



### 100 Amps @ -48VDC 5010-62

The 5010-62 modular rectifier system provides up to 100 Amps of power at -48VDC. The current is provided by two 50 Amp, switchmode rectifiers. The system operates from a 220VAC input, and utilizes four circuit breakers for distribution. These are found on the front of the standard alarm panel that contains LEDs for visual notification of alarms and system status. The 5010-62 can be operated with or

without batteries and comes with output voltage adjustment on the rectifier modules (float and equalize), low voltage disconnect and pick up (LVD and LVPU), HV and LV adjust, and battery disconnect capabilities.

- **Distribution and Alarm Panel** - Provides DC distribution via circuit breakers and displays plant alarm LEDs
- **Redundant Operation** - If the system is operating at a 50 Amp load, redundant operation of the rectifiers will occur
- **Load Share** - A circuit is provided so the rectifiers will proportionally share the load
- **Low Voltage Disconnect** - If the batteries reach the LVD setpoint, they are disconnected from the load to prevent damage to the batteries. Reconnect is automatic at a specified voltage
- **Rectifier Meter** - Digitally monitors and displays plant voltage and current readings
- **Individual Rectifier Circuit Breakers** - Each rectifier can be shut off individually, allowing the system to continue operation



### 150 or 300 Amps @ -48VDC 5010c - 5010d

The 5010c and 5010d modular rectifier systems provide up to 150 Amps (1 rectifier shelf) or 300 Amps (2 rectifier shelves) at -48VDC. They operate from a 220VAC input, and utilize A & B output distribution via the distribution circuit breakers on the standard distribution and alarm panel. Power is generated by 50 Amp, switchmode rectifiers. The system can be operated with or without batteries and comes with output voltage adjustment on the rectifier modules (float and equalize), low voltage disconnect and pick up (LVD and LVPU), HV and LV adjust, battery disconnect, and alarm capabilities via the DC distribution and alarm panel.

- **Distribution and Alarm Panel** - Provides DC distribution via circuit breakers and displays plant alarm LEDs
- **Load Share** - A circuit is provided so the rectifiers will proportionally share the load
- **Low Voltage Disconnect** - If the batteries reach the LVD setpoint, they are disconnected from the load to prevent damage to the batteries. Reconnect is automatic at a specified voltage
- **Rectifier Meter** - Digitally monitors and displays plant voltage and current readings
- **Individual Rectifier Circuit Breakers** - Each rectifier can be shut off individually, allowing the system to continue operation

### 5010 Series Specifications

Input	5010-62	5010c-5010d
Voltage Ranges	176 - 265VAC	
Frequency Range	45 - 60Hz	45 - 70Hz
Current	<20 Amps per rectifier at full load	

Output	5010-62	5010c-5010d
Float Voltage Range	50 - 59VDC	
Float Factory Setting	54.0VDC	
Regulation	<1.0% line and load, at 10 to 100% load	
Current	50 Amps per rectifier	
Efficiency	85% minimum at full load	

Noise	5010-62	5010c-5010d
Voice Band	32dBnC	
Wide Band	<250mV peak to peak 10Hz - 100MHz	

Environmental	5010-62	5010c-5010d
Storage Ambient	-40°F to +185°F (-40°C to +85°C)	
Operating Ambient		
Sea Level to 4,800 ft.	32°F to 122°F (0°C to 50°C)	
4,800 ft. to 7,000 ft.	32°F to 113°F (0°C to 45°C)	
7,000ft. to 10,000 ft.	32°F to 104°F (0°C to 40°C)	
Humidity	<95% non-condensing	
Heat Dissipation	1122 BTU/hr. per rectifier module	

Mechanical	5010-62	5010c-5010d
Height	17.5" (444.5mm)	28.0" (711.2mm)
Width	19.0" (482.6mm)	
Depth	17.75" (450.9mm)	
Weight	System = 20 lbs. (9.1kg) Rectifier = 18 lbs. (8.2kg)	System = 45 lbs. (20.4kg) Rectifier = 18 lbs. (8.2kg) Distribution and alarm panel = 45 lbs. (20.4kg)
Mounting	Relay rack	
Cooling	Front-to-rear variable speed fan	

Documentation	5010-62	5010c-5010d
Product Manual	4380078PD	4380090PD

## Visual Indicators & Alarms

### 5010-62:

	LED Description	Name	Color
<b>Rectifier Module:</b>	Test Mode	Test	Amber
	Run Mode	Go	Green
	Rectifier Fail	Fail	Red
	Equalize	EQ	Amber
<b>Distribution &amp; Alarm Panel Indicators:</b>	Power On	PWR ON	Green
	Rectifier Fail Alarm-Major	RFA	Red
	Rectifier Fail Alarm-Minor	MIN	Amber
	Test	TEST	Amber
	Distribution Fuse Alarm	DFA	Red
	AC Fail	AC Fail	Red
	Low Voltage Disconnect	LVD	Red
	High Voltage	HV	Red
	Low Voltage	LV	Red
	Battery Disconnect	BATT DISC	Red

### 5010c-5010d:

	LED Description	Name	Color
<b>Rectifier Module:</b>	Test Mode	Test	Amber
	Run Mode	Go	Green
	Rectifier Fail	Fail	Red
	Equalize	EQ	Amber
<b>Distribution &amp; Alarm Panel Indicators:</b>	Power On	PWR ON	Green
	Battery Online	BAT ONLINE	Green
	Rectifier Fail Alarm-Minor	RFA MINOR	Amber
	Rectifier Fail Alarm-Major	RFA MAJ	Red
	Test	TEST	Amber
	Distribution Fuse Alarm	DFA	Red
	AC Fail	AC Fail	Red
	Low Voltage Disconnect	LVD	Red
	High Voltage	HV	Red
	Low Voltage	LV	Red

## Options

### 5010-62:

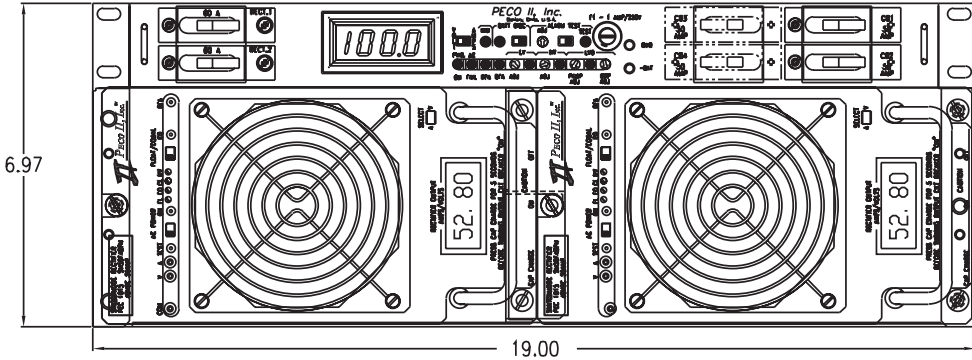
Description	PECO II Part Number
Rectifier module, -48V @ 50A with metering .....	.SM50F48PM
Rectifier module, -48V @ 50A without metering .....	.SM50F48PM-3
System equipped with 2 rectifiers & distribution .....	.6875010BLK-62
System equipped with 1 rectifier & distribution .....	.6875010BLK-62A

### 5010c - 5010d:

Description	PECO II Part Number
Rectifier module, -48V @ 50A with metering .....	.SM50F48PM
Rectifier module, -48V @ 50A without metering .....	.SM50F48PM-3
System equipped with 1 rectifier shelf and distribution (150 Amps) .....	.6875010BLK-58C
System equipped with 2 rectifier shelves and distribution (300 Amps) .....	.6875010BLK-58D

## Line Drawings

### 5010-62:



### 5010c:

