

# Olympian OD20 Diesel Generator Set

|                       |                                     |
|-----------------------|-------------------------------------|
| Engine Model          | Cat® C2.2 In-line 4, 4-cycle Diesel |
| Bore x Stroke         | 84 mm x 100 mm (3.3 in x 3.93 in)   |
| Displacement          | 2.2 L (134 in³)                     |
| Compression Ratio     | 23.3:1                              |
| Aspiration            | Naturally Aspirated                 |
| Fuel Injection System | Mechanical Cassette Type            |

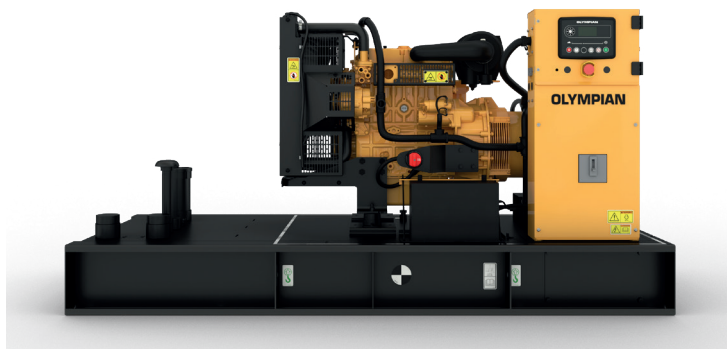


Image shown may not reflect actual configuration

| Model       | Standby | Emission Strategy¹                                |
|-------------|---------|---------------------------------------------------|
| <b>OD20</b> | 20 kW   | EPA TIER 4i (EPA 40 CFR Part 1039 Interim Tier 4) |

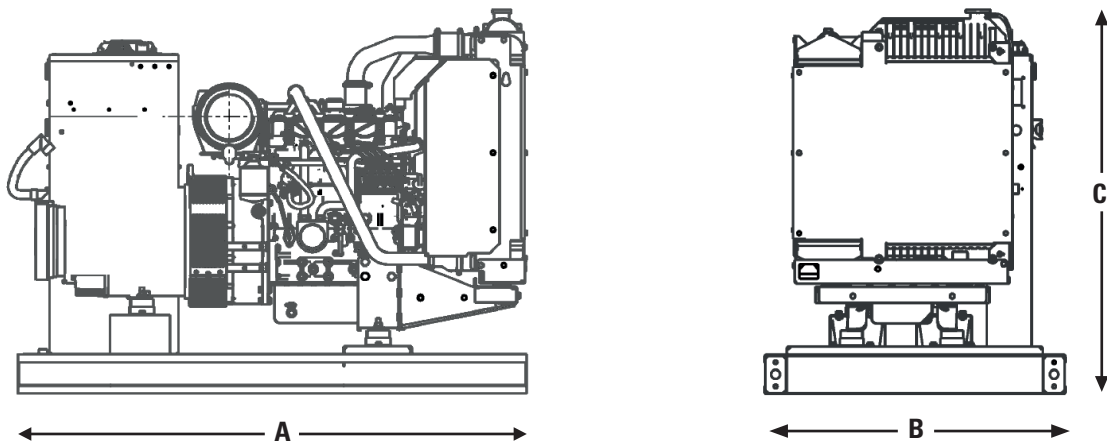
## Package Performance

| Performance                                                      | Standby      |         |
|------------------------------------------------------------------|--------------|---------|
|                                                                  | 3-Phase      | 1-Phase |
| Frequency, Hz                                                    | 60           |         |
| Genset power rating, kVA                                         | 25           | 20      |
| Genset power rating with fan, kW                                 | 20           |         |
| Performance number                                               | P3518A       |         |
| Fuel Consumption                                                 |              |         |
| 100% load with fan, L/hr (gal/hr)                                | 6.9 (1.8)    |         |
| 75% load with fan, L/hr (gal/hr)                                 | 5.3 (1.4)    |         |
| 50% load with fan, L/hr (gal/hr)                                 | 3.5 (0.9)    |         |
| Cooling System²                                                  |              |         |
| Radiator air flow, m³/min (CFM)                                  | 44 (1554)    |         |
| Radiator air flow restriction (system), kPa (in. water)          | 0.12         |         |
| Engine coolant capacity, L (gal)                                 | 3.6 (0.95)   |         |
| Radiator coolant capacity, L (gal)                               | 3.4 (0.90)   |         |
| Total coolant capacity, L (gal)                                  | 7 (1.85)     |         |
| Inlet Air                                                        |              |         |
| Max. combustion air intake restriction, kPa (in. water)          | 6.4 (25.7)   |         |
| Combustion air inlet flow rate, m³/min (CFM)                     | 1.74 (61.45) |         |
| Exhaust System                                                   |              |         |
| Exhaust stack gas temperature, °C (°F)                           | 498 (928)    |         |
| Exhaust gas flow rate, m³/min (CFM)                              | 4.76 (168.0) |         |
| Exhaust system backpressure (maximum allowable), kPa (in. water) | 10.2 (41.0)  |         |
| Heat Rejection                                                   |              |         |
| Heat rejection to jacket water, kW (BTU/min)                     | 22.2 (1262)  |         |
| Heat rejection from alternator, kW (BTU/min)                     | 4.2 (238)    |         |
| Heat rejection to atmosphere from engine, kW (BTU/min)           | 4.6 (262)    |         |
| Heat rejection to exhaust (total), kW (BTU/min)                  | 18.3 (1041)  |         |

### Alternator<sup>3</sup>

| Duty Cycle     |                                                   | Standby |         |         |         |          |
|----------------|---------------------------------------------------|---------|---------|---------|---------|----------|
| Phase          |                                                   | 3-Phase |         |         |         | 1-Phase  |
| Voltages, V    |                                                   | 208/120 | 480/277 | 600/346 | 240/120 | 240/120V |
| Current, Amps  |                                                   | 69      | 30      | 24      | 60      | 83       |
| Frame: M1455L4 | Temperature rise, °C                              | 125     | 125     | 125     | 125     |          |
|                | Excitation                                        | SE/AREP | SE/AREP | AREP    | SE/AREP |          |
|                | Motor starting capability @ 30% Voltage Dip, skVA | 12      | 55      | 53      | 16      |          |
| Frame: M1713L4 | Temperature rise, °C                              | 105     | 105     | 105     | 105     | 105      |
|                | Excitation                                        | SE      | SE      | AREP    | SE      | SE       |
|                | Motor starting capability @ 30% Voltage Dip, skVA | 11      | 50      | 58      | 14      | 46       |
| Frame: M1717L4 | Temperature rise, °C                              | 105     | 105     | 105     | 105     |          |
|                | Excitation                                        | SE      | SE      | AREP    | SE      |          |
|                | Motor starting capability @ 30% Voltage Dip, skVA | 53      | 67      | 76      | 53      |          |
| Frame: M1715L4 | Temperature rise, °C                              |         |         |         |         | 105      |
|                | Excitation                                        |         |         |         |         | SE       |
|                | Motor starting capability @ 30% Voltage Dip, skVA |         |         |         |         | 53       |
| Frame: M1736L4 | Temperature rise, °C                              |         |         |         |         | 105      |
|                | Excitation                                        |         |         |         |         | SE       |
|                | Motor starting capability @ 30% Voltage Dip, skVA |         |         |         |         | 76       |

### Weights & Dimensions



| Length "A"<br>mm (in) | Width "B"<br>mm (in) | Height "C"<br>mm (in) | Dry Weight<br>kg (lb) |
|-----------------------|----------------------|-----------------------|-----------------------|
| 1503 (59)             | 970 (38)             | 1038 (41)             | 482 (1062)            |

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

## Applicable Codes and Standards

CSA C22.2 No 100-04, UL142, UL489, UL869, cUL/UL2200, NFPA 37, NFPA 70, NFPA 99, NFPA 110, IBC, IEC60034-1, ISO 3046, ISO 8528, NEMA MG 1-33.

**Codes** may not be available in all model configurations. Please consult your local Olympian 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.

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

## Definitions and Conditions

<sup>1</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>2</sup> For ambient and altitude capabilities consult your Olympian representative. Air flow restriction (system) is added to existing restriction from factory.

<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.