Cat® C18 DIESEL GENERATOR SETS



Standby & Prime: 60Hz



Image shown might not reflect actual configuration

| Engine Model | Cat [®] C18 ATAAC™ In-line 6, 4-cycle diesel |
|-----------------------|---|
| Bore x Stroke | 145mm x 183mm (5.7in x 7.2in) |
| Displacement | 18.13 L (1106.3 in³) |
| Compression Ratio | 14 |
| Aspiration | Turbocharged Air-to-Air Aftercooled |
| Fuel Injection System | Electronic Unit Injection |
| Governor | Electronic ADEM™ A4 |

| Model | Standby | Prime | Emission Strategy |
|----------|---------|---------|-------------------|
| DE715SE0 | 716 ekW | 650 ekW | Low BSFC |

PACKAGE PERFORMANCE

| Performance | Standby | Prime | |
|---|-----------------|----------------|--|
| Frequency | 60 Hz | | |
| Genset Power Rating | 895 kVA | 812 kVA | |
| Genset power rating with fan @ 0.8 power factor | 716 ekW | 650 ekW | |
| Emissions | Low BSFC | | |
| Performance Number | EM3834 | EM3835 | |
| Fuel Consumption | | | |
| 100% load with fan, L/hr (gal/hr) | 192 (50.7) | 174.7 (46.1) | |
| 75% load with fan, L/hr (gal/hr) | 141.8 (37.5) | 127.6 (33.7) | |
| 50% load with fan, L/hr (gal/hr) | 95.9 (25.3) | 88.6 (23.4) | |
| 25% load with fan, L/hr (gal/hr) | 56.8 (15.0) | 53.2 (14.1) | |
| Cooling System ¹ | | | |
| Radiator air flow restriction (system), kPa (in. Water) | 0.12 (0.48) | 0.12 (0.48) | |
| Radiator air flow, m³/min (cfm) | N | Α | |
| Engine coolant capacity, L (gal) | 21 (5.5) | 21 (5.5) | |
| Radiator coolant capacity, L (gal) | 89 (23.5) | 89 (23.5) | |
| Total coolant capacity, L (gal) | 110 (29.1) | 110 (29.1) | |
| Inlet Air | | | |
| Combustion air inlet flow rate, m³/min (cfm) | 64.9 (2291.2) | 62.7 (2213.2) | |
| Max. Allowable Combustion Air Inlet Temp, °C (°F) | 49 (120) | 49 (120) | |
| Exhaust System | | | |
| Exhaust stack gas temperature, °C (°F) | 429 (804.2) | 408.3 (766.9) | |
| Exhaust gas flow rate, m³/min (cfm) | 158.5 (5597 .5) | 147.8 (5218.9) | |
| Exhaust system backpressure (maximum allowable) kPa (in. water) | NA NA | | |
| Heat Rejection | | | |
| Heat rejection to jacket water, kW (Btu/min) | 214 (12197) | 199 (11308) | |
| Heat rejection to exhaust (total) kW (Btu/min) | 683 (38840) | 620 (35248) | |
| Heat rejection to aftercooler, kW (Btu/min) | 245 (13945) | 226 (12840) | |
| Heat rejection to atmosphere from engine, kW (Btu/min) | 103 (5834) | 91.5 (5204) | |

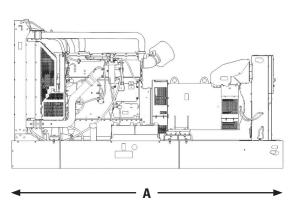
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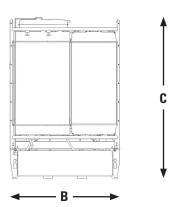
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| Emissions (Nominal) ² | | Standby | | | Prime | |
|---|-------------|---------------|-------------|------------|---------------|-------------|
| NOx, mg/Nm³ (g/hp-hr) | | 2781.9 (5.96) | | | 2528.7 (5.45) | |
| CO, mg/Nm³ (g/hp-hr) | | 127.8 (0.28) | | | 76.6 (0.17) | |
| HC, mg/Nm³ (g/hp-hr) | | 15.9 (0.04) | | | 20.0 (0.05) | |
| PM, mg/Nm³ (g/hp-hr) | | 9.9 (0.03) | | | 8.4 (0.02) | |
| Alternator ³ | | | | | | |
| Voltages | 480 V | 440 V | 380 V | 480 V | 440 V | 380 V |
| Motor starting capability @ 30% Voltage Dip & 0.8 P.F | 2501 skVA | 2142 skVA | 1413 skVA | 2512 skVA | 2142 skVA | 1630 skVA |
| Current | 1076.5 amps | 1174.4 amps | 1359.8 amps | 977.3 amps | 1066.1 amps | 1223.1 amps |
| Frame Size | LC7224J | LC7224J | LC7224L | LC7224J | LC7224H | LC7224H |
| Excitation | AREP | AREP | AREP | AREP | AREP | AREP |
| Temperature Rise | 130°C | 150°C | 130°C | 130°C | 125°C | 163°C |

WEIGHTS & DIMENSIONS





| Dim "A" mm (in) | Dim "B" mm (in) | Dim "C" mm (in) | Dry Weight kg (lb) | |
|-----------------|-----------------|-----------------|--------------------|--|
| 3910 (154) | 1461 (58) | 2156 (85) | 3862 (8514) | |

APPLICABLE CODES AND STANDARDS:

AS1359, CSA C22.2 No100-04, UL142, UL489, UL869, UL2200, NFPA37, NFPA70, NFPA99, NFPA110, IBC, IEC60034-1, ISO3046, ISO8528, NEMA MG1-22, NEMA MG1-33, 2006/95/EC, 2006/42/EC, 2004/108/EC.

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

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.

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 ekW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year

RATINGS: Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046 standard conditions.

DEFINITIONS AND CONDITIONS

- ¹ For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.
- ² Emissions data measurement procedures are consistent with those described in EPA CFR 40 Part 89, Subpart D & E and ISO8178-1 for measuring HC, CO, PM, NOx. Data shown is based on steady state operating conditions of 77° F, 28.42 in HG and number 2 diesel fuel with 35° API and LHV of 18,390 BTU/lb. The nominal emissions data shown is subject to instrumentation, measurement, facility and engine to engine variations. Emissions data is based on 100% load and thus cannot be used to compare to EPA regulations which use values based on a weighted cycle.
- ³ UL 2200 Listed packages may have oversized generators with a different temperature rise and motor starting characteristics. Generator temperature rise is based on a 40° C ambient per NEMA MG1-32.

LET'S DO THE WORK.