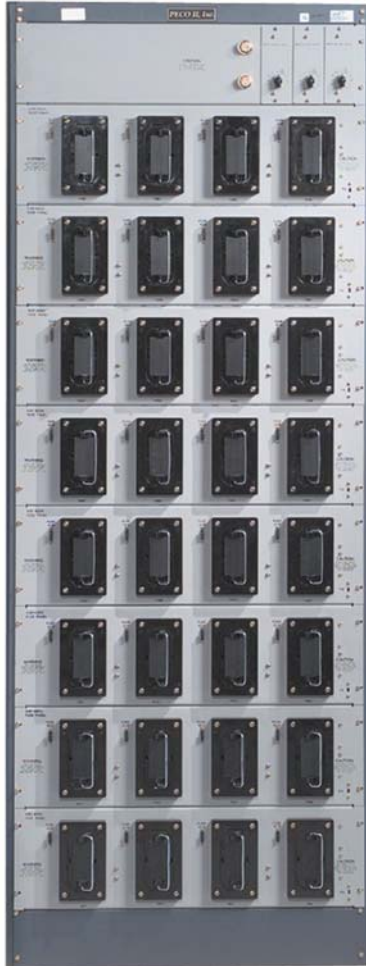


# 5000 Amps @ -48VDC

153M



- **Used in Conjunction with 200A, 400A, or 800A Ferroresonant Rectifiers**
- **Rectifier Load Sharing**
- **Rectifier Fail Alarm Module for up to 20 Rectifiers**
- **Digital Meter and Alarm Panel**
- **Bay Alarm Module**
- **Various Distribution Options**
- **2500 Amps Per Distribution Bay**
- **Designed for Left or Right Hand Expansion**
- **Bus Bar Kits Available to Expand Initial System**
- **Overhead Bus Bar Kit**



\*Consult the factory for a list of UL listed configurations.

## Product Description

The 153M power plant is designed to provide distribution and monitoring of -48VDC. The plant is rated at 5000 Amps (total 5000 rating includes main and supplemental bays). The -48VDC is fed through a 6000 Amp total discharge shunt that is bussed to a main bay and supplemental bays rated at 2500 Amps each.

The main source of power for the 153M power plant is commercial AC that is converted to DC by the rectifiers. The rectifiers provide "load current" and "trickle charge" for floating batteries. The batteries are for filtering and stand-by reserve. The 153M power plant provides system monitoring, alarming, and distribution of -48VDC to load circuits.

System operation is such that the rectifiers float the battery, charge the batteries as required, and provide current to the load circuits. Audible (optional) and visual alarms are produced by the meter and alarm panel when the battery float voltage deviates from system set points.

## 153M Power System Specifications

### Input

Voltage Range	Refer to selected rectifier specifications
Frequency	Refer to selected rectifier specifications
Current	Refer to selected rectifier specifications
Recommended Protection	Refer to selected rectifier specifications

### Output

Float Voltage Range	Float 48 - 54VDC
Regulation	<5% within 200ms when 20 – 100% step load applied
Current	5000 Amps maximum

### Noise

Voice Band	Refer to selected rectifier specifications
Wide Band	Refer to selected rectifier specifications

### Environmental

Storage Ambient	-40°F to +185° F (-40°C to +85°C)
Operating Ambient	
Sea level to 4,800 ft.	32°F to 86°F (0°C to 30°C)
4,800 ft. to 7,000 ft.	32°F to 77°F (0°C to 25°C)
7,000 ft. to 10,000 ft.	32°F to 68°F (0°C to 20°C)
Humidity	< 95% non-condensing (maximum)

### Mechanical

Height	84.0" (2133.6mm)
Width	31.5" (800.1mm)
Depth	18.0" (457.2mm)
Weight	565 lbs. (254kg) typical distribution bay
Mounting	Floor
Cooling	Convection

### Documentation

Product Manual	642153MP
System Layout Drawing	4383853-M

## Visual Indicators

Meter & Alarm Panel:	LED Description	Name	Color
	Power On	ON	Green
	Unit Fail	Unit Fail	Amber
	Audible Cut-Off	ACO	Amber
	Fuse Alarm	FA	Red
	Power Major	PMJ	Red
	High Voltage	HVA	Red
	Low Voltage	LVA	Red
	Low-Low Voltage	LLVA	Red
	Low Voltage Disconnect	LVD	Red

## Options

List #	Description	PECO II Part Number
1	Basic 153M power bay	.4383853-M-L1
2	Basic 153M supplemental power bay	.4383853-M-L2
5	Battery & ground bus for initial line-up rated at 5000 Amp	.4383853-M-L5
6	Battery & ground bus for initial line-up rated at 2400 Amp	.4383853-M-L6
24	Auto re-start module	.6310076P
25	Audible alarm module	.6313723
26	Alarm extension	.6423396
27	Branch metering module	.6310008P
28	Digital branch meter panel	.6310082P
29	Branch metering module	.6310008P
30	High/low calibration module (portable)	.6313722S
31	High/low calibration module	.6310043P
62 to 64	Hardware kit	.4362333 to 37
70	PEC 3874BL21 rectifier, 200 Amp, 60Hz, 3 phase, 187-254VAC	.6064228P
71	PEC 3874BL22 rectifier, 200 Amp, 60Hz 3 phase, 424-508VAC	.6064229
72	PEC 3875BL21 rectifier, 400 Amp, 60Hz 3 phase, 187-254VAC	.6064246P
73	PEC 3875BL22 rectifier, 400 Amp, 60Hz 3 phase, 424-508VAC	.6064247P
74	PEC 3876 rectifier, 800 Amp, 60Hz 3 phase, 424-508VAC	.6063876P

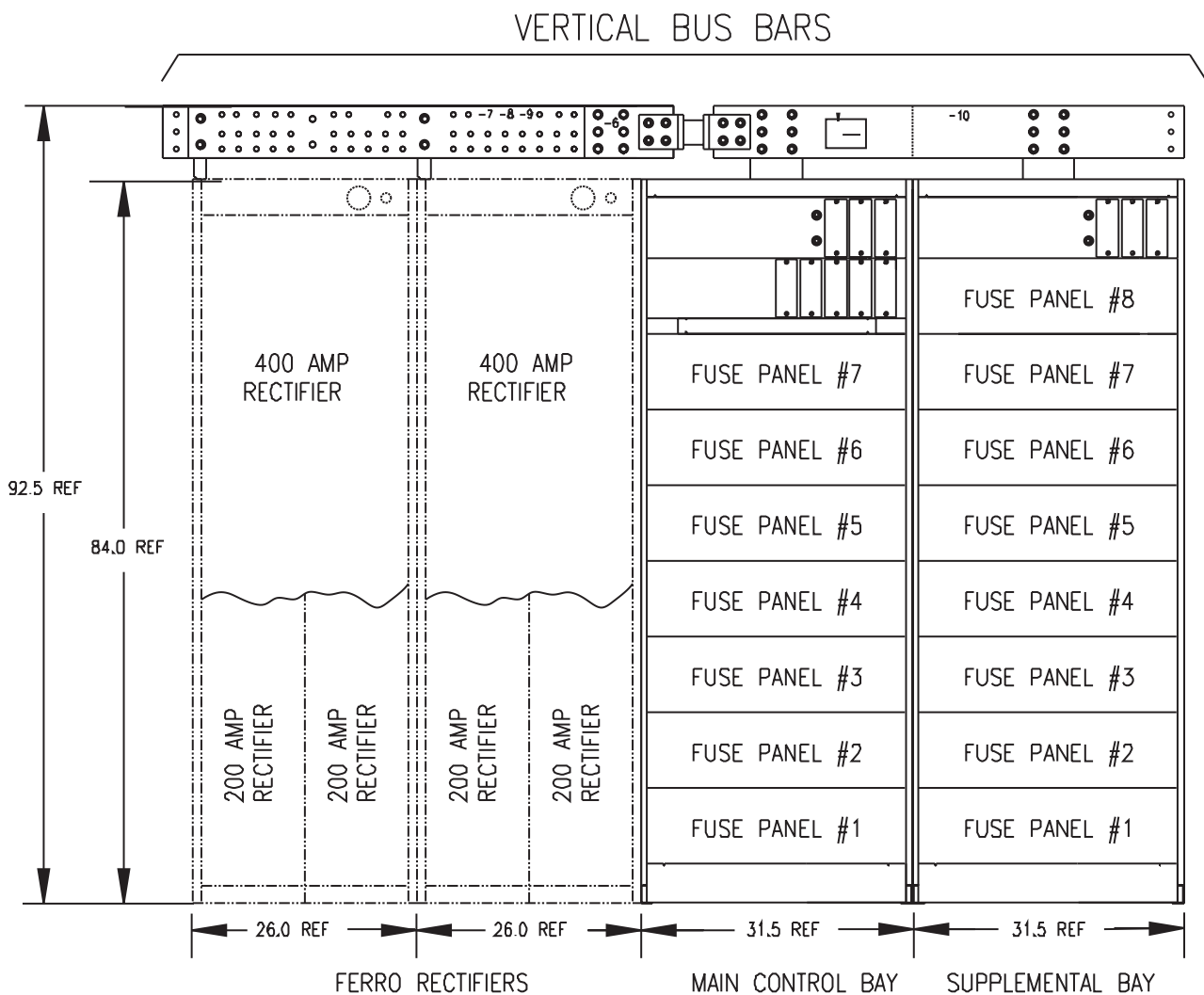
See J4383853-M for complete list of options

## Line Drawing

153M List 1 is shown

### Multi-Bay System

The 153M is a multi-bay system consisting of a main control bay, supplemental distribution bays, ferroresonant rectifiers (200A, 400A or 800A) and overhead bus. The system is designed for left or right growth with the main control bay being the central point. The supplemental bays expand out from the main control bay on one side and the ferroresonant rectifiers expand out from the other side. A key feature of the 153M is the overhead bus kit. The bus mounts on top of the system bays and includes the main discharge shunt, battery bus and return bus sections. The bus can expand, as kits, as additional supplemental bays or rectifiers are added.



TYPICAL 153M 5000 AMP SYSTEM

### Certifications:

