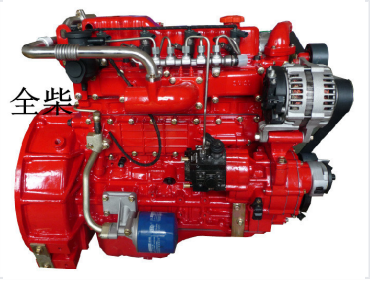
3.857L 85-100kW Diesel Engine for Automotive and Locomotive Applications

This 3.857L diesel engine provides 85-100kW of power at 2800rpm. It is designed for use in automobiles and locomotives.



ADDITIONAL IMAGES

Product Overview

Compact and efficient design suitable for medium-duty trucks and buses.

High-Performance 4F Series Diesel Engine

The 4F series is a 3.857L automotive diesel engine designed for 4-8T trucks and 5-8M buses. Developed with advanced electronic controlled high-pressure common rail technology, it offers a power range of 85-100kW. This engine combines turbocharging and intercooling with a water-cooled EGR system to deliver high efficiency, low emissions, and reliable performance for demanding automotive and locomotive applications.

Performance Metrics

Engineered for strong power and low fuel consumption in vehicle applications.

Key Performance Metrics

100 kW	3.857 L	400 N.m	2800 rpm
Max Power	Displacement	Max Torque	Rated Speed

Technical Specifications

The 4F series engine features a robust 4-cylinder design with integrated cooling fan and alternator.

Engine Layout

Parameter	Details
Model	4F
Cylinder Configuration	4 Cylinders
Bore x Stroke	102 x 118 mm
Intake System	Turbocharged and Inter-cooled
Fuel System	High-pressure common-rail (BOSCH)
Emission Standard	State IV / State Four

Output Ratings

Output Ranges

Metric	Range
Rated Output (kW)	85 ~ 100 kW
Rated Output (Ps)	110 ~ 135 Ps
Max Torque (N.m)	320 ~ 400 N.m
Torque Speed Range	1600 ~ 1800 rpm

Key Features & Technology

Detail view of the high-pressure common rail fuel system and filtration components.

Advanced Features

- BOSCH electronic controlled high-pressure common rail system
- Water-cooled Exhaust Gas Recirculation (EGR)
- Double DOC or DOC + POC emission control
- Finite element analysis (FEA) of key structural parts
- CFD, CAE, and ID optimized cooling and air supply systems
- Advanced friction pair technology for reduced fuel consumption
- Low noise and high reliability design

Applications

The engine is designed for reliability in demanding industrial and automotive environments.

Suitable Applications	4-8T Trucks, 5-8M Buses, Automobile Locomotives, Industrial Vehicles