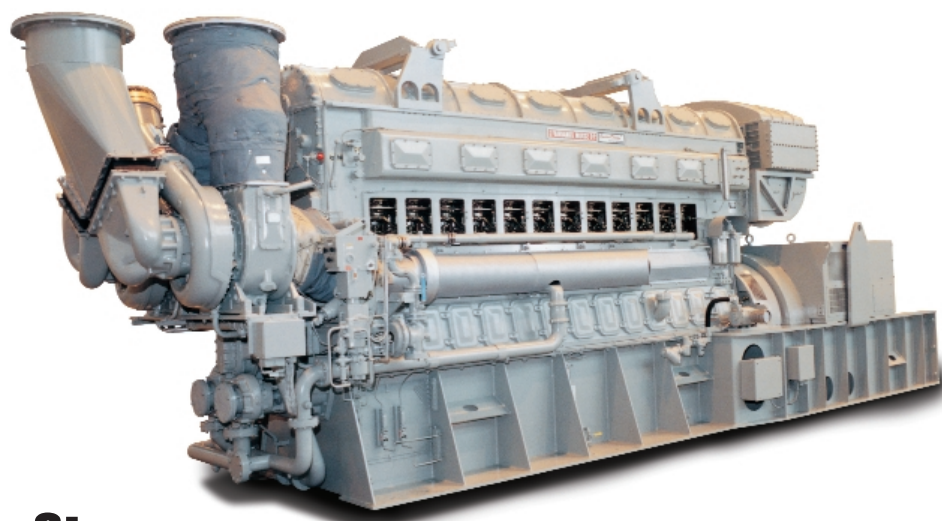


# Opposed Piston DF Technical Specifications

## Dual Fuel Generator Sets

- Low emission natural gas operation
- Robust diesel engine design
- Low life cycle cost – medium speed 900 rpm
- Exclusive Fairbanks Morse Engine Enviro-Design® Micro Diesel Pilot



## Opposed Piston Story

The Opposed Piston engine was developed in the 1930s for locomotive power, but was initially used to power submarines in World War II. Fairbanks Morse has manufactured thousands of these engines for marine power, electric power plants, and numerous mechanical drive applications. Today, the low emissions Enviro-Design® dual fuel model is the model of choice for many power plants.

## Benefits & Features

- 8-1/8" bore & 10" stroke
- Dual Fuel – 99% natural gas & 1% diesel pilot
- No spark plugs – diesel ignition of the natural gas
- Welded steel block – shock qualified
- Factory-direct support & service
- Two-cycle operation – no cylinder head maintenance
- Operate on 100% diesel if gas supply is interrupted
- Capable of 50% load step
- Fast starting – accept load within 10-15 seconds

## Standard Equipment

- Engine turbochargers & intercoolers
- Free standing control panel & motor control center
- Cooling tower & pump
- Intake & exhaust silencers
- Filters – lube oil, fuel oil, combustion air
- Heat exchangers
- Pumps & motors
- Starting air system

# Opposed Piston DF Ratings

Cylinders	RPM	Turbocharged Gross kWe	Turbocharged Bhp	Turbo-Blower Gross kWe	Turbo-Blower Bhp
6	900	1580	2205	1506	2100
9	900	2370	3308	2260	3150
12	900	3165	4410	3013	4200

Data at 100% load.

# Performance Data – Dual Fuel Operation

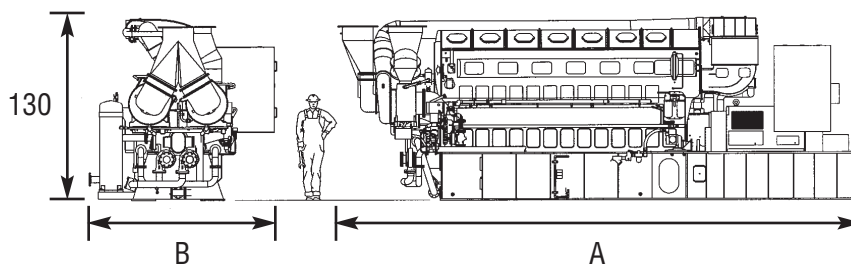
Engine Configuration	Natural Gas Heat Rate Btu/bhp-hr	Diesel Heat Rate Btu/bhp-hr	Total Heat Rate Btu/bhp-hr	NOx g/bhp-hr	CO g/bhp-hr	THC g/bhp-hr
Turbocharged	6157	93	6250	1.0	3.4	6
Turbo-Blower	6255	95	6350	1.0	3.4	6

Data at 100% load. Diesel operation heat rate is 0.350 lb/bhp-hr. THC: Total Hydrocarbons.

# Optional Equipment

- Radiator cooling
- Black start capabilities
- Gas compressor (70 psig required)
- Battery, rack & charger
- Switchgear
- Maintenance platform
- Emission reduction equipment
- Long-term service/maintenance agreement

# Typical Dimensions



Cylinders	A	B	Tons
6	250	90	32
9	300	110	39
12	366	130	45

Dimensions in inches. Dry genset weight.



[www.fairbanksmorse.com](http://www.fairbanksmorse.com)

Data and specifications subject to change without notice.