

**KEY FACTS**

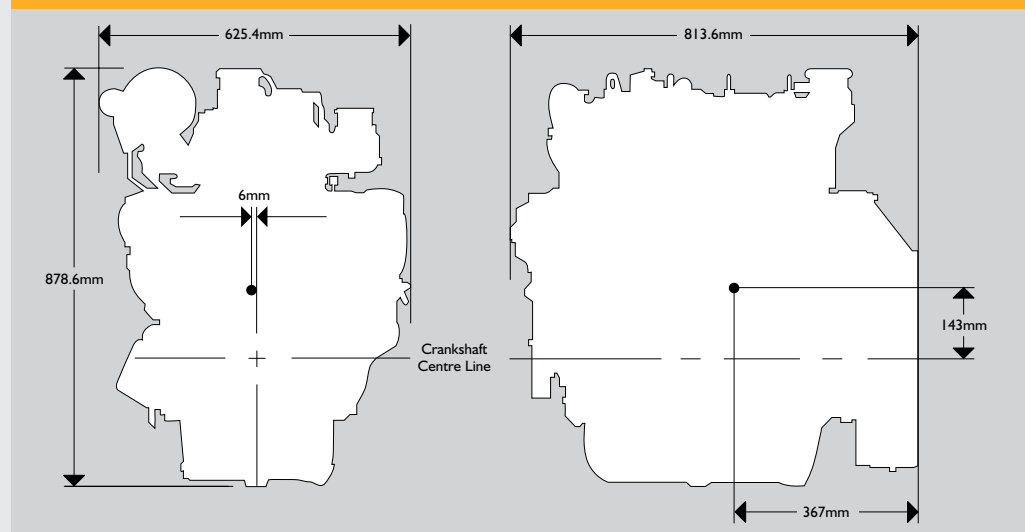
Heavy duty engine with common customer installation interface points across the product family

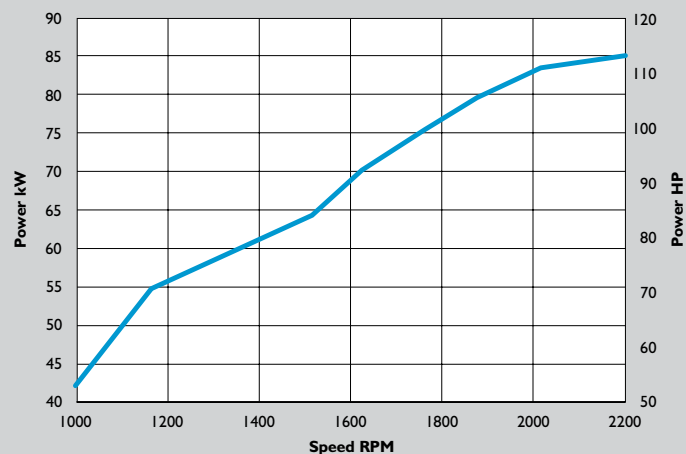
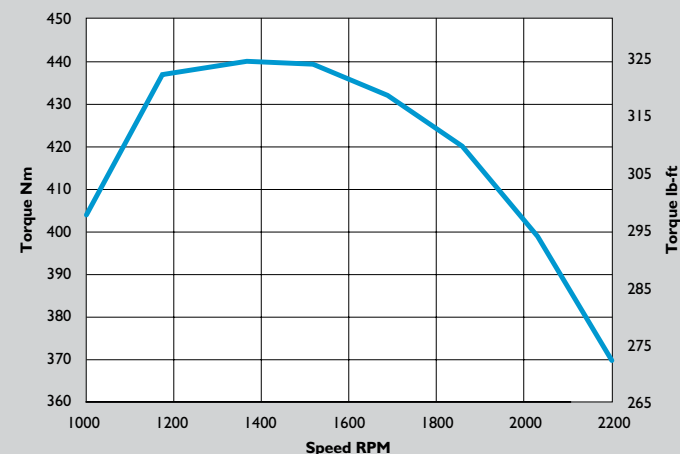
Supported by Global Distributor and Dealer Network

**GENERAL TECHNICAL DATA**

<b>Model</b>		<b>TCA-85</b>
Maximum rating (intermittent)	kW (hp)	85 (114)
Thermodynamic cycle		Diesel 4 stroke
Aspiration		TCA
Arrangement		4 cylinder
Emissions level		Stage IIIA / Tier 3
Bore	mm (in)	103 (4.1)
Stroke	mm (in)	132 (5.2)
Total displacement	cm <sup>3</sup> (in <sup>3</sup> )	4399 (269)
Valves per cylinder		4
Injection system		Mechanical
Cooling		Liquid
Direction of rotation (viewed from crank nose)		Clockwise
Dry weight	kg (lbs)	465 (1025)
Rated speed	rpm	2200
Peak torque	Nm (lb-ft)	440 (325)
Peak torque speed	rpm	1300
Maximum no load governed speed	rpm	2420
Nominal idling speed	rpm	900
Minimum starting temperature without auxiliaries	°C (°F)	-12 (10.4)
Gradability - continuous	degrees	35
Gradability - intermittent	degrees	45

\*As per ISO 14396


**DIMENSIONS**


**POWER CURVE**

**TORQUE CURVE**

**STANDARD CONFIGURATION**

Flywheel housing	SAE3
Intake manifold location	Left hand forward*
Exhaust manifold / turbocharger location	Right hand rearward*
Turbocharger	Wastegate Controlled
Fan drive ratios	0.85:1, 1:1, 1.16:1, 1.25:1
Distance between fan - crankshaft centres	mm 262 or 356
Fuel filter	Engine mounted
Fuel lift pump	Pre-filter with primary pump and WIF sensor
Oil filter	Single, vertical - LHS*
Oil sump	Pressed steel
Breather system	Open
Oil cooler	LHS*
Oil filler position	Top and left hand side*
Starter motor	12V, 4.2kW/24V, 4kW
Alternator	12/24V, 55A or 100A
Power Take-off: Heavy Duty	60kW, 205Nm, 1.268:1 RHS
Power Take-off: Light Duty	15kW, 40Nm, 1.625:1 LHS
Finish	Lacquered

\*Orientation from flywheel.

**OPTIONS**

Extensive range of configuration options available - contact local JCB Power Systems distributor, or JCB Power Systems sales and applications department for availability and configuration options.

For more information on purchasing a JCB engine or configuration of a bespoke product for your requirements contact a JCB Power Systems distributor.

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