

Industrial

# Diesel Engine 12V 4000 Cx5

for C&I and Mining Applications  
Tier 4 certified, without exhaust aftertreatment

Preliminary data



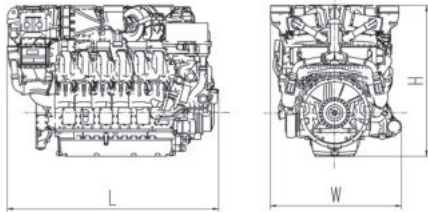
### Dimensions and Masses

Engine	Dimensions (LxWxH) mm (in)	Mass, dry kg (lbs)
12V	2633 x 1631 x 1997 (103.7 x 64.2 x 78.6)	7960 (17549)

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

Engine Model		
Bore/Stroke	mm (in)	170/210 (6.7/8.3)
Cylinder configuration		90° V
Displacement/cylinder	l (cu in)	4.77 (291)
Displacement, total	l (cu in)	57.2 (3491)
Fuel specification*		EN 590, Grade No.1-D/2-D

\*Ultra low sulfur diesel (<15ppm) required



Engine Type	Rated Power ICFN			Peak Torque			Optimization
	Model	kW	bhp	rpm	Nm	lb-ft	
<b>Application</b>	<b>Heavy duty operation (5A)</b>						
12V 4000 C15	1150	1542	1800	7351	5422	1494	②
12V 4000 C25	1250	1676	1800	7990	5893	1494	②
12V 4000 C35	1500	2012	1800	9588	7072	1494	②
<b>Application</b>	<b>Medium duty operation (5B)</b>						
12V 4000 C55	1750	2347	1900	9258	6828	1805	②
12V 4000 C65	1864	2500	1800	10409	7677	1710	②
12V 4000 C65	1864	2500	1900	9861	7273	1805	②

Optimization: ② Exhaust emission EPA Nonroad T4 (40CFR89)



Power. Passion. Partnership.

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 distributor/dealer for the rating that will apply to your specific application.

Standard Equipment	
Starting System	Electric starter (24 V/24 kW)
Fuel System	Common rail injection system, double-walled high pressure fuel lines with fuel leakage monitoring, 2 stage filters, fuel pre-filter with water separator
Lube Oil System	Multi-stage lube oil filters with oil centrifugal filter and prelube (prelube for Application 5A standard)
Combustion Air System	Two-stage turbocharging with exhaust gas recirculation (EGR)
Coolant System	Separate HT (JW) and LT (CAC) coolant circuits with separate pumps
Flywheel/Housing	SAE 00 flywheel housing with SAE 21 isolated flywheel
Accessory Drives	Engine mounted fan clutch (for Application 5B standard)
Engine Mounting	Front trunnion mount (three point)
Electronics and Instrumentation	ADEC engine control and management systems
Diagnosis System	Single exhaust temperature measurement, individual cylinder monitoring

Optional Equipment	
Lube Oil System	Oil sightglass, prelube for 5B application, automatic oil filter (maintenance free), oil pan options
Coolant System	Coolant connecting parts (flange, fittings)
Accessory Drives	Different battery charging alternators, air conditioning compressor drives, engine mounted fan clutch for 5A application
Electronics and Instrumentation	Customer interface cable (10 m/15 m), coolant level sensor, display, diagnostic interface connector
Air Intake System	Air intake elbow options

Reference conditions:

- > Intake-air temperature: 25°C (77°F)
- > Altitude above sea level: 100 m (328 ft)
- > Ambient air pressure: 1000 mbar (14.5 psi)
- > Charge air coolant temperature: 45°C (113°F)

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