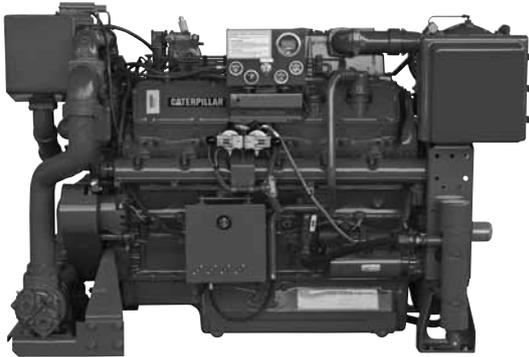




3412 Fire Pump

476-551 bkW/638-739 bhp
@ 1750-2100 rpm



Actual configuration may vary from displayed image

CAT® ENGINE SPECIFICATIONS

V-12, 4-Stroke-Cycle Diesel

Certifications.....	FM/UL/NFPA 20
Bore.....	137 mm (5.4 in)
Stroke.....	152 mm (6.0 in)
Displacement.....	27 L (1650 in ³)
Aspiration.....	Turbocharged-Aftercooled
Rotation (from flywheel end).....	Counterclockwise
Refill Capacity	
Cooling System.....	58 L (15.5 U.S. gal)
Lube Oil System.....	139 L (36.8 U.S. gal)
Oil Change Interval.....	19000 L of fuel/250 service hrs
Engine Weight, Net Dry (approximate).....	2730 kg (6018 lbs)
Flywheel and Flywheel Housing.....	SAE No. 0
Flywheel Teeth.....	136

FEATURES

- Available for global non-regulated areas
 - FM approved
 - UL listed — U.S. and Canada
 - Meets NFPA 20 requirements
- Proven reliability and durability
- Robust diesel strength design prolongs life and lowers owning and operating costs
- Market-leading power density
- Core engine components designed for reconditioning and reuse at overhaul

Testing

Every Cat® engine is full-load tested to ensure proper engine performance

World-class Product Support Offered Through Global Cat Dealer Network

- More than 2,200 dealer outlets
- Cat factory-trained dealer technicians service every aspect of your petroleum engine

- Cat parts and labor warranty
- Preventive maintenance agreements available for repair-before-failure options
- S•O•SSM program matches your oil and coolant samples against Caterpillar set standards to determine:
 - Internal engine component condition
 - Presence of unwanted fluids
 - Presence of combustion by-products
 - Site-specific oil change interval

Over 80 Years of Engine Manufacturing Experience

Ownership of these manufacturing processes enables Caterpillar to produce high quality, dependable products.

- Manufacturing of cast engine blocks, heads, cylinder liners, and flywheel housings
- Machining of critical components
- Complete engine assembly

Web Site

For all your petroleum power requirements, visit www.catoilandgasinfo.com.

STANDARD ENGINE EQUIPMENT

Air Inlet System

Air cleaner, regular-duty, dry, panel-type with service indicator (for watercooled manifold/turbo)

Charging System

Charging alternator 24V, 35A

Control System

Governor control, vernier
Governor, hydra-mechanical

Cooling System

Thermostats and housing
Jacket water pump, gear-driven, centrifugal, RH
Heat exchanger (installed)
Expansion tank

Exhaust System

Exhaust manifold
Exhaust elbow, dry 203 mm (8 in) on all T engines and TA with wet exhaust

Flywheels and Flywheel Housing

Flywheel — SAE No. 0
Flywheel housing — SAE No. 0
SAE standard rotation

Fuel System

Fuel filter, LH
Fuel transfer pump
Primary fuel filter
Fuel priming pump

Instrumentation

Instrument panel, LH
Engine oil pressure gauge
Fuel pressure gauge
Ammeter and water temperature gauges
Tachometer
Electric hour meter

Lube System

Crankcase breather
Oil cooler RH
Oil filler in valve cover and dipstick, RH
Oil filter, RH
Rear sump oil pan

Mounting System

Supports

Power Take-Off

Flywheel stub shaft

Protection System

Stop-start system, automatic (compatible with NFPA 20 requirements, energizable from either of two battery sources and capable of manual starter actuation)

Starting System

24V LH electric starting motor
Jacket water heater (6 kW, 240-480V)

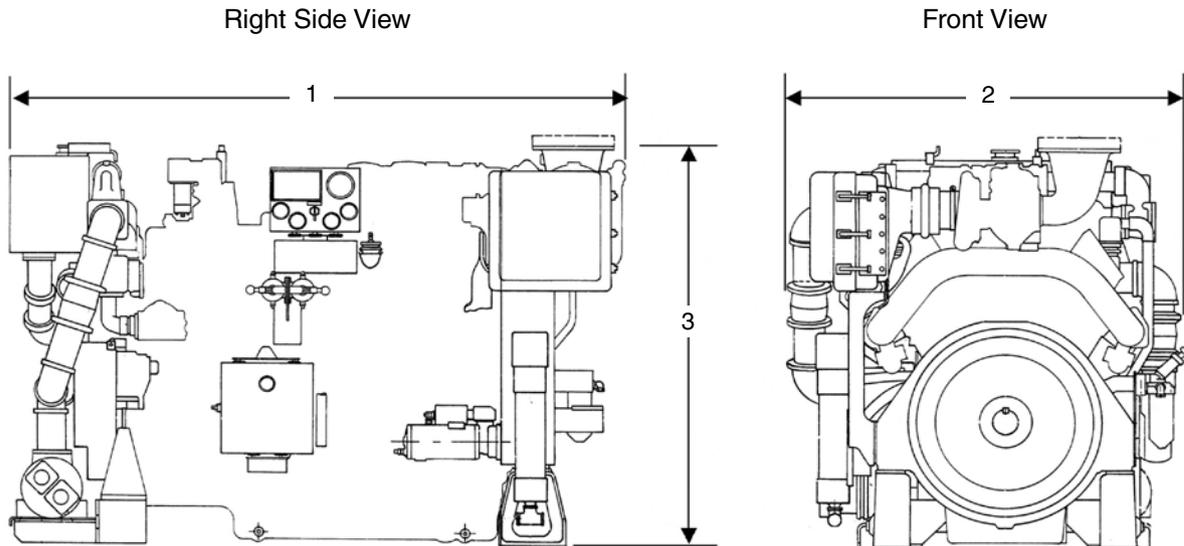
General

Paint, red
Vibration damper and guard
Lifting eyes
Literature



3412
Fire Pump
476-551 bkW/638-739 bhp
@ 1750-2100 rpm

DIMENSIONS



Engine Dimensions		
(1) Length	1980 mm	78.0 in
(2) Width	1300 mm	51.2 in
(3) Height	1285 mm	50.6 in
Weight — dry (approx.)	2730 kg	6018 lb

Note: For general dimensions only, not actual configuration. Do not use for installation design. See general dimension drawings for detail.

RATING DEFINITIONS AND CONDITIONS

Standby Fire Pump — Ratings represent the output which may be utilized to drive stationary fire pumps where the pumping equipment has been sized according to NFPA 20 standards. Engine rating is FM approved and UL listed (US and Canada).

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.

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