Energy Station RPP™

APPLICATION

The Energy Station RPP™ is a Remote Power Panel designed to provide localized branch circuit distribution loads in data centers, in a compact 24" x 24" (1-tile) package or 24" x 12" for against-the-wall installation. The source of power is typically a sub-feed breaker originating in a PDU or main distribution panel.

DESCRIPTION

The Powersmiths Energy Station RPP is highly configurable for a variety of Panelboards, monitoring options, and preventative maintenance features. The RPP is available with voltage ratings of 208/120V, 415/240V, 480/277V, with individual panelboard current ratings of 225, 250 and 400 Amps. Panelboard configurations include up to four (4) 42-circuit panels and up to two (2) 84-circuit panels. The RPP may be equipped with main panel monitoring, as well as branch circuit monitoring for current or full power. Surge Protection options are available.

ENHANCED MAINTAINABILITY

The Energy Station RPP comes standard with compartmentalized main breakers. Panelboards are equipped with IR Grills behind hinged dead-fronts to facilitate safe IR scans of the main and branch circuits. Maintainability is enhanced with front-accessible monitor controls, and an optional hinged side-access door. Side-mounted IR ports for scans of the main input terminations are also available.

MONITORING OPTIONS

Metering, when specified, is supported by several revenue grade Cyberhawk™ platforms. Available metering functions include Main Power/Energy, Main Power/Energy with Branch Circuit Currents, and Main & Branch Circuit Power/Energy, etc. Connectivity options include Modbus TCP and BACnet/IP (SMART Sensor Protocol). The user interacts with the unit locally via the color touch screen display, and remotely via live Web pages using a browser, or via a 3rd party BAS/BMS. The integrated trend log function can be used for system start-up and commissioning during load tests, avoiding the cost and complexity of external data acquisition equipment.

BENEFITS

Our modular approach enables a high degree of tailoring the product configuration for each application on a standardized UL Listed platform, with the cost & delivery advantages associated with a standard product. The standard grills and optional IR Ports provide for safe IR scans for effective preventative maintenance without exposing the field tech to arc flash risks. The trend logs in the web-server can be configured to document the load test commission without requiring external data acquisition loggers. By providing a full Web-server instead of a more typical gateway, the user gains live direct access to the unit over the network. A user could also access the unit via a 3rd party BAS/BMS by using the gateway function.

SERVICE ORGANIZATION

Powersmiths provides start-up and commissioning support services and nationwide 24/7 service support.

SPECIFICATIONS & OPTIONS

*Indicates Available Options

INPUT:
- 3-Phase, 4-wire plus Ground
- Feeds: Individual/Panel or Common (per requirement)
- Wiring: Bottom or Top Entry (per requirement)
- Voltages: 208/120V, 415/240V or 480/277V ... (per requirement)
- Frequency: 60/50 Hz

OUTPUT DISTRIBUTION PANELBOARDS:*
- 225/400A MB; 208/120V, Type NQ (Square-D)
- 250/400A MB; to 600/347V, Type NF (Square-D)
- Wiring: Bottom, Conduit Connection Box; Top with Conduit Connection Box
- Neutral: 100 or 200% (per specification)
- Ground: ISO (Isolated) Ground (standard, field selected)
- SPD: Up to 200kA/Mode with Service Disconnect

MONITORING:*
- Main Currents, Branch Circuit Currents
- Main Power/Energy, Branch Circuit Currents
- Main Power/Energy, Branch Circuit Currents, Power
- Communication: Modbus TCP or BACnet/IP (Smart Sensor Protocol)
- HMI: Color Touch Screen and Browser Access to Dynamic WEB Pages
- Dual Independent WEB Servers

MAINTAINABILITY:
- Front and One Side Access; Hinged Side Door(s)*
- Hinged Dead-front
- Transparent Front and Rear Doors*
- Compartmentalized Main Breakers
- IR Viewing Grills over Panelboard Distribution behind Dead-front
- IR View Port(s) for Power Compartment*
- Pre-wired Load Circuits with Pluggable Touch-safe Plugs*
- Front Accessible Controls
- Dedicated Communication Service Port

PHYSICAL / ENVIRONMENT:
- Enclosure: Type 1
- Operating Temperature: 0 to 40°C
- Wiring: Braced, Compression Lugs (breakers/terminal excepted), ...
- Dimensions: 24"W x 24"D, Height is 78" or 84" (config. dependent)
  24"W x 12"D (wall mounting)
- Weight: 450-650 lbs., (dependent on configuration)
- Floor Stand: Adjustable Height with Integrated Conduit Connection Box*

QUALITY & ENVIRONMENTAL CERTIFICATIONS:
- Manufacturing Certifications: ISO 9001 and ISO 14001
- UL Listed UL/cUL (UL 891, CSA 22.2 No. 244)

807-000431-162-A00