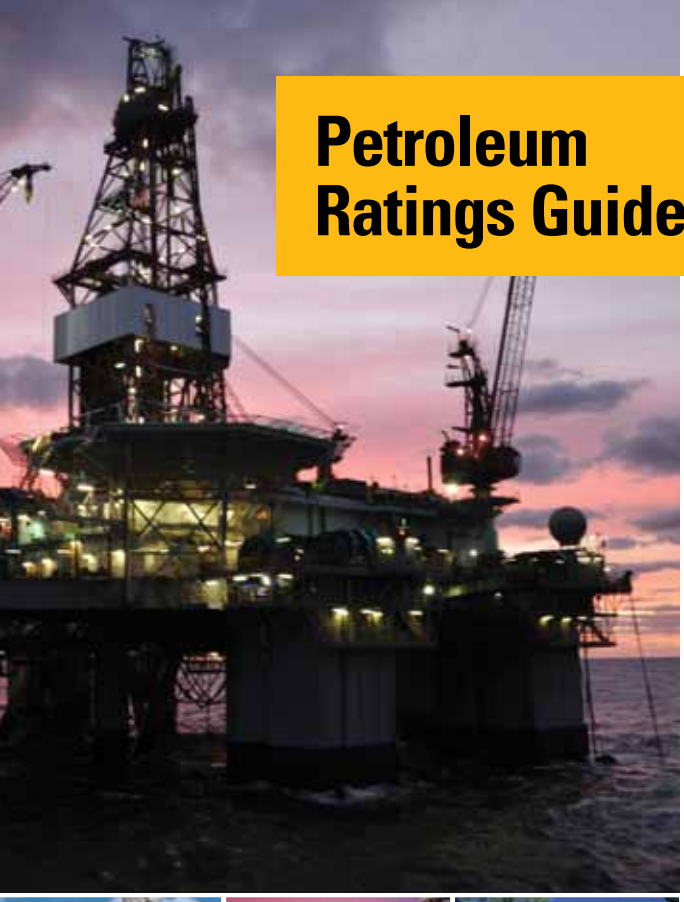
# Petroleum Ratings Guide









MaK

CAT®

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# Caterpillar: Making Sustainable Progress Possible

The essence of Caterpillar is one of progress, so it only makes sense that the development we enable strengthens economies, communities, and businesses — including our own. In short, it's progress that is sustainable. By pursuing sustainable development — and sustainable progress — in every aspect of our business, Caterpillar and the global dealer network strive to meet the emerging sustainability requirements of our worldwide customers.

Caterpillar Global Petroleum is committed to driving sustainability in the manufacturing of products at all global facilities, as well as embedding an environmentally focused culture for all employees in their office environments and homes. By designing engines to exceed global emissions standards, embracing remanufacturing and recycling of engine components and office waste, and redesigning office spaces to reduce energy consumption, employees are constantly working to shrink their overall carbon footprint. But we're not stopping there — Caterpillar is also globally partnering with customers to help them achieve their sustainable goals, making sustainable progress possible.

Visit catoilandgas.cat.com for future updates on continual efforts by Caterpillar to lead the petroleum industry in the development of products and services with minimum impact on our environment.

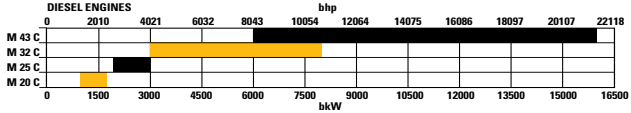
## Application Power/Engine Selection Guide

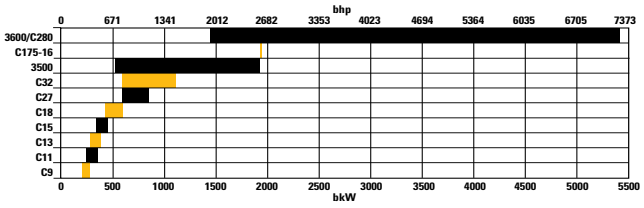
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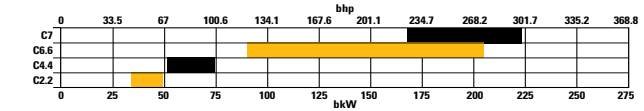
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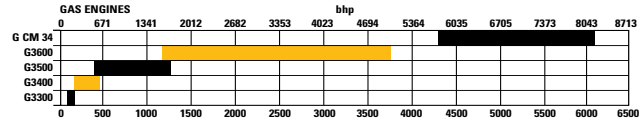
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## Match a Reliable Cat® Engine to Your Application



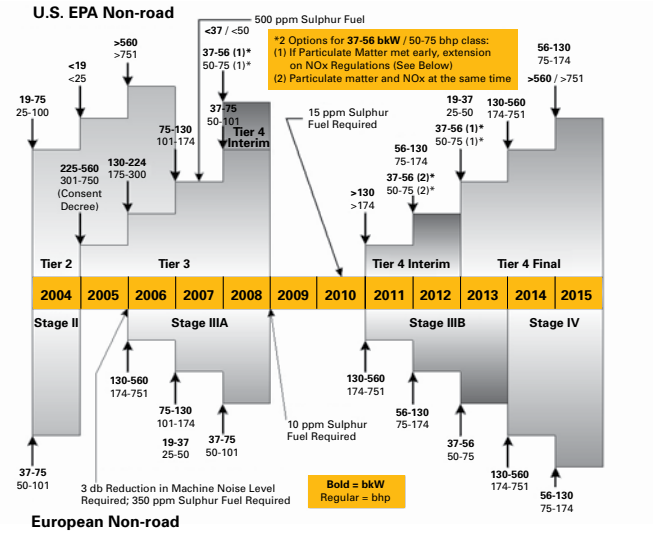



## EPA & EU NON-ROAD EMISSIONS REGULATIONS*

### Tier 3 Changes for Consent Decree Signatories




*Additional information available at www.dieselnet.com

## EPA Stationary Regulations

For important information related to the New Source Performance Standard (NSPS) for diesel stationary engines, refer to the EPA web site at www.epa.gov.

## Diesel Engine Rating Definitions

**Explanation of Ratings A, B, C, D, and E:**
For an exact determination of the appropriate rating, contact your local Cat® dealer. Engine rating obtained and presented in accordance with ISO3046/1.

**A Rating (Continuous)**
Continuous heavy-duty service where the engine is operated at maximum power and speed up to 100% of the time without interruption or load cycling.

**B Rating**
For service where power and/or speed are cyclic (time at full load not to exceed 80%).

**C Rating (Intermittent)**
Intermittent service where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

**D Rating**
For service where maximum power is required for periodic overloads (time at full load not to exceed 10% of the duty cycle).

**E Rating**
For service where maximum power is required for a short time for initial starting or sudden overload. For emergency service where standard power is unavailable (time at full load not to exceed 5% of the duty cycle).

## Rating Conditions

**Diesel Engines — up to 6.6 liter**
All rating conditions are based on ISO/TR14396, inlet air standard conditions with a total barometric pressure of 100 kPa (29.5 in. Hg), with a vapor pressure of 1 kPa (.295 in. Hg), and 25° C (77° F). Performance measured using fuel to specification EPA 2D 89.330-96 with a density of 0.845-0.850 kg/L @ 15° C (59° F) and fuel inlet temperature 40° C (104° F).

**Diesel Engines — 7 liter and higher**
All rating conditions are based on SAE J1995, inlet air standard conditions of 99 kPa (29.31 in. Hg) dry barometer and 25° C (77° F) temperature. Performance measured using a standard fuel with fuel gravity of 35° API having a lower heating value of 42,780 kJ/kg (18,390 btu/lb) when used at 29° C (84.2° F) with a density of 838.9 g/L.

**Gas**
Ratings are based on SAE J1349 standard conditions of 100 kPa (29.61 in Hg) and 25° C (77° F). These ratings also apply at ISO3046, DIN6271, and BS5514 standard conditions of 100 kPa (29.61 in Hg) and 27° C (81° F); and API 7B-11C standard conditions of 99 kPa (29.28 in Hg) and 29° C (85° F) also apply.

Ratings are based on dry natural gas having an LHV of 35.54 MJ/$Nm^3$ (905 btu/$ft^3$). Variations in altitude, temperature, and gas composition from standard conditions may require a reduction in engine horsepower.

Turbocharged-Aftercooled ratings apply to 1525 m (5000 ft) and 25° C (77° F).

**Offshore Drilling — Prime plus 10%**
Prime rating with 10% overload for MCS Certification

**Land Drilling — Prime**
Prime Rating

**Emergency Genset — Prime plus 10%**
Prime rating with 10% overload for MCS Certification

**Land Production — Prime**
Prime Rating

## ISO 9001:2000 Certification

Factory-designed systems built at Caterpillar ISO 9001:2000 certified facilities.

## Abbreviations

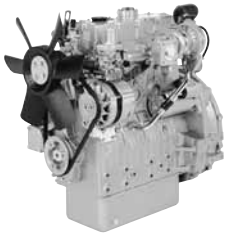
| | |
|---|---|
| ATAAC | Air-to-Air Aftercooled |
| bhp | Brake horsepower |
| bkW | Brake Kilowatts |
| NA | Naturally Aspirated |
| HD | High Displacement |
| LE | Low Emission |
| REMAC | Remote Aftercooler |
| SCAC | Separate Circuit Aftercooled |
| T | Turbocharged |
| TA | Turbocharged/Aftercooled |
| Haz Loc | Hazardous Location |
| EPA T1 | EPA Tier 1 |
| EPA T2 | EPA Tier 2 |
| EPA T3 | EPA Tier 3 |
| EPA T4 Int. | U.S. EPA Tier 4 Interim |
| EPA T4 Final | U.S. EPA Tier 4 Final |
| EU IIIA | EU Stage IIIA |
| EU IIIB | EU Stage IIIB |
| IMO TI | IMO Tier I |
| IMO TII | IMO Tier II |
| Mar T1 | EPA Marine Tier 1 |
| Mar T2 | EPA Marine Tier 2 |
| China II Non-Road | China Stage II Non-Road |
| China On-Hwy III | China On-Highway Phase 3 |
| CARB | California Air Resource Board |

**To find spec sheets referenced in this guide go to:**
**www.catoilandgas.cat.com/products/engines**

# Well Service Engine Ratings

From frac jobs to cementing the well, the well service industry presents a unique set of challenges. Cat engines meet these challenges with outstanding reliability across a wide range of available horsepower and can run on almost any fuel. They meet the toughest worldwide emissions standards and are backed by the expert support of the worldwide Cat dealer network.





## Well Service

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| C | 31 | 41.6 | 2200 | EPA T3, EU IIIA | Naturally Aspirated |
| C | 34.1 | 45.7 | 2400 | EPA T3, EU IIIA | Naturally Aspirated |
| C | 35.7 | 47.9 | 2600 | EPA T3, EU IIIA | Naturally Aspirated, Derate to 31.4 bhp/42.1 bkW |
| C | 37.3 | 50 | 2800 | EPA T3, EU IIIA | Naturally Aspirated Derate to 32.8 bhp/43.9 bkW |
| C | 38 | 51 | 3000 | EPA T3, EU IIIA | Naturally Aspirated Derate to 34 bhp/45.6 bkW |
| C | 40 | 53.3 | 2600 | EPA T3, EU IIIA | Turbocharged |
| C | 43 | 57.7 | 2600 | EPA T3, EU IIIA | Turbocharged |
| C | 44.7 | 60 | 2800 | EPA T3, EU IIIA | Turbocharged |
| C | 45.5 | 61 | 3000 | EPA T3, EU IIIA | Turbocharged |
| C | 49.2 | 66 | 2800 | EPA T 3, EU IIIA | Turbocharged Aftercooled |

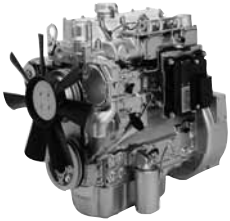
## Specifications

**Bore x Stroke** . . . . . 84 x 100 mm (3.3 x 3.9 in)
**Displacement** . . . . . 2.2 liters (135 $in^3$)

## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **NA** | 661.5 mm/26 in | 439 mm/17.3 in | 676 mm/26.6 in | 184 kg/406 lbs |
| **T, TA** | 662 mm/26.1 in | 489 mm/19.3 in | 698 mm/27.5 in | 194 kg/427.7 lbs |

For diesel engine rating definitions please see pages 6-7.



## Well Service

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| **C4.4** | | | | | |
| C | 54 | 72 | 2200 | EPA T3, EU IIIA | Naturally Aspirated |
| C | 56 | 75 | 2200 | EPA T3, EU IIIA | Naturally Aspirated |
| C | 56-75 | 75-100 | 2200-2400 | EPA T3, EU IIIA | Turbocharged |
| **C4.4 ACERT** | | | | | |
| C | 62-75 | 83-99 | 2200 | EPA T3, EU IIIA | Turbocharged |
| C | 68-83 | 91-111 | 2200-2400 | EPA T3, EU IIIA | Turbocharged Aftercooled |
| C | 75-106 | 100-142 | 2200 | EPA T3, EU IIIA | Turbocharged Aftercooled |

## Specifications

**Bore x Stroke** ..... 105 x 127 mm (4.1 x 5 in)
**Displacement** ..... 4.4 liters (269 $in^3$)

## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **C4.4** | 663 mm/26.1 in | 597 mm/23.5 in | 810 mm/32 in | 306 kg/675 lbs |
| **C4.4 ACERT** | 631 mm/24.8 in | 626 mm/24.7 in | 824 mm/32 in | 360 kg/794 lbs |

For diesel engine rating definitions please see pages 6-7.



## Well Service

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| C | 95 | 128 | 2200 | EPA T3, EU IIIA | Turbocharged Aftercooled |
| C | 116 | 156 | 2200 | EPA T3, EU IIIA | Turbocharged Aftercooled |
| C | 129 | 173 | 2000-2500 | EPA T3, EU IIIA | Turbocharged Aftercooled |
| C | 130 | 174 | 1800-2500 | EPA T3, EU IIIA | Turbocharged Aftercooled |
| C | 136 | 182 | 2200 | EPA T3, EU IIIA | Turbocharged Aftercooled |
| C | 140 | 188 | 2200 | EPA T3, EU IIIA | Turbocharged Aftercooled |
| C | 144 | 193 | 2200 | EPA T3, EU IIIA | Turbocharged Aftercooled |
| C | 146 | 196 | 2200 | EPA T3, EU IIIA | Turbocharged Aftercooled |
| C | 151 | 203 | 1800-2200 | EPA T3, EU IIIA | Turbocharged Aftercooled |
| C | 159 | 213 | 2200 | EPA T3, EU IIIA | Turbocharged Aftercooled |
| C | 168 | 225 | 2200 | EPA T3, EU IIIA | Turbocharged Aftercooled |
| C | 176 | 236 | 2200 | EPA T3, EU IIIA | Turbocharged Aftercooled |
| C | 186 | 250 | 2200 | EPA T3, EU IIIA | Turbocharged Aftercooled |
| C | 205 | 275 | 2200 | EPA T3, EU IIIA | Turbocharged Aftercooled |

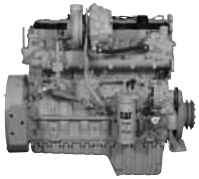
## Specifications

**Bore x Stroke** . . . . . 105 x 127 mm (4.1 x 5 in)
**Displacement** . . . . . 6.6 liters (403 in³)

## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| | 929 mm/34 in | 668 mm/26.3 in | 797 mm/31.4 in | 506 kg/1116 lbs |

For diesel engine rating definitions please see pages 6-7.



## Well Service

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| **C7 ACERT** | | | | | |
| B | 153 | 205 | 2200 | IMO TII, Mar T2, EPA T3, EU IIIA | Water-Cooled, SCAC, REMAC avail |
| C | 172 | 230 | 2200 | IMO TII, Mar T2, EPA T3, EU IIIA | Water-Cooled, SCAC, REMAC avail |
| D | 205 | 275 | 2200 | IMO TII, Mar T2, EPA T3, EU IIIA | Water-Cooled, SCAC, REMAC avail |
| B | 153 | 205 | 2200 | IMO TII, Mar T2, EPA T3, EU IIIA | Haz Loc, SCAC only |
| C | 172 | 230 | 2200 | IMO TII, Mar T2, EPA T3, EU IIIA | Haz Loc, SCAC only |
| D | 205 | 275 | 2200 | IMO TII, Mar T2, EPA T3, EU IIIA | Haz Loc, SCAC only, Derate Option |
| B | 168 | 225 | 2200 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Dry Manifold, ATAAC |
| C | 186 | 250 | 2200 | IMO TII, EPA T3, EU IIIA, China II Non-Road, China On-Hwy III | Dry Manifold, ATAAC |
| D | 224 | 300 | 2200 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Dry Manifold, ATAAC |
| **C7.1 ACERT** | | | | | |
| B | 168 | 225 | 1800-2200 | EPA T4 Int, EU IIIB | Dry Manifold |
| C | 168 | 250 | 1800-2200 | EPA T4 Int, EU IIIB | Dry Manifold |
| C | 205 | 275 | 1800-2200 | EPA T4 Int, EU IIIB | Dry Manifold |
| D | 224 | 300 | 1800-2200 | EPA T4 Int, EU IIIB | Dry Manifold |

## Specifications

**Bore x Stroke** ..... **C7** 110 x 127 mm (4.3 x 5 in) ..... **C7.1** 105 x 135 mm (4.1 x 5.3 in)
**Displacement** ..... **C7** 7.2 liters (439 $in^3$) ..... **C7.1** 7.1 liters (427.7 $in^3$)

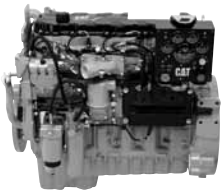
## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **C7 ACERT** | 1053 mm/41.5 in | 758 mm/29.8 in | 1032 mm/40.6 in | 629 kg/1386 lbs |
| **C7.1 ACERT** | 1065 mm/41.9 in | 820 mm/32.3 in | 907 mm/35.7 in | 715 kg/1576 lbs |

**Please see spec sheet for more information:**

C7 ACERT ..... LEHW0043, LEHW0044, LEHW0045

For diesel engine rating definitions please see pages 6-7.



## Well Service

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| **C9 ACERT** | | | | | |
| C | 242 | 325 | 2200 | IMO TII, EPA T3, EU IIIA | Water-Cooled, SCAC, REMAC avail |
| D | 254 | 340 | 2200 | IMO TII, EPA T3, EU IIIA | Water-Cooled, SCAC, REMAC avail |
| D | 254 | 340 | 2200 | IMO TII, EPA T3, EU IIIA | Haz Loc, SCAC & REMAC avail |
| A | 205 | 275 | 2200 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Dry Manifold |
| B | 224 | 300 | 2200 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Dry Manifold |
| C | 242 | 325 | 2200 | IMO TII, EPA T3, EU IIIA, China II Non-Road, China On-Hwy III | Dry Manifold |
| C | 261 | 350 | 2200 | IMO TII, EPA T3, EU IIIA, China On-Hwy III | Dry Manifold |
| D | 280 | 375 | 2200 | IMO TII, EPA T3, EU IIIA | Dry Manifold |
| **C9.3 ACERT** | | | | | |
| A | 224 | 300 | 1800-2200 | EPA T4 Int, EU IIIB | Dry Manifold |
| B | 242 | 325 | 1800-2200 | EPA T4 Int, EU IIIB | Dry Manifold |
| C | 261 | 350 | 1800-2200 | EPA T4 Int, EU IIIB | Dry Manifold |

## Specifications

**Bore x Stroke**…**C9 ACERT** 112 x 149 mm (4.4 x 5.8 in) .. **C9.3 ACERT** 115 x 149 mm (4.5 x 5.9 in)
**Displacement** ..**C9 ACERT** 8.8 liters (537 $in^3$)…… **C9.3 ACERT** 9.3 liters (567.5 $in^3$)

## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **C9 ACERT** | 1091 mm/43 in | 827 mm/32.6 in | 1023 mm/40.3 in | 716 kg/1578 lbs |
| **C9.3 ACERT** | 1150 mm/45.3 in | 827 mm/32.6 in | 1123 mm/44.21 in | 885 kg/1950 lbs |

**Please see spec sheet for more information:**

C9 ACERT ..... LEHW0014, LEHW0046, LEHW0047, LEHW0099

For diesel engine rating definitions please see pages 6-7.



## Well Service

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| A | 242 | 325 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Dry Manifold |
| B | 261 | 350 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Dry Manifold |
| C | 287 | 385 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road, China On-Hwy III | Dry Manifold |
| D | 313 | 420 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Dry Manifold |
| E | 336 | 450 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Dry Manifold |

## Specifications

**Bore x Stroke** ..... 130 x 140 mm (5.12 x 5.5 in)
**Displacement** ..... 11.1 liters (677 $in^3$)

## Dimensions & Weights

| L | W | H | Wt |
|---|---|---|---|
| 1203 mm/47.4 in | 1054 mm/41.5 in | 1176 mm/46.3 in | 892 kg/1967 lbs |

**Please see spec sheet for more information:**

C11 ACERT ..... LEHW0063

For diesel engine rating definitions please see pages 6-7.



## Well Service

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| A | 287 | 385 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Avail with Cat Compression Brake, Dry Manifold |
| B | 309 | 415 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Avail with Cat Compression Brake, Dry Manifold |
| C | 328 | 440 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road, China On-Hwy III | Avail with Cat Compression Brake, Dry Manifold |
| D | 354 | 475 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Dry Manifold |
| E | 388 | 520 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Dry Manifold |
| A | 287 | 385 | 1800-2100 | EPA T4 Int, EU IIIB | Dry Manifold |
| B | 309 | 415 | 1800-2100 | EPA T4 Int, EU IIIB | Dry Manifold |
| C | 328 | 440 | 1800-2100 | EPA T4 Int, EU IIIB | Dry Manifold |
| D | 354 | 475 | 1800-2100 | EPA T4 Int, EU IIIB | Dry Manifold |
| E | 388 | 520 | 1800-2100 | EPA T4 Int, EU IIIB | Dry Manifold |

## Specifications

**Bore x Stroke** . . . . . 130 x 157 mm (5.1 x 6.2 in)
**Displacement** . . . . . 12.5 liters (763 $in^3$)

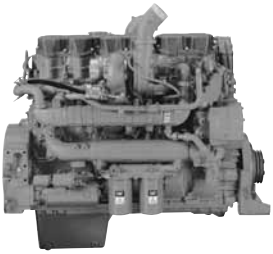
## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **C13 ACERT** | 1203 mm/47.4 in | 1011 mm/39.8 in | 1186 mm/46.7 in | 896 kg/1976 lbs |
| **C13 ACERT T4** | 1203 mm/47.4 in | 933.14 mm/36.74 in | 1186 mm/46.7 in | 1350 kg/2976 lbs |

**Please see spec sheet for more information:**

C13 ACERT ..... LEHW0062, LEHW0096

For diesel engine rating definitions please see pages 6-7.



## Well Service

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| A | 328 | 440 | 1800-2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Avail with Cat Compression Brake, Dry Manifold |
| B | 354 | 475 | 1800-2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road, China On-Hwy III | Avail with Cat Compression Brake, Dry Manifold |
| C | 403 | 540 | 1800-2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road, China On-Hwy III | Avail with Cat Compression Brake, Dry Manifold |
| D | 433 | 580 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Dry Manifold |
| E | 444 | 595 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Dry Manifold |
| A/B | 354 | 475 | 1800-2100 | EPA T4 Int, EU IIIB | Dry Manifold |
| C | 403 | 540 | 1800-2100 | EPA T4 Int, EU IIIB | Dry Manifold |
| D | 433 | 580 | 1800-2100 | EPA T4 Int, EU IIIB | Dry Manifold |

## Specifications

**Bore x Stroke** . . . . . 137.2 x 171.5 mm (5.4 x 6.75 in)
**Displacement** . . . . . 15.2 liters (927.6 $in^3$)

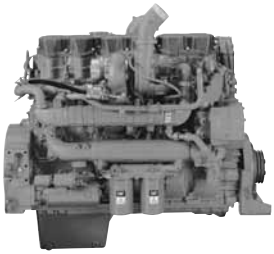
## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **C15 ACERT** | 1377 mm/54 in | 927 mm/37 in | 1227 mm/48 in | 1245 kg/2743 lbs |
| **C15 ACERT T4** | 1530 mm/60.2 in | 961 mm/37.8 in | 1282 mm/51 in | 1580 kg/3482 lbs |

**Please see spec sheet for more information:**

C15 ACERT ..... LEHW0097, LEHW0061

For diesel engine rating definitions please see pages 6-7.



## Well Service

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| A | 429 | 575 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Avail with Cat Compression Brake, Dry Manifold |
| B | 447 | 600 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Avail with Cat Compression Brake, Dry Manifold |
| C | 470 | 630 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road, China On-Hwy III | Avail with Cat Compression Brake, Dry Manifold |
| C | 522 | 700 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road, China On-Hwy III | Dry Manifold |
| D | 570 | 765 | 2100 | IMO TII, EPA T2 | Dry Manifold |
| E | 597 | 800 | 2100 | IMO TII, EPA T2 | Dry Manifold |
| A/B | 447 | 600 | 1800-1900 | EPA T4 Int, EU IIIB | Dry Manifold |
| C | 470 | 630 | 1800-1900 | EPA T4 Int, EU IIIB | Dry Manifold |
| C | 522 | 700 | 1800-1900 | EPA T4 Int, EU IIIB | Dry Manifold |
| C | 563 | 755 | 1800 | EPA T4 Final | Dry Manifold |
| D | 597 | 800 | 1800 | EPA T4 Final | Dry Manifold |

## Specifications

**Bore x Stroke** . . . . . 145 x 183 mm (5.7 x 7.2 in)
**Displacement** . . . . . 18.1 liters (1105 $in^3$)

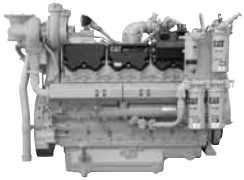
## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **C18 ACERT** | 1389 mm/54.7 in | 919 mm/36.2 in | 1227 mm/49.5 in | 1273 kg/2807 lbs |
| **C18 ACERT T4** | 1530 mm/60.2 in | 961 mm/37.8 in | 1282 mm/51 in | 1580 kg/3482 lbs |

**Please see spec sheet for more information:**

C18 ACERT ..... LEHW0098, LEHW0053

For diesel engine rating definitions please see pages 6-7.



## Well Service

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| A | 597 | 800 | 1800-2100 | EPA T2, EU II | Dry Manifold |
| B | 652 | 875 | 1800-2100 | EPA T2, EU II | Dry Manifold |
| C | 708 | 950 | 1800-2100 | EPA T2, EU II | Dry Manifold |
| C | 783 | 1050 | 1800-2100 | EPA T2, EU II | Dry Manifold |
| A | 597 | 800 | 1800 | EPA T4 Final | Narrow Config, Dry Manifold |

## Specifications

**Bore x Stroke** ..... 137.7 x 152.4 mm (5.42 x 6 in)
**Displacement** ..... 27 liters (1648 $in^3$)

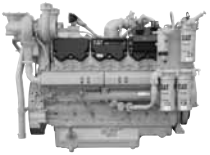
## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **C27 ACERT** | 1918 mm/75.5 in | 1463 mm/57.6 in | 1321 mm/52 in | 2895 kg/6382 lbs |
| **C27 ACERT T4** | 2160 mm/85 in | 1270 mm/50 in | 1650 mm/65 in | 3096 kg/6825 lbs |

**Please see spec sheet for more information:**

C27 ACERT ..... LEHW0052

For diesel engine rating definitions please see pages 6-7.



## Well Service

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| A | 597 | 800 | 2100 | EPA T2, Mar T2, IMO TII | Water-Cooled, SCAC, SCAC+ HEX, & REMAC |
| A | 641 | 860 | 2100 | EPA T2, Mar T2, IMO TII | Water-Cooled, SCAC, SCAC+ HEX, & REMAC |
| B | 686 | 920 | 2100 | EPA T2, Mar T2, IMO TII | Water-Cooled, SCAC, SCAC+ HEX, & REMAC |
| C | 746 | 1000 | 2100 | EPA T2, Mar T2, IMO TII | Water-Cooled, SCAC, SCAC+ HEX, & REMAC |
| D | 828 | 1110 | 2100 | EPA T2, Mar T2, IMO TII | Water-Cooled, SCAC, SCAC+ HEX, & REMAC |
| E | 913 | 1225 | 2100 | EPA T2, Mar T2, IMO TII | Water-Cooled, SCAC, SCAC+ HEX, & REMAC |
| A | 597 | 800 | 2100 | EPA T2, Mar T2, IMO TII | Haz Loc, SCAC only |
| A | 641 | 860 | 2100 | EPA T2, Mar T2, IMO TII | Haz Loc, SCAC only |
| B | 686 | 920 | 2100 | EPA T2, Mar T2, IMO TII | Haz Loc, SCAC only; |
| D | 828 | 1110 | 2100 | EPA T2, Mar T2, IMO TII | Haz Loc, SCAC only |
| A | 597 | 800 | 2100 | EPA T2 | Dry Manifold |
| B | 708 | 950 | 1800-2100 | EPA T2 | Dry Manifold |
| C | 839 | 1125 | 1800-2100 | EPA T2 | Dry Manifold |
| D | 895 | 1200 | 1800-2100 | EPA T2 | Dry Manifold |
| E | 1007 | 1350 | 1800-2100 | EPA T2 | Dry Manifold |
| E | 1119 | 1500 | 2100 | EPA T2 | Dry Manifold |
| C | 839 | 1125 | 1800 | EPA T4 Final | Dry Manifold |

## Specifications

**Bore x Stroke** . . . . . 145 x 165 mm (5.7 x 6.5 in)
**Displacement** . . . . . 32 liters (1953 $in^3$)

## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **C32 ACERT** | 1918 mm/75.5 in | 1473 mm/58 in | 1321 mm/52 in | 2286 kg/5040 lbs |
| **C32 ACERT T4** | 1905 mm/75 in | 1600 mm/63 in | 1549 mm/61 in | |

**Please see spec sheet for more information:**

C32 ACERT ..... LEHW0049, LEHW0050, LEHW0051, LEHW0100,

For diesel engine rating definitions please see pages 6-7.



## Well Service

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| E | 1491 | 2000 | 1900 | Non-Current U.S. EPA T1, Non-Current Mar T1 |
| E | 1603 | 2150 | 1900 | Non-Current U.S. EPA T1, Non-Current Mar T1 |
| E | 1678 | 2250 | 1900 | Non-Current U.S. EPA T1, Non-Current Mar T1 |

## Specifications

**Bore x Stroke** ..... 170 x 190 mm (6.7 x 7.5 in)
**Displacement** ..... 52 liters (3173 $in^3$)

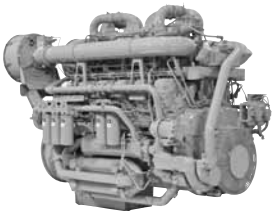
## Dimensions & Weights

| L | W | H | Wt |
|---|---|---|---|
| 2827 mm/111.3 in | 1793 mm/70.6 in | 1862 mm/73.3 in | 4803.6 kg/10,590 lbs |

**Please see spec sheet for more information:**

3512B..... LEHW0055

For diesel engine rating definitions please see pages 6-7.



## Well Service

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| E | 1603 | 2150 | 1900 | EPA T2, Mar T2 IMO TII | ATAAC, 1.6% or 7% Torque Rise |
| E | 1678 | 2250 | 1900 | EPA T2, Mar T2 IMO TII | ATAAC, 1.6% or 7% Torque Rise |
| E | 1752 | 2350 | 1900 | EPA T2, Mar T2 IMO TII | ATAAC, 7% Torque Rise |
| E | 1864 | 2500 | 1900 | EPA T2, Mar T2 IMO TII | ATAAC, 7% Torque Rise |
| E | 1678 | 2250 | 1900 | EPA T2 | SCAC, 1.6% or 7% Torque Rise |
| E | 1864 | 2500 | 1900 | EPA T2 | SCAC, 7% Torque Rise |

## Specifications

**Bore x Stroke** ..... 170 x 215 mm (6.7 x 8.5 in)
**Displacement** ..... 58.9 liters (3596 $in^3$)

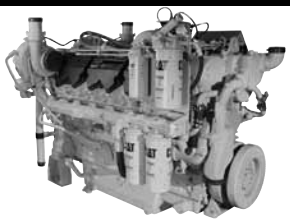
## Dimensions & Weights

| L | W | H | Wt |
|---|---|---|---|
| 2875 mm/113.2 in | 1609 mm/63.4 in | 2187 mm/86.1 in | 6740 kg/14,860 lbs |

**Please see spec sheet for more information:**

3512C HD ..... LEHW0056, LEHW0090

For diesel engine rating definitions please see pages 6-7.



## Well Service

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| **C7 ACERT** | | | | | |
| B | 153 | 205 | 2200 | IMO TII, Mar T2, EPA T3, EU IIIA | Haz Loc, SCAC only |
| C | 172 | 230 | 2200 | IMO TII, Mar T2, EPA T3, EU IIIA | Haz Loc, SCAC only |
| D | 205 | 275 | 2200 | IMO TII, Mar T2, EPA T3, EU IIIA | Haz Loc, SCAC only, Derate Option |
| **C9 ACERT** | | | | | |
| D | 254 | 340 | 2200 | IMO TII, EPA T3 , EU IIIA | Haz Loc, SCAC & REMAC avail, Derate Option |
| **C32 ACERT** | | | | | |
| A | 597 | 800 | 2100 | EPA T2, Mar T2, IMO TII | Haz Loc, SCAC only |
| A | 641 | 860 | 2100 | EPA T2, Mar T2, IMO TII | Haz Loc, SCAC only |
| B | 686 | 920 | 2100 | EPA T2, Mar T2, IMO TII | Haz Loc, SCAC only |
| D | 826 | 1110 | 2100 | EPA T2, Mar T2, IMO TII | Haz Loc, SCAC only |

## Specifications

**Bore x Stroke** ..... **C7 ACERT** 110 x 127 mm (4.3 x 5 in)
**C9 ACERT** 112 x 149 mm (4.4 x 5.8 in)
**C32 ACERT** 145 x 165 mm (5.7 x 6.5 in)

**Displacement** ..... **C7 ACERT** 7.2 liters (439 $in^3$)
**C9 ACERT** 8.8 liters (537 $in^3$)
**C32 ACERT** 32 liters (1953 $in^3$)

## Dimensions & Weights

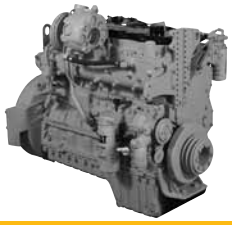
| | L | W | H | Wt |
|---|---|---|---|---|
| **C7 ACERT** | 1053 mm/41.5 in | 758 mm/29.8 in | 1032 mm/40.6 in | 629 kg/1386 lbs |
| **C9 ACERT** | 1091 mm/43 in | 827 mm/32.6 in | 1023 mm/40.3 in | 716 kg/1578 lbs |
| **C32 ACERT** | 1918 mm/75.5 in | 1473 mm/58 in | 1321 mm/52 in | 2286 kg/5040 lbs |

**Please see spec sheet for more information:**

C7 ACERT .....LEHW0044 C9 ACERT.....LEHW0014 C32 ACERT..... LEHW0051

For diesel engine rating definitions please see pages 6-7.

# Water Cooled Manifold WELL SERVICE



## Well Service

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| **C7 ACERT** | | | | | |
| B | 153 | 205 | 2200 | IMO TII, Mar T2, EPA T3, EU IIIA | Water Cooled, SCAC & REMAC avail |
| C | 172 | 230 | 2200 | IMO TII, Mar T2, EPA T3, EU IIIA | Water Cooled, SCAC & REMAC avail |
| D | 205 | 275 | 2200 | IMO TII, Mar T2, EPA T3, EU IIIA | Water Cooled, SCAC & REMAC avail |
| **C9 ACERT** | | | | | |
| C | 242 | 325 | 2200 | IMO TII, EPA T3 , EU IIIA | Water Cooled, SCAC & REMAC avail |
| D | 254 | 340 | 2200 | IMO TII, EPA T3 , EU IIIA | Water Cooled, SCAC & REMAC avail |
| **C32 ACERT** | | | | | |
| A | 597 | 800 | 2100 | EPA T2, Mar T2, IMO TII | Water Cooled, SCAC, SCAC + HEX & REMAC avail |
| A | 641 | 860 | 2100 | EPA T2, Mar T2, IMO TII | Water Cooled, SCAC, SCAC + HEX & REMAC avail |
| B | 686 | 920 | 2100 | EPA T2, Mar T2, IMO TII | Water Cooled, SCAC, SCAC + HEX & REMAC avail |
| C | 746 | 1000 | 2100 | EPA T2, Mar T2, IMO TII | Water Cooled, SCAC, SCAC + HEX & REMAC avail |
| D | 828 | 1110 | 2100 | EPA T2, Mar T2, IMO TII | Water Cooled, SCAC, SCAC + HEX & REMAC avail |
| E | 913 | 1225 | 2100 | EPA T2, Mar T2, IMO TII | Water Cooled, SCAC, SCAC + HEX & REMAC avail |

## Specifications

**Bore x Stroke** ..... **C7 ACERT** 110 x 127 mm (4.3 x 5 in)
**C9 ACERT** 112 x 149 mm (4.4 x 5.8 in)
**C32 ACERT** 145 x 165 mm (5.7 x 6.5 in)

**Displacement** ..... **C7 ACERT** 7.2 liters (439 $in^3$)
**C9 ACERT** 8.8 liters (537 $in^3$)
**C32 ACERT** 32 liters (1953 $in^3$)

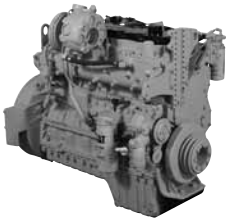
## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **C7 ACERT** | 1053 mm/41.5 in | 758 mm/29.8 in | 1032 mm/40.6 in | 629 kg/1386 lbs |
| **C9 ACERT** | 1091 mm/43 in | 827 mm/32.6 in | 1023 mm/40.3 in | 716 kg/1578 lbs |
| **C32 ACERT** | 1918 mm/75.5 in | 1473 mm/58 in | 1321 mm/52 in | 2286 kg/5040 lbs |

**Please see spec sheet for more information:**
C7 ACERT .....LEHW0045 C9 ACERT.....LEHW0046 C32 ACERT..... LEHW0050

For diesel engine rating definitions please see pages 6-7.

# Water Cooled Manifold



| Rating | Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|---|
| **3508** | | | | | | |
| | A | 507 | 680 | 1200 | Non-Certified | Water Cooled |
| | C | 611 | 820 | 1300 | Non-Certified | Water Cooled |
| | A | 638 | 855 | 1800 | Non-Certified | Water Cooled |
| | C | 746 | 1000 | 1800 | Non-Certified | Water Cooled |
| | C | 846 | 1135 | 1900 | Non-Certified | Water Cooled |
| **3512** | | | | | | |
| | A | 761 | 1020 | 1200 | Non-Certified | Water Cooled |
| | C | 858 | 1150 | 1300 | Non-Certified | Water Cooled |
| | A | 954 | 1280 | 1800 | Non-Certified | Water Cooled |
| | C | 1119 | 1500 | 1800 | Non-Certified | Water Cooled |
| | C | 1342 | 1800 | 1900 | Non-Certified | Water Cooled |
| **3516** | | | | | | |
| | A | 1010 | 1355 | 1200 | Non-Certified | Water Cooled |
| | C | 1242 | 1665 | 1300 | Non-Certified | Water Cooled |

## Specifications

| | | |
|---|---|---|
| **Bore x Stroke** ..... | **3508** | 170 x 190 mm (6.7 x 7.5 in) |
| | **3512** | 170 x 190 mm (6.7 x 7.5 in) |
| | **3516** | 170 x 190 mm (6.7 x 7.5 in) |
| **Displacement** ..... | **3508** | 34.5 liters (2105 $in^3$) |
| | **3512** | 51.8 liters (3158 $in^3$) |
| | **3516** | 69 liters (4210 $in^3$) |

## Dimensions & Weights

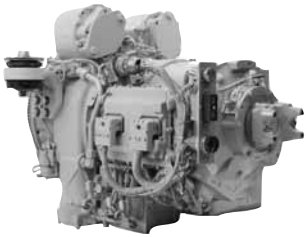
| | L | W | H | Wt |
|---|---|---|---|---|
| **3508** | 2136.14 mm/84.1 in | 1701.8 mm/67 in | 1719.58 mm/67.7 in | 4309 kg/9500 lbs |
| **3512** | 2674.62 mm/105.3 in | 1701.8 mm/67 in | 1719.58 mm/67.7 in | 5203.75 kg/11,462 lbs |
| **3516** | 3251 mm/128 in | 1701 mm/67 in | 2004 mm/78.9 in | 8660 kg/19,090 lbs |

For diesel engine rating definitions please see pages 6-7.

# Transmission Application Chart

| Engine | Transmission | Max hp | Page |
|---|---|---|---|
| C9 ACERT | TH31-E61 | 350 | 27 |
| | TH31-E61* | 350 | 28 |
| | CX31-P600 | 600 | 31 |
| | CX31-P600* | 600 | 32 |
| C11 ACERT | TH35-E81 | 450 | 29 |
| | TH35-E81* | 450 | 30 |
| | CX31-P600 | 600 | 31 |
| | CX31-P600* | 600 | 32 |
| C13 ACERT | TH35-E81 | 520 | 29 |
| | TH35-E81* | 520 | 30 |
| | CX31-P600 | 600 | 31 |
| | CX31-P600* | 600 | 32 |
| C15 ACERT | TH35-E81 | 540 | 29 |
| | TH35-E81* | 540 | 30 |
| | CX31-P600 | 600 | 31 |
| | CX31-P600* | 600 | 32 |
| | CX35-P800 | 800 | 33 |
| C18 ACERT | CX35-P800 | 800 | 33 |
| C27 ACERT | TH48-E70 | 1150 | 34 |
| C32 ACERT | TH48-E70 | 1500 | 34 |
| 3512B | TH48-E80 | 2250 | 35 |
| 3512C | TH48-E80 | 2250 | 35 |
| | TH55-E70 | 2500 | 36 |

*Dropbox 2WD or 4WD



**Ratings**

| | |
|---|---|
| Gross Input Power | 261 kW (350 hp) |
| Gross Input Torque | 1556 N•m (1148 lb-ft) |
| Maximum Turbine Torque | 2746 N•m (2025 lb-ft) |
| Rated Input Speed | 2100 rpm |
| Maximum Input Speed | 2500 rpm |

**Output Connection Options**

1710 output yoke
1810 companion flange

**Power Take Off**

(Pump Auxiliary Drive)

**Description**

4 x PTOs integral live drive

**Location & Rated Power**

11 o'clock 149 kW/200 hp and
1 o'clock 149 kW/200 hp
Total 164 kW (220 hp)

**PTO Mountings**

SAE C mounting pads facing output (2)
SAE B mounting pads facing input (2)

**Transmission Speed Ratios**

| Gear | Ratio |
|---|---|
| 1F | 4.40 |
| 2F | 2.33 |
| 3F | 1.53 |
| 4F | 1.00 |
| 5F | 0.71 |
| 6F | 0.60 |
| 1R | 3.96 |
| Stall Torque Ratio | 2.46 |

**Dimensions**

| | |
|---|---|
| Height: | 833.8 mm (32.83 in) |
| Width: | 1008.6 mm (39.71 in) |
| Length: | 1097.5 mm (43.21 in) |

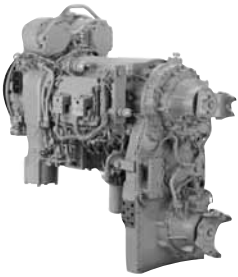
**Weight**

Approximate
Dry Weight 841 kg (1855 lbs)

**Spec Sheet**

LEHW1000

# TH31-E61 WELL SERVICE TRANSMISSION WITH INTEGRAL DROP BOX



**Ratings**

| | |
|---|---|
| Gross Input Power | 261 kW (350 hp) |
| Gross Input Torque | 1556 N•m (1148 lb-ft) |
| Maximum Turbine Torque | 2746 N•m (2025 lb-ft) |
| Rated Input Speed | 2100 rpm |
| Maximum Input Speed | 2500 rpm |

**Output Connection Options**
1710 output yoke
1810 companion flange

**Power Take Off**
(Pump Auxiliary Drive)

**Description**
4 x PTOs integral live drive

**Location & Rated Power**
11 o'clock 149 kW/200 hp and
1 o'clock 149 kW/200 hp
Total 164 kW (220 hp)

**PTO Mountings**
SAE C mounting pads facing output (2)
SAE B mounting pads facing input (2)

**Transmission Speed Ratios**

| Gear | Ratio |
|---|---|
| 1F | 4.40 |
| 2F | 2.33 |
| 3F | 1.53 |
| 4F | 1.00 |
| 5F | 0.71 |
| 6F | 0.60 |
| 1R | 3.96 |
| Stall Torque Ratio | 2.46 |

**Dimensions**

| | |
|---|---|
| Height: | 1371.1 mm (53.98 in) |
| Width: | 685.6 mm (26.99 in) |
| Length: | 1377.1 mm (54.22 in) |

**Weight**
Approximate Dry Weight

| | |
|---|---|
| 2WD model | 1250 kg (2755 lbs) |
| 4WD model | 1282 kg (2827 lbs) |

**Integral Drop Box** (optional)
2WD or 4WD options available

**Spec Sheet**
LEHW1004

# TH35-E81 WELL SERVICE TRANSMISSION



**Ratings**

| | |
|---|---|
| Gross Input Power | 410 kW (540 hp) |
| Gross Input Torque | 2237 N•m (1650 lb-ft) |
| Maximum Turbine Torque | 3295 N•m (2430 lb-ft) |
| Rated Input Speed | 2100 rpm |
| Maximum Input Speed | 2500 rpm |

**Output Connection Options**

1810 output yoke
1810 companion flange

**Power Take Off**

(Pump Auxiliary Drive)

**Description**

4 x PTOs integral live drive

**Location & Rated Power**

11 o'clock 149 kW/200 hp and
1 o'clock 149 kW/200 hp
Total 164 kW (220 hp)

**PTO Mountings**

SAE C mounting pads facing output (2)
SAE B mounting pads facing input (2)

**Transmission Speed Ratios**

| Gear | Ratio |
|---|---|
| 1F | 5.72 |
| 2F | 3.57 |
| 3F | 2.71 |
| 4F | 1.94 |
| 5F | 1.42 |
| 6F | 1.00 |
| 7F | 0.73 |
| 8F | 0.63 |
| 1R | 4.46 |
| Stall Torque Ratio | 2.46 |

**Dimensions**

| | |
|---|---|
| Height: | 833.8 mm (32.83 in) |
| Width: | 1023.6 mm (40.30 in) |
| Length: | 1222.8 mm (48.14 in) |

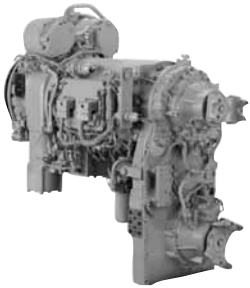
**Weight**

Approximate
Dry Weight 973 kg (2145 lbs)

**Spec Sheet**

LEHW1001

# TH35-E81 WELL SERVICE TRANSMISSION
## WITH INTEGRAL DROP BOX



### Ratings

| | |
|---|---|
| Gross Input Power | 410 kW (540 hp) |
| Gross Input Torque | 2237 N•m (1650 lb-ft) |
| Maximum Turbine Torque | 3295 N•m (2430 lb-ft) |
| Rated Input Speed | 2100 rpm |
| Maximum Input Speed | 2500 rpm |

### Output Connection Options
1810 output yoke
1810 companion flange

### Power Take Off
(Pump Auxiliary Drive)

**Description**
4 x PTOs integral live drive

**Location & Rated Power**
11 o'clock 149 kW/200 hp and
1 o'clock 149 kW/200 hp
Total 164 kW (220 hp)

**PTO Mountings**
SAE C mounting pads facing output (2)
SAE B mounting pads facing input (2)

**Transmission Speed Ratios**

| Gear | Ratio |
|---|---|
| 1F | 5.72 |
| 2F | 3.57 |
| 3F | 2.71 |
| 4F | 1.94 |
| 5F | 1.42 |
| 6F | 1.00 |
| 7F | 0.73 |
| 8F | 0.63 |
| 1R | 4.46 |
| Stall Torque Ratio | 2.46 |

### Dimensions

| | |
|---|---|
| Height: | 1371.1 mm (53.98 in) |
| Width: | 685.6 mm (26.99 in) |
| Length: | 1491.4 mm (58.71 in) |

### Weight
Approximate Dry Weight

| | |
|---|---|
| 2WD model | 1350 kg (2975 lbs) |
| 4WD model | 1382 kg (3047 lbs) |

### Integral Drop Box (optional)
**Drive Ratio**
1:1 to selected outputs

2WD or 4WD options available

### Spec Sheet
LEHW1005

# CX31-P600 WELL SERVICE TRANSMISSION



## Ratings

| | |
|---|---|
| Gross Input Power | 447 kW (600 hp) |
| Gross Input Torque | 2746 N•m (2025 lb-ft) |
| Rated Input Speed | 2100 rpm |
| Maximum Input Speed | 2500 rpm |

## Output Connection Options

1710 output yoke, 1810 yoke, 1810 companion flange, ISO-8667 flange

## Power Take Off

(Pump Auxiliary Drive)

### Description

4 x PTOs integral live drive

### Location

Standard: 1 o'clock and 8 o'clock, 5 o'clock at rear
Optional Integral PTO Drives: 1 o'clock and 11 o'clock, 5 o'clock at rear

### PTO Mountings

Cat 8-bolt pattern and spline at standard side and rear (1)

### Transmission Speed Ratios

| Gear | Ratio |
|---|---|
| 1F | 4.40 |
| 2F | 2.33 |
| 3F | 1.53 |
| 4F | 1.00 |
| 5F | 0.72 |
| 6F | 0.61 |
| 1R | 3.97 |

Stall Torque Ratio @ Rated Speed

| | |
|---|---|
| < 400 hp engine | 2.669, 2.324 |
| > 400 hp engine | 2.324 |

## Dimensions

| | |
|---|---|
| Height: | 719 mm (28.3 in) |
| Width: | 613 mm (241 in) |
| Length: | 1098 mm (43.2 in) |

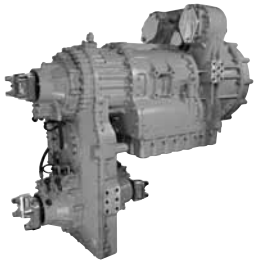
## Weight

| | |
|---|---|
| Approximate Dry Weight | 465 kg (1026 lbs) |

## Spec Sheet

LEHW0008

# CX31-P600 WELL SERVICE TRANSMISSION WITH INTEGRAL DROP BOX



**Ratings**

| | |
|---|---|
| Gross Input Power | 447 kW (600 hp) |
| Gross Input Torque | 2746 N•m (2025 lb-ft) |
| Rated Input Speed | 2100 rpm |
| Maximum Input Speed | 2500 rpm |

**Output Connection Options**
1710 output yoke, 1810 yoke, 1810 companion flange, ISO-8667 flange

**Power Take Off**
(Pump Auxiliary Drive)

**Description**
4 x PTOs integral live drive

**Location**
Standard: 1 o'clock and 8 o'clock, 5 o'clock at rear
Optional Integral PTO Drives: 1 o'clock and 11 o'clock, 5 o'clock at rear

**PTO Mountings**
Cat 8-bolt pattern and spline at standard side and rear (1)

**Transmission Speed Ratios**

| Gear | Ratio |
|---|---|
| 1F | 4.40 |
| 2F | 2.33 |
| 3F | 1.53 |
| 4F | 1.00 |
| 5F | 0.72 |
| 6F | 0.61 |
| 1R | 3.97 |

Stall Torque Ratio @ Rated Speed

| | |
|---|---|
| < 400 hp engine | 2.669, 2.324 |
| > 400 hp engine | 2.324 |

**Dimensions**

| | |
|---|---|
| Height: | 1393 mm (54.8 in) |
| Width: | 672 mm (26.5 in) |
| Length: | 1383 mm (54.4 in) |

**Weight**
Approximate Dry Weight

| | |
|---|---|
| 2WD model | 842 kg (1857 lbs) |
| 4WD model | 876 kg (1932 lbs) |

**Integral Drop Box** (optional)
2WD or 4WD options available

**Spec Sheet**
LEHW0008



## Ratings

| | |
|---|---|
| Gross Input Power | 597 kW (800 hp) |
| Gross Input Torque | |
| 1F-3F | 3254 N•m (2400 lb-ft) |
| 4F-8F | 3661 N•m (2700 lb-ft) |
| Maximum Turbine Torque | |
| 1F-3F | 3254 N•m (2400 lb-ft) |
| 4F-8F | 3661 N•m (2700 lb-ft) |
| Rated Input Speed | 2100 rpm |
| Maximum Input Speed | 2500 rpm |

## Output Connection Options

1810 yoke, 1810 companion flange, ISO-8667 flange

## Power Take Off

(Pump Auxiliary Drive)

**Description**

4 x PTOs integral live drive

**Location**

Standard: 8 o'clock and 1 o'clock side positions, 5 o'clock at rear
Optional Integral PTO Drives:
1 o'clock and 11 o'clock above T/C housing, 5 o'clock at rear

**PTO Mountings**

10-bolt, rear PTO mounting Cat
8-bolt (1)

**Transmission Speed Ratios**

| Gear | Ratio |
|---|---|
| 1F | 5.73 |
| 2F | 3.57 |
| 3F | 2.72 |
| 4F | 1.95 |
| 5F | 1.43 |
| 6F | 1.00 |
| 7F | 0.74 |
| 8F | 0.63 |
| 1R | |
| Stall Torque Ratio | 1.962 |

## Dimensions

| | |
|---|---|
| Height: | 860.9 mm (33.9 in) |
| Width: | 609.4 mm (24.0 in) |
| Length: | 1253 mm (49.3 in) |

## Weight

| | |
|---|---|
| Approximate Dry Weight | 731 kg (1611 lbs) |

## Spec Sheet

LEHW0007

# TH48-E70 WELL SERVICE TRANSMISSION



**Ratings**

| | |
|---|---|
| Gross Input Power | 895 kW (1200 hp) |
| | 1118 kW (1500 hp) |
| Gross Input Torque | 5484 N•m (4045 lb-ft) |
| | 5995 N•m (4422 lb-ft) |
| Maximum Turbine Torque | 7442 N•m (5489 lb-ft) |
| Rated Input Speed | 2100 rpm |
| Maximum Input Speed | 2200 rpm |

**Output Connection (Yoke)**
GWB 390.60/GWB 390.65

**Power Take Off**
(Pump Auxiliary Drive)

**Location & Rated Power**
3 positions (3 o'clock, 5 o'clock, and 9 o'clock from rear)

112 kW/150 hp continuous

**PTO Mountings**
SAE 8 bolt (J704)

**Transmission Speed Ratios**

| Gear | Ratio |
|---|---|
| 1F | 6.16 |
| 2F | 4.52 |
| 3F | 3.33 |
| 4F | 2.47 |
| 5F | 1.82 |
| 6F | 1.36 |
| 7F | 1.00 |
| Stall Torque Ratio | 2.20 |

**Dimensions**

| | |
|---|---|
| Height: | 1092 mm (43 in) |
| Width: | 866 mm (34 in) |
| Length: | 1681 mm (66 in) |

**Weight**
Approximate Dry Weight
Transmission 1694 kg (3735 lbs)
Engine/Transmission Coupling 108 kg (238 lbs)

**Spec Sheet**
LEHW1002



## Ratings

| | |
|---|---|
| Gross Input Power | 1715 kW (2300 hp) |
| Gross Input Torque | 9024 N•m (6656 lb-ft) |
| Rated Input Speed | 1900 rpm |
| Maximum Input Speed | 2100 rpm |

## Output Connection (Yoke)

GWB 390.60/GWB 390.65

## Power Take Off

(Pump Auxiliary Drive)

**Location & Rated Power**

3 positions (3 o'clock, 5 o'clock, and 9 o'clock from rear)

112 kW/150 hp continuous

**PTO Mountings**

SAE 8 bolt (J704)

**Transmission Speed Ratios**

| Gear | Ratio |
|---|---|
| 1F | 3.33 |
| 2F | 2.45 |
| 3F | 2.20 |
| 4F | 1.80 |
| 5F | 1.61 |
| 6F | 1.35 |
| 7F | 1.19 |
| 8F* | 0.99 |
| Stall Torque Ratio | 2.20 |

## Dimensions

| | |
|---|---|
| Height: | 1182 mm (46.5 in) |
| Width: | 838.2 mm (33 in) |
| Length: | 1977 mm (78 in) |

## Weight

| | |
|---|---|
| Approximate Dry Weight | |
| Transmission | 2028 kg (4468 lbs) |
| Engine/Transmission Coupling | 186 kg (410 lbs) |

## Spec Sheet

LEHW1003

***Warm-Up Mode Option** — provides torque converter stall for aiding powertrain warming during cold starts. 8F is unavailable on units configured with the warm-up mode option.



**Ratings**

| | |
|---|---|
| Max. Gross Input Power | 2237 kW (3000 hp) |
| Max. Gross Input Torque | 12 403 N•m (9148 lb-ft) |
| Rated Input Speed | 1900 rpm |
| Maximum Input Speed | 1970 rpm |

**Output Connection (Yoke)**
GWB 390.65

**Power Take Off**
(Pump Auxiliary Drive)

**Location & Rated Power**
2 positions (3 o'clock and 11 o'clock from rear)

112 kW/150 hp continuous

**PTO Mountings**
SAE 8 bolt (J704) @ 3 o'clock
SAE C-size (J744) @ 11 o'clock

**Transmission Speed Ratios**

| Gear | Ratio |
|---|---|
| 1F | 6.25 |
| 2F | 4.59 |
| 3F | 3.38 |
| 4F | 2.48 |
| 5F | 1.83 |
| 6F | 1.36 |
| 7F | 1.00 |
| Stall Torque Ratio | 2.23 |

**Dimensions**

| | |
|---|---|
| Height: | 1288.3 mm (50.72 in) |
| Width: | 1150.4 mm (45.29 in) |
| Length: | 2200.1 mm (86.62 in) |

**Weight**

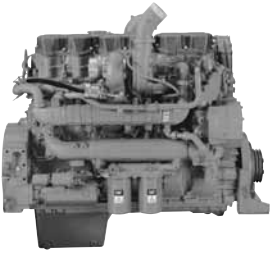
| | |
|---|---|
| Approximate Dry Weight | |
| Transmission | 2920 kg (6430 lbs) |
| Engine/Transmission Coupling | 136 kg (300 lbs) |

**Spec Sheet**
LEHW1006



# Drilling Engine Ratings

Cat engines have been the driving force behind the majority of the world's drilling wells for years. Cat 3500, C175, C280, and MaK engines feature proven reliability and durabililty, the right power for each application, easy servicing, fuel consumption optimized for drilling, ease of installation, and low owning and operating costs.



## Drilling

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| A | 328 | 440 | 1800-2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Avail with Cat Compression Brake, Dry Manifold |
| B | 354 | 475 | 1800-2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road, China On-Hwy III | Avail with Cat Compression Brake, Dry Manifold |
| C | 403 | 540 | 1800-2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road, China On-Hwy III | Avail with Cat Compression Brake, Dry Manifold |
| D | 433 | 580 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Dry Manifold |
| E | 444 | 595 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Dry Manifold |
| A/B | 354 | 475 | 1800-2100 | EPA T4 Int, EU IIIB | Dry Manifold |
| C | 403 | 540 | 1800-2100 | EPA T4 Int, EU IIIB | Dry Manifold |
| D | 433 | 580 | 1800-2100 | EPA T4 Int, EU IIIB | Dry Manifold |

## Specifications

**Bore x Stroke** . . . . . 137.2 x 171.5 mm (5.4 x 6.75 in)
**Displacement** . . . . . 15.2 liters (927.6 $in^3$)

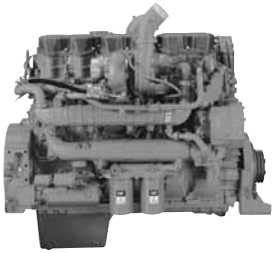
## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **C15 ACERT** | 1377 mm/54 in | 927 mm/37 in | 1227 mm/48 in | 1245 kg/2743 lbs |
| **C15 ACERT T4** | 1530 mm/60.2 in | 961 mm/37.8 in | 1282 mm/51 in | 1580 kg/3482 lbs |

**Please see spec sheet for more information:**

C15 ACERT ..... LEHW0097, LEHW0061

For diesel engine rating definitions please see pages 6-7.



## Drilling

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| A | 429 | 575 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Avail with Cat Compression Brake, Dry Manifold |
| B | 447 | 600 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road | Avail with Cat Compression Brake, Dry Manifold |
| C | 470 | 630 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road, China On-Hwy III | Avail with Cat Compression Brake, Dry Manifold |
| C | 522 | 700 | 2100 | IMO TII, EPA T3, EU IIIA, China II Non-Road, China On-Hwy III | Dry Manifold |
| D | 570 | 765 | 2100 | IMO TII, EPA T2 | Dry Manifold |
| E | 597 | 800 | 2100 | IMO TII, EPA T2 | Dry Manifold |
| A/B | 447 | 600 | 1800-1900 | EPA T4 Int, EU IIIB | Dry Manifold |
| C | 470 | 630 | 1800-1900 | EPA T4 Int, EU IIIB | Dry Manifold |
| C | 522 | 700 | 1800-1900 | EPA T4 Int, EU IIIB | Dry Manifold |
| C | 563 | 755 | 1800 | EPA T4 Final | Dry Manifold |
| D | 597 | 800 | 1800 | EPA T4 Final | Dry Manifold |

## Specifications

**Bore x Stroke** ..... 145 x 183 mm (5.7 x 7.2 in)
**Displacement** ..... 18.1 liters (1105 $in^3$)

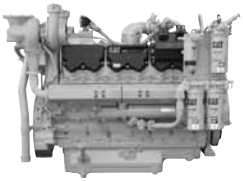
## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **C18 ACERT** | 1389 mm/54.7 in | 919 mm/36.2 in | 1227 mm/49.5 in | 1273 kg/2807 lbs |
| **C18 ACERT T4** | 1530 mm/60.2 in | 961 mm/37.8 in | 1282 mm/51 in | 1580 kg/3482 lbs |

**Please see spec sheet for more information:**

C18 ACERT ..... LEHW0098, LEHW0053

For diesel engine rating definitions please see pages 6-7.



## Drilling

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| A | 597 | 800 | 1800-2100 | EPA T2, EU II | Dry Manifold |
| B | 652 | 875 | 1800-2100 | EPA T2, EU II | Dry Manifold |
| C | 708 | 950 | 1800-2100 | EPA T2, EU II | Dry Manifold |
| C | 783 | 1050 | 1800-2100 | EPA T2, EU II | Dry Manifold |
| A | 597 | 800 | 1800 | EPA T4 Final | Narrow Config, Dry Manifold |

## Specifications

**Bore x Stroke** ..... 137.7 x 152.4 mm (5.42 x 6 in)
**Displacement** ..... 27 liters (1648 $in^3$)

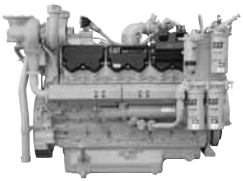
## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **C27 ACERT** | 1918 mm/75.5 in | 1463 mm/57.6 in | 1321 mm/52 in | 2895 kg/6382 lbs |
| **C27 ACERT T4** | 2160 mm/85 in | 1270 mm/50 in | 1650 mm/65 in | 3096 kg/6825 lbs |

**Please see spec sheet for more information:**

C27 ACERT ..... LEHW0052

For diesel engine rating definitions please see pages 6-7.



## Drilling

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| A | 597 | 800 | 2100 | EPA T2 | Dry Manifold |
| B | 708 | 950 | 1800-2100 | EPA T2 | Dry Manifold |
| C | 839 | 1125 | 1800-2100 | EPA T2 | Dry Manifold |
| D | 895 | 1200 | 1800-2100 | EPA T2 | Dry Manifold |
| E | 1007 | 1350 | 1800-2100 | EPA T2 | Dry Manifold |
| E | 1119 | 1500 | 2100 | EPA T2 | Dry Manifold |
| C | 839 | 1125 | 1800 | EPA T4 Final | Dry Manifold |

## Specifications

**Bore x Stroke** ..... 145 x 165 mm (5.7 x 6.5 in)
**Displacement** ..... 32 liters (1953 $in^3$)

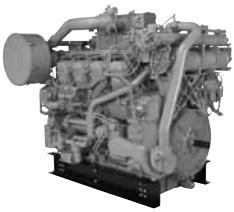
## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **C32 ACERT** | 1918 mm/75.5 in | 1473 mm/58 in | 1321 mm/52 in | 2286 kg/5040 lbs |
| **C32 ACERT T4** | 1905 mm/75 in | 1600 mm/63 in | 1549 mm/61 in | |

**Please see spec sheet for more information:**

C32 ACERT..... LEHW0049, LEHW0050, LEHW0051, LEHW0100,

For diesel engine rating definitions please see pages 6-7.



## Land Mechanical Drilling Ratings

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| A | 507 | 680 | 1200 | Not Emissions Certified | Dry or Watercooled Manifold |
| B | 567 | 760 | 1200 | Not Emissions Certified | Dry Manifold |
| C | 611 | 820 | 1300 | Not Emissions Certified | Dry or Watercooled Manifold |
| A | 638 | 855 | 1800 | Not Emissions Certified | Dry or Watercooled Manifold |
| C | 746 | 1000 | 1800 | Not Emissions Certified | Dry or Watercooled Manifold |
| E | 846 | 1135 | 1900 | Not Emissions Certified | Dry or Watercooled Manifold |

## Land Electric Drilling Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| A | 641 | 860 | 1200 | Not Emissions Certified |

## Specifications

**Bore x Stroke** ..... 170 x 190 mm (6.7 x 7.5 in)
**Displacement** ..... 34.5 liters (2105 $in^3$)

## Dimensions & Weights

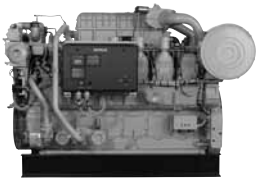
| | L | W | H | Wt |
|---|---|---|---|---|
| **Land Mechanical Drilling Engine** | 2136.14 mm/84.1 in | 1701.8 mm/67 in | 1719.58 mm/67.7 in | 4309 kg/9,500 lbs |
| **Land Electric Drilling Module*** | 7874 mm/310 in | 2385.06 mm/93.9 in | 2778.76 mm/109.4 in | 14 443 kg/31,843 lbs |

*Module weight and dimensions include — inner and outer base, radiator, generator, and engine

**Please see spec sheet for more information:**

3508 ..... LEHW0058, LEHW0069

For diesel engine rating definitions please see pages 6-7.



## Land Mechanical Drilling Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| B | 671 | 900 | 1200 | Non Current EPA T1 |
| B | 567 | 760 | 1200 | Non Current EPA T1 |

## Land Electric Drilling Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| Prime | 682 | 915 | 1200 | Non Current EPA T1 |

## Offshore Electric Drilling Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| Prime + 10% | 682 | 915 | 1200 | IMO TI, Non Current EPA T1, Mar T1 |
| Prime + 10% | 856 | 1148 | 1500 | IMO TI, Non Current EPA T1, Mar T1 |

## Offshore Emergency Generator Set Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| Prime + 10% | 968 | 1298 | 1800 | IMO Compliant, Non Current EPA T1, Mar T1 |

## Specifications

**Bore x Stroke** . . . . . 170 x 190 mm (6.7 x 7.5 in)
**Displacement** . . . . . 34.5 liters (2105 $in^3$)

## Dimensions & Weights

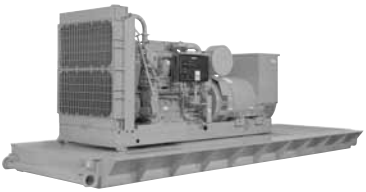
| L | W | H | Wt |
|---|---|---|---|
| **Land Mechanical Drilling Engine** | | | |
| 2136.14 mm/84.1 in | 1701.8 mm/67.0 in | 2024.38 mm/79.7 in | 4309 kg/9,500 lbs |
| **Land Electric Drilling Module*** | | | |
| 4986.02 mm/196.3 in | 2319.02 mm/91.3 in | 2595.88 mm/102.2 in | 14 443 kg/31,843 lbs |
| **Offshore Electric Drilling Module*** | | | |
| 4986.02 mm/196.3 in | 2319.02 mm/91.3 in | 2595.88 mm/102.2 in | 14 443 kg/31,843 lbs |

*Module weight and dimensions include — inner and outer base, radiator, generator, and engine

**Please see spec sheet for more information:**

3508B..... LEHW0057, LEHW0070

For diesel engine rating definitions please see pages 6-7.



## Land Mechanical Drilling Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| B | 671 | 900 | 1200 | EPA T2 |

## Land Electric Drilling Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| Prime | 682 | 915 | 1200 | EPA T2 |

## Specifications

**Bore x Stroke** . . . . . 170 x 190 mm (6.7 x 7.5 in)
**Displacement** . . . . . 34.5 liters (2105 $in^3$)

## Dimensions & Weights

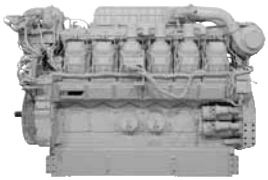
| L | W | H | Wt |
|---|---|---|---|
| **Land Mechanical Drilling Engine** | | | |
| 2136.14 mm/84.1 in | 1701.8 mm/67.0 in | 2024.38 mm/79.7 in | 4581.7 kg/10,101 lbs |
| **Land Electric Drilling Module*** | | | |
| 4986.02 mm/196.3 in | 2319.02 mm/91.3 in | 2595.88 mm/102.2 in | 15 352 kg/33,846 lbs |

*Module weight and dimensions include — inner and outer base, radiator, generator, and engine

**Please see spec sheet for more information:**

3508C..... LEHW0071, LEHW0059

For diesel engine rating definitions please see pages 6-7.



## Land Mechanical Drilling Ratings

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| A | 761 | 1020 | 1200 | Not Emissions Certified | Dry or Watercooled Manifold |
| B | 764 | 1025 | 1200 | Not Emissions Certified | Dry Manifold |
| C | 858 | 1150 | 1300 | Not Emissions Certified | Dry or Watercooled Manifold |
| B | 932 | 1250 | 1200 | Not Emissions Certified | Dry Manifold |
| A | 954 | 1280 | 1800 | Not Emissions Certified | Dry or Watercooled Manifold |
| C | 1119 | 1500 | 1900 | Not Emissions Certified | Dry or Watercooled Manifold |

## Land Electric Drilling Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| Prime | 708 | 950 | 1200 | Not Emissions Certified |
| Prime | 830 | 1113 | 1000 | Not Emissions Certified |
| Prime | 890 | 1194 | 1000 | Not Emissions Certified |
| Prime | 985 | 1321 | 1200 | Not Emissions Certified |
| Prime | 1070 | 1435 | 1200 | Not Emissions Certified |
| Prime | 1090 | 1462 | 1500 | Not Emissions Certified |

## Specifications

**Bore x Stroke** ..... 170 x 190 mm (6.7 x 7.5 in)
**Displacement** ..... 51.8 liters (3158 $in^3$)

## Dimensions & Weights

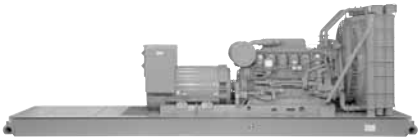
| L | W | H | Wt |
|---|---|---|---|
| **Land Mechanical Drilling Engine** | | | |
| 2674.62 mm/105.3 in | 1701.8 mm/67.0 in | 1719.58 mm/67.7 in | 5203.75 kg/11,462 lbs |
| **Land Electric Drilling Module*** | | | |
| 7874 mm/310 in | 2385.06 mm/93.9 in | 2936.24 mm/115.6 in | 15 714 kg/34,644 lbs |

*Module weight and dimensions include — inner and outer base, radiator, generator, and engine

**Please see spec sheet for more information:**

3512 ..... LEHW0066, LEHW0060

For diesel engine rating definitions please see pages 6-7.



## Land Electric Drilling Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| Prime | 1101 | 1476 | 1200 | Non Current EPA T1, Mar T1 |
| Prime | 1310 | 1757 | 1500 | Non Current EPA T1, Mar T1 |

## Offshore Electric Drilling Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| Prime + 10% | 1102 | 1478 | 1200 | IMO TI, Non Current EPA T1 Mar T1 |
| Prime + 10% | 1257 | 1686 | 1500 | IMO TII |

## Offshore Emergency Generator Sets Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| Prime + 10% | 1424 | 1910 | 1800 | IMO Compliant, Non Current EPA T1, Mar T1 |

## Specifications

**Bore x Stroke** ..... 170 x 190 mm (6.7 x 7.5 in)
**Displacement** ..... 51.8 liters (3158 $in^3$)

## Dimensions & Weights

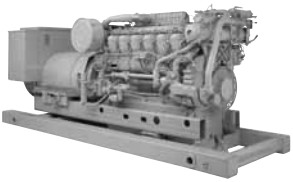
| L | W | H | Wt |
|---|---|---|---|
| **Land Electric Drilling Module*** | | | |
| 7874 mm/310 in | 2385.06 mm/93.9 in | 2956.56 mm/116.4 in | 15 652 kg/34,507 lbs |
| **Offshore Electric Drilling Module*** | | | |
| 7874 mm/310 in | 2385.06 mm/93.9 in | 2956.56 mm/116.4 in | 15 652 kg/34,507 lbs |

*Module weight and dimensions include — inner and outer base, radiator, generator, and engine

**Please see spec sheet for more information:**

3512B..... LEHW0067

For diesel engine rating definitions please see pages 6-7.



## Land Electric Drilling Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| Prime | 1101 | 1476 | 1200 | EPA T2 |

## Offshore Electric Drilling Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| Prime + 10% | 1102 | 1478 | 1200 | IMO TII, EPA Mar T2 |

## Specifications

**Bore x Stroke** ..... 170 x 190 mm (6.7 x 7.5 in)
**Displacement** ..... 51.8 liters (3158 $in^3$)

## Dimensions & Weights

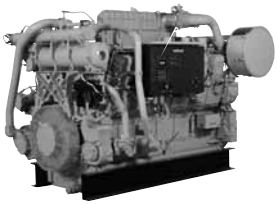
| L | W | H | Wt |
|---|---|---|---|
| **Land Electric Drilling Module*** | | | |
| 7874 mm/310 in | 2385.06 mm/93.9 in | 2956.56 mm/116.4 in | 15 566 kg/34,319 lbs |
| **Offshore Electric Drilling Module*** | | | |
| 5448 mm/214.49 in | 1827 mm/71.13 in | 2315.2 mm/91.15 in | 10 590 kg/23,300 lbs |

*Module weight and dimensions include — inner and outer base, radiator, generator, and engine

**Please see spec sheet for more information:**

3512C..... LEHW0078, LEHW0068

For diesel engine rating definitions please see pages 6-7.



## Land Mechanical Drilling Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| Prime | 1100 | 1475 | 1200 | EPA T2 |
| Prime | 932 | 1250 | 1200 | EPA T2 |

## Specifications

**Bore x Stroke** ..... 170 x 215 mm (6.7 x 8.5 in)
**Displacement** ..... 58.6 liters (3575 $in^3$)

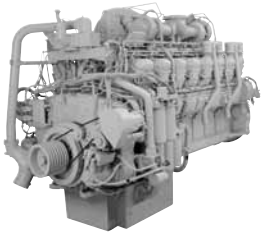
## Dimensions & Weights

| L | W | H | Wt |
|---|---|---|---|
| 2682.24 mm/105.6 in | 1790.7 mm/70.5 in | 2019.3 mm/79.5 in | 5423 kg/11,945 lbs |

**Please see spec sheet for more information:**

3512C HD ..... LEHW0048

For diesel engine rating definitions please see pages 6-7.



## Land Mechanical Drilling Ratings

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| Prime | 1044 | 1400 | 1200 | Not Emissions Certified | Dry Manifold |
| Prime | 1230 | 1649 | 1200 | Not Emissions Certified | Dry Manifold |
| Prime | 1010 | 1355 | 1200 | Not Emissions Certified | Dry or Watercooled Manifold |
| Prime | 1242 | 1665 | 1300 | Not Emissions Certified | Dry or Watercooled Manifold |

## Land Electric Drilling Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| Prime | 1200 | 1609 | 1000 | Not Emissions Certified |
| Prime | 1345 | 1804 | 1200 | Not Emissions Certified |

## Specifications

**Bore x Stroke** ..... 170 x 190 mm (6.7 x 7.5 in)
**Displacement** ..... 69 liters (4210 $in^3$)

## Dimensions & Weights

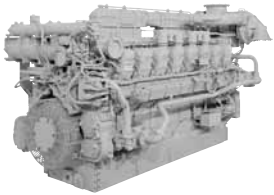
| L | W | H | Wt |
|---|---|---|---|
| **Land Mechanical Drilling Engine** | | | |
| 3251 mm/128 in | 1701 mm/67 in | 2004 mm/78.9 in | 878 kg/19,090 lbs |
| **Land Electric Drilling Module*** | | | |
| 6704 mm/264 in | 1988 mm/78 in | 2520 mm/99 in | 16 874 kg/37,200 lbs |

*Module weight and dimensions include — inner and outer base, radiator, generator, and engine

**Please see spec sheet for more information:**

3516 ..... LEHW0064

For diesel engine rating definitions please see pages 6-7.



## Land Electric Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| Prime | 1383 | 1855 | 1200 | EPA/CARB T1 Non-Road Certified |

## Offshore Electric Ratings

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| **3516B** | | | | | |
| Prime + 10%* | 1383 | 1855 | 1200 | Non Current | |
| Prime + 10%* | 1717 | 2303 | 1500 | IMO TII | |
| **3516B HD** | | | | | |
| Prime + 10%* | 1603 | 2150 | 1200 | Non Current | |

## Offshore Emergency Generator Set Ratings

| Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|
| Prime | 1901 | 2549 | 1800 | IMO TI, Mar T1<br>EPA/CARB T1 Non-Road | Emergency Rating |

## Specifications

**Bore x Stroke** ..... **3516B** 170 x 190 mm (6.7 x 7.5 in)
**3516B HD** 170 x 215 mm (6.7 x 8.5 in)

**Displacement** ..... **3516B** 69 liters (4210 $in^3$)
**3516B HD** 78 liters (4470 $in^3$)

## Dimensions & Weights

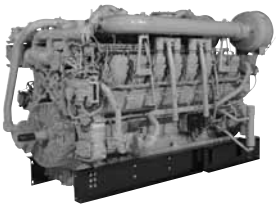
| | L | W | H | Wt |
|---|---|---|---|---|
| **Engine** | 3213 mm/127 in | 1786 mm/70 in | 2024 mm/80 in | 7484 kg/16500 lbs |
| **Module** | 7874 mm/310 in | 2385 mm/93.9 in | 2520 mm/99.2 in | 18 810 kg/41,469 lbs |

**Please see spec sheet for more information:**

3516B..... LEHW0065

*With 10% overload for MCS certifications and IMO certified.

For diesel engine rating definitions please see pages 6-7.



## Offshore Electric Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| Prime + 10%* | 1383 | 1855 | 1200 | IMO TII, EPA Mar T2 |
| Prime + 10%* | 1603 | 2150 | 1200 | IMO TII, EPA Mar T2 |

## Specifications

**Bore x Stroke** ..... 170 x 215 mm (6.7 x 8.5 in)
**Displacement** ..... 78 liters (4770 $in^3$)

## Dimensions & Weights

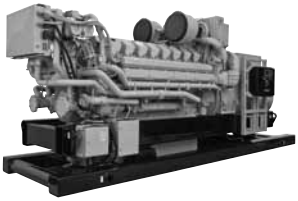
| | L | W | H | Wt |
|---|---|---|---|---|
| **Engine** | 5915 mm/223 in | 1786 mm/70 in | 2024 mm/80 in | 7484 kg/16,500 lbs |
| **Module** | 6704 mm/264 in | 1988 mm/78 in | 2520 mm/99 in | 16 874 kg/37,200 lbs |

**Please see spec sheet for more information:**

3516C..... LEHW0073

*With 10% overload for MCS certifications and IMO certified.

For diesel engine rating definitions please see pages 6-7.



## Offshore Electric Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| Prime + 10%* | 1930 | 2586 | 1200 | IMO TII, EPA Mar T2 |

## Specifications

**Bore x Stroke** ..... 175 x 220 mm (6.9 x 8.7 in)
**Displacement** ..... 84.7 liters (5164 $in^3$)

## Dimensions & Weights

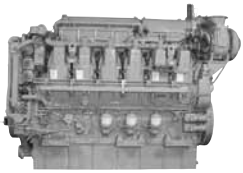
| | L | W | H | Wt |
|---|---|---|---|---|
| **Engine** | 6705 mm/264 in | 2160 mm/85 in | 2797 mm/110 in | 24 312 kg/53,600 lbs |

**Please see spec sheet for more information:**

3516C..... LEHW6097

*With 10% overload for MCS certifications and IMO certified.

For diesel engine rating definitions please see pages 6-7.



## Offshore Generator Set Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| **C280-6** | | | | |
| Prime + 10%* | 2722 | 2548 | 900 | IMO TII, EPA Mar T2 |
| Prime + 10%* | 2548 | 2722 | 1000 | IMO TII, EPA Mar T2 |
| **C280-8** | | | | |
| Prime + 10%* | 2530 | 3393 | 900 | IMO TII, EPA Mar T2 |
| Prime + 10%* | 2710 | 3634 | 1000 | IMO TII, EPA Mar T2 |
| **C280-12** | | | | |
| Prime + 10%* | 3800 | 5096 | 900 | IMO TII, EPA Mar T2 |
| Prime + 10%* | 4060 | 5444 | 1000 | IMO TII, EPA Mar T2 |
| **C280-16** | | | | |
| Prime + 10%* | 5060 | 6785 | 900 | IMO TII, EPA Mar T2 |
| Prime + 10%* | 5420 | 7268 | 1000 | IMO TII, EPA Mar T2 |

## Specifications

**Bore x Stroke** ..... 280 x 300 mm (11 x 11.8 in)
**Displacement** ..... **C280-6** 111 liters (6773 $in^3$)
**C280-8** 148 liters (9031 $in^3$)
**C280-12** 222 liters (13,546 $in^3$)
**C280-16** 296 liters (18,062 $in^3$)

## Dimensions & Weights

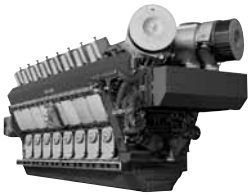
| | L | W | H | Wt |
|---|---|---|---|---|
| **C280-6** | 4276 mm/168 in | 1722 mm/68 in | 2733 mm/108 in | 15 680 kg/34,500 lbs |
| **C280-8** | 5561 mm/219 in | 1722 mm/68 in | 2733 mm/108 in | 19 000 kg/41,800 lbs |
| **C280-12** | 4861 mm/191 in | 1741 mm/69 in | 3550 mm/140 in | 25 140 kg/55,300 lbs |
| **C280-16** | 5482 mm/216 in | 1741 mm/69 in | 3550 mm/140 in | 29 950 kg/65,900 lbs |
| **C280-16 Module** | 9881 mm/389 in | 2490 mm/98 in | 5293 mm/209 in | 82 000 kg/184,000 lbs |

**Please see spec sheet for more information:**

C280-6 (50 Hz)..... LEHW0085
C280-6 (60 Hz)..... LEHW0091
C280-8 (50 Hz)..... LEHW0086
C280-8 (60 Hz)..... LEHW0092
C280-12 (50 Hz)..... LEHW0087
C280-12 (60 Hz)..... LEHW0093
C280-16 (50 Hz)..... LEHW0088
C280-16 (60 Hz)..... LEHW0094

*With 10% overload for MCS certifications and IMO certified.

For diesel engine rating definitions please see pages 6-7.



## Offshore Generator Set Ratings

| Model | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| 9 M 32 C | 4500 | 6120 | 600 | IMO TII |
| 12 M 32 C | 6000 | 8060 | 750 | IMO TII |
| 16 M 32 C | 8000 | 10,880 | 750 | IMO TII |

## Specifications

**Bore x Stroke**

**9 M 32 C** 320 x 480 mm (12.6 x 18.9 in)
**12 M 32 C** 320 x 460 mm (12.6 x 18.1 in)
**16 M 32 C** 320 x 460 mm (12.6 x 18.1 in)

**Displacement**

**9 M 32 C** 347 liters (21,175 $in^3$)
**12 M 32 C** 405 liters (24,715 $in^3$)
**16 M 32 C** 541 liters (33,014 $in^3$)

## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **9 M 32 C** | 4276 mm/168 in | 1722 mm/68 in | 2733 mm/108 in | 49.4 tons/108,908 lbs |
| **12 M 32 C** | 5561 mm/219 in | 1722 mm/68 in | 2733 mm/108 in | 64.5 tons/142,195 lbs |
| **16 M 32 C** | 4861 mm/191 in | 1741 mm/69 in | 3550 mm/140 in | 81.6 tons/179,894 lbs |

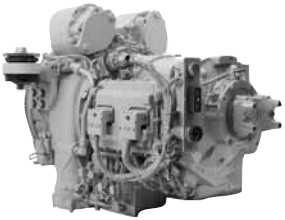
**Please see spec sheet for more information:**
12 M 32 C..... LEHW0024 16 M 32 C .....LEHW0025

For diesel engine rating definitions please see pages 6-7.

# Drilling Transmission Application Chart

| Engine | Transmission | Max hp | Page |
|---|---|---|---|
| **C9 ACERT** | TH31-E61 | 350 | 56 |
| **C11 ACERT** | TH35-E81 | 450 | 57 |
| **C13 ACERT** | TH35-E81 | 520 | 57 |
| **C15 ACERT** | TH35-E81 | 540 | 57 |
| | CX31-P600 | 600 | 58 |
| | CX35-P800 | 800 | 59 |
| **C18 ACERT** | CX35-P800 | 800 | 59 |
| **C27 ACERT** | TH48-E70 | 1150 | 60 |
| **C32 ACERT** | TH48-E70 | 1500 | 60 |

# TH31-E61 DRILLING TRANSMISSION



**Ratings**

| | |
|---|---|
| Gross Input Power | 261 kW (350 hp) |
| Gross Input Torque | 1556 N•m (1148 lb-ft) |
| Maximum Turbine Torque | 2746 N•m (2025 lb-ft) |
| Rated Input Speed | 2100 rpm |
| Maximum Input Speed | 2500 rpm |

**Output Connection Options**

1710 output yoke
1810 companion flange

**Power Take Off**

(Pump Auxiliary Drive)

**Description**

4 x PTOs integral live drive

**Location & Rated Power**

11 o'clock 149 kW/200 hp and
1 o'clock 149 kW/200 hp
Total 164 kW (220 hp)

**PTO Mountings**

SAE C mounting pads facing output (2)
SAE B mounting pads facing input (2)

**Transmission Speed Ratios**

| Gear | Ratio |
|---|---|
| 1F | 4.40 |
| 2F | 2.33 |
| 3F | 1.53 |
| 4F | 1.00 |
| 5F | 0.71 |
| 6F | 0.60 |
| 1R | 3.96 |
| Stall Torque Ratio | 2.46 |

**Dimensions**

| | |
|---|---|
| Height: | 833.8 mm (32.83 in) |
| Width: | 1008.6 mm (39.71 in) |
| Length: | 1097.5 mm (43.21 in) |

**Weight**

Approximate
Dry Weight 841 kg (1855 lbs)

**Spec Sheet**

LEHW1000

# TH35-E81 DRILLING TRANSMISSION



**Ratings**

| | |
|---|---|
| Gross Input Power | 410 kW (540 hp) |
| Gross Input Torque | 2237 N•m (1650 lb-ft) |
| Maximum Turbine Torque | 3295 N•m (2430 lb-ft) |
| Rated Input Speed | 2100 rpm |
| Maximum Input Speed | 2500 rpm |

**Output Connection Options**

1810 output yoke
1810 companion flange

**Power Take Off**

(Pump Auxiliary Drive)

**Description**

4 x PTOs integral live drive

**Location & Rated Power**

11 o'clock 149 kW/200 hp and
1 o'clock 149 kW/200 hp
Total 164 kW (220 hp)

**PTO Mountings**

SAE C mounting pads facing output (2)
SAE B mounting pads facing input (2)

**Transmission Speed Ratios**

| Gear | Ratio |
|---|---|
| 1F | 5.72 |
| 2F | 3.57 |
| 3F | 2.71 |
| 4F | 1.94 |
| 5F | 1.42 |
| 6F | 1.00 |
| 7F | 0.73 |
| 8F | 0.63 |
| 1R | 4.46 |
| Stall Torque Ratio | 2.46 |

**Dimensions**

| | |
|---|---|
| Height: | 833.8 mm (32.83 in) |
| Width: | 1023.6 mm (40.30 in) |
| Length: | 1222.8 mm (48.14 in) |

**Weight**

Approximate
Dry Weight 973 kg (2145 lbs)

**Spec Sheet**

LEHW1001



## Ratings

| | |
|---|---|
| Gross Input Power | 447 kW (600 hp) |
| Gross Input Torque | 2746 N•m (2025 lb-ft) |
| Rated Input Speed | 2100 rpm |
| Maximum Input Speed | 2500 rpm |

## Output Connection Options

1710 output yoke, 1810 yoke, 1810 companion flange, ISO-8667 flange

## Power Take Off

(Pump Auxiliary Drive)

### Description

4 x PTOs integral live drive

### Location

Standard: 1 o'clock and 8 o'clock, 5 o'clock at rear
Optional Integral PTO Drives: 1 o'clock and 11 o'clock, 5 o'clock at rear

### PTO Mountings

Cat 8-bolt pattern and spline at standard side and rear (1)

## Transmission Speed Ratios

| Gear | Ratio |
|---|---|
| 1F | 4.40 |
| 2F | 2.33 |
| 3F | 1.53 |
| 4F | 1.00 |
| 5F | 0.72 |
| 6F | 0.61 |
| 1R | 3.97 |

| Stall Torque Ratio @ Rated Speed | |
|---|---|
| < 400 hp engine | 2.669, 2.324 |
| > 400 hp engine | 2.324 |

## Dimensions

| | |
|---|---|
| Height: | 719 mm (28.3 in) |
| Width: | 613 mm (241 in) |
| Length: | 1098 mm (43.2 in) |

## Weight

| | |
|---|---|
| Approximate Dry Weight | 465 kg (1026 lbs) |

## Spec Sheet

LEHW0008



## Ratings

| | |
|---|---|
| Gross Input Power | 597 kW (800 hp) |
| Gross Input Torque | |
| 1F-3F | 3254 N•m (2400 lb-ft) |
| 4F-8F | 3661 N•m (2700 lb-ft) |
| Maximum Turbine Torque | |
| 1F-3F | 3254 N•m (2400 lb-ft) |
| 4F-8F | 3661 N•m (2700 lb-ft) |
| Rated Input Speed | 2100 rpm |
| Maximum Input Speed | 2500 rpm |

## Output Connection Options

1810 yoke, 1810 companion flange, ISO-8667 flange

## Power Take Off

(Pump Auxiliary Drive)

### Description

4 x PTOs integral live drive

### Location

Standard: 8 o'clock and 1 o'clock side positions, 5 o'clock at rear
Optional Integral PTO Drives:
1 o'clock and 11 o'clock above T/C housing, 5 o'clock at rear

### PTO Mountings

10-bolt, rear PTO mounting Cat
8-bolt (1)

## Transmission Speed Ratios

| Gear | Ratio |
|---|---|
| 1F | 5.73 |
| 2F | 3.57 |
| 3F | 2.72 |
| 4F | 1.95 |
| 5F | 1.43 |
| 6F | 1.00 |
| 7F | 0.74 |
| 8F | 0.63 |
| 1R | |
| Stall Torque Ratio | 1.962 |

## Dimensions

| | |
|---|---|
| Height: | 860.9 mm (33.9 in) |
| Width: | 609.4 mm (24.0 in) |
| Length: | 1253 mm (49.3 in) |

## Weight

| | |
|---|---|
| Approximate Dry Weight | 731 kg (1611 lbs) |

## Spec Sheet

LEHW0007

# TH48-E70 DRILLING TRANSMISSION



**Ratings**

| | |
|---|---|
| Gross Input Power | 895 kW (1200 hp) |
| | 1118 kW (1500 hp) |
| Gross Input Torque | 5484 N•m (4045 lb-ft) |
| | 5995 N•m (4422 lb-ft) |
| Maximum Turbine Torque | 7442 N•m (5489 lb-ft) |
| Rated Input Speed | 2100 rpm |
| Maximum Input Speed | 2200 rpm |

**Output Connection (Yoke)**
GWB 390.60/GWB 390.65

**Power Take Off**
(Pump Auxiliary Drive)

**Location & Rated Power**
3 positions (3 o'clock, 5 o'clock, and 9 o'clock from rear)

112 kW/150 hp continuous

**PTO Mountings**
SAE 8 bolt (J704)

**Transmission Speed Ratios**

| Gear | Ratio |
|---|---|
| 1F | 6.16 |
| 2F | 4.52 |
| 3F | 3.33 |
| 4F | 2.47 |
| 5F | 1.82 |
| 6F | 1.36 |
| 7F | 1.00 |
| Stall Torque Ratio | 2.20 |

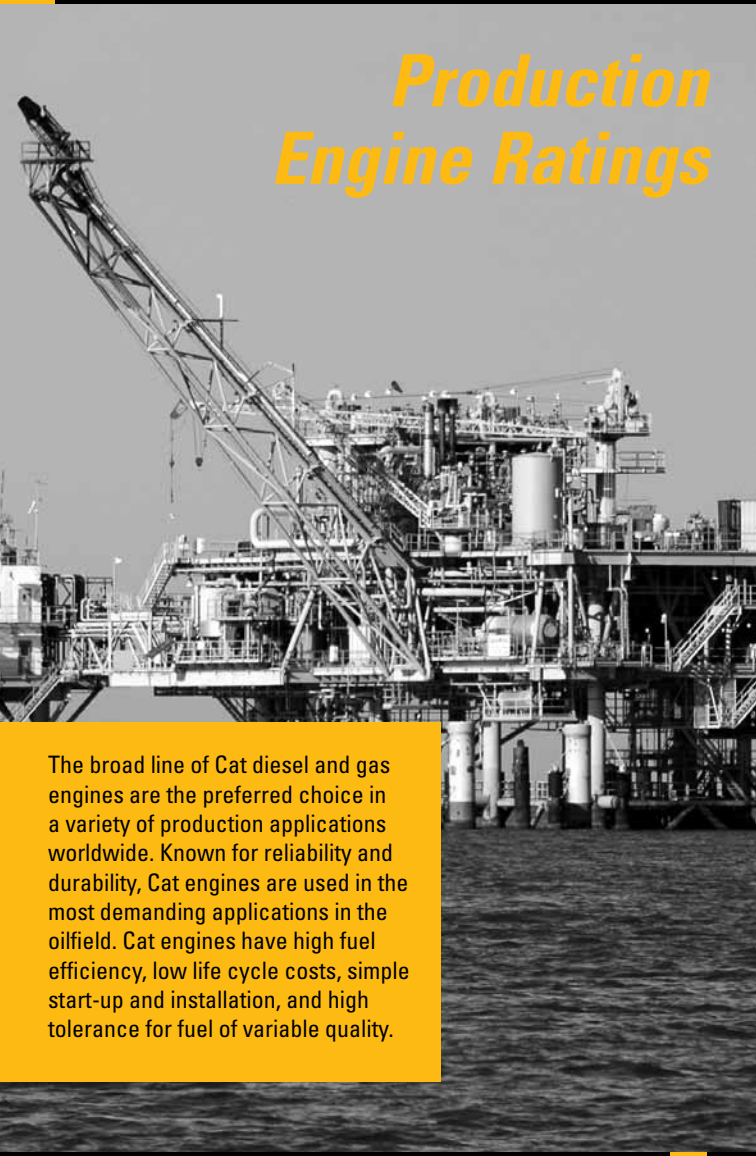
**Dimensions**

| | |
|---|---|
| Height: | 1092 mm (43 in) |
| Width: | 866 mm (34 in) |
| Length: | 1681 mm (66 in) |

**Weight**
Approximate Dry Weight
Transmission 1694 kg (3735 lbs)
Engine/Transmission Coupling 108 kg (238 lbs)

**Spec Sheet**
LEHW1002

# Production Engine Ratings



The broad line of Cat diesel and gas engines are the preferred choice in a variety of production applications worldwide. Known for reliability and durability, Cat engines are used in the most demanding applications in the oilfield. Cat engines have high fuel efficiency, low life cycle costs, simple start-up and installation, and high tolerance for fuel of variable quality.




## Production Ratings

| Model | Volt | kV•A | ekW | Hz | Emissions |
|---|---|---|---|---|---|
| C15 ACERT | 400 | 365 | 292 | 50 | EU II Certified, China II Non-Road Emissions Certified |
| C15 ACERT | 400 | 455 | 365 | 50 | EU II Certified, China II Non-Road Emissions Certified |
| C15 ACERT | 480 | 400 | 320 | 60 | U.S. Non-Road EPA T3 Certified |
| C15 ACERT | 480 | 455 | 365 | 60 | U.S. Non-Road EPA T3 Certified |
| C15 ACERT | 480 | 515 | 410 | 60 | U.S. Non-Road EPA T3 Certified |
| C15 ACERT | 480 | 570 | 455 | 60 | U.S. Non-Road EPA T3 Certified |
| C18 ACERT | 400 | 545 | 435 | 50 | EU II Certified |
| C18 ACERT | 480 | 625 | 500 | 60 | U.S. Non-Road EPA T2 Certified |
| C18 ACERT | 600 | 625 | 500 | 60 | U.S. Non-Road EPA T2 Certified |
| C18 ACERT | 480 | 680 | 545 | 60 | U.S. Non-Road EPA T2 Certified |
| C18 ACERT | 600 | 680 | 545 | 60 | U.S. Non-Road EPA T2 Certified |
| C27 ACERT | 480 | 906 | 725 | 60 | U.S. Non-Road EPA T2 Certified |
| C32 ACERT | 380 | 1000 | 800 | 50 | U.S. Non-Road EPA T2 Certified |
| C32 ACERT | 600 | 1137 | 910 | 60 | U.S. Non-Road EPA T2 Certified |

## Specifications

**Bore x Stroke** ..... **C15 ACERT** 137.2 x 171.5 mm (5.4 x 6.75 in)
**C18 ACERT** 145 x 183 mm (5.7 x 7.2 in)
**C27 ACERT** 137.7 x 152.4 mm (5.42 x 6 in)
**C32 ACERT** 145 x 165 mm (5.7 x 6.5 in)

**Displacement** ..... **C15 ACERT** 15.2 liters (927.6 $in^3$)
**C18 ACERT** 18.1 liters (1105 $in^3$)
**C27 ACERT** 27 liters (1648 $in^3$)
**C32 ACERT** 32 liters (1953 $in^3$)

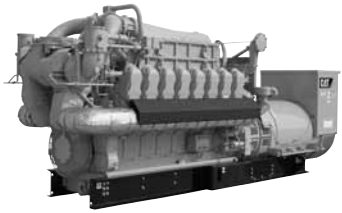
## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **C15 ACERT** | 2804 mm/110.4 in | 1504 mm/59.2 in | 2192 mm/86.3 in | 6645 kg/14,650 lbs |
| **C18 ACERT** | 3632 mm/143 in | 1524 mm/60 in | 2108 mm/83 in | 5655 kg/12,469 lbs |
| **C27 ACERT** | 4572 mm/180 in | 2286 mm/90 in | 2286 mm/90 in | 8046 kg/17,738 lbs |
| **C32 ACERT** | 4572 mm/180 in | 2286 mm/90 in | 2286 mm/90 in | 8046 kg/17,738 lbs |

**Please see spec sheet for more information:**

C15 ACERT ..... LEHW0010
C18 ACERT ..... LEHW6319, LEHW7449, LEHW7450, LEHW7451

For diesel engine rating definitions please see pages 6-7.



## Production Ratings

| Model | ekW | kVA | rpm | Hz |
|---|---|---|---|---|
| G3406 | 190 | 238 | 1800 | 60 |
| G3406 | 160 | 200 | 1500 | 50 |
| G3412 | 280 | 350 | 1500 | 50 |
| G3412 | 360 | 450 | 1800 | 60 |
| G3412 | 305 | 380 | 1500 | 50 |
| G3412 | 450 | 563 | 1800 | 60 |
| G3412C LE | 360 | 450 | 1500 | 50 |
| G3412C LE | 375 | 469 | 1800 | 60 |
| G3508 | 370 | — | 1200 | 60 |
| G3512 | 585 | — | 1200 | 60 |
| G3516B | — | 1356 | 1500 | 50 |
| G3516B | 1300 | — | 1800 | 60 |
| G3516 | 975 | — | 1500 | 50 |
| G3516 | 770 | — | 1200 | 60 |
| G3520 | — | 2458 | 1500 | 50 |
| G3520 | 2055 | — | 1800 | 60 |

## Specifications

**Bore x Stroke** .....
**G3406** 137 x 152 mm (5.4 x 6 in)
**G3408** 137 x 152 mm (5.4 x 6 in)
**G3412** 137 x 152 mm (5.4 x 6 in)
**G3508** 170 x 190 mm (6.7 x 7.5 in)
**G3512** 170 x 190 mm (6.7 x 7.5 in)
**G3516** 170 x 190 mm (6.7 x 7.5 in)
**G3520C** 170 x 190 mm (6.7 x 7.5 in)

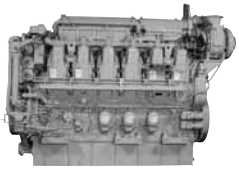
**Displacement** .....
**G3406** 14 liters (893 $in^3$)
**G3408** 18 liters (1099 $in^3$)
**G3412** 27 liters (1649 $in^3$)
**G3508** 34.5 liters (2105 $in^3$)
**G3512** 51.8 liters (3158 $in^3$)
**G3516** 69 liters (4211 $in^3$)
**G3520C** 86 liters (5263 $in^3$)

**Please see spec sheet for more information:**

G3406..... LEHW3888, LEHW3891
G3412..... LEHW3889, LEHW3890

*Other ratings available, see dealer for details.

For gas engine rating definitions please see pages 6-7.



## Production Ratings

| Model | Rating | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|---|
| C280-6 | Continuous | 1730 | 2320 | 900 | EPA T2, IMO II |
| C280-6 | Continuous | 1850 | 2481 | 1000 | EPA T2, IMO II |
| C280-6 | Prime + 10% | 1900 | 2548 | 900 | EPA T2, IMO II |
| C280-6 | Prime + 10% | 2030 | 2722 | 1000 | EPA T2, IMO II |
| C280-8 | Continuous | 2300 | 3084 | 900 | EPA T2, IMO II |
| C280-8 | Continuous | 2460 | 3299 | 1000 | EPA T2, IMO II |
| C280-8 | Prime + 10% | 2530 | 3393 | 900 | EPA T2, IMO II |
| C280-8 | Prime + 10% | 2710 | 3634 | 1000 | EPA T2, IMO II |
| C280-12 | Continuous | 3460 | 4640 | 900 | EPA T2, IMO II |
| C280-12 | Continuous | 3700 | 4962 | 1000 | EPA T2, IMO II |
| C280-12 | Prime + 10% | 3800 | 5096 | 900 | EPA T2, IMO II |
| C280-12 | Prime + 10% | 4060 | 5444 | 1000 | EPA T2, IMO II |
| C280-16 | Continuous | 4600 | 6169 | 900 | EPA T2, IMO II |
| C280-16 | Continuous | 4920 | 6598 | 1000 | EPA T2, IMO II |
| C280-16 | Prime + 10% | 5060 | 6785 | 900 | EPA T2, IMO II |
| C280-16 | Prime + 10% | 5420 | 7268 | 1000 | EPA T2, IMO II |

## Specifications

**Bore x Stroke** ..... 280 x 300 mm (11.0 x 11.8 in)

**Displacement** ..... **C280-6** 111 liters (6773 $in^3$)
**C280-8** 148 liters (9031 $in^3$)
**C280-12** 222 liters (13,546 $in^3$)
**C280-16** 296 liters (18,062 $in^3$)

## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **C280-6** | 3691 mm/145 in | 1722 mm/68 in | 2733 mm/108 in | 15 680 kg/34,496 lbs |
| **C280-8** | 4511 mm/178 in | 1722 mm/68 in | 2641 mm/104 in | 19 000 kg/41,800 lbs |
| **C280-12** | 4087 mm/161 in | 1741 mm/69 in | 3550 mm/140 in | 25 980 kg/57,276 lbs |
| **C280-16** | 5007 mm/197 in | 1704 mm/67 in | 3171 mm/125 in | 28 500 kg/62,832 lbs |

For diesel engine rating definitions please see pages 6-7.



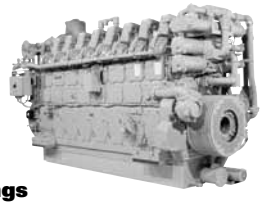
## Production Ratings

| Model | ekW | kVA | rpm | Hz |
|---|---|---|---|---|
| 3406C | 275 | — | 1800 | 60 |
| 3406C | — | 320 | 1500 | 50 |
| 3406C | — | 365 | 1500 | 50 |
| 3406C | — | 400 | 1500 | 50 |
| 3412 | 591 | — | 1800 | 60 |
| 3412 | — | 810 | 1500 | 50 |
| 3512 | — | 1275 | 1500 | 50 |
| 3512B | — | 1500 | 1500 | 50 |
| 3512B HD | — | 1700 | 1500 | 50 |
| 3512 | 1000 | — | 1800 | 60 |
| 3512B | 1275 | — | 1800 | 60 |
| 3512B | 1360 | — | 1800 | 60 |
| 3516 | — | 1825 | 1500 | 50 |
| 3516B | — | 1750 | 1500 | 50 |
| 3516B | — | 2000 | 1500 | 50 |
| 3516B HD | — | 2275 | 1500 | 50 |
| 3516 | 1600 | — | 1800 | 60 |
| 3516B | 1825 | — | 1800 | 60 |
| 3516C | 1825 | — | 1800 | 60 |

## Specifications

| | | |
|---|---|---|
| **Bore x Stroke** ..... | **3406C** | 137 x 152 mm (5.4 x 6 in) |
| | **3412** | 137 x 152 mm (5.4 x 6 in) |
| | **3512** | 170 x 190 mm (6.7 x 7.5 in) |
| | **3512B** | 170 x 215 mm (6.7 x 8.5 in) |
| | **3512B HD** | 170 x 215 mm (6.7 x 8.5 in) |
| | **3516** | 170 x 190 mm (6.7 x 7.5 in) |
| | **3516B** | 170 x 190 mm (6.7 x 7.5 in) |
| | **3516B HD** | 170 x 190 mm (6.7 x 7.5 in) |
| **Displacement** ..... | **3406C** | 14 liters (893 $in^3$) |
| | **3412** | 27 liters (1649 $in^3$) |
| | **3512** | 51.8 liters (3158 $in^3$) |
| | **3512B** | 51.8 liters (3158 $in^3$) |
| | **3512B HD** | 58.6 liters (3575 $in^3$) |
| | **3516** | 69 liters (4211 $in^3$) |
| | **3516B** | 69 liters (4211 $in^3$) |
| | **3516B HD** | 78 liters (4470 $in^3$) |

For diesel engine rating definitions please see pages 6-7.



## Production Ratings

| Rating Tier | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| **3606** | | | | |
| Continuous | 1490 | 1998 | 750 | IMO TI* |
| Continuous | 1560 | 2092 | 800 | IMO TI* |
| Continuous | 1730 | 2320 | 900 | IMO TI* |
| Continuous | 1850 | 2481 | 1000 | IMO TI* |
| **3608** | | | | |
| Continuous | 2080 | 2787 | 800 | IMO TI* |
| Continuous | 2300 | 3084 | 900 | IMO TI* |
| Continuous | 2460 | 3299 | 1000 | IMO TI* |
| **3612** | | | | |
| Continuous | 2980 | 3996 | 750 | IMO TI* |
| Continuous | 3120 | 4184 | 800 | IMO TI* |
| Continuous | 3460 | 4640 | 900 | IMO TI* |
| Continuous | 3700 | 4962 | 1000 | IMO TI* |
| **3616** | | | | |
| Continuous | 4160 | 5579 | 800 | IMO TI* |
| Continuous | 4600 | 6269 | 900 | IMO TI* |
| Continuous | 4920 | 6598 | 1000 | IMO TI* |

## Specifications

**Bore x Stroke** . . . . . **3606** 280 x 300 mm (11 x 11.8 in)
**3608** 280 x 300 mm (11 x 11.8 in)
**3612** 280 x 300 mm (11 x 11.8 in)
**3616** 280 x 300 mm (11 x 11.8 in)

**Displacement** . . . . . **3606** 111 liters (6773 $in^3$)
**3608** 148 liters (9031 $in^3$)
**3612** 222 liters (13,546 $in^3$)
**3616** 296 liters (18,062 $in^3$)

## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **3606** | 4276 mm/168 in | 1722 mm/68 in | 2733 mm/108 in | 15 680 kg/34,500 lbs |
| **3608** | 5561 mm/219 in | 1722 mm/68 in | 2733 mm/108 in | 19 000 kg/41,800 lbs |
| **3612** | 4861 mm/191 in | 1741 mm/69 in | 3550 mm/140 in | 25 140 kg/55,300 lbs |
| **3616** | 5482 mm/216 in | 1741 mm/69 in | 3550 mm/140 in | 29 950 kg/65,900 lbs |

**Please see spec sheet for more information:**

3600 ..... LEHW0629

*IMO TI certified with 32° C cooling water at 25° C ambient sea water temperature.

For diesel engine rating definitions please see pages 6-7.



## Offshore Generator Sets

| Model | bkW | bhp | rpm |
|---|---|---|---|
| 6 M 20 C | 1020/1140 | 1390/1550 | 900/1000 |
| 8 M 20 C | 1360/1520 | 1850/2070 | 900/1000 |
| 9 M 20 C | 1530/1710 | 2080/2325 | 900/1000 |
| 6 M 25 C | 2000 | 2720 | 750 |
| 8 M 25 C | 2660 | 3620 | 750 |
| 9 M 25 C | 3000 | 4080 | 750 |

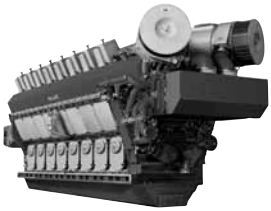
## Specifications

| Bore x Stroke | | Displacement | |
|---|---|---|---|
| **6 M 20 C** | 200 x 300 mm (7.87 x 11.8 in) | **6 M 20 C** | 57 liters (3451 $in^3$) |
| **8 M 20 C** | 200 x 300 mm (7.87 x 11.8 in) | **8 M 20 C** | 75 liters (4601 $in^3$) |
| **9 M 20 C** | 200 x 300 mm (7.87 x 11.8 in) | **9 M 20 C** | 85 liters (5176 $in^3$) |
| **6 M 25 C** | 255 x 400 mm (9.61 x 15.7 in) | **6 M 25 C** | 122 liters (7480 $in^3$) |
| **8 M 25 C** | 255 x 400 mm (9.61 x 15.7 in) | **8 M 25 C** | 163 liters (9973 $in^3$) |
| **9 M 25 C** | 255 x 400 mm (9.61 x 15.7 in) | **9 M 25 C** | 184 liters (11,219 $in^3$) |

## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **6 M 20 C** | 4049 mm/159 in | 1596 mm/62.8 in | 3040 mm/119.7 in | 10.7 tons/23,589 lbs |
| **8 M 20 C** | 5561 mm/219 in | 1722 mm/68 in | 2733 mm/108 in | 14 tons/30,865 lbs |
| **9 M 20 C** | 4861 mm/191 in | 1741 mm/69 in | 3550 mm/140 in | 15 tons/33,069 lbs |
| **6 M 25 C** | 5482 mm/216 in | 1741 mm/69 in | 3550 mm/140 in | 21 tons/46,296 lbs |
| **8 M 25 C** | 4276 mm/168 in | 1722 mm/68 in | 2733 mm/108 in | 28 tons/61,728 lbs |
| **9 M 25 C** | 5561 mm/219 in | 1722 mm/68 in | 2733 mm/108 in | 29.6 tons/65,256 lbs |

For diesel engine rating definitions please see pages 6-7.



## Offshore Generator Sets

| Model | bkW | bhp | rpm | Emissions |
|---|---|---|---|---|
| 6 M 32 C | 3000 | 4080 | 600 | |
| 8 M 32 C | 4000 | 5440 | 600 | |
| 9 M 32 C | 4500 | 6120 | 600 | IMO TII |
| 12 M 32 C | 6000 | 8060 | 750 | IMO TII |
| 16 M 32 C | 8000 | 10,880 | 750 | IMO TII |

## Specifications

| Bore x Stroke | | Displacement | |
|---|---|---|---|
| **6 M 32 C** | 320 x 480 mm (12.6 x 18.9 in) | **6 M 32 C** | 232 liters (14,158 $in^3$) |
| **8 M 32 C** | 320 x 480 mm (12.6 x 18.9 in) | **8 M 32 C** | 309 liters (18,856 $in^3$) |
| **9 M 32 C** | 320 x 480 mm (12.6 x 18.9 in) | **9 M 32 C** | 347 liters (21,175 $in^3$) |
| **12 M 32 C** | 320 x 460 mm (12.6 x 18.1 in) | **12 M 32 C** | 405 liters (24,715 $in^3$) |
| **16 M 32 C** | 320 x 460 mm (12.6 x 18.1 in) | **16 M 32 C** | 541 liters (33,014 $in^3$) |

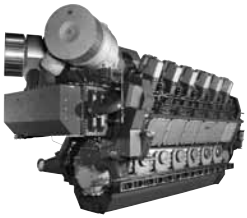
## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **6 M 32 C** | 4861 mm/191 in | 1741 mm/69 in | 3550 mm/140 in | 37.5 tons/82,673 lbs |
| **8 M 32 C** | 5482 mm/216 in | 1741 mm/69 in | 3550 mm/140 in | 46.4 tons/102,295 lbs |
| **9 M 32 C** | 4276 mm/168 in | 1722 mm/68 in | 2733 mm/108 in | 49.4 tons/108,908 lbs |
| **12 M 32 C** | 5561 mm/219 in | 1722 mm/68 in | 2733 mm/108 in | 64.5 tons/142,195 lbs |
| **16 M 32 C** | 4861 mm/191 in | 1741 mm/69 in | 3550 mm/140 in | 81.6 tons/179,894 lbs |

**Please see spec sheet for more information:**

12 M 32 C..... LEHW0024 16 M 32 C .....LEHW0025

For diesel engine rating definitions please see pages 6-7.



## Offshore Generator Sets

| Model | bkW | bhp | rpm |
|---|---|---|---|
| 6 M 43 C | 6000 | 8160 | 500/514 |
| 7 M 43 C | 7000 | 9520 | 500/514 |
| 8 M 43 C | 8000 | 10,880 | 500/514 |
| 9 M 43 C | 9000 | 12,240 | 500/514 |
| 12 M 43 C | 12 000 | 16,320 | 500/514 |
| 16 M 43 C | 16 000 | 21,760 | 500/514 |

## Specifications

| Bore x Stroke | | Displacement | |
|---|---|---|---|
| **6 M 43 C** | 430 x 610 mm (17 x 24 in) | **6 M 43 C** | 531 liters (32,404 in$^3$) |
| **7 M 43 C** | 430 x 610 mm (17 x 24 in) | **7 M 43 C** | 620 liters (37,820 in$^3$) |
| **8 M 43 C** | 430 x 610 mm (17 x 24 in) | **8 M 43 C** | 709 liters (43,266 in$^3$) |
| **9 M 43 C** | 430 x 610 mm (17 x 24 in) | **9 M 43 C** | 797 liters (48,636 in$^3$) |
| **12 M 43 C** | 430 x 610 mm (17 x 24 in) | **12 M 43 C** | 1063 liters (62,868 in$^3$) |
| **16 M 43 C** | 430 x 610 mm (17 x 24 in) | **16 M 43 C** | 1417 liters (86,471 in$^3$) |

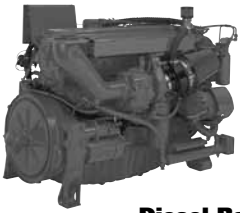
## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **6 M 43 C** | 5482 mm/216 in | 1741 mm/69 in | 3550 mm/140 in | 93 tons/205,030 lbs |
| **7 M 43 C** | 4276 mm/168 in | 1722 mm/68 in | 2733 mm/108 in | 106 tons/233,685 lbs |
| **8 M 43 C** | 5561 mm/219 in | 1722 mm/68 in | 2733 mm/108 in | 114 tons/251,327 lbs |
| **9 M 43 C** | 4276 mm/168 in | 1722 mm/68 in | 2733 mm/108 in | 126 tons/277,783 lbs |
| **12 M 43 C** | 5561 mm/219 in | 1722 mm/68 in | 2733 mm/108 in | 162 tons/357,149 lbs |
| **16 M 43 C** | 4861 mm/191 in | 1741 mm/69 in | 3550 mm/140 in | 215 kg/473,994 lbs |

**Please see spec sheet for more information:**

12 M 32 C..... LEHW0024 16 M 32 C .....LEHW0025

For diesel engine rating definitions please see pages 6-7.



## Diesel Ratings

| Model | bkW | bhp | rpm |
|---|---|---|---|
| 3406 | 218 | 292 | 1750 |
| 3406 | 275 | 370 | 1750 |
| 3406 | 313 | 420 | 1750 |
| 3406 | 343 | 460 | 1750 |
| 3406 | 280 | 375 | 1900 |
| 3406 | 317 | 425 | 1900 |
| 3406 | 343 | 460 | 1900 |
| 3406 | 246 | 330 | 2100 |
| 3406 | 280 | 375 | 2100 |
| 3406 | 321 | 430 | 2100 |
| 3406 | 359 | 482 | 2100 |
| 3412 | 476 | 638 | 1750 |
| 3412 | 551 | 739 | 1900 |
| 3412 | 551 | 739 | 2100 |

## Diesel Ratings

| Model | bkW | bhp | rpm |
|---|---|---|---|
| C18 ACERT | 641 | 700 | 1500 |
| C18 ACERT | 447 | 600 | 1750 |
| C18 ACERT | 641 | 700 | 1750 |
| C18 ACERT | 597 | 800 | 1750 |
| C18 ACERT | 447 | 600 | 1900 |
| C18 ACERT | 641 | 700 | 1900 |
| C18 ACERT | 597 | 800 | 1900 |
| C18 ACERT | 447 | 600 | 2150 |
| C18 ACERT | 641 | 700 | 2150 |
| C18 ACERT | 597 | 800 | 2150 |
| 3508 | 709 | 950 | 1460 |
| 3508 | 794 | 1065 | 1750 |
| 3512 | 1067 | 1430 | 1460 |
| 3512 | 1193 | 1600 | 1750 |
| 3516 | 1417 | 1900 | 1460 |
| 3516 | 1480 | 1985 | 1750 |

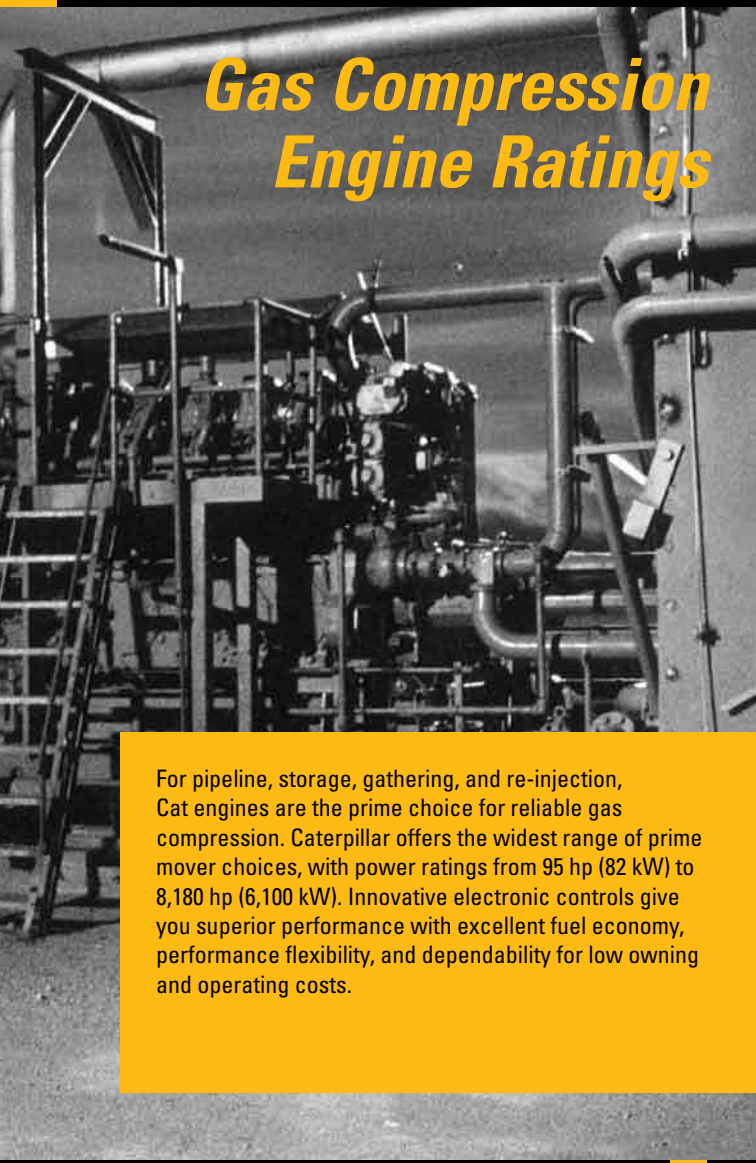
## Specifications

| | | |
|---|---|---|
| **Bore x Stroke** ..... | **3406** | 137 x 165 mm (5.4 x 6.5 in) |
| | **3412** | 137 x 152 mm (5.4 x 6 in) |
| | **C18 ACERT** | 145 x 183 mm (5.7 x 7.2 in) |
| | **3508** | 170 x 190 mm (6.7 x 7.5 in) |
| | **3512** | 170 x 190 mm (6.7 x 7.5 in) |
| | **3516** | 170 x 190 mm (6.7 x 7.5 in) |
| **Displacement** ..... | **3406** | 14.6 liters (893 $in^3$) |
| | **3412** | 27 liters (1649 $in^3$) |
| | **C18 ACERT** | 18.1 liters (1104.5 $in^3$) |
| | **3508** | 34.5 liters (2105 $in^3$) |
| | **3512** | 51.8 liters (3158 $in^3$) |
| | **3516** | 69 liters (4210 $in^3$) |

## Dimensions & Weights

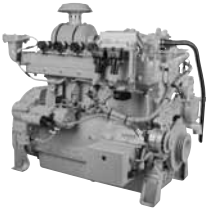
| | L | W | H | Wt |
|---|---|---|---|---|
| **3406** | 1938 mm/76.3 in | 1176 mm/46.3 in | 1310 mm/51.6 in | 588 kg/3947 lbs |
| **3412** | 2062 mm/81.2 in | 1346 mm/53 in | 1412 mm/55.6 in | 2579 kg/5686 lbs |
| **C18 ACERT** | 1554 mm/61.2 in | 1069 mm/42.1 in | 1379 mm/54.3 in | 1767 kg/3897 lbs |
| **3508** | 2350 mm/92.5 in | 1744 mm/68.7 in | 1903 mm/74.9 in | 5355 kg/11,806 lbs |
| **3512** | 2890 mm/113.8 in | 1905 mm/74.9 in | 1742 mm/68.6 in | 6350 kg/14,000 lbs |
| **3516** | 2891 mm/146.9 in | 1744 mm/68.7 in | 1903 mm/74.9 in | 8073 kg/17,800 lbs |

For diesel engine rating definitions please see pages 6-7.



# Gas Compression Engine Ratings

For pipeline, storage, gathering, and re-injection, Cat engines are the prime choice for reliable gas compression. Caterpillar offers the widest range of prime mover choices, with power ratings from 95 hp (82 kW) to 8,180 hp (6,100 kW). Innovative electronic controls give you superior performance with excellent fuel economy, performance flexibility, and dependability for low owning and operating costs.



**Gas Ratings – All ratings available in 0.5% $O_2$ or 2% $O_2$ set points**

| Model | Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|---|
| G3304 NA[1] | Continuous | 71 | 95 | 1800 | NSPS Site Compliant Capable | With Customer Provided AFRC & Aftertreatment |
| G3304B NA | Continuous | 71 | 95 | 1800 | NSPS Site Compliant Capable | With Caterpillar Provided AFRC & Aftertreatment |
| G3306 NA[1] | Continuous | 108 | 145 | 1800 | NSPS Site Compliant Capable | With Customer Provided AFRC & Aftertreatment |
| G3306 T | Continuous | 112 | 150 | 1800 | NSPS Site Compliant Capable | With Customer Provided AFRC & Aftertreatment |
| G3306 TA[1] | Continuous | 151 | 203 | 1800 | NSPS Site Compliant Capable | With Customer Provided AFRC & Aftertreatment |
| G3306 TAA[1] | Continuous | 157 | 211 | 1800 | NSPS Site Compliant Capable | With Customer Provided AFRC & Aftertreatment |
| G3306 TA[1] | Continuous | 164 | 220 | 1800 | NSPS Site Compliant Capable | With Customer Provided AFRC & Aftertreatment |
| G3306B NA | Continuous | 108 | 145 | 1800 | NSPS Site Compliant Capable | With Caterpillar Provided AFRC & Aftertreatment |
| G3306B TA | Continuous | 153 | 205 | 1800 | NSPS Site Compliant Capable | With Caterpillar Provided AFRC & Aftertreatment |
| G3306B TAA | Continuous | 157 | 211 | 1800 | NSPS Site Compliant Capable | With Caterpillar Provided AFRC & Aftertreatment |

[1] 54°C/130°F Water to Aftercooler

Ratings listed are for 25°C (77°F) ambient temperature, 500′ altitude, and pipeline quality gas.

## Specifications

**Bore x Stroke** . . . . . 121 x 152 mm (4.75 x 6.0 in)
**Displacement** . . . . . **3304 NA** 7 liters (425 $in^3$)
**3306 TA** 10.5 liters (638 $in^3$)

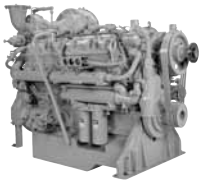
## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **G3304 NA** | 1158 mm/46 in | 744 mm/29 in | 1170 mm/46 in | 757 kg/1670 lbs |
| **G3306 TA** | 1505 mm/59 in | 1208 mm/48 in | 978 mm/39 in | 948 kg/2090 lbs |

**Please see spec sheet for more information:**

G3304 (0.5% $O_2$)..... LEHW0018
G3304..... LEHW0019
G3306 (0.5% $O_2$)..... LEHW0026
G3306 ..... LEHW0027

For gas engine rating definitions please see pages 6-7.



## Gas Ratings

| Model | Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|---|
| G3406 NA | Continuous | 160 | 215 | 1800 | NSPS Site Compliant Capable | With Customer Supplied AFRC & Aftertreatment 0.5% $O_2$ or 2% $O_2$ Set Points |
| G3406 TA[1] | Continuous | 206 | 276 | 1800 | NSPS Site Compliant Capable | With Customer Supplied AFRC & Aftertreatment 0.5% $O_2$ Set Point |
| G3406 TA[1] | Continuous | 242 | 325 | 1800 | Export Only | 2% $O_2$ Emission Rating |
| G3408 NA | Continuous | 190 | 255 | 1800 | NSPS Site Compliant Capable | With Customer Supplied AFRC & Aftertreatment 0.5% $O_2$ or 2% $O_2$ Set Points |
| G3408 TA[1] | Continuous | 249 | 332 | 1500 | NSPS Site Compliant Capable | With Customer Supplied AFRC & Aftertreatment 0.5% $O_2$ Set Point |
| G3408 TA[1] | Continuous | 298 | 400 | 1800 | Export Only | 2% $O_2$ Emission Rating |
| G3408C LE[1] | Continuous | 317 | 425 | 1800 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment |
| G3412 TA[1] | Continuous | 373 | 500 | 1500 | NSPS Site Compliant Capable | With Customer Supplied AFRC & Aftertreatment 0.5% $O_2$ Set Points |
| G3412 TA | Continuous | 448 | 600 | 1800 | Export Only | 2% $O_2$ Set Point |
| G3412C LE[1] | Continuous | 475 | 637 | 1800 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment |

[1] 54°C/1330°F Water to Aftercooler

**G3400 Gas Compression continued on the next page.**

**G3400 Gas Compression continued from previous page.**

## Specifications

**Bore x Stroke** ..... 137 x 152 mm (5.4 x 6.0 in)
**Displacement** ..... **G3406** 14 liters (893 $in^3$)
**G3408** 18 liters (1099 $in^3$)
**G3412** 27 liters (1649 $in^3$)

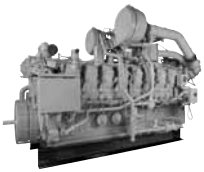
## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **G3406 TA** | 1934 mm/76 in | 1270 mm/50 in | 1433 mm/56 in | 1362 kg/3000 lbs |
| **G3408 TA** | 1738 mm/68 in | 1312 mm/52 in | 1542 mm/61 in | 1680 kg/3700 lbs |
| **G3408C LE** | 1753 mm/69 in | 1575 mm/62 in | 1753 mm/69 in | 2245 kg/4950 lbs |
| **G3412 TA** | 2087 mm/82 in | 1224 mm/48 in | 1542 mm/61 in | 2143 kg/4720 lbs |
| **G3412C LE** | 2442 mm/96 in | 1598 mm/63 in | 1960 mm/77 in | 2141 kg/4720 lbs |

**Please see spec sheet for more information:**

G3406..... LEHW0029
G3408..... LEHW0030
G3408C LE..... LEHW0031
G3412 ..... LEHW0032
G3412C LE ..... LEHW0033

For gas engine rating definitions please see pages 6-7.



## Gas Ratings

| Model | Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|---|
| G3508 TA[1] | Continuous | 391 | 524 | 1200 | NSPS Site Compliant Capable | With Customer Supplied AFRC & Aftertreatment 0.5% $O_2$ Set Point |
| G3508 LE | Continuous | 500 | 670 | 1400 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment |
| G3508B LE[2,3] | Continuous | 515 | 690 | 1400 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment 0.5 & 1 g/bhp-hr NOx NTE |
| G3512 TA[1] | Continuous | 589 | 790 | 1200 | NSPS Site Compliant Capable | With Customer Supplied AFRC & Aftertreatment 0.5% $O_2$ Set Point |
| G3512 LE | Continuous | 642 | 860 | 1200 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment 2 g/bhp-hr NOx NTE |
| G3512 LE | Continuous | 749 | 1005 | 1400 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment 2 g/bhp-hr NOx NTE |
| G3512B LE | Continuous | 772 | 1035 | 1400 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment 0.5 & 1 g/bhp-hr NOx NTE |
| G3516 NA | Continuous | 492 | 660 | 1200 | NSPS Site Compliant Capable | With Customer Supplied AFRC & Aftertreatment 0.5% $O_2$ Set Point |
| G3516 TA[1] | Continuous | 783 | 1050 | 1200 | NSPS Site Compliant Capable | With Customer Supplied AFRC & Aftertreatment 0.5% $O_2$ Set Point |
| G3516 LE | Continuous | 858 | 1150 | 1200 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment 2 g/bhp-hr NOx NTE |
| G3516 LE | Continuous | 1000 | 1340 | 1400 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment 2 g/bhp-hr NOx NTE |
| G3516B LE[2,3] | Continuous | 1029 | 1380 | 1400 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment 0.5 & 1 g/bhp-hr NOx NTE |
| G3520B LE[2,3] | Continuous | 1104 | 1480 | 1200 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment 0.5 & 1 g/bhp-hr NOx NTE |
| G3520B LE[2,3] | Continuous | 1286 | 1725 | 1400 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment 0.5 & 1 g/bhp-hr NOx NTE |

[1] 54°C/130°F Water to Aftercooler
[2] 250 mg/N•m$^3$ dry NOx NTE emissions (corrected to 5% $O_2$)
[3] 500 mg/N•m$^3$ dry NOx NTE emissions (corrected to 5% $O_2$)

Ratings listed are for 25°C (77°F) ambient temperature, 500' altitude, and pipeline quality gas.

**G3500 Gas Compression continued on the next page.**

**G3500 Gas Compression continued from previous page.**

## Specifications

**Bore x Stroke** ..... 170 x 190 mm (6.7 x 7.5 in)
**Displacement** ..... **G3508** 34.5 liters (2105 $in^3$)
**G3512** 51.8 liters (3158 $in^3$)
**G3516** 69 liters (4211 $in^3$)
**G3520B** 86.7 liters (5288 $in^3$)

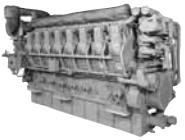
## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **3508 LE** | 2245 mm/88 in | 1747 mm/69 in | 1907 mm/75 in | 5425 kg/11,950 lbs |
| **3508B LE** | 2522 mm/99 in | 2014 mm/79 in | 2131 mm/84 in | 3941 kg/8688 lbs |
| **3512 LE** | 2786 mm/109 in | 1790 mm/71 in | 1863 mm/73 in | 6676 kg/14,720 lbs |
| **3516 LE** | 3339 mm/131 in | 1820 mm/72 in | 1863 mm/73 in | 8015 kg/17,670 lbs |
| **3516B LE** | 3400 mm/133 in | 1844 mm/73 in | 2286 mm/90 in | 8401 kg/18,520 lbs |
| **3520B LE** | 4180 mm/164 in | 1755 mm/69 in | 2385 mm/94 in | 11,168 kg/24,622 lbs |

**Please see spec sheet for more information:**

G3508 TA ..... LEHW0034
G3508B LE ..... LEHW0072
G3512 TA ..... LEHW0035
G3512B LE ..... LEHW0095
G3516 TA ..... LEHW0036
G3516B LE ..... LEHW0037
G3520B LE (1200 rpm) ..... LEHW0017
G3520B LE (1400 rpm) ..... LEHW0038

For gas engine rating definitions please see pages 6-7.



## Gas Ratings

| Model | Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|---|
| G3606 LE[3,4,5] | Continuous | 1324 | 1775 | 1000 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment 0.5 & 0.7 g/bhp-hr NOx NTE |
| G3606 LE[2,5] | Continuous | 1368 | 1835 | 1000 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment |
| G3606 LE[1,5] | Continuous | 1413 | 1895 | 1000 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment |
| G3608 LE[3,4,5] | Continuous | 1767 | 2370 | 1000 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment 0.5 & 0.7 g/bhp-hr NOx NTE |
| G3608 LE[2,5] | Continuous | 1823 | 2445 | 1000 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment |
| G3608 LE[1,5] | Continuous | 1879 | 2520 | 1000 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment |
| G3612 LE[3,4,5] | Continuous | 2647 | 3550 | 1000 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment 0.5 & 0.7 g/bhp-hr NOx NTE |
| G3612 LE[2,5] | Continuous | 2733 | 3665 | 1000 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment |
| G3612 LE[1,5] | Continuous | 2822 | 3785 | 1000 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment |
| G3616 LE[3,4,5] | Continuous | 3531 | 2735 | 1000 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment 0.5 & 0.7 g/bhp-hr NOx NTE |
| G3616 LE[2,5] | Continuous | 3647 | 4890 | 1000 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment |
| G3616 LE[1,5] | Continuous | 3762 | 5045 | 1000 | NSPS Site Compliant Capable | With Customer Supplied Aftertreatment |

[1] 32°C Aftercooler Water & 88°C Jacket Water
[2] 43°C Aftercooler Water & 88°C Jacket Water
[3] 250 mg/N•m$^3$ dry NOx NTE emissions (corrected to 5% $O_2$)
[3] 350 mg/N•m$^3$ dry NOx NTE emissions (corrected to 5% $O_2$)

Ratings listed are for 25°C (77°F) ambient temperature, 500' altitude, and pipeline quality gas.

## Specifications

**Bore x Stroke** .... 300 x 300 mm (11.8 x 11.8 in)
**Displacement** .... **G3606 LE** 127.2 liters (7762 in$^3$)..... **G3612 LE** 254 liters (15,528 in$^3$)
**G3608 LE** 169.6 liters (10,350 in$^3$).... **G3616 LE** 10.5 liters (638 in$^3$)

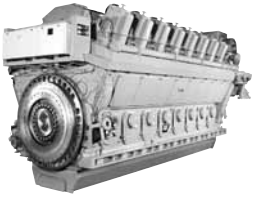
## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **G3606 LE** | 4638 mm/183 in | 1744 mm/69 in | 2921 mm/115 in | 15 640 kg/34,560 lbs |
| **G3608 LE** | 5465 mm/215 in | 1868 mm/74 in | 2922 mm/115 in | 19 000 kg/41,888 lbs |
| **G3612 LE** | 4735 mm/186 in | 2380 mm/94 in | 3220 mm/127 in | 25 084 kg/55,300 lbs |
| **G3616 LE** | 5661 mm/223 in | 2380 mm/94 in | 3208 mm/126 in | 29 892 kg/65,900 lbs |

**Please see spec sheet for more information:**

G3606 LE..... LEHW0039
G3608 LE..... LEHW0040
G3612 LE.....LEHW0041
G3616 LE.....LEHW0042

For gas engine rating definitions please see pages 6-7.



## Gas Ratings

| Model | Rating Tier | bkW | bhp | rpm | Emissions | Notes |
|---|---|---|---|---|---|---|
| G 12 CM 34 | A | 4575 | 6135 | 750 | NSPS Site Compliant Capable | 0.5 & 0.7 g/bhp-hr NOx NTE |
| G 16 CM 34 | A | 6100 | 8180 | 750 | NSPS Site Compliant Capable | 0.5 & 0.7 g/bhp-hr NOx NTE |

## Specifications

**Bore x Stroke** ..... 340 x 420 mm (13.4 x 16.5 in)
**Displacement** ..... **G 12 CM 34** 458 liters (27,947 in$^3$)
**G 16 CM 34** 610 liters (37,222 in$^3$)

## Dimensions & Weights

| | L | W | H | Wt |
|---|---|---|---|---|
| **G 12 CM 34** | 7055 mm/278 in | 2992 mm/118 in | 3875 mm/153 in | 65 000 kg/143,300 lbs |
| **G 16 CM 34** | 8405 mm/331 in | 2992 mm/118 in | 3875 mm/153 in | 82 000 kg/181,000 lbs |

**Please see spec sheet for more information:**

G 12 CM 34..... LEHW8997
G 16 CM 34..... LEHW0001

For gas engine rating definitions please see pages 6-7.

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Materials and specifications are subject to change without notice. Rating ranges listed include the lowest and highest available for a specific engine or family of engines. Load factor and time at rated load and speed will determine the best engine/rating match.


LECW2462-14 (8-10)


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