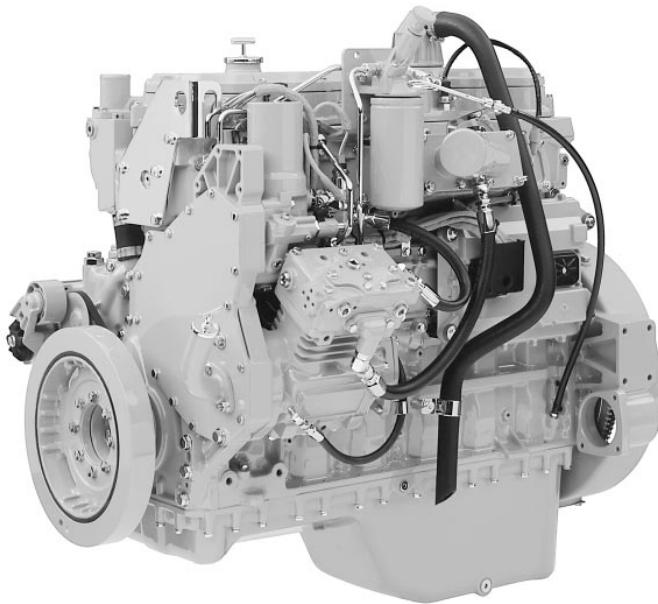




Diesel Truck Engine

3126B 175-330 hp

420-860 lb-ft @ 1440 rpm Peak Torque



Shown with
Optional Equipment

CATERPILLAR® ENGINE SPECIFICATIONS

6-Cylinder, 4-Stroke-Cycle Diesel

Bore — in (mm) 4.33 (110)

Stroke — in (mm) 5.0 (127)

Displacement — cu in (L) 439 (7.2)

Aspiration ATAAC¹

Compression Ratio

175-300 hp 16:1

Rotation (from flywheel end) Counterclockwise

Cooling System² — gal (L) 3.5 (13.2)

Lube Oil System (refill) — gal (L) 4.75 (18.0)³

Weight, Net Dry (approx) — lb (kg)

Including Flywheel 1295 (588)

¹ Air-to-Air AfterCooling

² Engine Only. Capacity will vary with radiator size and use of cab heater.

³ Optional 28L (7.5 gal) oil pan also available in some chassis.

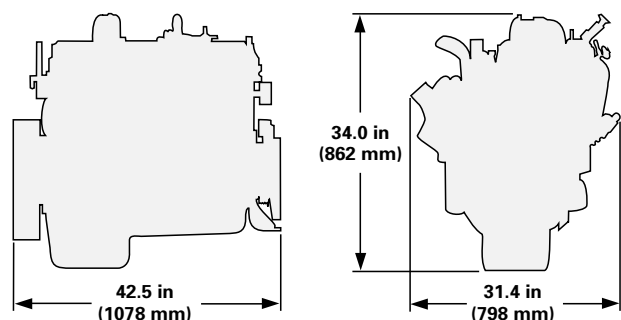
STANDARD EQUIPMENT

- Air inlet manifold heater
- Cooling: belt-driven jacket water pump, oil cooler
- Crankcase breather
- Electronic Control Module (ECM)
- Electronic Data Link, SAE J1922, J1939, ATA J1587
- HEUI Fuel System (Hydraulically actuated, Electronically controlled Unit Injector)
- Flywheel and SAE No. 1 or SAE No. 2 housing
- Fuel: spin-on secondary filter, transfer pump, hand priming pump
- Governor: full-range, electronically controlled
- Lifting eyes
- Lubrication: gear-driven pump, front or rear sump, full flow spin-on filter, left-hand side oil level gauge (dipstick)
- Turbocharger
- Vibration damper

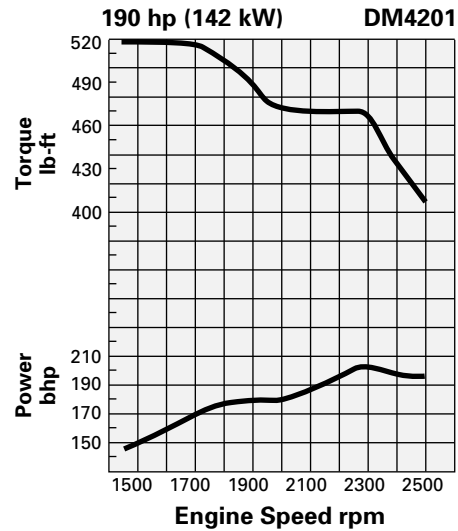
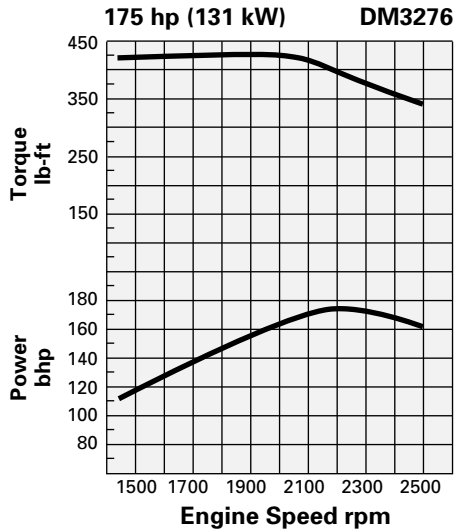
ACCESSORY EQUIPMENT

- Air compressor: gear driven, 0.37 m³/min (13.2 cfm) or 0.46 m³/min(16.5 cfm)
- Air conditioner compressor mounting
- Air inlet elbow
- Auxiliary brake compatible (exhaust)
- Ether starting aid/adaptation
- Fan drive mounting bracket
- Fan drive
- Front engine support
- Front PTO adapter
- Jacket water heater
- Rear power take-off
- Starting motor: 12 V or 24 V
- Turbocharger compressor outlet elbow
- Hydraulic pump drive, SAE A

DIMENSIONS



PERFORMANCE CURVES

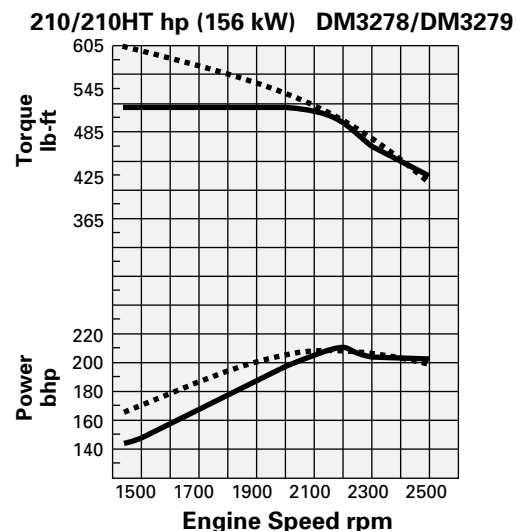
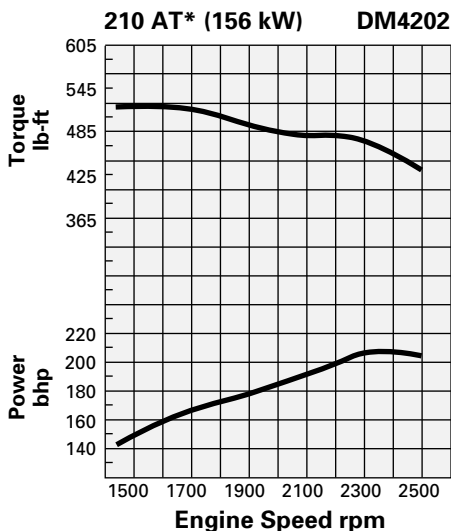


PERFORMANCE DATA

Max hp (kW) 175 (131)
 Advertised hp (kW) 175 (131)
 Operating Range (rpm) 1440-2500 (1060)
 Maximum Engine rpm 2640
 Governed Speed rpm 2500
 Peak Torque — lb-ft (N•m)..... 420 (569)
 Peak Torque rpm 1440
 Torque Rise (%) (Gov. rpm)..... 25
 Altitude Capability — ft (m)..... 10 000 (3050)

Max hp (kW) 207 (154)
 Advertised hp (kW) 190 (142)
 Operating Range (rpm) 1440-2500 (1060)
 Maximum Engine rpm 2640
 Governed Speed rpm 2500
 Peak Torque — lb-ft (N•m)..... 520 (705)
 Peak Torque rpm 1440
 Torque Rise (%) (Gov. rpm)..... 27
 Altitude Capability — ft (m)..... 10 000 (3050)

PERFORMANCE CURVES



* Approved for use with the AT 545 Transmission

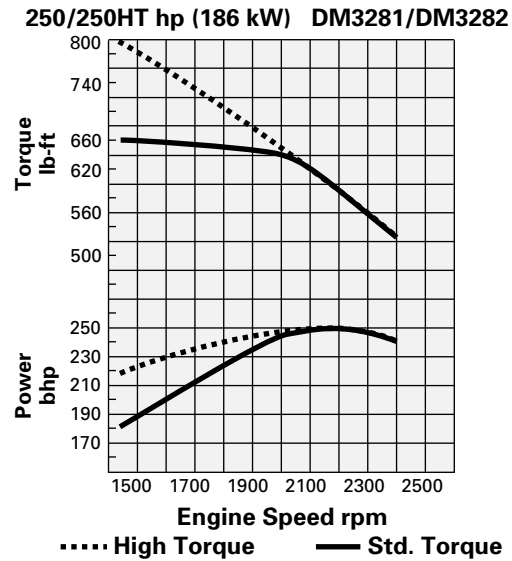
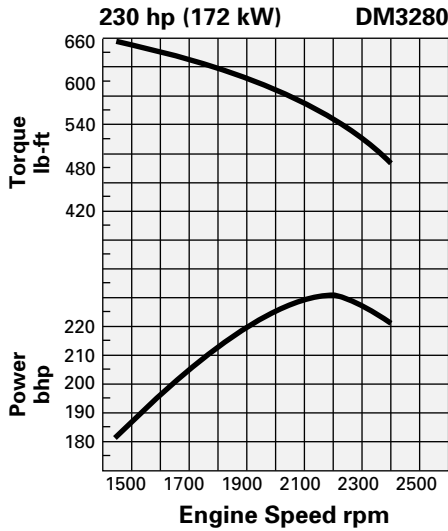
..... High Torque — Std. Torque

PERFORMANCE DATA

Max hp (kW) 216 (161)
 Advertised hp (kW) 210 (156)
 Operating Range (rpm) 1440-2500 (1060)
 Maximum Engine rpm 2640
 Governed Speed rpm 2500
 Peak Torque — lb-ft (N•m)..... 520 (705)
 Peak Torque rpm 1440
 Torque Rise (%) (Gov. rpm)..... 21
 Altitude Capability — ft (m)..... 10 000 (3050)

Max hp (kW) 210 (156)
 Advertised hp (kW) 210 (156)
 Operating Range (rpm) 1440-2500 (1060)
 Maximum Engine rpm 2640
 Governed Speed rpm 2500
 Peak Torque — lb-ft (N•m) 520 (705)/605 (820)
 Peak Torque rpm 1440
 Torque Rise (%) (Gov. rpm) 23/45
 Altitude Capability — ft (m)..... 10 000 (3050)

PERFORMANCE CURVES

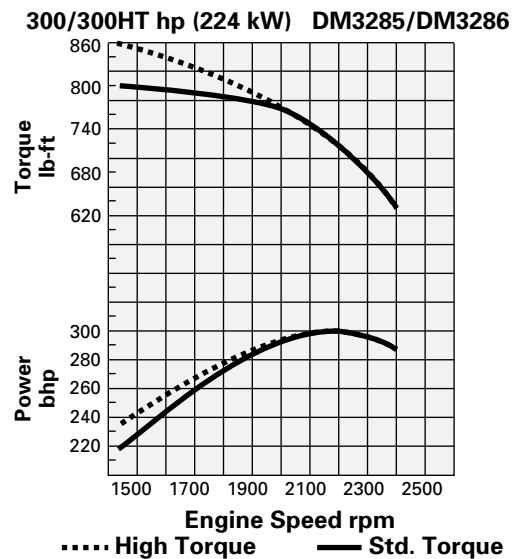
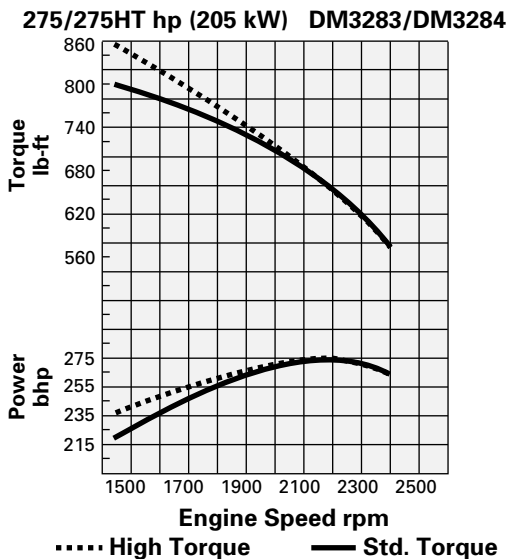


PERFORMANCE DATA

Max hp (kW) 230 (172)
 Advertised hp (kW) 230 (172)
 Operating Range (rpm) 1440-2400 (960)
 Maximum Engine rpm 2640
 Governed Speed rpm 2400
 Peak Torque — lb-ft (N•m)..... 660 (895)
 Peak Torque rpm 1440
 Torque Rise (%) (Gov. rpm) 37
 Altitude Capability — ft (m)..... 10 000 (3050)

Max hp (kW) 250 (186)
 Advertised hp (kW) 250 (186)
 Operating Range (rpm) 1440-2400 (960)
 Maximum Engine rpm 2640
 Governed Speed rpm 2400
 Peak Torque — lb-ft (N•m) 660 (895)/800 (1085)
 Peak Torque rpm 1440
 Torque Rise (%) (Gov. rpm) 26/52
 Altitude Capability — ft (m)..... 10 000 (3050)

PERFORMANCE CURVES

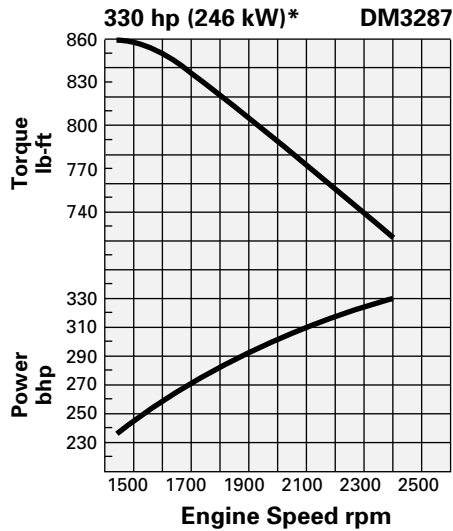


PERFORMANCE DATA

Max hp (kW) 275 (205)
 Advertised hp (kW) 275 (205)
 Operating Range (rpm) 1440-2400 (960)
 Maximum Engine rpm 2640
 Governed Speed rpm 2400
 Peak Torque — lb-ft (N•m) 800 (1085)/860 (1166)
 Peak Torque rpm 1440
 Torque Rise (%) (Gov. rpm) 39/49
 Altitude Capability — ft (m)..... 10 000 (3050)

Max hp (kW) 300 (224)
 Advertised hp (kW) 300 (224)
 Operating Range (rpm) 1440-2400 (960)
 Maximum Engine rpm 2640
 Governed Speed rpm 2400
 Peak Torque — lb-ft (N•m) 800 (1085)/860 (1166)
 Peak Torque rpm 1440
 Torque Rise (%) (Gov. rpm) 27/37
 Altitude Capability — ft (m)..... 10 000 (3050)

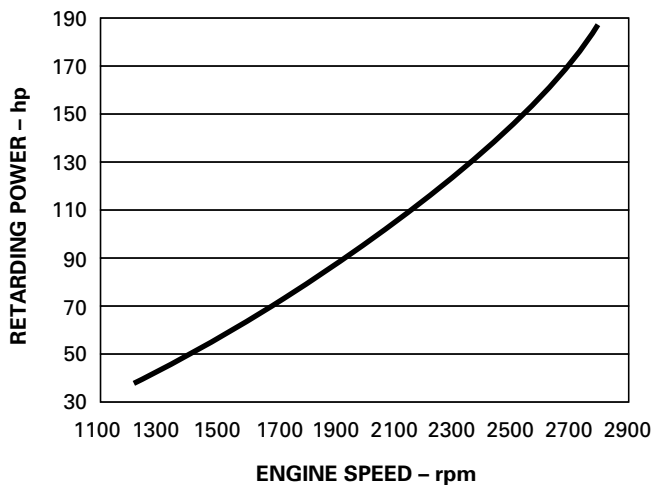
PERFORMANCE CURVES



* For RV and Fire Truck only

PERFORMANCE DATA

Max hp (kW)	.....	330 (246)
Advertised hp (kW)	.....	330 (246)
Operating Range (rpm)	.....	1440-2400 (960)
Maximum Engine rpm	.....	2640
Governed Speed rpm	.....	2400
Peak Torque — lb-ft (N•m)	.....	860 (1166)
Peak Torque rpm	.....	1440
Torque Rise (%) (Gov. rpm)	.....	19
Altitude Capability — ft (m)	.....	10 000 (3050)



Exhaust Brake Performance

Three operational modes can be programmed:
Coast, Latch, or Manual

ELECTRONIC FEATURES

Electronic self-diagnostics
Compatible with Caterpillar electronic technician (ET), electronic control analyzer programmer (ECAP), and MPSI Pro-Link service tools

Cold weather startup strategy and electronic idle control functions

ECM storage of operational, maintenance, and diagnostic data

J1939 compatible — ABS, Allison WT

Customer selectable, re-programmable operational parameters:

- Engine Monitoring System — off, warning, derate, or shutdown
- Cruise control with exclusive SoftCruise
- Vehicle speed [mph (km/h)] limiting and protection
- Idle shutdown timer & override
- 2-speed fast idle
- Maintenance monitor [miles (km) or hours]
- Cooling fan control
- Customer password protection
- Exhaust brake operational modes
- Theft deterrent
- Adjustable low idle rpm
- OEM parameter lockout

Programmable Power Take-Off (PTO) functions:

- Adjustable speed control [mph (km/h)] of vehicle while in PTO mode
- Adjustable maximum engine rpm speed
- Adjustable minimum engine rpm speed
- Limit engine torque to driven equipment
- Adjustable ramp rate up or down between PTO set speed(s)
- Adjustable rpm “bump” intervals
- Selectable PTO configuration for “in cab” or station of remote operation

GEARING CONSIDERATIONS

The 3126B is designed and built to take full advantage of a “gear fast, run slow” strategy. Unlike mechanically governed engines of the past, the fully electronic 3126B need not be gear-bound to limit maximum vehicle speed — this should be done using Vehicle Speed Limiting (VSL) and Protection.

For the best balance of performance and fuel economy, spec axle ratios and tire sizes to obtain: **2000 rpm @ 60 mph** (97 km/h) subject to the following: Maximum cruise speed of **65 mph** (105 km/h) **or below**. Maximum recommended engine speed at cruise — 2400 rpm. Minimum recommended engine speed at a cruise speed of 55 mph (89 km/hr) — **1800 rpm**

Depending on the application, the absolute minimum startability in first gear should be 6 percent, preferably in excess of 10 percent. On/off highway severe service applications will require considerably greater startability. Minimum gradeability should be 1.5 percent (1.8 percent recommended) at peak torque in top gear, and 0.5 percent at cruise rpm.

To further optimize the matching of your truck to the performance characteristics of the engine, a computerized spec'ing tool called Caterpillar Truck Engine Pro (TEP) is offered by your Caterpillar dealer. It calculates the effects of various driveline variables on engine operation such as transmissions, axles, and tires. This lets you see the results before you finalize your truck specs.

RATING DEFINITIONS AND CONDITIONS

Performance is based on SAE J1349 standard conditions of 29.61 in. Hg (100 kPa) and 77° F (25° C).

The curves shown are for a standard engine without fan, but equipped with air compressor and fuel, lubricating oil, and jacket water pumps.