



BS EN ISO 9001:2000
Certificate No FM55900

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Equipment Category **3G Engine Pac**

JCB444 NA DIESEL MAX Engine

FlameTec

Integrated Flame / Explosion Protection System

Assessed to and In accordance with the **Essential Health & Safety Requirements** as per Annex IV and VII the European Directive: -



ATEX 95
Directive
94/9/EC

and specifically with the new European harmonised standard for CEN members
(National standards bodies) **EN1834-1: 2000**

Equipment Group II (Surface Industries), reciprocating internal combustion engines - Safety requirements for design and construction of engines for use in potentially explosive atmospheres.

for Potentially Explosive Atmospheres and Hazardous Areas applications

Zone 2, Gas Group IIA, Temp T3 (200°C).

Equipment Category 3G

Nett Standard Industrial Ratings (deduct additional 2.5% for high capacity fan power demand).

1500rpm:	42 kWm / 57 BHP continuous	47 kWm / 63 BHP intermittent.
1800rpm:	49 kWm / 66 BHP continuous	55 kWm / 73 BHP intermittent.
2000rpm:	52 kWm / 70 BHP continuous	58 kWm / 78 BHP intermittent.
2200rpm:	54 kWm / 73 BHP continuous	60 kWm / 81 BHP intermittent.

Standard engine performance measured according to ISO 14396 after 50 hours running. Ambient and altitude qualification advised on receipt of end user site information. Emission Certification – EPA T2, EU Stage 2.

JCB DIESEL MAX engine Model JCB444 NA, four stroke, **In-line 4 cylinder, 4.4. Litre** (365 cu in), **Bore 103 x 132mm stroke** (3.937 x 5.00 ins), 4 Valves per cylinder, Jacket water-cooled, Naturally aspirated specially fitted with jacket water-cooled exhaust gas manicooler, direct injection via high pressure lines to rotary fuel pump. SAE 3 flywheel housing and SAE 10/11.5 flywheel. **For Variable Speed Applications.**

Radiator to flywheel configuration, with **Pneumatic Start Motor and local push button electric pilot start control**. The FlameTec Flame Protection equipment incorporates **Automatic Electrical Shutoff System with Remote Stop, 12Vdc 50 Amp Charging Alternator with Key Ignition and Indicator, Maintenance Free 55Ahr Battery. Suitable for Rig Yellow Alert or Gas Detection Shut Down Signals and Auxiliary Power Output.** The exhaust gas *Manicooler is mounted direct to the engine exhaust manifold head and designed to limit all surface and exhaust gas stack temperatures to below 200° Deg C (392° F)* mounted to (R.H) of engine with mounted 316L exhaust Spark Arrestor. The engine is complete with fully fitted antistatic blower fan and drive belts, fan and belt guards together with a **Heavy Duty Radiator, Fully Soldered Dipped Core with Galvanised Fabrications, sized for 50°C** open ambient conditions. Complete with all cooling and control interconnections assembled, fabricated front and rear feet. Engine mounted gauges for coolant & exhaust temp', oil pressure, flameproof exhaust flame trap service indicator/back pressure gauge and digital rpm. Engine Pac complete with front and rear feet for four point mounting. (*Shipping Dry Weight: 700 kg Approx.*)

The Flame Protection / Explosion Protection system is also in accordance with the essential safety requirements of other recognised industry guidelines such as BP200, OCMA Mec 1 and EEMUA Publication 107 1992. The Engine Pac is designed specifically to comply with European equipment directive ATEX 95 (Directive 94/9/EC) and European CEN specification standard EN1834-1:2000, for group II diesel engines (for use in potentially explosive atmospheres), equipment Category 3G.

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