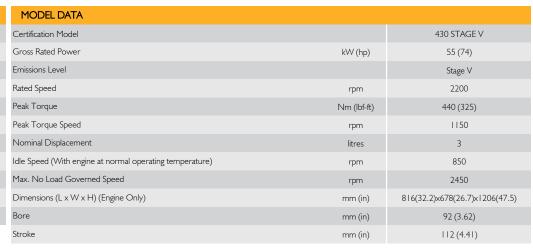
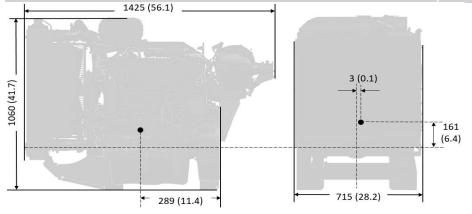


FUEL SYSTEM		
Injection System		Common Rail
Brake Specific Fuel Consumption (BSFC) @ Full Load Rated Speed (FLRS)	g/kW/hr	220.5
BSFC @ Peak Torque	g/kW/hr	217.7
Max. Fuel Inlet Temperature Measured Before Engine Mounted Fuel Filter.	°C (°F)	80 (176)
Max. Fuel System Back Pressure Measured at Engine Spill Line Outlet From Engine	kPa (PSI)	30 (4.35)
Max. Fuel Inlet Depression Measured at Inlet to Fuel Lift Pump	kPa (PSI)	25 (3.6)
Nominal Fuel Inlet Flow to Pump @ FLRS	litre/h (gal/h)	99 (21.8)
Heat Rejection to Returned Fuel	kW (hp)	0.65 (0.87)
Nominal Fuel Return Flow to Tank @FLRS	litre/h (gal/h)	84 (18.5)
Engine Fuel Pre Filter	micron	12
Engine Fuel Main Filter	micron	4





ENGINE LUBRICATION		
Engine Oil Pressure @ FLRS	kPa (PSI)	350-450 (50.7-65.3)
Max. Continuous Oil Temperature	°C (°f)	125 (257)
Max. Intermittent Oil Temperature	°C (°f)	135 (275)
Oil Capacity	litres (gals)	14.5 (3.8)
Oil SAE Classification (as supplied from factory)	SAE	10W30 or 5W40
Min. Required Oil Grade	API	API CJ4/ CK-4/ ACEA E6/ E9

POWER & TO	ORQUE													
Speed (r/min)	850	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
Power (kW)	26.7	36.7	44.3	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	55.5
Power (hp)	36	49	59	73	73	73	73	73	73	73	73	73	73	74
Torque (Nm)	300	350	385	433	400	371	346	325	306	289	273	260	247	241



JCB 430 DIESELMAX STAGE V 55 kW (74 hp) Rear Mount IPU Engine

ENGINE BREATHING			ENGINE COOLING		
Max. Rise Over Ambient at Inlet to Turbocharger	°C (°F)	10 (18)	Heat to Coolant @ Rated Condition, 25°c Ambient	kW (hp) thermal	49 (66)
Max. Induction Depression @ FLRS, Clean Filter	kPa (PSI)	3.5 (0.5)	Heat to Coolant @ Peak Torque, 25°c Ambient	kW (hp) thermal	37 (50)
Min. Induction Depression @ FLRS, Clean Filter	kPa (PSI)	2.5 (0.36)	Radiator Flow @ Rated Speed (cab heater off)	l/min (gal/h)	182 (2402)
Max. Induction Depression @ FLRS, Dirty Filter	kPa (PSI)	7 (1.02)	Radiator Flow @ Peak Torque (cab heater off)	l/min (gal/h)	93 (1227)
Air Requirement For Combustion / CAC Mass Flow @ FLRS, 25°c Ambient	kg/h (Lb/h)	305	Max. Coolant System Pressure Drop Between T.Stat Outlet and Coolant Inlet	kPa (PSI)	55 (7.98)
Air Requirement For Combustion / CAC Mass Flow @ Peak Torque, 25°c Ambient	kg/h (Lb/h)	245	Min. Coolant Fill Rate	l/min (gal/h)	10 (132)
Engine Compressor Outlet Temperature @ FLRS 25°C Ambient	°C (°F)	180 (356)	Max. Coolant Temperature	°C (°F)	110 (230)
Engine Compressor Outlet Temperature @ Peak Torque 25°C Ambient	°C (°F)	150 (302.5)	Max. Managed Coolant Temperature	°C (°F)	115 (239)
Max. Engine Compressor Outlet Temperature @ Limiting Ambient Temperature (LAT)	°C (°F)	171.3 (340.3)	Thermostat Opening Temperature	°C (°F)	96 (205)
Turbocharger Boost Pressure @ FLRS	kPa abs (PSI abs)	225 (32.6)	Coolant Temperature Warning Threshold	°C (°F)	113 (235)
Max. Turbocharger Boost Pressure	kPa abs (PSI abs)	265 (38.4)	Coolant Capacity Engine Only	litres (gals)	7.9 (2.1)
CAC Outlet Temperature @ FLRS, 25°C Ambient	°C (°F)	44-60 (111-140)			
CAC Outlet Temperature @ Peak Torque, 25°C Ambient	°C (°F)	53-60 (127-140)	MASS / GEOMETRY		
Heat Rejection to CAC @ FLRS 25°C Ambient	kW (hp) thermal	9 (12.1)	Direction of Rotation (viewed from crank nose)		Clockwise
Heat Rejection to CAC @ Peak Torque 25°C Ambient	kW (hp) thermal	-	Approximate Weight (Engine Only, Dry)	kg (lb)	475 (1047)
CAC System (comp. outlet to intake manifold inlet) Max. Pressure Drop @ FLRS	kPa (PSI)	5 (0.73)	Max. Bending Moment on Standard Flywheel Housing	Nm (lbf-ft)	1400 (1032)
CAC System (comp. outlet to intake manifold inlet) Min. Pressure Drop @ FLRS	kPa (PSI)	4 (0.58)	Mass Moment of Inertia	kgm² (lbft²)	-
			Centre of Gravity: x (distance from rear face of standard FH2 flywheel housing)	mm (in)	214 (8.4
EXHAUST & EGR			Centre of Gravity: y (distance to left of crank centreline, viewed from rear)	mm (in)	3 (0.1)
Exhaust Mass Flow @ FLRS	kg/h (Lb/h)	325 (716.5)	Centre of Gravity: z (height above centreline of crank)	mm (in)	187 (7.4)
Exhaust Mass Flow @ peak torque	kg/h (Lb/h)	241 (531.3)			
Max. Allowable Exhaust Back Pressure @ FLRS	kPa (PSI)	33 (4.79)	OTHER TEMPERATURE LIMITS		
Min. Allowable Exhaust Back Pressure @ FLRS	kPa (PSI)	4 (0.58)	Max. Engine ECU Case Temperature	°C (°F)	115 (239)
Turbocharger Turbine Outlet Gas Temperature @ FLRS	°C (°F)	700 (1292)	Max. Alternator Air Inlet Temperature	°C (°F)	110 (230)
Max. EGR Actuator Skin Temperature	°C (°F)	150 (302)			

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