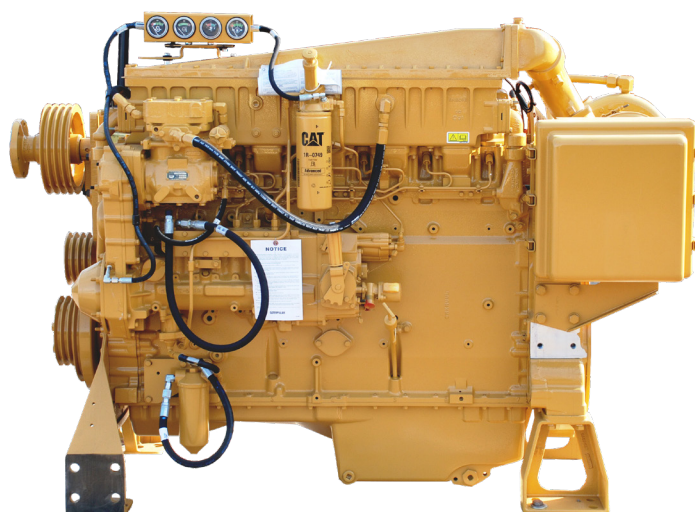


# Caterpillar 3406c Dita Petroleum Diesel Engine

## Specification

<b>3406C DITA</b>	365bKw
<b>Petroleum</b>	(490bhp)
<b>Engine</b>	2100 rpm
<b>In-Line, 6 Cylinder, 4-Stroke, Cycle Diesel</b>	
<b>Displacement</b>	14.6L
<b>Aspiration</b>	Turbocharged-Aftercooled
<b>Bore</b> – in (mm)	5.4 (137)
<b>Stroke</b> – in (mm)	5.98 (152)
<b>Low idle</b> – rpm	600
<b>Rotation</b> (from flywheel end)	CCW
<b>Flywheel and flywheel housing</b>	SAE1
<b>Governor and protection</b>	Hydra mechanical
<b>Flywheel Teeth</b>	113
<b>Capacity for liquids (L):</b>	
Cooling system (engine only)	20.08
Lube oil (refill)	34.1
<b>Engine weight</b> , net dry (approx.) kg	1350



## Features

### Fuel efficiency

Fuel consumption optimised to match operating cycles of a wide range of equipment and applications. Consistent performance, variable-timed fuel injection, broad rpm turbo charger match installation while maintaining low operating costs.

### Reliable, quiet and durable power

Diesel tough components, precise balance and conservative speed for smooth operation and long engine life.

### Broad application range

High torque rise, big displacement, convenient installation, superior load acceptance, optimised ambient and altitude capabilities for operating and better performance for your money.

### Worldwide product support and parts availability

More than 2,200 dealer outlets, Caterpillar factory trained technicians service every aspect of your petroleum package with global reach.

## POWER SOLUTIONS FOR A CHANGING WORLD

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## Standard Equipment

### Air compressor – gear driven and mounted

12 cfm – Bendix Tu-Flo 501 Series.

### Crankcase breather

Complete with thread pipe connection.

### Cooling

Lube oil, with dual butterfly bonnet/connections, Thermostats and housing Engine fan drive.

### Filters, left side

Fuel, primary and standard.

### Air intake

Air cleaner, regular duty (Dry) – panel type c/w Service indicator and aftercooler.

### Control System

Governor – hydra mechanical governor control, vernier and positive lock.

### Exhaust System

Water cooled manifold outlet from turbo for client specification and connection to exhaust system.

### Filter, right side

Lube oil – remote mounted specification.

### Pump

- Fuel priming and transfer
- Centrifugal gear driven jacket water
- Rear sump oil pump.

### Oil level gauge (dipstick)

‘Positive lock’ gauge on left side.

### Turbocharger (Single)

Water cooled, rear mounted.

### Flywheel and flywheel housing

SAE No.1, Allison compatible.

### General

- Engine lifting eyes
- Flexible fuel lines
- Mechanical tachometer drive, single
- Rear sump oil pan
- Vibration damper.

### Instrumentation

- Standard Caterpillar instrument panel
- Engine oil pressure gauge
- Fuel pressure gauge
- Jacket water temperature gauge
- Mechanical hour meter.

### Protection devices

Air inlet shut off valve.

### Support

Front and rear.

### Documentation

- One copy of Caterpillar general arrangement
- One copy of Caterpillar engine wiring diagram
- EEC declaration of incorporation for engine
- Two copies of Caterpillar standard parts book
- Two copies of Caterpillar standard operation and maintenance manual.

## Optional Equipment

ATEX compliant packaging services to include the following:

- Charging system
- Control system - various options available
- Exhaust gas cooling kit
- Fuel system
- Power take offs - auxiliary drives, enclosed clutches, hydraulic pumps
- Protection devices - various options available to include:
  - Exhaust temperature
  - Overspeed
  - Water temperature
- Radiator
- Spark arrestor silencers
- Skid base – engine or power-pack format
- Starter motor, air or electric format

**All options can be supplied loose or mounted**

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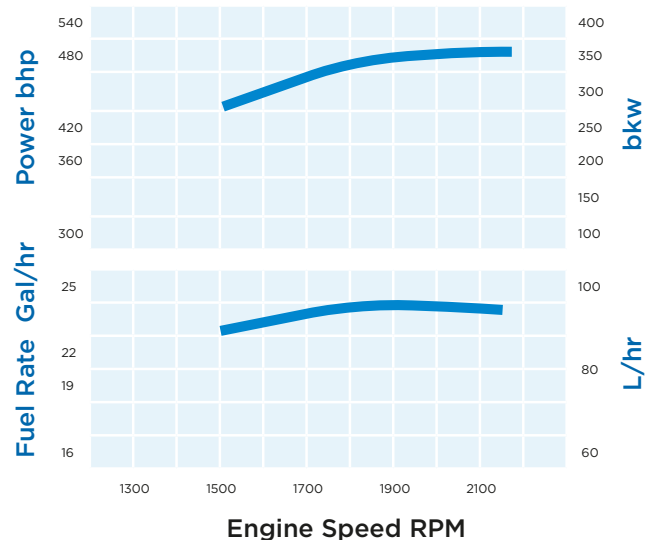
## Performance

### Turbocharged-Aftercooled

Rating Level	D		
Rated rpm	2100		
Engine Power @ rpm	490 bhp (366 bkW)		
rpm	2100	1800	1500
bhp	490	484	449
lb/bhp-hr	.377	.356	.352
gal/hr	26.4	24.6	22.4
bkW	366	361	251
g/bkW-hr	229	217	214
L/hr	100	93	85

## Rating Curves

### D Rating



## Dimensions



This engine has provisions to be equipped with an air intake flame arrester, an air actuated inlet air shutoff, an exhaust spark arrester, an exhaust gas cooler and other required devices and equipment to meet ATEX 94/9/EC, machinery safety directive, so that the installation can be certified for Zone II Applications.

## Industrial Ratings

IND-D ratings are for service where rated power is required by period overloads. The maximum horsepower and speed capability of the engine can be utilised for a maximum of 30 uninterrupted minutes followed by one hour at intermittent.

### Operating limits are:

1. Time at full load not to exceed 10% of the duty cycle or 30 min max
2. Load factor limited to 50%
3. Full load operation to a maximum of 30 minutes followed by one hour at intermittent
4. Typical operating hours per year is 1500

### Examples of an IND-D industrial application are:

1. Offshore cranes
2. LN2 Unit
3. Water well drills
4. Portable air compressors
5. Fire pump certification power (advertised power)

## Rating Definitions & Conditions

**Ratings** are based on SAE J1349 standard conditions. These ratings also apply at ISO3046/1, DIN6271, and BS5514 standard conditions. Additional ratings are available for specific client requirements.

**Fuel rates** are based on ISO3046 and on fuel oil of 35° API (60° F or 16° C) gravity having an LHV of 18,390 Btu/lb (42,780 kJ/kg) when used at 85° F (29° C) and weighing 7.001 lbs/U.S. gal. (838.9 g/L).