



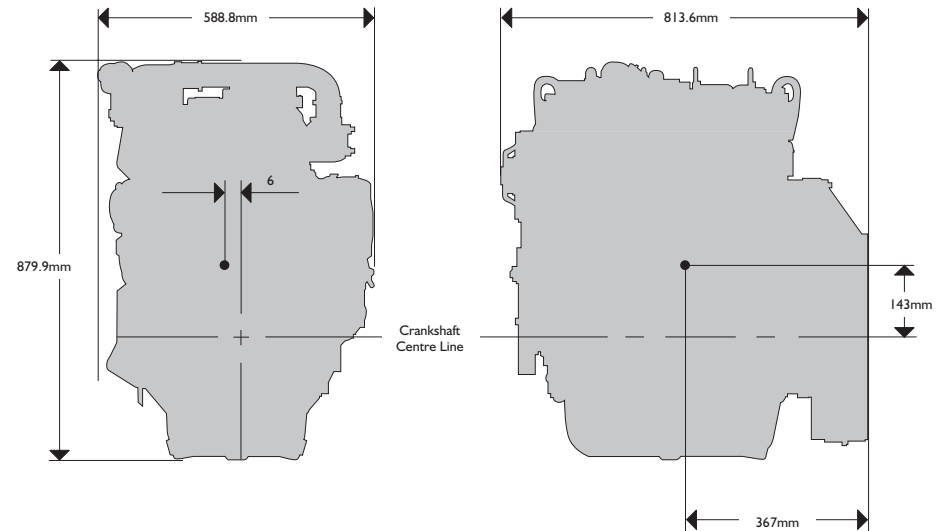
## PRELIMINARY MECHANICAL TIER 3 ENGINES

**JCB DIESELMAX** 63kW (85hp), 68kW (91hp), 74kW (100hp), 85kW (114hp)



### TURBO CHARGED 63kW & 68kW

### TURBO CHARGED AFTERCOOLED 74kW & 85kW



### GENERAL TECHNICAL DATA

Technical Code		TC 63kW & 68kW	TCA 74kW & 85kW
Thermodynamic cycle		Diesel 4 stroke	Diesel 4 stroke
Air intake		TC	TCA
Arrangement	litre	4.4	4.4
Nominal bore	mm	103	103
Stroke	mm	132	132
Total displacement	cm <sup>3</sup>	4399	4399
Valves per cylinder		4	4
Cooling		Liquid	Liquid
Engine pre filter	micron	30	30
Engine main filter	micron	5	5
Noise at maximum rating	dBA 1m	89	89
Minimum starting temperature without auxiliaries	°C	-12	-12
Dry weight	kg	477	477

### STANDARD CONFIGURATION

Technical Code		TC 63kW & 68kW	TCA 74kW & 85kW
Flywheel housing	SAE	3	3
Flywheel	SAE	11 ½	11 ½
Main fuel filter and pre filter		Included	Included
Fuel pump		Included	Included
Oil filter	qty	1 left side	1 left side
Oil sump		Pressed dual skin	Pressed dual skin
Oil heat exchanger		Left side	Left side
Oil filler position		Top and left hand side	Top and left hand side
Starter motor		12V, 4.2kW	12V, 4.2kW
Alternator		12V, 95A	12V, 95A
Engine stop		Electrical	Electrical
Power take off Heavy Duty (OEM Spec)		Standard: 60kW. RHS.	Standard: 60kW. RHS.
Power take off Light Duty		Standard: 10kW. LHS.	Standard: 10kW. LHS.
Power take off crank nose		Standard: 60kW	Standard: 60kW

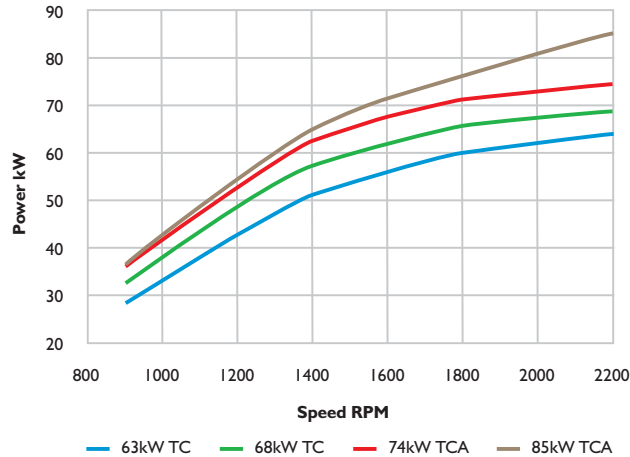


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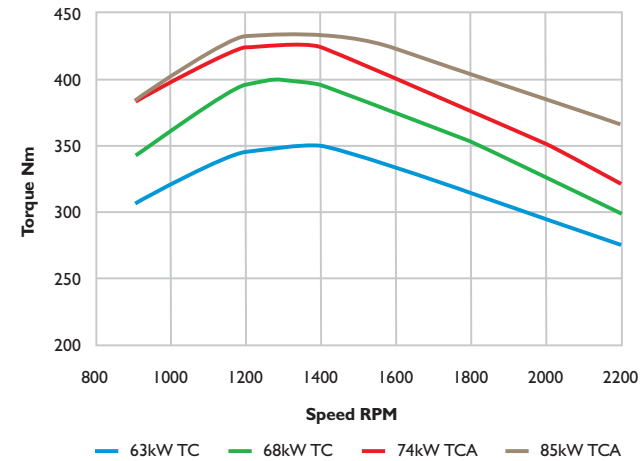
**JCB DIESELMAX** 63kW (85hp), 68kW (91hp), 74kW (100hp), 85kW (114hp)



POWER CURVE



TORQUE CURVE



GENERAL TECHNICAL DATA

Technical Code		TC (63kW)	TC (68kW)	TCA (74kW)	TCA (85kW)
Maximum rating* (gross intermittent)	kW	63	68	74	85
At speed	rpm	2200	2200	2200	2200
Maximum torque	Nm	350	400	425	440
At speed	rpm	1300	1300	1300	1300
Emission certification		EPA Tier 3/ EU Stage 3	EPA Tier 3/ EU Stage 3	EPA Tier 3/ EU Stage 3	EPA Tier 3/ EU Stage 3
Injection system		Rotary mech.	Rotary mech.	Rotary mech.	Rotary mech.
Engine angularity limits in continuous operation:					
Maximum front up and front down	degrees	35	35	35	35
Maximum right hand and left hand	degrees	35	35	35	35
Electrical system type (ETR – Energize to Run)		Neg. Ground ETR	Neg. Ground ETR	Neg. Ground ETR	Neg. Ground ETR
Water pump flow at rated speed	ltr/min	240	240	240	240

GENERAL TECHNICAL DATA

Technical Code		TC (63kW)	TC (68kW)	TCA (74kW)	TCA (85kW)
Heat to reject by heat exchanger at maximum power	kW	46.4	49.3	46.0	52.0
Thermostat temperature	°C	90	90	90	90
Cooling liquid maximum temperature	°C	110	110	110	110
Minimum and maximum pressure in the cooling circuit	kPa (bar)	l bar max – min	l bar max – min	l bar max – min	l bar max – min
Maximum allowable air intake restriction with clean air filter	mbar	50	50	50	50
Heat rejected to intercooler at maximum power	kW	n/a	n/a	7.5	12
Intercooler system maximum pressure drop	mbar	n/a	n/a	125	125
Maximum allowable back pressure	mbar	150	150	150	150
Standard (Starter & Alternator)	V	12	12	12	12
Coolant capacity – engine only	ltr	7	7	7	7
Specific fuel consumption (Rated condition)	g/kWh	237	235	229	236
Specific fuel consumption (Max. torque)	g/kWh	219	219	214	214



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