**Cat® 3512C**
\[\text{Diesel Generator Sets}\]

**Standard Features**

**Cat® Diesel Engine**
- Meets U.S. EPA Stationary Emergency Use Only (Tier 2) emission standards
- Reliable performance proven in thousands of applications worldwide

**Generator Set Package**
- Accepts 100% block load in one step and meets NFPA 110 loading requirements
- Conforms to ISO 8528-5 G3 load acceptance requirements
- Reliability verified through torsional vibration, fuel consumption, oil consumption, transient performance, and endurance testing

**Alternators**
- Superior motor starting capability minimizes need for oversizing generator
- Designed to match performance and output characteristics of Cat diesel engines

**Cooling System**
- Cooling systems available to operate in ambient temperatures up to 50°C (122°F)
- Tested to ensure proper generator set cooling

**EMCP 4 Control Panels**
- User-friendly interface and navigation
- Scalable system to meet a wide range of installation requirements
- Expansion modules and site specific programming for specific customer requirements

**Warranty**
- 24 months/1000-hour warranty for standby and mission critical ratings
- 12 months/unlimited hour warranty for prime and continuous ratings
- Extended service protection is available to provide extended coverage options

**Worldwide Product Support**
- Cat dealers have over 1,800 dealer branch stores operating in 200 countries
- Your local Cat dealer provides extensive post-sale support, including maintenance and repair agreements

**Financing**
- Caterpillar offers an array of financial products to help you succeed through financial service excellence
- Options include loans, finance lease, operating lease, working capital, and revolving line of credit
- Contact your local Cat dealer for availability in your region

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<table>
<thead>
<tr>
<th>Standby 60 Hz e\text{kW (kVA)}</th>
<th>Mission Critical 60 Hz e\text{kW (kVA)}</th>
<th>Prime 60 Hz e\text{kW (kVA)}</th>
<th>Continuous 60 Hz e\text{kW (kVA)}</th>
<th>Emissions Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500 (1875)</td>
<td>1500 (1875)</td>
<td>1360 (1700)</td>
<td>1230 (1537)</td>
<td>U.S. EPA Stationary Emergency Use Only. (Tier 2)</td>
</tr>
</tbody>
</table>

**Image shown may not reflect actual configuration**
Optional Equipment

**Engine**

*Air Cleaner*
- Single element
- Dual element
- Heavy duty

*Muffler*
- Industrial grade (15 dB)

**Starting**
- Standard batteries
- Oversized batteries
- Standard electric starter(s)
- Dual electric starter(s)
- Air starter(s)
- Jacket water heater

**Alternator**

*Output voltage*
- 380V
- 440V
- 480V
- 600V
- 6160V
- 6300V

*Temperature Rise (over 40°C ambient)*
- 150°C
- 125°C/130°C
- 105°C
- 80°C

*Winding type*
- Random wound
- Form wound

*Excitation*
- Internal excitation (IE)
- Permanent magnet (PM)

*Attachments*
- Anti-condensation heater
- Stator and bearing temperature monitoring and protection

**Power Termination**

*Type*
- Bus bar
- Circuit breaker
- 1600A
- 2000A
- 2500A
- 3200A
- 3000A
- UL
- IEC
- 3-pole
- 4-pole
- Manually operated
- Electrically operated

*Trip Unit*
- LSI
- LSI-G
- LSIG-P

**Control System**

*Controller*
- EMCP 4.2B
- EMCP 4.3
- EMCP 4.4

*Attachments*
- Local annunciator module
- Remote annunciator module
- Expansion I/O module
- Remote monitoring software

**Charging**
- Battery charger – 10A
- Battery charger – 20A
- Battery charger – 35A

**Vibration Isolators**
- Spring
- Seismic rated

**Cat Connect**

*Connectivity*
- Ethernet
- Cellular
- Satellite

**Extended Service Options**

*Tets*
- 2 year (prime)
- 3 year
- 5 year
- 10 year

*Coverage*
- Silver
- Gold
- Platinum
- Platinum Plus

**Ancillary Equipment**

- Automatic transfer switch (ATS)
- Uninterruptible power supply (UPS)
- Paralleling switchgear
- Paralleling controls

**Certifications**

- UL 2200 Listed
- CSA
- IBC seismic certification
- OSHPD pre-approval

**Note:** Some options may not be available on all models. Certifications may not be available with all model configurations. Consult factory for availability.
## Package Performance

<table>
<thead>
<tr>
<th>Performance</th>
<th>Standby</th>
<th>Mission Critical</th>
<th>Prime</th>
<th>Continuous</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency</strong></td>
<td>60 Hz</td>
<td>60 Hz</td>
<td>60 Hz</td>
<td>60 Hz</td>
</tr>
<tr>
<td>Gen set power rating with fan</td>
<td>1500 ekW</td>
<td>1500 ekW</td>
<td>1360 ekW</td>
<td>1230 ekW</td>
</tr>
<tr>
<td>Gen set power rating with fan @ 0.8 power factor</td>
<td>1875 kVA</td>
<td>1875 kVA</td>
<td>1700 kVA</td>
<td>1537 kVA</td>
</tr>
</tbody>
</table>

### Emissions

- **EPA Stationary Emergency (Tier 2)**
- **EPA Stationary Emergency (Tier 2)**
- **EPA Stationary Emergency (Tier 2)**
- **EPA Stationary Emergency (Tier 2)**

<table>
<thead>
<tr>
<th>Performance number</th>
<th>EM1898-00</th>
<th>EM1899-00</th>
<th>DM8261-04</th>
<th>DM8262-04</th>
</tr>
</thead>
</table>

### Fuel Consumption

- **100% load with fan – L/hr (gal/hr)**
- **75% load with fan – L/hr (gal/hr)**
- **50% load with fan – L/hr (gal/hr)**
- **25% load with fan – L/hr (gal/hr)**

<table>
<thead>
<tr>
<th>Performance</th>
<th>100% load with fan</th>
<th>75% load with fan</th>
<th>50% load with fan</th>
<th>25% load with fan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L/hr (gal/hr)</td>
<td>L/hr (gal/hr)</td>
<td>L/hr (gal/hr)</td>
<td>L/hr (gal/hr)</td>
</tr>
<tr>
<td></td>
<td>395.9 (104.6)</td>
<td>395.9 (104.6)</td>
<td>364.1 (96.2)</td>
<td>336.9 (89.0)</td>
</tr>
<tr>
<td></td>
<td>310.5 (82.0)</td>
<td>310.5 (82.0)</td>
<td>285.8 (75.5)</td>
<td>262.2 (69.3)</td>
</tr>
<tr>
<td></td>
<td>219.7 (58.0)</td>
<td>219.7 (58.0)</td>
<td>201.7 (53.3)</td>
<td>185.0 (48.9)</td>
</tr>
<tr>
<td></td>
<td>128.4 (33.9)</td>
<td>128.4 (33.9)</td>
<td>119.7 (31.6)</td>
<td>111.7 (29.5)</td>
</tr>
</tbody>
</table>

### Cooling System

- **Radiator air flow restriction (system) – kPa (in. water)**
- **Radiator air flow – m³/min (cfm)**
- **Engine coolant capacity – L (gal)**
- **Radiator coolant capacity – L (gal)**
- **Total coolant capacity – L (gal)**

<table>
<thead>
<tr>
<th>Performance</th>
<th>100% load with fan</th>
<th>75% load with fan</th>
<th>50% load with fan</th>
<th>25% load with fan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L/hr (gal/hr)</td>
<td>L/hr (gal/hr)</td>
<td>L/hr (gal/hr)</td>
<td>L/hr (gal/hr)</td>
</tr>
<tr>
<td></td>
<td>0.12 (0.48)</td>
<td>0.12 (0.48)</td>
<td>0.12 (0.48)</td>
<td>0.12 (0.48)</td>
</tr>
<tr>
<td></td>
<td>2075 (73278)</td>
<td>2075 (73278)</td>
<td>2075 (73278)</td>
<td>2075 (73278)</td>
</tr>
<tr>
<td></td>
<td>156.8 (41.4)</td>
<td>156.8 (41.4)</td>
<td>156.8 (41.4)</td>
<td>156.8 (41.4)</td>
</tr>
<tr>
<td></td>
<td>234.0 (61.0)</td>
<td>234.0 (61.0)</td>
<td>234.0 (61.0)</td>
<td>234.0 (61.0)</td>
</tr>
<tr>
<td></td>
<td>390.8 (102.4)</td>
<td>390.8 (102.4)</td>
<td>390.8 (102.4)</td>
<td>390.8 (102.4)</td>
</tr>
</tbody>
</table>

### Inlet Air

- **Combustion air inlet flow rate – m³/min (cfm)**

<table>
<thead>
<tr>
<th>Performance</th>
<th>100% load with fan</th>
<th>75% load with fan</th>
<th>50% load with fan</th>
<th>25% load with fan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L/hr (gal/hr)</td>
<td>L/hr (gal/hr)</td>
<td>L/hr (gal/hr)</td>
<td>L/hr (gal/hr)</td>
</tr>
<tr>
<td></td>
<td>139.8 (4937.2)</td>
<td>139.8 (4937.2)</td>
<td>134.8 (4758.3)</td>
<td>129.5 (4572.1)</td>
</tr>
</tbody>
</table>

### Exhaust System

- **Exhaust stack gas temperature – °C (°F)**
- **Exhaust gas flow rate – m³/min (cfm)**
- **Exhaust system backpressure (maximum allowable – kPa (in. water)**

<table>
<thead>
<tr>
<th>Performance</th>
<th>100% load with fan</th>
<th>75% load with fan</th>
<th>50% load with fan</th>
<th>25% load with fan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>°C (°F)</td>
<td>°C (°F)</td>
<td>°C (°F)</td>
<td>°C (°F)</td>
</tr>
<tr>
<td></td>
<td>402.6 (756.6)</td>
<td>402.6 (756.6)</td>
<td>387.3 (729.2)</td>
<td>380.6 (717.1)</td>
</tr>
<tr>
<td></td>
<td>332.3 (11734.1)</td>
<td>332.3 (11734.1)</td>
<td>312.2 (11028.8)</td>
<td>296.4 (10466.9)</td>
</tr>
<tr>
<td></td>
<td>6.7 (27.0)</td>
<td>6.7 (27.0)</td>
<td>6.7 (27.0)</td>
<td>6.7 (27.0)</td>
</tr>
</tbody>
</table>

### Heat Rejection

- **Heat rejection to jacket water – kW (Btu/min)**
- **Heat rejection to exhaust (total) – kW (Btu/min)**
- **Heat rejection to aftercooler – kW (Btu/min)**
- **Heat rejection to atmosphere from engine – kW (Btu/min)**
- **Heat rejection from alternator – kW (Btu/min)**

<table>
<thead>
<tr>
<th>Performance</th>
<th>100% load with fan</th>
<th>75% load with fan</th>
<th>50% load with fan</th>
<th>25% load with fan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>kW (Btu/min)</td>
<td>kW (Btu/min)</td>
<td>kW (Btu/min)</td>
<td>kW (Btu/min)</td>
</tr>
<tr>
<td></td>
<td>502 (28541)</td>
<td>502 (28541)</td>
<td>474 (26951)</td>
<td>449 (25556)</td>
</tr>
<tr>
<td></td>
<td>1398 (79477)</td>
<td>1398 (79477)</td>
<td>1284 (73015)</td>
<td>1202 (68380)</td>
</tr>
<tr>
<td></td>
<td>519 (29539)</td>
<td>519 (29539)</td>
<td>478 (27174)</td>
<td>438 (24921)</td>
</tr>
<tr>
<td></td>
<td>124 (7072)</td>
<td>124 (7072)</td>
<td>119 (6744)</td>
<td>114 (6473)</td>
</tr>
<tr>
<td></td>
<td>74 (4208)</td>
<td>74 (4208)</td>
<td>64 (3645)</td>
<td>69 (3913)</td>
</tr>
</tbody>
</table>

### Emissions* (Nominal)

- **NOx mg/Nm³ (g/hp-h)**
- **CO mg/Nm³ (g/hp-h)**
- **HC mg/Nm³ (g/hp-h)**
- **PM mg/Nm³ (g/hp-h)**

<table>
<thead>
<tr>
<th>Performance</th>
<th>100% load with fan</th>
<th>75% load with fan</th>
<th>50% load with fan</th>
<th>25% load with fan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mg/Nm³ (g/hp-h)</td>
<td>mg/Nm³ (g/hp-h)</td>
<td>mg/Nm³ (g/hp-h)</td>
<td>mg/Nm³ (g/hp-h)</td>
</tr>
<tr>
<td></td>
<td>2373.9 (5.48)</td>
<td>2373.9 (5.48)</td>
<td>2363.9 (5.46)</td>
<td>1691.5 (4.04)</td>
</tr>
<tr>
<td></td>
<td>237.3 (0.48)</td>
<td>237.3 (0.48)</td>
<td>236.6 (0.48)</td>
<td>195.6 (0.41)</td>
</tr>
<tr>
<td></td>
<td>51.7 (0.12)</td>
<td>51.7 (0.12)</td>
<td>52.0 (0.12)</td>
<td>64.8 (0.16)</td>
</tr>
<tr>
<td></td>
<td>13.0 (0.03)</td>
<td>13.0 (0.03)</td>
<td>13.0 (0.03)</td>
<td>15.4 (0.04)</td>
</tr>
</tbody>
</table>

### Emissions* (Potential Site Variation)

- **NOx mg/Nm³ (g/hp-h)**
- **CO mg/Nm³ (g/hp-h)**
- **HC mg/Nm³ (g/hp-h)**
- **PM mg/Nm³ (g/hp-h)**

<table>
<thead>
<tr>
<th>Performance</th>
<th>100% load with fan</th>
<th>75% load with fan</th>
<th>50% load with fan</th>
<th>25% load with fan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mg/Nm³ (g/hp-h)</td>
<td>mg/Nm³ (g/hp-h)</td>
<td>mg/Nm³ (g/hp-h)</td>
<td>mg/Nm³ (g/hp-h)</td>
</tr>
<tr>
<td></td>
<td>2848.7 (6.58)</td>
<td>2848.7 (6.58)</td>
<td>2836.7 (6.55)</td>
<td>2029.8 (4.85)</td>
</tr>
<tr>
<td></td>
<td>427.2 (0.87)</td>
<td>427.2 (0.87)</td>
<td>425.8 (0.86)</td>
<td>352.1 (0.74)</td>
</tr>
<tr>
<td></td>
<td>68.8 (0.16)</td>
<td>68.8 (0.16)</td>
<td>69.2 (0.16)</td>
<td>86.2 (0.21)</td>
</tr>
<tr>
<td></td>
<td>18.2 (0.04)</td>
<td>18.2 (0.04)</td>
<td>18.3 (0.04)</td>
<td>21.5 (0.05)</td>
</tr>
</tbody>
</table>

*Math levels are corrected to 5% O₂. Contact your local Cat dealer for further information.*
Weights and Dimensions

<table>
<thead>
<tr>
<th>Dim “A” mm (in)</th>
<th>Dim “B” mm (in)</th>
<th>Dim “C” mm (in)</th>
<th>Dry Weight kg (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5920 (233.1)</td>
<td>2281 (89.8)</td>
<td>2794 (110.0)</td>
<td>13,970 (30,790)</td>
</tr>
</tbody>
</table>

Note: For reference only. Do not use for installation design. Contact your local Cat dealer for precise weights and dimensions.

**Ratings Definitions**

**Standby**
Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

**Mission Critical**
Output available with varying load for the duration of the interruption of the normal source power. Average power output is 85% of the mission critical power rating. Typical peak demand up to 100% of rated power for up to 5% of the operating time. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

**Prime**
Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated e kW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year.

**Continuous**
Output available with non-varying load for an unlimited time. Average power output is 70-100% of the continuous power rating. Typical peak demand is 100% of continuous rated kW for 100% of the operating hours.

**Applicable Codes and Standards**

Note: Codes may not be available in all model configurations. Please consult your local Cat dealer for availability.

**Data Center Applications**
- ISO 8528-1 Data Center Power (DCP) compliant per DCP application of Cat diesel generator set prime power rating.
- All ratings Tier III/Tier IV compliant per Uptime Institute requirements.
- All ratings ANSI/TIA-942 compliant for Rated-1 through Rated-4 data centers.

**Fuel Rates**
Fuel rates are based on fuel oil of 35° API [16°C (60°F)] gravity having an LHV of 42,780 kJ/kg (18,390 Btu/lb) when used at 29°C (85°F) and weighing 838.9 g/liter (7.001 lbs/U.S. gal.)