Cat® EMCP 4.4 Generator Set Master Controller

EGP Configuration

Caterpillar is leading the power generation marketplace with power solutions engineered to deliver unmatched flexibility, expandability, reliability, and cost effectiveness.

General Description

The EMCP 4.4 master control panel is a wall-mounted system that monitors and controls up to ten (10) Cat® EMCP 4.4 equipped generator sets.

Together with the EMCP 4.4 generator set controllers, this cost-effective approach provides centralized, automatic controls and communications through an intuitive graphic interface.

Features

- 15” color, touchscreen operator interface
- Integral protective functions
- Annunciation and alarm history
- Selectable transition modes to and from generator power
- Selectable load sense/load demand mode to avoid unnecessary generator set operation and reduce fuel consumption
- Automatic load shed/load add control based on available capacity to prevent generator set overloading
- High-speed communications with individual EMCP 4.4 generator set controls provide the operator with control and data acquisition capability of each generator set from a centralized location
- Easy-to-follow, step-by-step installation and start-up instructions
- Password security system for user interface
- Interface capability with SCADA system
- Two-year standard Caterpillar warranty

Image shown may not reflect actual configuration
Operating Modes

- Emergency standby
- Load sense/load demand
  - Generator set priority or engine-hour balancing
  - Automatically matches on-line generator capacity to the loads
- Load shed/load add
  - Automatic or manual load shed up to eight (8) stages
- No load test mode

User System Requirement

- All Cat diesel engine generators are required to be packaged with EMCP 4.4 configured for MGDL
- The EMCP 4.4 master control panel requires an ethernet connection to the EMCP 4.4 generator control on each generator set
## Specifications

### Generator Sets Supported

<table>
<thead>
<tr>
<th>Cat Engine-Generators</th>
<th>C9 ACERT™ - C32 ACERT, C175, 3500</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Capacity</td>
<td>2-10 Generator Sets</td>
</tr>
<tr>
<td>Voltage and Frequency</td>
<td>208V - 600V, 50/60Hz</td>
</tr>
</tbody>
</table>

### System Control Voltage

| Control Relay Ratings       | 10A @ 110 VDC, 4A @ 225 VDC resistive |
| Control Voltage Nominal     | 24 VDC                               |
| Maximum Control Voltage Range | 10-36 VDC                         |

### SCADA Interface

| Modbus RTU (RS 485) 2-wire | Standard feature |
| Modbus TCP (Ethernet)       | Optional feature |

### Environmental Parameters

| Certifications              | UL 508A/cUL, CSA, OSP-0165-10  |
| Vibration and Shock         | SDS(g) = 2.77, z/h = 1.0, Ip = 1.5 |
| Humidity                    | 10%-90% non-condensing humidity |
| Operating Temperature       | 0°C to 50°C                      |
| Storage Temperature         | -10°C to +60°C                   |
| Control Panel Enclosure     | NEMA 12 Type (IP52)              |

### Enclosure Dimensions & Weights

| 30H x 24W x 11.125 inches, 74 lbs. wall mount |
Dimensions

EMCP 4.4 Master Control Panel

Dimensions

Materials and specifications are subject to change without notice.

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