

# Medium DC Power Plants

BULLETIN: 03.131/a  
MARCH 2001

## -48 VDC @ 500 AMP

## MODULAR FRONT ACCESS POWER PLANTS



**Model No.** 131N-B1  
**Spec. No.** 438131NP-B1

- 50 AMP MODULAR SWITCHMODE RECTIFIERS
- TOTAL FRONT ACCESS
- LOW VOLTAGE -48V LOAD DISCONNECT\*
- CIRCUIT BREAKER OR FUSE DISTRIBUTION\*
- FULLY ARMED
- TWO HOLE CABLE LUG TERMINATION
- FULL 2 YEAR WARRANTY

\*OPTIONAL

**DESCRIPTION:** The 131N-B1 Power System provides -48V power in maximum capacity of 500 Amps. The compact, lightweight, modular PECO II 50 Amp Switchmode Rectifiers provide cost saving solutions. The Distribution Cabinet provides circuit breaker or fuse distribution plus metering and alarms. Circuit breaker distribution is through 1-100A circuit breakers. Two hole lug terminations are provided for all DC connections. AC input terminations are made at the AC input panel. Standard available configurations include 7'-0" height of either standard or Zone 4 earthquake construction. Low voltage load disconnects, and multiple sizes and types of circuit breakers, permit custom configurations. The racks of equipment are available configured, prewired, and pretested to your specifications.

### TECHNICAL SPECIFICATIONS ELECTRICAL

#### INPUT

**Voltage:** 230 VAC (nominal)  
184 VAC (minimum)  
264 VAC (maximum)

**Current:** 230 VAC  
13.5 Amps per rectifier

#### INPUT PROTECTION

Internal Fuse (Per Module)  
Internal Overtemperature Shutdown

#### OUTPUT

**Voltage:** -54.48 VDC (factory)  
-50.00 VDC (minimum)  
-60.00 VDC (maximum)

**Regulation:**  $\pm 0.1\%$

**Power:** 2700 watts per module

#### OUTPUT NOISE

**Voice Band:** <32 dBrnC

**Wide Band:** <250 MV (Peak-Peak)

**Acoustic:** <45 dBa

#### OUTPUT OVERVOLTAGE PROTECTION

53.50 – 59.00 VDC  
Once exceeded, the Overvoltage Protection circuit turns off the Module's electronics. Removal and re-insertion of the Module, turning the AC "OFF" & "ON", is required to reset the Module.

### INDICATORS

"Rectifier Module Power On" (Green LED)  
"Rectifier Module Fail" (Red LED)  
"Plant Fail" (Red LED)

### ENVIRONMENTAL TEMPERATURE

	MINIMUM	MAXIMUM
<b>Storage Ambient:</b>	-40°F (-40°C)	185°F (85°C)
<b>Operating Ambient :</b>		
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)

#### Zone 4 Earthquake Design

**Humidity:** 0 to 95% non-condensing

### OPTIONS

Switchmode Rectifier Module 50A  
Low Voltage Disconnect  
Digital Metering  
Fuse or Circuit Breaker Distribution

**Fuse Distribution:** 0 – 30A Fuse: 16 Max.

31 – 60A Fuse: 8 Max.

**Circuit Breaker Distribution:** 1 – 100A 24 Max.  
100 – 250A 2 Max.

Front Access AC Input Panel  
Side AC Input Termination  
Rear AC Input Termination

CLICK TO EXIT



**DOCUMENTATION**

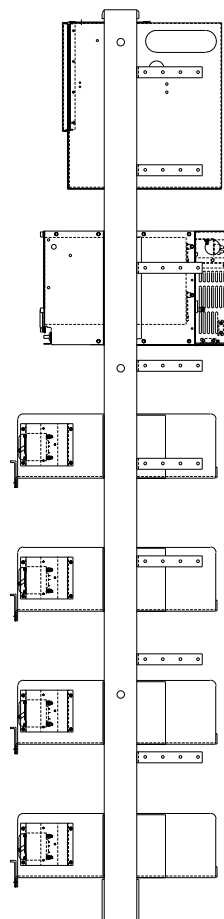
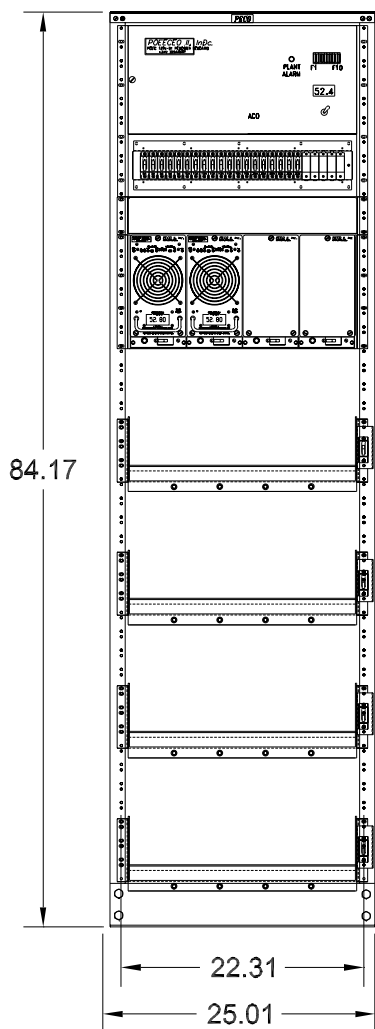
Instruction Manual: 642131NP-B1  
Mechanical Drawing: J438131NP-B1  
Specification Drawing: J438131NP-B1

**ORDERING INFORMATION**

See J438131NP-B1 or contact PECO II for a quotation.

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

**OUTLINE DRAWING**



131NB1  
RELAY RACK

CLICK TO EXIT

