

**KEY FACTS**

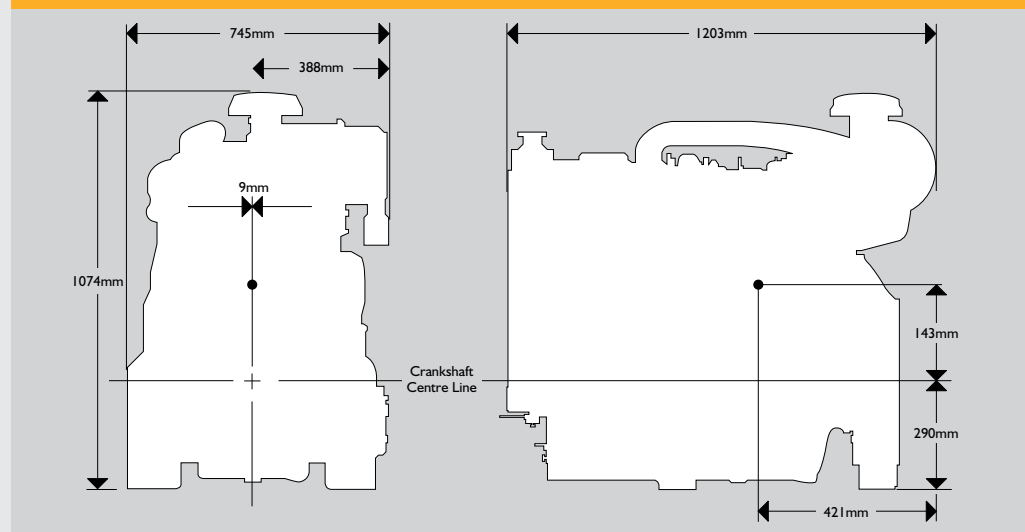
Heavy duty engine with common customer installation interface points across the product family

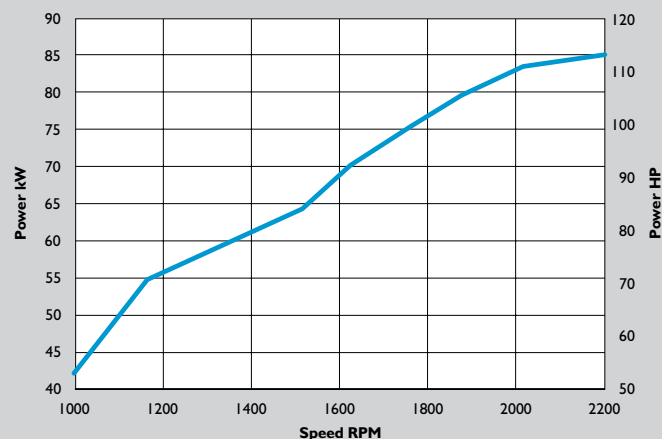
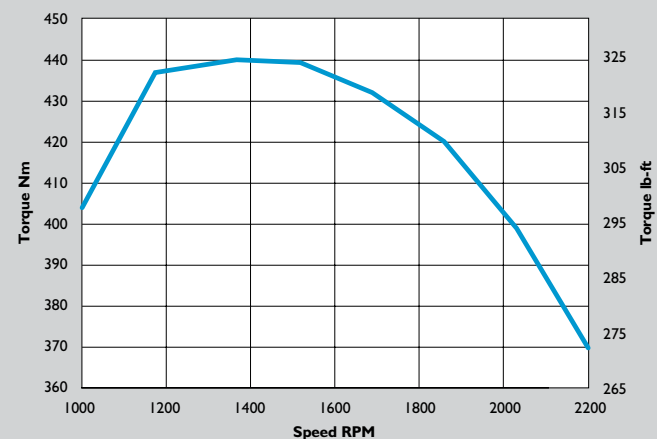
Supported by Global Distributor and Dealer Network

**GENERAL TECHNICAL DATA**

<b>Model</b>		<b>TCA-85</b>
Maximum rating (gross intermittent)	kW (hp)	85 (114)
Thermodynamic cycle		Diesel 4 stroke
Aspiration		TCA
Arrangement		4 cylinder IPU
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)	600 (1323)
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, 1.16, 1.25:1
Distance between fan - crankshaft centres	mm (in) 262 (10.3)
Fuel filter	Engine mounted
Fuel lift pump	Pre-filter with primary pump & 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.

©2019 JCB Sales. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any other means, electronic, mechanical, photocopying or otherwise, without prior permission from JCB Sales. All references in this publication to operating weights, sizes, capacities and other performance measurements are provided for guidance only and may vary dependant upon the exact specification of machine. They should not therefore be relied upon in relation to suitability for a particular application. Guidance and advice should always be sought from your JCB Dealer. JCB reserves the right to change specifications without notice. Illustrations and specifications shown may include optional equipment and accessories. The JCB logo is a registered trademark of J C Bamford Excavators Ltd.