

# Zenith MX250

## Entelli-Switch Microprocessor Controller

### Introduction

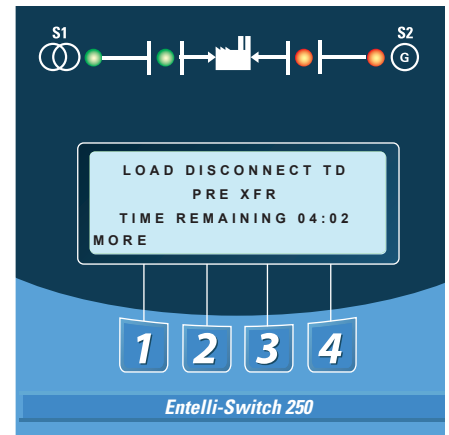
With more powerful integrated features, the Entelli-Switch 250 microprocessor, standard with the entire GE Zenith ZTS product family, offers expanded programmability and field adaptability. This premium controller is designed for use in specification-grade applications. As an embedded digital controller, the Entelli-Switch 250 series offers high reliability and ease of unattended operation across a range of applications.

- Available in ALL transfer modes:  
~ Open, Closed, Delayed and Bypass

### Features and Benefits

- User-friendly programmable engine exerciser, used for the engine generator with or without load, at any interval in a one-year period
- Operating voltages available in a single controller for most domestic and international applications
- Real-time display of ATS status, including active timer(s)
- Multiple levels of user-defined password protection
- Serial communications allowing connectivity with other ATS's, paralleling switchgear and SCADA systems
- Time-tested synchronous logic automatically measures phase angle and frequency allowing disturbance-free transfer
- Unsurpassed statistical ATS/System monitoring available in real-time
- T3/W3 elevator pre-signal timer and output contacts. Automatically bypassed if the selected source fails, minimizing time an elevator is without power

- Universal Motor Disconnect (UMD) sends a pre-signal, post-signal or both to any motor control center. Not bypassed in an outage, the UMD ensures safety in the event of a single phase loss.



- Voltage unbalance detection standard
- Optically isolated inputs and outputs
- Includes all standard Zenith MX150 microprocessor controller features

### User-Friendly Operation

LEDs are used in a recognizable line configuration for continuous monitoring of switch position. A 4x20 character LCD display shows source availability, exercise time delay operation and system source condition. A new simplified adjustment is featured for voltage, frequency and time delay settings.

The control operates off a close differential 3-phase under-voltage sensing of Source 1 (normal), factory standard setting 90% pickup, 80% dropout; under-frequency sensing of Source 1 factory setting 95% pickup; voltage and frequency sensing of Source 2 (emergency), factory standard setting 90% pickup voltage, 95% pickup frequency. All factory settings are operator adjustable (see table on reverse side).

A test is standard (fast test/load/no load) to simulate Source 1 failure - automatically bypassed should Source 2 fail.

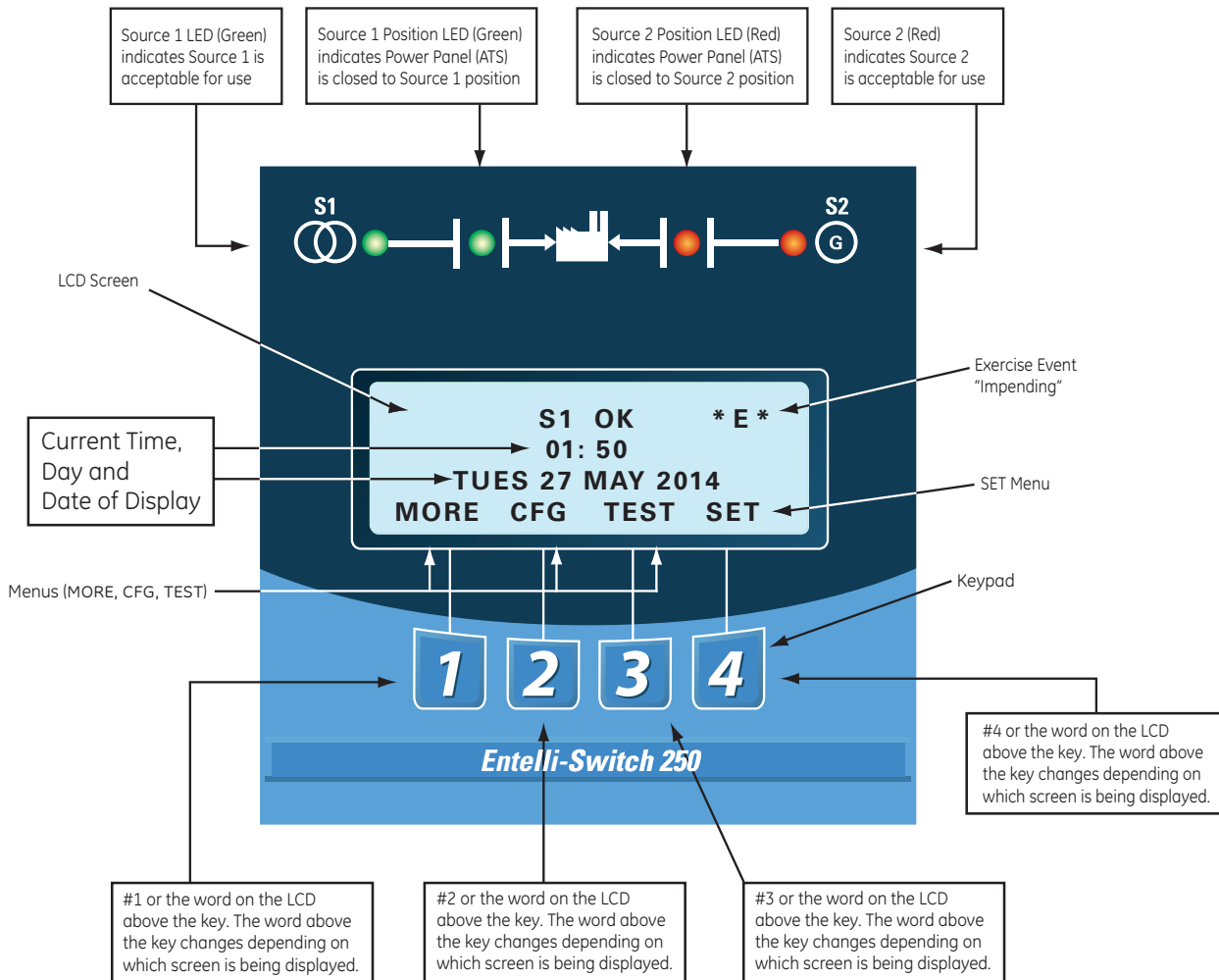


## Fully Approved

- UL and CSA listed
- Ringing wave immunity per IEEE 472 (ANSI C37.90A)
- Conducted and Radiated Emissions per EN55022 Class B (CISPR 22) (Exceeds EN55011 & MILSTD 461 Class 3)
- ESD Immunity test per EN61000-4-2 Class B (Level 4)
- Radiated RF, electromagnetic field immunity test per EN61000-4-3 (ENV50140) 10v/m
- Electrical fast transient/burst immunity test for EN61000-4-4
- Surge immunity test per EN61000-4-5 IEEE C62.41 (1.2 x 50µs, 0.5 to 4 kV)
- Conducted immunity test per EN61000-4-6 (ENV50141)
- Voltage dips and interruption immunity EN61000-4-11

| Control Setting Ranges            |               |                                     |                 |
|-----------------------------------|---------------|-------------------------------------|-----------------|
| Control Feature                   | Function      | MX250                               |                 |
|                                   |               | Range                               | Factory Setting |
| S1 Line Sensing - Under-voltage   | Fail          | 75-98%                              | 80%             |
|                                   | Restore       | 85-100%                             | 90%             |
| S1 Line Sensing - Under-frequency | Fail          | 88-98%                              | 90%             |
|                                   | Restore       | 90-100%                             | 95%             |
| S2 Line Sensing - Under-voltage   | Fail          | 75-98%                              | 80%             |
|                                   | Restore       | 85-100%                             | 90%             |
| S2 Line Sensing - Under-frequency | Fail          | 88-98% (2 Hz below restore setting) | 90%             |
|                                   | Restore       | 90-100%                             | 95%             |
| Time Delay S2 Start               | P1 Timer      | 0-10 seconds                        | 3 seconds       |
| S2 Stop Delay                     | U Timer       | 0-60 minutes                        | 5 minutes       |
| Time Delay S2 Stable Timer        | W Timer       | 0-5 minutes                         | 1 second        |
| Time Delay S1 Stable Timer        | T Timer       | 0-60 minutes                        | 30 minutes      |
| Universal Motor Disconnect *      | UMD Timer     | 0-60 seconds                        | 5 seconds       |
| Elevator Transfer Presignal *     | T3/W3 Timers  | 0-60 seconds                        | 20 seconds      |
| Delay Transition Time Delays      | DT, DW Timers | 1 second-10 minutes                 | 5 seconds       |

\* Form C Double Throw Contact Output



imagination at work

GE Critical Power  
601 Shiloh Road, Plano, TX 75074  
800 637 1738 [www.GECriticalPower.com](http://www.GECriticalPower.com)

Information subject to change without notice. Please verify all details with GE.  
PB-1106 (2/14) © 2014 General Electric Company All Rights Reserved