TCG2015

Heavy Duty Gas Engines. 220 and 322 HP (164 and 240 kW)

The engine company. DEUTZ®

Characteristics

Modern water-cooled 90° V6 and V8 engines | Turbocharged with charge air cooling | 24V electric starter with charging alternator | Fully assembled and wired ignition system | Solid-state engine controller | Programmable speed controller | Engine-mounted dry-type air cleaner and turbocharger | Wet exhaust manifold for combined heat and power (CHP) applications | Engine gas train includes shut off valve, pressure regulator, fuel trim valve, Venturi mixer and throttle | SAE 1 flywheel housing | SAE 14" flywheel | Engine-mounted control panel with safety shutdowns for low oil pressure & high engine temperature | Flexible engine mounts, secured to a wooden transport frame for ease of installation

Your Benefits

- Single cooling circuit: water-to-air charge air cooling enables one water radiator to cool the entire engine.
- Water-cooled exhaust manifolds and turbocharger provide Combined Heat and Power (CHP) capability.
- Compact engine design allows reduced space requirements for lower installation costs.
- Individual cylinder heads facilitate quick and cost-efficient repairs.
- Wet cylinder liners: easy overhaul ensures extended life cycle and lowered operating costs
- Gear-driven fan hub eliminates fan belt requirement for lower life cycle cost
- Flexible cooling options:
  - Water-To-Air Radiator (Heat Exchanger)
  - Water-To-Water Heat Exchanger
- Common turbocharger and charge air cooler for V6 and V8 models

Engine Specifications

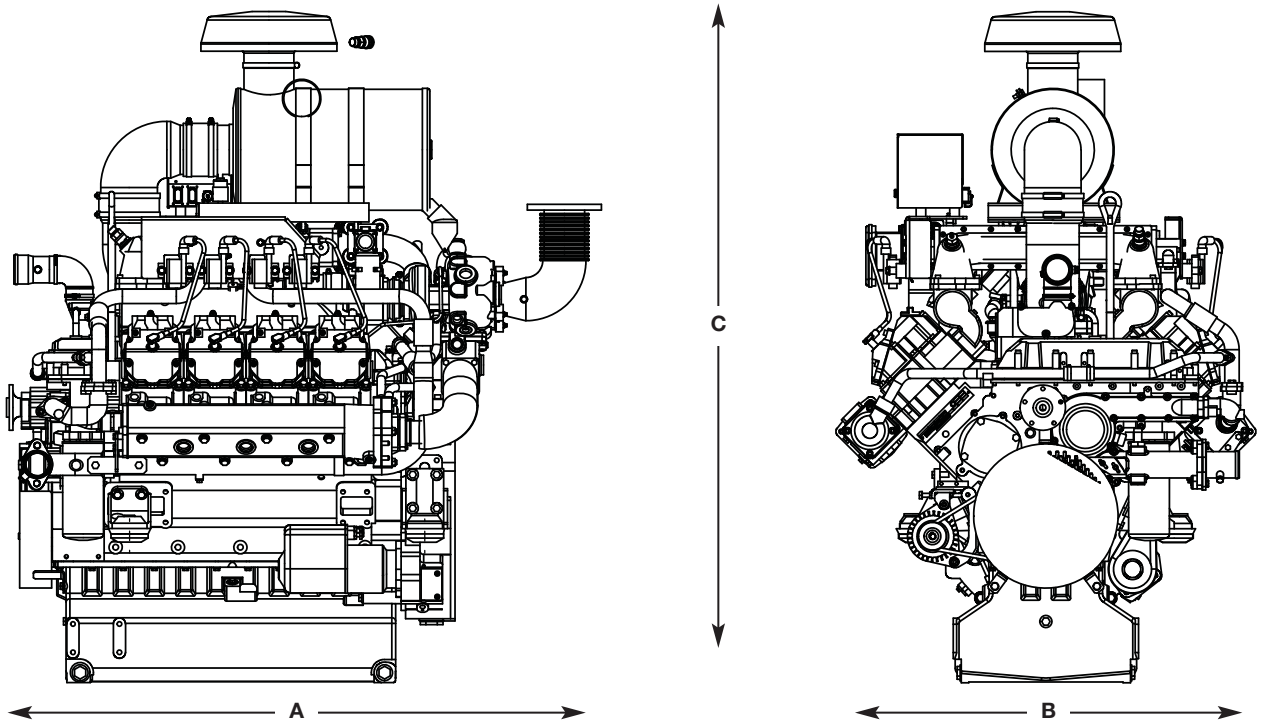
Cooling system:	Liquid cooling
Crankcase:	Crankcase of grey cast iron with wet liners
Crankcase breather:	Closed-circuit system, vacuum-controlled
Cylinder head:	Individual cylinder heads, grey cast iron, crossflow design
Valve arrangement/timing:	Overhead valves in cylinder head, four-valve technology, actuated via tappets, pushrods and rocker arms, driven by gears and central camshaft
Turbocharging:	Single turbocharger and charge air cooler
Piston:	Three-ring pistons
Piston cooling:	Oil-cooled with spray nozzles
Connecting rod:	Drop-forged steel rod with trapezoidal piston pin support
Crankshaft:	Drop-forged steel crankshaft with bolted counterweights
Main and big end bearings:	Tri-metal plain bearings
Camshaft:	Steel camshaft
Lubrication system:	Forced-feed circulation lubrication with gear pump
Engine oil cooler:	Integrated
Lubricating oil filter:	Paper-type microfilter as replaceable cartridge, full-flow filter.
Alternator:	Three-phase alternator, 28 V / 55 A
Starter motor:	24 V / 5.5 kW

Technical Data

		TCG 2015 V6	TCG 2015 V8
General Data			
Number of Cylinders		6	8
Cylinder arrangement		V, 90°	V, 90°
Aspiration		Turbocharged with charge air cooler	
Total displacement	Litre | in^3	11.9 | 726.5	15.9 | 968.7
Weight, dry	lb | kg	2,194 | 995	2,844 | 1,290
EPA Certified and non-EPA Certified Power Ratings[1)]			
Maximum output[2)]	hp | kW	241 | 180	322 | 240
At engine speed	rpm	1,800	1,800
Low idle speed	rpm	800	800
Peak torque at 1,500 rpm	NM | lb-ft	1043 | 769.2	1400 | 1,032.4
Fuel consumption	kWh | kWh btu | BHPH	2.91 7,401	2.91 7,586
Fuel Type		Dry natural Gas, minimum Methane number > 70 %	

[1)] Certified according to EPA for Natural Gas (SI-Engines) for stationary use
[2)] Gross power, continuous

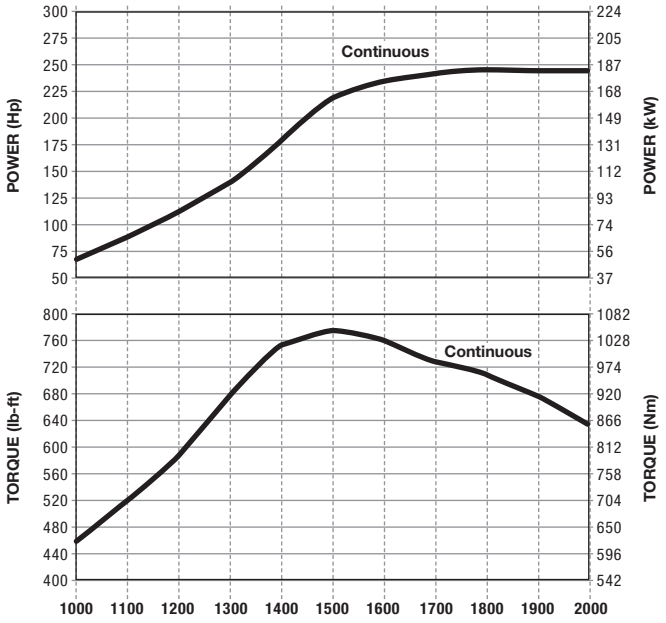
Dimensions



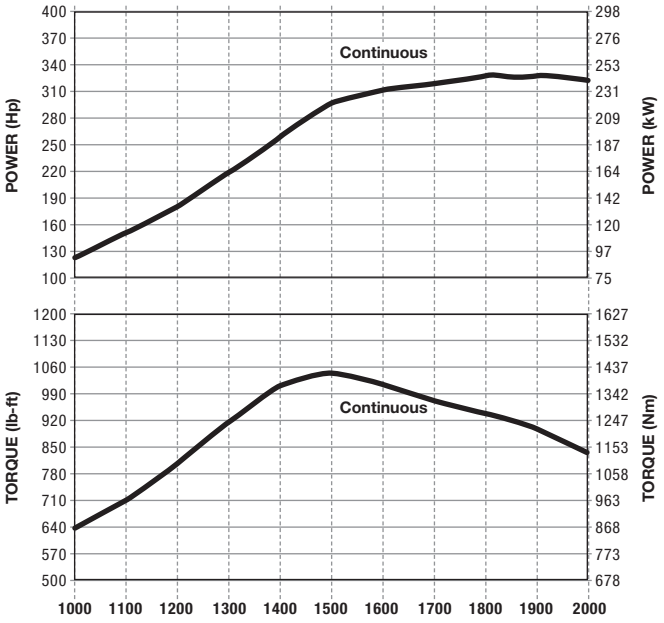
		TCG 2015 V6	TCG 2015 V8
A	mm | in	1,039 | 40.9	1,153 | 45.4
B	mm | in	935 | 36.8	955 | 37.6
C	mm | in	1,174 | 46.2	1,174 | 46.2

Engine Performance Curves

TCG 2015 V6



TCG 2015 V8



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