CATERPILLAR®



Engine pictured with Optional Equipment







Underground 3054 Mining T&TA Equipment 103-122 bhp /78-91 bkW 2200-2400 rpm 2200-2400 rpm

CATERPILLAR® ENGINE SPECIFICATIONS

In-Line 4 Cylinder, Four-Stroke-Cycle Diesel
Bore — in (mm) 3.94 (100)
Stroke — in (mm) 5.00 (127)
Displacement — cu in (liter) 243 (4.0)
Combustion System Direct injection
Rotation (from flywheel end) Counterclockwise
Capacity for Liquids — U.S. gal (L)
Cooling System (engine only)
DIT 2.9 (11.0)
DITA 3.0 (11.4)
Lube Oil System (refill) typical 3.5 (13.3)
Weight, Net Dry (approximate) — lb (kg)
Turbocharged (T) 614 (279)
Turbocharged-Aftercooled (TA) 627 (285)
Rated Engine Speed, Full Load
Intermittent — rpm 2400
Continuous — rpm 2200

BENEFITS

■ FUEL ECONOMY

Consistent performance and excellent fuel economy over entire operating range.

■ BROAD APPLICATION RANGE

Big displacement, more performance for your money, and convenient installation.

■ RELIABILITY AND DIESEL DURABILITY

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

■ HIGH PERFORMANCE

Horsepower and torque capabilities optimized. Substantial 20 percent torque rise.

■ CLEAN AND QUIET POWER

Cleaner and guieter, free from visible smoke throughout operational speed range.

■ EASY LOW-COST MAINTENANCE

Convenient positioning of service points on right-hand side for easy accessibility.

FEATURES

Options must be selected for the following features. See your Caterpillar dealer for a detailed description of options for each feature.

Adapter plate Alternator Balancer Belt-driven auxiliaries Cab heater connections Cold start aid

Coolant pump and thermostat housing

Coolant temperature gauge and sender

Engine mountings Exhaust manifolds Fan and extensions

Fan drive

Flywheel and starter ring

Flywheel housing Front end drives Fuel filter Fuel pre-filter Heater switch Induction manifolds

Lifting eyes

Lubricating oil fillers and breathers

Lubricating oil filter and cooler Lubricating oil pressure switch

Lubricating oil sump

Paint Radiator Rating

Starter motor

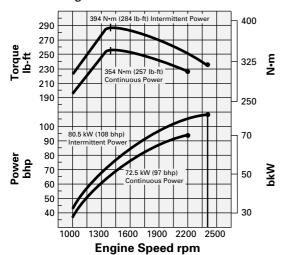
Stop and throttle controls Timing case and gear-driven

auxiliaries

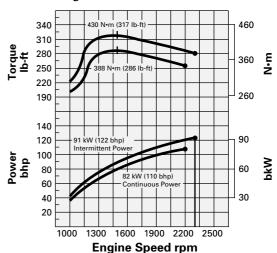
Turbocharger, manifolds

PERFORMANCE DATA

Turbocharged



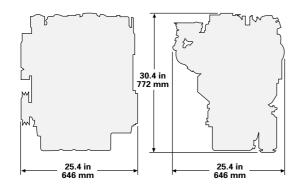
Turbocharged-Aftercooled



	MSHA CERTIFIED RATINGS										
		hp	kW	rpm	Vent Rate			Particulate Index			
	Aspiration				cfm	cum/min	cfm/hp	cfm	cum/min	cfm/hp	
	Т	108	81	2400	9000	255	83	9000	255	83	
	Т	103	78	2200	7500	213	73	9000	255	87	
	TA	122	91	2300	10 000	284	82	7500	213	61	

Emissions information: 3054T MSHA Cert. # 7E-B027-0 3054TA MSHA Cert. # 7E-B020-0

DIMENSIONS



RATING DEFINITIONS AND CONDITIONS

Intermittent is the horsepower and speed capability of the engine which can be used for about one hour, followed by an hour of operation at or below the continuous rating.

Continuous is the horsepower and speed capability of the engine which can be used without interruption or load cycling. Additional ratings are available for specific customer requirements.

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Ratings are based on SAE J1995 standard conditions of 29.61 in Hg (100 kPa) and 77° F (25° C). These ratings also apply at ISO3046/1, DIN6271 and BS5514 standard conditions of 29.61 in Hg (100 kPa), 81° F (27° C) and 30% relative humidity.

Fuel consumption is based on fuel oil having an LHV of 18 390 Btu/lb (42 780 kJ/kg) and weighing 7.001 lb/U.S. gal (838.9 g/liter). Power ratings are based on engine equipped with fuel, lube oil and jacket water pumps but without fan.