PPS 25 Power System

Cabinet System

Description

PPS 25 modular DC power cabinet systems are designed to meet rigid telecom applications with very high reliability and flexibility for future expansion. These cabinet power solutions provide rectification, system management and power distribution while allowing configurable solutions within the same cabinet or through the use of external distribution cabinets. The PPS 25 systems are based on hot-swappable fan-cooled PMP 25 rectifier modules with constant output power available at 24V/110A or 48V/50A per module.

System management is accomplished through messages and alarms displayed on the system controller's (PCS) LCD screen and can also be displayed remotely via the PC-based PowCom™ software package.



Features

- High reliability
- Simple installation and operation
- LCD display for self-guided controller operation
- Interfaces standards include RS232, and Form "C" dry alarm contacts with grouped alarms
- Up to 1200A per cabinet
- Live expansion up to 6400A
- Plug-in ready for various DC distributions and subracks
- Inter-cabinet DC paralleling bus
- Site programmable supervision unit
- Intelligent battery management
- Optional Ethernet (SNMP compatible) interface module
- International standards compliance

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Changing the Shape of Power

System Configurations



PPS 25 with integrated DC distribution



PPS 25 with bulk outputs feeding remote DC distributions

PPS 25 System

The PPS 25 system offers flexible solutions that fit a large number of site requirements. Some of these features include:

- Easy configuration with internal or remote DC distribution
- Internal DC bus for simple plug-in of load distribution modules, battery breaker modules, and rectifier subracks
- Inter-cabinet paralleling bus for live connection of expansion cabinets
- Internal data bus for advanced system monitoring and control
- Wide range of plug-in DC load distributions, low and high ohmic

System Components

Rectifier Modules

The PPS 25 system utilizes plug-in rectifier modules that are based on a soft-switching approach. Features include 3 LEDs for rectifier status indication, thermal shutdown, and input overvoltage disconnection with an automatic reset.

Model	Voltage	Power (max.)	Current (max.)
PMP 25.24 SIC	24V DC	3080W	110A at 28V DC
PMP 25.48 SIC	48V DC	2800W	50A at 56V DC



PMP 25 Rectifier

Supervision Module

Advanced system supervision is accomplished using a microprocessor based control module that allows both local and remote system monitoring.

PCS Features

- Menu guided operation
- RS232 interface for remote operation
- Enhanced battery management and testing
- Temperature compensation
- Site programmable flash EPROM
- Supervision for up to 128 rectifiers and 128 micro processors
- Multiple language choices
- Programmable alarms, logic functions, and operations
- Monthly data logging
- Optional Ethernet interface through SNMP and/or TCP/IP



PCS Supervision Module

Cabinet

Innovative and flexible cabinet design.

Cabinet Features

- In cabinet vertical DC bus allows live expansion of distribution and rectifier modules
- Separate cable duct for output load cables
- Inter cabinet DC bus for live cabinet expansion
- Top or bottom cable entry
- Matching DC distribution cabinets



100mm Cable Duct

Battery Breaker Modules
Plugable battery breaker module, based on MCCB's, MCB's or knife fuses

DC Distribution
Plugable load distribution module, based on MCB's, MCCB's or knife fuses. Low or high ohmic.

PPS 25 Cabinet

PPS 25 Power System

Cabinet System

Input

Model	**PPS 25 System**
Input	230/400V 3-phase (site configurable)
Inputs (max.)	Single input for each 6 rectifier positions (4 inputs for 24 rectifier cabinets)

Output

Rectifier Modules (max.)	24 (bulk output feed to battery and load)
Battery Outputs	Several battery breaker modules are available and are based on: MCCB's: 1x1500A, 2x600A, 4x384A MCB's: 12x100A Knife fuses: 5xNH1-3
Load Outs - MCB (2-63A)	Several battery breaker modules are available and are based on: MCCB's: 1x1500A, 2x600A, 2x384A, 4x384A MCB's: 24x2-63A, 16x80-100A, 24x2-16A high ohmic Knife fuses: 5xNH1-3, 9xNH00
24V DC Version	Yes (max. 1200A per cabinet)
48V DC Version	Yes

Features

Supervision	PCS

Expansion

Expansion Rack	Up to six subracks per cabinet, each with four rectifier modules
Expansion Cabinet	Expansion cabinet can be be placed to the left or right of existing cabinets, allowing up to 128 rectifier modules

Battery

Battery Symmetry Inputs	4 (expandable to 12 by adding the optional interface circuit board)
Low Voltage Battery Disconnection (LVBD)	Yes (through a trip coil in each MCCB or contactor)

Mechanical

Dimensions (WxHxD)	600x2150x600mm
Cable Entry	Top and/or bottom for cables <50sq/mm (using cable duct) Top or bottom entry for cables >50sq/mm
Plug-in for multiple racks, subracks, and PDU's	A total of 35U is available for rectifier subracks, distribution, and battery breaker modules (29U at bottom cable entry)

Options

Temp. Comp. Charge	Yes
Partial Load Disconnect	Yes
Hinged Door Access	Yes
Ethernet Network Interface	Yes
Modem Interface	Yes

Note: All specifications are subject to change without notification.