EXL – Emergency Transfer Load Manager

The EXL is a wall mounted system that monitors and controls a single engine generator for in parallel with a single utility source.

This cost effective alternative to switchgear mounted controls is designed for voltages from 208V – 32kV.

The EXL will support Emergency Standby as well as Utility Paralleling.

FEATURES

- Provides Automatic Control for One Genset and One Utility
- Emergency Standby Mode
- Utility Paralleling including Power Import, Export, and Baseload
- Closed Transition to and from Generator Power
- Engine Communications (EMCP3.2, 3.3, 4.2)
- Easy User Programming of Custom Logic
- State of the Art, Color Touchscreen for Operator Interface
- Easy to Follow, Step by Step Installation and Start-up Instructions
- Cat® Engine Generators Seamless Support for Diesel and Gas
DESCRIPTION

- Can be integrated into existing switchgear to provide a fully automated system
- Direct access to Cat engine data
- Complete metering and control from intuitive color touchscreen
- Complete protective functions, with annunciation and alarm history
- User programmable input and outputs
- Supported modes of operation include:
  - Emergency Standby (utility failure protection)
  - Utility Parallel, import power from grid
  - Utility Parallel, export power to grid
  - Utility Parallel, base load operations
  - Automatic Engine Generator Exercising
- Closed transition to and from generator to minimize power interruptions
- NFPA 99 and 110 compliant
- Comprehensive manual and documentation provided
- NEMA 12 (IP52) rated wallmount cabinet, UL508A / cUL labeled
- Building management system interface
- Password security assures system integrity

USER SYSTEM REQUIREMENTS

The EXL control system utilizes user provided electrically operated Generator and Utility circuit breakers. These circuit breakers should be provided with two (2) auxiliary contacts (1A & 1B), a bell alarm contact, a circuit breaker open circuit, a circuit breaker close circuit, and integral short circuit protection. The Generator and Utility must also be furnished with Voltage Sensing (3ph 3w or 3ph 4w) and Current Sensing (3ph, 5a Secondary).
## SPECIFICATIONS

<table>
<thead>
<tr>
<th>Generator Sets Supported</th>
<th>Cat Engine-Generators</th>
<th>C9-C32, C175, 3300, 3400, 3500, G3300, G3400 &amp; G3500</th>
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</thead>
<tbody>
<tr>
<td>System Capacity</td>
<td>1 Generator Set &amp; 1 Utility</td>
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<tr>
<td>Voltage and Frequency</td>
<td>208V - 32kV, 50/60Hz</td>
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### System Control Voltage
- **Utility and Generator Circuit Breaker**: 40A @ 120 Vac, 3A @ 480 Vac, 50 / 60 Hz
- **Control Relay Ratings**: 10A @ 110 VDC, 4A @ 225 VDC resistive
- **Control Voltage Nominal**: 24 VDC
- **Maximum Control Voltage Range**: 18-40 VDC

### Environmental Parameters
- **Certifications**: UL 508A / cUL
- **Vibration and Shock**: 5Hz to 9Hz single amplitude 3.5mm, 9-150Hz fixed acceleration of 9.8m/s²
- **Humidity**: 0-95% Non-Condensing Humidity
- **Operating Temperature**: 0-55°C
- **Storage Temperature**: -20°C to +60°C
- **Control Panel Enclosure**: NEMA 12 Type (IP52)

### Generator Protective Devices and Functions
- **ANSI Protective Devices**: 15/25, 27/59, 81 O/U, 32, 40, 50, 51 (Industrial Grade)
- **Metering**: V, A, PF, kVAR, kW, Hz, kWhr, kVarH
- **Accuracy**: Voltage L-L, Current Frequency (0.5%), Power, kW Power Factor, kVAR (1%)*  

### Utility Protective Devices and Functions
- **ANSI Protective Devices**: 15/25, 27/59, 81 O/U, 32, 47 (Industrial Grade)
- **Metering**: Voltage L-L, Current Frequency (0.5%), Power, kW Power Factor, kVAR, (1%)

### Optional
- **Supplemental Hardware 25 Relay**: Additional Discrete Synchronization Protection for the Synchronizing Circuit

*Dependent on CT/PT Accuracy
## Dimensions & Weights

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<tbody>
<tr>
<td>Control Panel Dimensions</td>
<td>36&quot;H x 24&quot; W x 8&quot;D (914mmH x 610mmW x 203mmD)</td>
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<tr>
<td>Shipping Weight (approx.)</td>
<td>192 lbs. (87kg)</td>
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<tr>
<td>Interconnect Control Wiring</td>
<td>Top or Bottom Conduit Access</td>
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<tr>
<td>Control Panel Installation</td>
<td>Wall Mount</td>
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</table>

### Enclosure Dimensions

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