



JOHN DEERE

4045TF250

PowerTECH

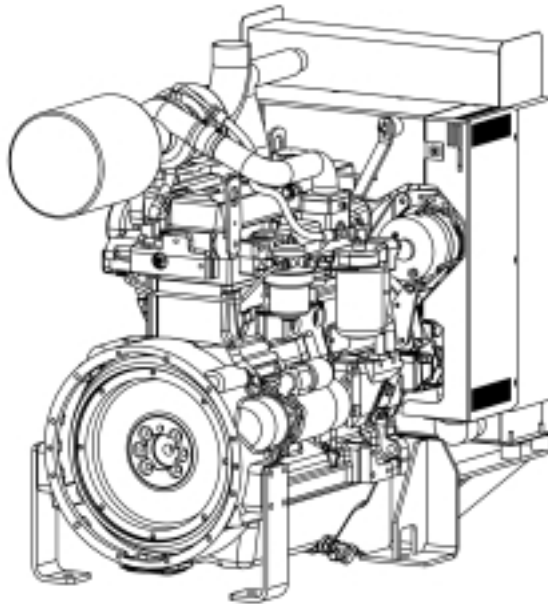
SPECIFICATIONS

For Variable Speed

Tier-1 Emission Certifications:

CARB; EPA; EU

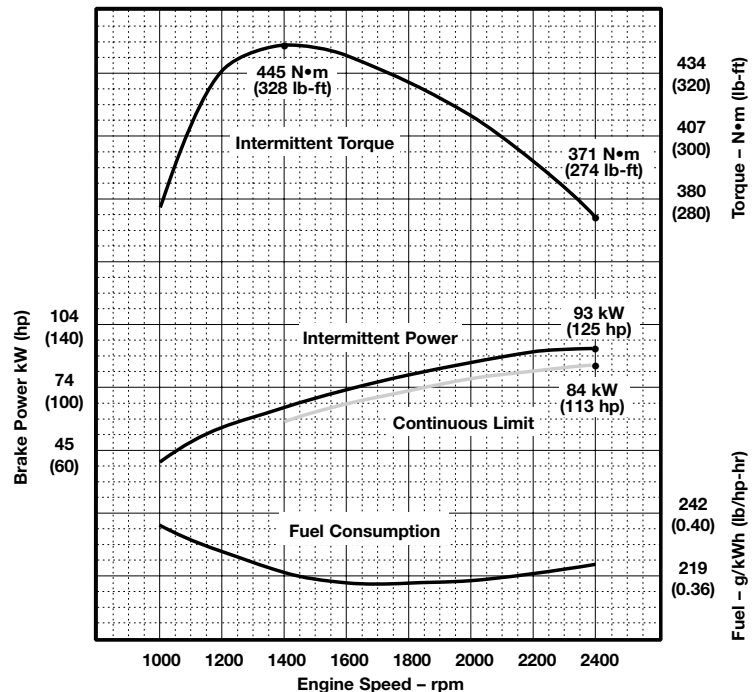
Power Units



Performance Data

Gross Rated Power (without fan) – kW (hp)	[C]..... 84 (113)
	[I]..... 93 (125)
Rated Speed – rpm	2400
Peak Torque – N•m (lb-ft)	[C]..... 401 (296)
	[I]..... 445 (328)
Peak Torque Speed – rpm	1400
Low Idle Speed – rpm	850
BMEP – kPa (psi)	[C]..... 930 (135)
	[I]..... 1030 (149)
Friction Power @ Rated Speed – kW (hp)	21 (28)
Altitude Capability – m (ft)	2300 (7500)
Air: Fuel Ratio	[C]..... 29.4 : 1
	[I]..... 28.4 : 1
Smoke @ Rated Speed – Bosch No.	[C]..... < 2
	[I]..... < 2
Noise – dB(A) @ 1 m	[C]..... 95.5
	[I]..... 96.5

Engine Speed rpm	Contin. Limit kW (hp)	Intermit. Power kW (hp)	Intermit. Torque N•m (lb-ft)	BSFC g/kWh (lb/hp-hr)
2400	84 (113)	93 (125)	371 (274)	224 (0.367)
2200	82 (110)	91 (122)	396 (292)	220 (0.361)
2000	78 (105)	87 (117)	415 (306)	218 (0.357)
1800	73 (98)	81 (109)	428 (316)	217 (0.356)
1600	67 (90)	74 (99)	440 (325)	217 (0.356)
1400	59 (79)	65 (87)	445 (328)	220 (0.361)
1200	-	55 (74)	434 (320)	229 (0.376)
1000	-	39 (52)	375 (277)	239 (0.392)



Gross power guaranteed within + or - 5% at SAE J1995 and ISO 3046 conditions:

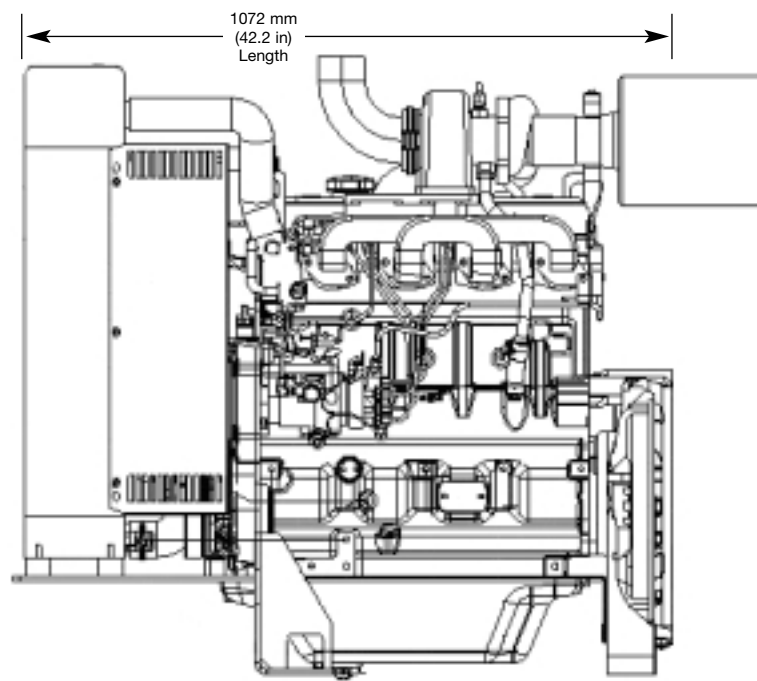
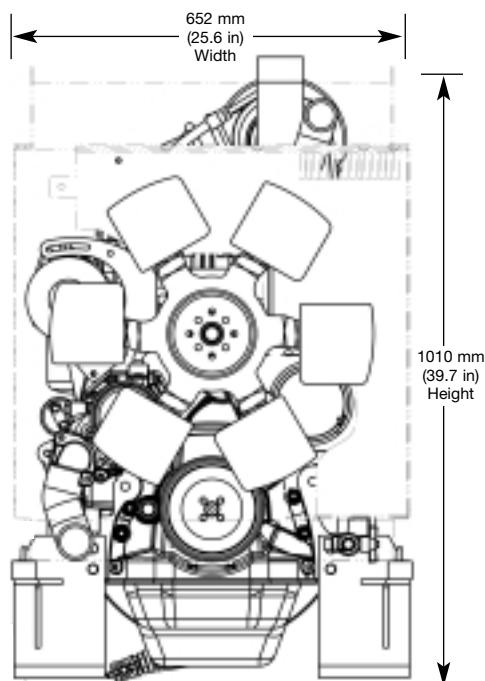
77 °F (25 °C) air inlet temperature
29.31 in.Hg (99 kPa) barometer
104 °F (40 °C) fuel inlet temperature
0.853 fuel specific gravity @ 60 °F (15.5 °C)

Conversion factors:

Power: kW = hp x 0.746
Fuel: 1 gal = 7.1 lb, 1 L = 0.85 kg
Torque: N•m = lb-ft x 1.356

Photographs may show non standard equipment.





General Data

Model	4045TF250
Number of cylinders	4
Bore and Stroke – mm (in.)	106 x 127 (4.19 x 5.00)
Displacement – dm ³ (in ³)	4.5 (276)
Compression Ratio	17.0 : 1
Valves per Cylinder – Intake/Exhaust	1 / 1
Firing Order	1-3-4-2
Combustion System	Direct Injection
Engine type	In-line, 4-cycle
Aspiration	Turbocharged
Engine Crankcase Vent System	Open
Engine Crankcase Pressure – kPa (in.H ₂ O)	0.5 (2)

Physical Data

Length – mm (in.)	1072 (42.2)
Width – mm (in.)	652 (25.6)
Height – mm (in.)	1010 (39.7)
Weight, dry – kg (lb)	548 (1208)
(Includes flywheel housing, flywheel, & electrics)	
Center of gravity location	
From Rear Face of block (X-axis) – mm (in.)	263 (10.3)
Right of Crankshaft (Y-axis) – mm (in.)	-10 (-0.4)
Above Crankshaft (Z-axis) – mm (in.)	145 (5.6)
Max. Allow. Static Bending Moment at Rear	
Face of Flywheel Hsg w/ 5-G Load – N•m (lb-ft)	814 (600)
Thrust Brng. Load Limit (Forward) – N (lb) [C]	2224 (500)
[I]	4003 (900)

Electrical Data

Recommended Battery Capacity (CCA)	
12 Volt System – Amp	640
24 Volt System – Amp	570
Maximum Allowable Starting Circuit Resistance	
12 Volt System – Ohm	0.0012
24 Volt System – Ohm	0.002
Starter Rolling Current – 12 Volt System	
At 0°C (32°F) – Amp	780
At -30°C (-22°F) – Amp	1000
Starter Rolling Current – 24 Volt System	
At 0°C (32°F) – Amp	600
At -30°C (-22°F) – Amp	700

Air System

Maximum Allowable Temperature Rise	
Ambient Air to Engine Inlet – °C (°F)	8 (15)
Maximum Air Intake Restriction	
Dirty Air Cleaner – kPa (in. H ₂ O)	6.25 (25)
Clean Air Cleaner – kPa (in. H ₂ O)	3 (12)
Engine Air Flow – m ³ /min (ft ³ /min) [C]	8.2 (289)
[I]	8.5 (300)

Exhaust System

Exhaust Flow – m ³ /min (ft ³ /min) [C]	19.7 (695)
[I]	21 (741)
Exhaust Temperature – °C (°F) [C]	476 (889)
[I]	495 (923)
Max. Allow. Back Pressure – kPa (in.H ₂ O)	7.5 (30)
Recommended Exhaust Pipe Dia – mm (in.)	102 (4.0)

Cooling System

Thermostat Start to open – °C (°F)	82 (180)
Thermostat Fully Open – °C (°F)	94 (202)
Power Unit Coolant Capacity – L (qt)	25 (26.5)
Minimum Air to Boil temperature – °C (°F)	47 (117)

Fuel System

Fuel Injection Pump	Lucas
Governor Regulation	7 – 10%
Governor Type	Mechanical
Fuel Consumption – kg/hr (lb/hr) [C]	18.9 (41.6)
[I]	20.9 (46)
Fuel Spill Rate – kg/hr (lb/hr) [C]	7.5 (16.5)
[I]	7.5 (16.5)
Total Fuel Flow – kg/h (lb/h) [C]	26.4 (58.1)
[I]	28.4 (62.5)
Maximum Fuel Transfer Pump Suction – m (ft)	0.9 (3)
Fuel Filter Micron Size @ 98% Efficiency	8

Lubrication System

Oil Pressure at Rated Speed – kPa (psi)	345 (50)
Oil Pressure at Low Idle – kPa (psi)	105 (15)
In Pan Oil Temperature – °C (°F)	115 (240)
Oil Pan Capacity, Low – L (qt)	11.3 (12)
Oil Pan Capacity, High – L (qt)	12.3 (13)
Total Engine Oil Capacity with filter – L (qt)	13.3 (14)
Engine Angularity Limits, Any Direction – degrees [C]	20
[I]	30

Specifications and design subject to change without notice.



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