Width: 13.00 in. (330 mm)
Depth: 15.00 in. (381 mm)
Height: 84.00 in. (2134 mm)
Front Access Design: yes
Cable Entrance: **Input:** top or top front
 Output: top or top front
Weight: 735 lbs (331 kg)
Colors: blue/gray
 (other colors are available-consult factory)
Finish: spattered vinyl

DOCUMENTATION

Instruction Manual: 6424398
Mechanical Drawing: 6064228

ORDERING INFORMATION

Part Number	Spec. Number
6064228P	PEC 3874B L-21, 220 VAC input
6064229	PEC 3874B L-22, 466 VAC input

SPARE PARTS

Part Number	Description
6423388	PEC 3874B Spare Parts Kit

**Specifications are subject to change without notice.
 Please contact our website for the latest version.**

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