

Industrial

# Diesel Engines 8V 502 C

for C & I, Agriculture, Mining and Forestry Application

with EPA Tier 3 / EU Stage III A / EPA Tier 4i / EU Stage III B Certification



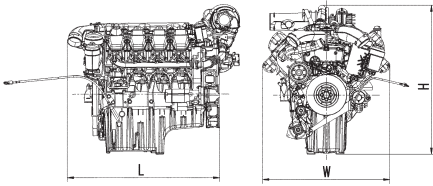
## Dimensions and Masses

Engine	Dimensions (LxWxH) mm (in)	Mass, dry kg (lbs)
8V 502 C21-C51	1515x1013x1053 (60x40x41)	1125 (2480)
8V 502 C61-C71	1385x1021x1198 (55x40x47)	1125 (2480)
8V 502 C02	1530x1195x1080 (60x47x43)	1135 (2502)

All dimensions are approximate, for complete information refer to the installation drawing.

## Engine Model

Bore/stroke	mm (in)	130/150 (5.1/5.9)
Cylinder configuration		8 Cyl./90° V
Displacement/cylinder	l (cu in)	1.99 (121)
Displacement, total	l (cu in)	15.9 (970)
Fuel specification		EN 590, Grade No.1-D/2-D



Application	Power definition	
5A	Continuous operation w/100% load	Load factor: $\geq 60\%$ , Operating hours: unrestricted, Overload: Fuel stop (ICFN)
5B	Continuous operation w/variable load	Load factor: $< 60\%$ , Operating hours: unrestricted, Overload: Fuel stop (ICFN)

Power output within 5% tolerance at standard conditions. Power definition according to ISO 3046 (ratings also correspond to SAE J 1995 and SAE J 1349 standard conditions) Consult your MTU Detroit Diesel or MTU distributor/dealer for the rating that will apply to your specific application.



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Engine Type	Rated Power ICFN			Peak Torque			Optimization
Model	kW	bhp	rpm	Nm	lb-ft	rpm	
<b>Application</b>	<b>Heavy duty operation (5A)</b>						
8V 502 C21	330	442	1800	2150	1585	1300	⑦ ⑧
8V 502 C31	350	469	1800	2300	1695	1300	⑦ ⑧
<b>Application</b>	<b>Medium duty operation (5B)</b>						
8V 502 C41	390	523	1800	2400	1770	1300	⑦ ⑧
8V 502 C51	420	563	1800	2700	1990	1300	⑦ ⑧
8V 502 C61	450	603	1800	2700	1990	1300	⑦ ⑧
8V 502 C71	480	644	1800	2800	2065	1300	⑦ ⑧
8V 502 C42	375	503	1800	2400	1770	1300	16 17
8V 502 C52	405	543	1800	2600	1915	1300	16 17
8V 502 C62	440	590	1800	2800	2065	1300	16 17
8V 502 C72	480	644	1800	3000	2210	1300	16 17
Optimization	⑦ Exhaust emission EPA 40 CFR 89/Tier 3 16 Exhaust emission EPA 40 CFR 89/Tier 4i			⑧ Exhaust emission EU 97/68 EC/Stage III A 17 Exhaust emission EU 97/68 EC/Stage III B			

Standard Equipment	
Starting System	Electrical starter 24 V, Alternator 28 V/80 A
Fuel System	High pressure fuel injection with solenoid-valve controlled unit injection pumps and multijet fuel injectors, Fuel filter
Lube Oil System	Oil filter
Air System	Turbo charging with charge-air cooling
Exhaust Gas System	Four valves per cylinder
Coolant System	Water-charge-air cooling
Flywheel/Housing	SAE 1
Engine Mounting	Resilient
Electronics and Instrumentation	Electronic engine management
SCR Aftertreatment System (engines with EPA Tier 4i/ EU Stage 3B certification only)	Engine mounted SCR components with urea dosing unit, urea injection nozzle and heating valve, vehicle mounted SCR components with SCR catalyst including muffler, urea supply unit and SCR control unit
Optional Equipment	
on request	

## Reference conditions:

&gt; Intake-air temperature: 25°C (77°F)

&gt; Ambient air pressure: 1000 mbar

&gt; Altitude above sea level: 100 m (328 ft)

Subject to change without notice. Customization possible. Engines illustrated in this document may feature options not fitted as standard to standard engine.