Zero Transfer Time Ferroresonant UPS

PZM9500

Standard Features

- Advanced Constant-Voltage Ferroresonant Transformer (C.V.T.) modular technology provides clean, interference-free and reliable uninterruptible power with field-selectable output voltage 60 and 90 VAC.
- Zero transfer time uninterrupted power between normal line and standby mode, provides stable powering needs of digital transmission network.
- Synchronized, in-phase transfer from normal to standby and back again.
- Quasi-square wave output, both in normal line and standby mode, eliminates all distortion and reduces the harmonic ripples in the output waveform.
- Crystal controlled inverter stable the output frequency, high efficiency and excellent output voltage regulated in AC line or load variation.
- Magnetic AC input circuit breaker and foldback current-limited output overload protection.
- Surge and short circuit protection with automatic restart upon short or overload is removed.
- Current-limited and temperature-compensated battery charger in float and equalize charge modes.
- High output battery charge, the fastest battery recharge time available.
- Positive disconnect from utility during inverter operation prevents power line back-feed.
- Magnetic battery circuit breaker, AC output fuse and battery in-line fuse included.
- Automatic Diagnostic System (A.D.S.) - interface options available, programmable self-tests and equalize charger intervals & durations.
- Add-on logic upgrades, Remote Status Monitoring (R.S.M.) interface options available.
- Self-test, charger mode, system status, and output current indicators on the from of panel; two pairs of test point easy access the AC output and battery voltage in charging or discharging.
- Front panel openable. Modular controller and driver interface board removable designs, easy to replace or upgrate without interrupting the output power.
- Side panel quick connects accommodate power-in code, battery connector, output connector, R.S.M. interface connector, temperature sensor, A.D.S. remote indicator, status remote indicator, and standby status relay.
- Lightweight heavy-duty aluminized steel housing with all external fasteners stainless steel, and finish in black epoxy powder coat.
- Flexible mounting configurations, available for pole, wall or ground mount enclosure with System Circuit Box (S.C.B.).
- External AC input normal, output status (line, standby or battery DC low) and self-test fault warning indicators on the bottom of the System Circuits Box.
- AC convenience outlet provides and additional power source for maintenance, and auxiliary inlet feature to supply emergency generator power included on the System Circuits Box.
- Bypass switch and connector on the System Circuits Box allows for maintenance without interrupting power.
- Line/auxiliary input switch on the System Circuits Box to ensure the power module in double self-protection.
PZM9500 Series

The PZM9500 Series Zero Transfer Time (ZTT) Ferroresonant UPS is the premier Uninterruptible Power Supplies (UPS) for Cable TV and Broadband communication networks in two-way digital transmission.

The PZM9500 Series’ advanced C.V.T. Ferroresonant technology provides the high efficiency regulated AC quasi-square wave with field-selectable output voltage, stable frequency, surge & short circuit protection, and full conditioned at input and output in all modes of operation and loading.

Automatic Diagnostic System (ADS), programmable charger mode, and Remote Status Monitoring (RSM) removable interface feature the PZM9500 series upgrade available; total modular configuration can be install in pole, wall or ground mount enclosure with System Circuits Box (SCB), and without power interrupted when any module be upgraded, replaced, or maintained.

Nominal Specification

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Input Voltage</th>
<th>AC Line Frequency</th>
<th>Output Voltage &amp; Current (RMS)</th>
<th>Output Power*</th>
<th>Standby Time*</th>
<th>Weight (kgs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PZM9510E</td>
<td>220 ± 25 VAC</td>
<td>50 Hz</td>
<td>63 VAC / 10 Amps. 42 VAC / 10 Amps.</td>
<td>900 VA</td>
<td>3.1 hours</td>
<td>27.7</td>
</tr>
<tr>
<td>PZM9510S</td>
<td>Specify Input / Output Voltage and Frequency</td>
<td>(Output 15 Amps, 900 VA max.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PZM9515E</td>
<td>220 ± 25 VAC</td>
<td>50 Hz</td>
<td>63 VAC / 15 Amps. 42 VAC / 15 Amps.</td>
<td>1350 VA</td>
<td>1.4 hours</td>
<td>38.0</td>
</tr>
<tr>
<td>PZM9515S</td>
<td>Specify Input / Output Voltage and Frequency (Output 15 Amps, 1350 VA max.)</td>
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</table>

* Output power value based on 60 VAC output setting.
* Standby time based on 100AH batteries at 77°F (25°C) and typical 80% load. Figures will vary according to: battery age, capacity & condition, type of load, temperature and other factors.

General Specifications:

Transformer Type: Advanced Constant Voltage Ferroresonant Transformer (C.V.T.)

Output Wave Form: Quasi-Square Wave

Frequency Stability: 0.05% (Inverter Mode)

Output Regulation: ± 3%

Transformer Efficiency:
Normal Mode – 90% or better
Inverter Mode – 85% or better

Foldback Limited:
150% of Full Load Typical

Overload & Short Circuit Protection:
20 Amperes Input Magnetic Circuit Breaker

Output Fuse: 20 Amperes

Transfer Characteristic: True Uninterrupted Output in all Modes of Operation

Inverter Input Voltage: 36 VDC

Batteries Quantity & Type: Three Pieces of 12 VDC Maintenance-Free Battery

Charger Type: Current-Limited Float/Equalize Charger

Charge Current: 10 Amperes (max.)

Recharge Time: 8 – 12 hours typical

Battery Circuit Breaker: 70 Amperes Magnetic Circuit Breaker

Battery In-line Fuse: 80 Amperes

Temperature-Compensated Control:
149°F (65°C) Thermal Protection

Front Panel Indicators: A.D.S. Status, Charger status, System Status & Output Current

Front Panel Test Points: AC Output Voltage & Battery Voltage (in charging or discharging)

Housing Material: Lightweight Heavy-Duty Aluminized Steel

External Fasteners: All Stainless Steel

Finish: Black Epoxy Powder Coat

Mounting Style: Pole, Wall, or Ground Mount

Operating Temperature:
-40°F to +140°F (-40°C to +60°C)

Relative Humidity: 0 ~ 95% (non-immersible)

Dimensions: 16.2” W x 10.3” H x 15.2” D (411mm W x 262mm H x 386mm D)

System Circuits Box (in external enclosure)

Status Indicators: AC Input Normal, Output Status (Line, Standby or Battery DC Low) & Self-test Fault Warning

Accessories: AC Convenience Outlet, Auxiliary Inlet, Bypass Switch, Maintenance Connector, Ground Clamp

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