Large DC Power Plants

BULLETIN: 05.165/a
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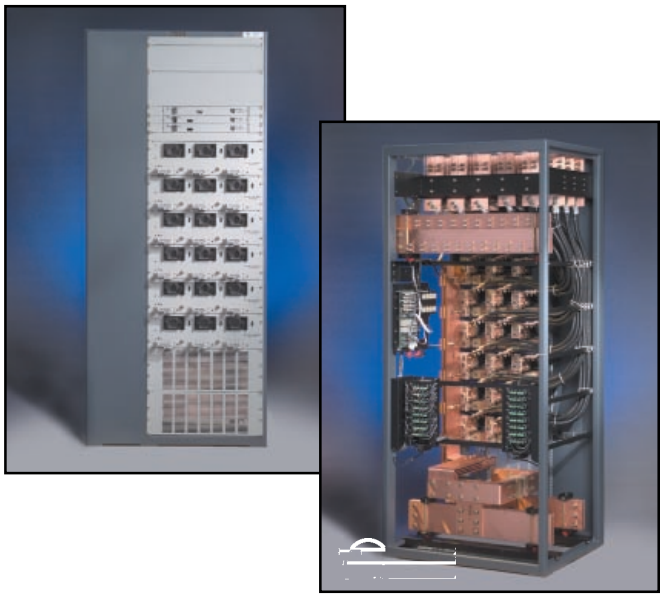
-48 VDC @ 2,000 TO 10,000 AMP
165N INTERNAL BUS POWER PLANTS



165 Rear View

Spec No.
687165 P Series

- UL LISTED
- 100,000 AMP UL SURGE RATING
- UL AND CSA APPROVALS
- COMPLIES WITH NEC ENCLOSED BUS REQUIREMENTS
- NO EXPOSED BUS BARS
- DESIGNED FOR RIGHT AND LEFT EXPANSION
- SWITCHMODE/CONTROLLED FERRORESONANT RECTIFIERS
- REMOTE MONITORING*
- BATTERY DISCONNECTS*
- DIGITAL METERING / INTERFACE
- FULL 2 YEAR WARRANTY

*OPTIONAL

DESCRIPTION: The 165N Internal Bus Power Plant, in combination with Rectifiers and Batteries, produces -48 VDC power in capacities from 2,000 to 10,000 Amps. The plants have UL listing with a 100,000 Amp surge rating and compliance with the NEC requirements for Enclosed Bus Bar Systems. This combination allows the 165N Power System to be installed in facilities with the most stringent requirements. Installation times and site preparations are greatly reduced due to the use of Internal Bus Bar. Exposed External Bus Bars are eliminated by moving their function Internal to the 165N Plant. Combinations of Main Control, Supplemental Distribution, Battery Termination, and Rectifier Termination bays support a variety of configurations. Fuse panels with fuse ratings from 1 to 800 Amps and Circuit Breaker Panels with circuit breaker ratings from 1 to 700 Amps provide the selection of many different distribution schemes.

165N BAYS

MAIN CONTROL BAY

One Main Control Bay is required, which provides both a user interface to the plant and load distribution. The user interface consists of a means to display the Total Load current for the plant and the Individual Load currents of all fuses and circuit breakers with ratings greater than 100 Amps. Monitoring and Alarm functions are included and provide discrete relay loop closures plus "optional" remote communications.

SUPPLEMENTAL BAY

The Supplemental Distribution Bay is located adjacent to the Main Control Bay and provides additional load distribution. Supplemental Distribution Bays are equipped on an as needed basis and can grow to the left or right of the Main Control Bay.

FERRO RECTIFIER TERMINATION BAY

The Ferro Rectifier Termination Bay provides for the termination of Rectifiers with an analog interface (i.e. Control Ferroresonant Rectifiers). Terminations for large output power cables and an analog to digital interface for the monitoring and control systems are also provided.

DIGITAL RECTIFIER BAY

The Digital Rectifier Bay contains the Switchmode 100 Amp Rectifier with Digital interface. The bay is available in a 24" wide version (600 mm) and provides 1,800 Amps via six shelves of three 100 Amp rectifiers. Each shelf contains AC Input circuit breakers for either a 3 Phase AC Service or a Single Phase AC Service. This allows the bay to be powered by either two or six 3Ø AC circuits. A 36" wide version provides 3,000 Amps via six shelves of five 100 Amp rectifiers. Each shelf contains AC Input circuit breakers for a Single Phase AC Service. This allows the Bay to be powered via two 3Ø AC circuits. The Digital interface built into each rectifier allows direct communications between each rectifier and the power system. The user interface in the Main Control Bay and the optional user interface in the Digital Rectifier Bay can access the status of each rectifier and make changes as required (i.e. Float Voltage, Equalize Mode, etc.).

BATTERY TERMINATION BAY

The Battery Termination Bays provide a means to terminate the large battery cables and offer options such as Disconnects (with and without fuses), Charge Shunts, and Monitoring. The 165N Internal Bus Power Plant can provide the configuration and features required.

CLICK TO EXIT

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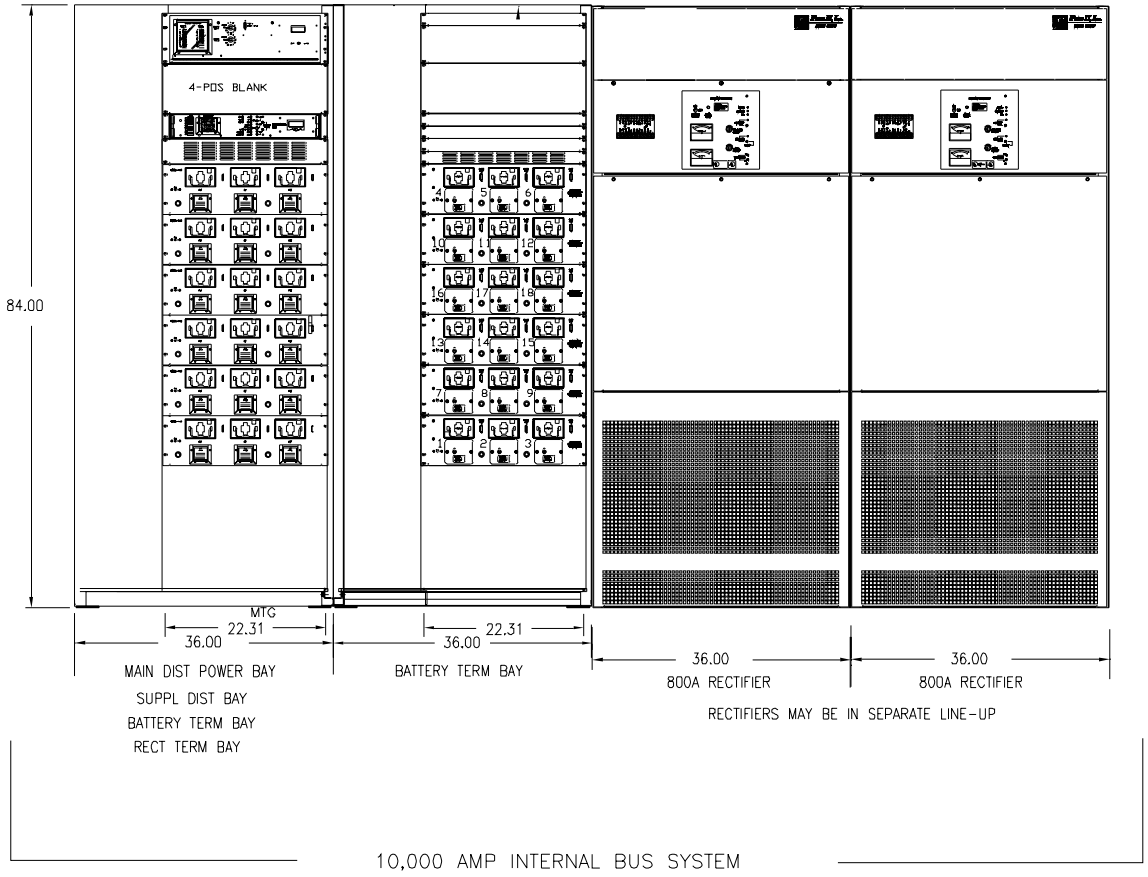
OUTLINE DRAWING



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