

PCC Controller Module



Key Features & Benefits

User controls and interfaces:

- User-selectable alarm parameters
- Password controlled environment
- RS232 Interface and Form “C” dry alarm contacts
- Programmable alarm routing, logic unit and analog inputs
- 10 Mbps Ethernet interface with integrated web server
- 40-event alarm log

Intelligent site management:

- Temperature compensation with programmable compensation factor
- Automatic and manual load testing
- Battery voltage and symmetry monitoring
- Low voltage disconnection

The Prime Controller Card (PCC) is a pluggable microprocessor controller that provides monitoring and control for a broad range of DC Power Systems. The PCC monitors all system parameters including: DC voltage, rectifier current, rectifier temperature, system capacity, battery parameters, and circuit breaker status.

Alarm and warning notifications are indicated by front panel LEDs, and through potential free alarm contacts that allow remote signaling. External monitoring of alarms is accomplished through an RS232 port using PC-based PowCom™ software. The PCC has an Ethernet port allowing monitoring and control over a TCP/IP network. Alarms can be mapped via SNMP traps to customer OSS platforms such as HP Openview™.

To meet individual site requirements, the PCC contains a Programmable Logic Unit that can be used to monitor and control specified requirements. This allows individual alarm routing and logic operations to be set as actions, alarms to be triggered, and outputs to be activated based on internal and external signal monitoring, comparing, and processing.

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PCC Controller Module

TECHNICAL DATA

Input

Voltage	30 – 60 VDC
Current	< 200 mA

Interface

Display	3 x 16 character LCD
Internal Communication	RS485 Data Bus (20 modules max.) RS232 Serial interface for remote control via modem or directly from a PC with PowCom™ software.
External Communication	Ethernet port allowing monitoring and control over a 10Mbps TCP/IP network and alarm mapping via SNMP traps.
Indications	Green LED - Power ON Yellow LED - System warning Red LED - System alarm
Signal Inputs	Battery current reading (via shunt) Output voltage reading 6 x analog inputs for battery symmetry reading or general use 1 x battery temperature sensor 1 x load fuse failure 1 x battery fuse failure
Signal Outputs	1 x LVD disconnect 1 x PLD disconnect 1 x LVD/PLD reconnect 4 x Alarm contact (Form C) 3 x LED 1 x LCD
Software	Site upgradeable by EPROM/ Flash

Other Technical Data

Dimensions (W x H x D)	85 mm x 40 mm x 225 mm
Weight	0.2 kg (0.44 lb)
Operating Temperature	- 40 to +70 °C
Storage Temperature	- 40 to +85 °C
EMC	EN 61000-6-2, EN 61000-6-3, EN 300 386-2
Environment	Storage: ETS 300 019-2-1 Transport: ETS 300 019-2-2 Operation: ETS 300 019-2-3

Alarms

Alarm Contacts	4 potential free change-over alarm contacts
Alarms	Low Voltage Alarm High Voltage Alarm Batteries on Discharge Overvoltage Shutdown Alarm High Load (Rectifier Capacity Alarm) Battery Test Failure Battery Symmetry Alarm Mains Failure Module Alarm Urgent Module Alarm Battery Fuse Failure Load Breaker Failure Battery/Load Disconnect Alarm High Battery Temperature Alarm Low Battery Temperature Alarm Temperature Probe Failure 16 x Additional User Definable Alarms

Battery Management

Battery Disconnection	Allows voltage controlled disconnection of batteries.
Boost Charging	Manual time controlled or automatic boost charging with adjustable time and voltage levels.
Battery Tests	Automatic or manual testing of batteries up to six times per year. Variables include test duration and end voltage.
Symmetry Measurement	Optional tool that measures batteries for early detection of thermal runaway. Allows for separate measurements of up to 6 parallel battery branches using mid-point measurement.
Temperature Compensation Charging	Allows continuous adjustment of output voltage according to battery temperature. Features include adjustable compensation factor and separate thresholds for high temperature alarms.
Load Shedding (PLD)	Optional feature that allows voltage or time controlled disconnection of non-essential load.

For more information on these products consult: tech.support@psbel.com

NUCLEAR AND MEDICAL APPLICATIONS - Products are not designed or intended for use as critical components in life support systems, equipment used in hazardous environments, or nuclear control systems.

TECHNICAL REVISIONS - The appearance of products, including safety agency certifications pictured on labels, may change depending on the date manufactured. Specifications are subject to change without notice.

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