

## Standby & Prime: 50 Hz



Image shown might not reflect actual configuration

|                       |                                    |
|-----------------------|------------------------------------|
| Engine Model          | Cat® C4.4 Inline 4-stroke Diesel   |
| Bore x Stroke         | 105.0mm x 127.0mm (4.1in x 5.0 in) |
| Displacement          | 4.4 L (268.5 in³)                  |
| Compression Ratio     | 18.2:1                             |
| Aspiration            | Turbocharged                       |
| Fuel Injection System | Inline                             |
| Governor              | Mechanical                         |

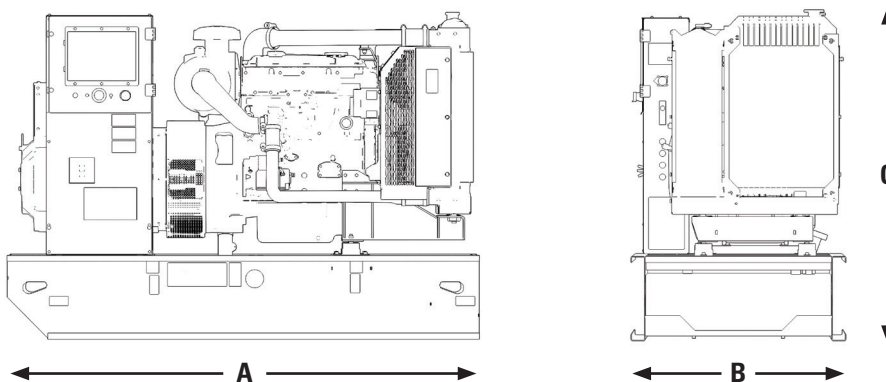
| Model  | Standby            | Prime              | Emission Strategy |
|--------|--------------------|--------------------|-------------------|
| DE55E2 | 50 Hz              | 50 Hz              | EU II             |
|        | 55.0 kVA (44.0 kW) | 50.0 kVA (40.0 kW) |                   |

## PACKAGE PERFORMANCE

| Performance  | Standby     | Prime       |
|--|-------------|-------------|
| Frequency  | 50 Hz       | 50 Hz       |
| Genset Power Rating  | 55.0 kVA    | 50.0 kVA    |
| Genset power rating with fan @ 0.8 power factor                  | 44.0 kW     | 40.0 kW     |
| Emissions  | EU II       |             |
| Performance Number   | P3350A      |             |
| <b>Fuel Consumption</b>  |             |             |
| Fuel Tank Capacity, litres (US gal)                              | 219 (57.9)  |             |
| 100% load with fan, L/hr (gal/hr)                                | 17.4 (4.6)  | 15.9 (4.2)  |
| 75% load with fan, L/hr (gal/hr)                                 | 13.1 (3.5)  | 12.0 (3.2)  |
| 50% load with fan, L/hr (gal/hr)                                 | 8.9 (2.4)   | 8.1 (2.1)   |
| <b>Cooling System<sup>1</sup></b>                                |             |             |
| Radiator air flow restriction (system), kPa (in. Water)          | 8.0 (32.1)  |             |
| Radiator air flow, m³/min (cfm)                                  | 97.8 (3454) |             |
| Total coolant capacity, L (gal)                                  | 12.6 (3.3)  |             |
| <b>Inlet Air</b>   |             |             |
| Combustion air inlet flow rate, m³/min (cfm)                     | 4.4 (156)   | 4.3 (153)   |
| Max. Allowable Combustion Air Inlet Temp, °C (°F)                | 50 (122)    |             |
| <b>Exhaust System</b>  |             |             |
| Exhaust stack gas temperature, °C (°F)                           | 493 (919)   | 446 (835)   |
| Exhaust gas flow rate, m³/min (cfm)                              | 10.0 (353)  | 9.0 (318)   |
| Exhaust system backpressure (maximum allowable), kPa (in. water) | 12.0 (3.5)  |             |
| <b>Heat Rejection</b>  |             |             |
| Heat rejection to jacket water, kW (Btu/min)                     | 42.0 (2388) | 38.0 (2161) |
| Heat rejection to alternator, kW (Btu/min)                       | 5.9 (336)   |             |
| Heat rejection to atmosphere from engine, kW (Btu/min)           | 18.9 (1075) | 14.6 (830)  |

| Alternator <sup>3</sup>                           | 50 Hz   |      |      |
|---|---------|------|------|
| Voltages  | 415V    | 400V | 380V |
| Motor starting capability @ 30% Voltage Dip, skVA | 50      | 50   | 50   |
| Current, amps                                     | 77      | 79   | 81   |
| Temperature Rise, °C                              | 163/27  |      |      |
| Frame Size  | R1935L4 |      |      |
| Excitation  | S.E     |      |      |

## WEIGHTS & DIMENSIONS



**Note:** General configuration not to be used for installation. See general dimension drawings for detail.

| Dim "A" mm (in) | Dim "B" mm (in) | Dim "C" mm (in) | Dry Weight kg (lb) |
|-----------------|-----------------|-----------------|--------------------|
| 1925 (75.8)     | 1120 (44.1)     | 1361 (53.6)     | 944 (2081)         |

### 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 kW 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

<sup>1</sup> For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.

<sup>2</sup> 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.

<sup>3</sup> 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.

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