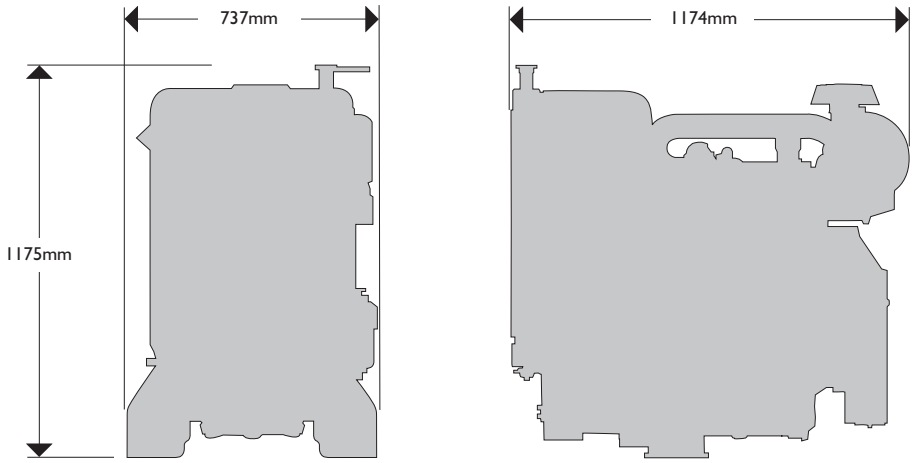
JCB DIESELMAX

TURBOCHARGED 60KVA & 80KVA PRIME @50HZ (66KVA & 88KVA STAND-BY)

G-DRIVE



PERFORMANCE DATA

		G-TC1 1500rpm, 50Hz		G-TC2 1500rpm, 50Hz	
		Prime	Standby	Prime	Standby
Calculated gen-set output:					
kWe (1)		48	53	64	70
kVA (2)		60	66	80	88
Engine power (kWm) at kVA rating (3)		56	62	74	81
Fuel consumption:					
110% load	l/h (g/kWh)	15.3 (210)		20.1 (207)	
100% load	l/h (g/kWh)	14.1 (215)		18.7 (208)	
75% load	l/h (g/kWh)	10.6 (230)		14.3 (216)	
50% load	l/h (g/kWh)	8.2 (245)		10.2 (232)	
Governing		ISO8528 G2 Class		ISO8528 G2 Class	

Notes: (1) kWe calculation assumes 90% alternator efficiency
(2) kVA calculation assumes 0.8 Power Factor
(3) measured according to ISO14396
Prime Power and Stand-By as defined by ISO8528-1

GENERAL TECHNICAL DATA

Technical Code		G-TC1 & G-TC2
Thermodynamic cycle		Diesel 4 stroke
Aspiration		TC
Arrangement		inline, 4 cyl.
Nominal bore x stroke	mm	103 x 132
Total displacement	cm^3	4399
Valves per cylinder		4
Cooling		Liquid
Direction of rotation (viewed from crank nose)		Clockwise
Compression ratio		17.5:1
Rotational mass moment of inertia excluding flywheel	kgm^2	0.2255
11.5" flywheel inertia	kgm^2	0.6986
Exhaust emissions certificate		EU 97/68/EC St.2
Minimum starting temperature without auxiliaries	°C	-10
Dry weight	kg	580

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COOLING SYSTEM

		G-TC1 & G-TC2
Coolant capacity – (inc. Cooling Pack)	Ltrs	16
Cooling liquid maximum temperature	°C	110
Coolant specification approved (JCB HP high performance)		ASTM D6210
Cooling air flow requirement and canopy depression		3.3m³/sec@13mmH_2O
Maximum working ambient temperature	°C	50
Fan type (standard)		22" Pusher

FUEL SYSTEM

Injection system		Rotary Mechanical
Fuel maximum intake restriction	mbar	150
Fuel maximum intake temperature	°C	50
Engine pre-filter	Micron	30
Engine main filter	Micron	5
Fuel maximum return restriction	mbar	250

LUBRICATING SYSTEM

Lubricating oil pressure	bar	4.6
Maximum oil temperature: Prime (Standby)	°C	125 (135)
Engine angularity limits (continuous operation): Maximum front up and front down	deg	35
Maximum right hand and left hand	deg	35
Total system capacity – including pipes, filters etc	Ltrs	14
Minimum recommended oil grade	API	CH4
Oil filter maintenance service schedule	Hours	500
Oil consumption	% of fuel consumed	0.1

EXHAUST SYSTEM

Maximum allowable back pressure	mbar	100
Exhaust temperature at Stand by rating	°C	542
Exhaust flow at Stand by rating	kg/h	367

ELECTRICAL SYSTEM

		G-TC1 & G-TC2
Starter and alternator	V	12, Earth return
Minimum cranking speed	rpm	100
Battery – minimum capacity recommended, not included		145Ah.
Battery – minimum cold cranking capacity recommended, not included		850CCA

AIR INDUCTION SYSTEM

Maximum allowable restriction with dirty air filter	mbar	80
Air requirement for combustion at Stand by rating	kg/h	367
Air filter type		2 stage paper element

STANDARD CONFIGURATION

Flywheel housing		SAE 3
Flywheel		SAE 11.5"
Intake manifold location		Left hand
Exhaust manifold/ turbocharger location		Right hand
Turbocharger		NA
Fan transmission ratios		1.25
Distance between fan – crankshaft centres	mm	356
Main Fuel Filter & Pre Filter		Included
Fuel pump		Mechanical with primer
Oil filter		1, left side
Oil sump		Pressed dual skin
Oil vapours blow-by circuit		Open
Oil heat exchanger		Left side
Oil filter position		Top and left side
Starter motor		12V, 4.2kW
Alternator		12V, 95A
Engine stop		Electric
Power Take Off light-duty	kW	6.8
Finish		Lacquered

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