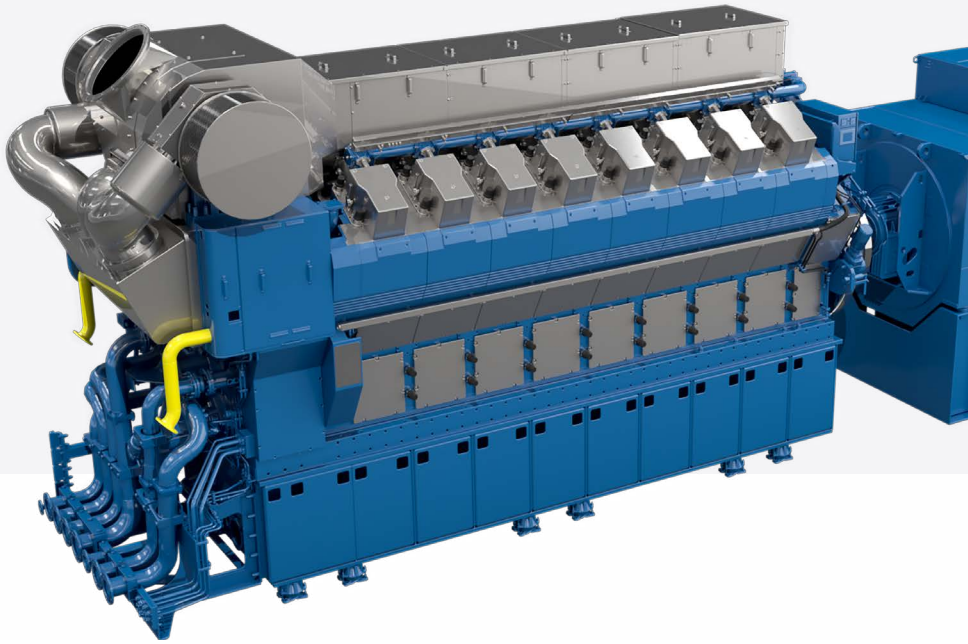
B36:45V

Generator Set
Natural Gas
6,900 - 9,600 kW



Modular Design for Maxiumum Versatility

Bergen's B-series, rooted in a modular design, epitomizes adaptability, catering specifically to the demands of the marine market. Crafted following extensive consultation with marine operators, designers, and shipbuilders, this series debuted in 2014 with a diesel version, later complemented by a gas iteration in 2018. Offering a range of configurations, including inline or V-cylinder variants, the B36:45 seamlessly integrates into marine propulsion systems and auxiliary power generation setups.

Pioneering Efficiency for Maritime Solutions

Bergen's latest B36:45V engine, honed through decades of maritime expertise, redefines efficiency for marine applications. Engineered in collaboration with marine stakeholders and service experts, it introduces advanced features such as Cylinder Pressure Monitoring (CPM) for precise load control, Variable Valve Timing (VVT) for optimized response, and a wastegate turbocharger ensuring optimized fuel-to-air ratios at varying ambient conditions for lean-burn operation.

For ship owners, the B36:45V engine boasts remarkably low emissions of NOx, CO2, SOx, and particulates. Featuring no smoke emissions and equipped with double-wall piping, vessels equipped with Bergen's technology ensure cleaner engine rooms and provide operators with enhanced safety against gas-related hazards.

Key Benefits for Shipyards

- Easy Installation
- Resilient Mounting; No need for welding brackets
- Aligned Piping at Pump-End for Easy Connection
- IMO Tier III Compliant without SCR
- Single Fuel = Single Bunkering
- Fast Load Response
- Low Methane Slip at all Engine Loads
- Convertible to Liquid Fuel Operation with Bergen's B3X Platform

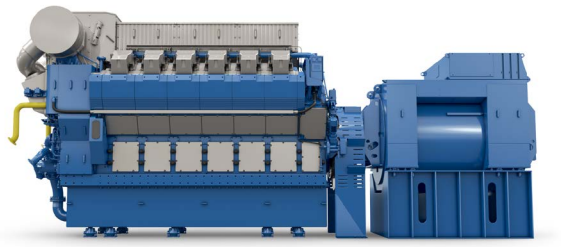
Product Range

B36:45V (720 r/min)
Max Cont Rating (kW)

B36:45V (750 r/min)
Max Cont Rating (kW)

Weight & Dimensions

	Dry Engine Weight (kg)	Engine Length (mm)	Engine Width (mm)	Engine Height (mm)
B36:45V12 A	74,400	6,900	3,140	4,540
B36:45V16 A	99,700	8,400	3,660	5,010



Technical Data

720 r/min

	B36:45V12 A	B36:45V16 A
Number of Cylinders	12	16
Mean Piston Speed (m/s)	10.8	10.8
Max. Cont Rating (MCR, kW)	6,900	9,200
Max. Cont Rating altern, h=0.97 (kWel)	6,695	8,925
Max. Cont Rating altern, Cos f=0.8 (kVa)	8,370	11,135
Max. Cont Rating altern, Cos=0.9 (kVa)	7,440	9,915
Mean Effective Pressure (BMEP, bar)	20.92	20.92
Specific Energy Consumption (kJ/kWh)	7,370	7,350
Specific Lub. Oil Consumption (g/kWh)	0.3	0.3
Cooling Water Temp. Engine Outlet (*C)	90	90

750 r/min

B36:45V12 A	B36:45V16 A
12	16
11.2	11.2
7,200	9,600
6,985	9,310
8,730	11,640
7,760	10,345
20.96	20.96
7,370	7,350
0.3	0.3
90	90

Stroke Ratio

	B36:45V
Cylinder Diameter (mm)	360
Piston Stroke (mm)	450
Ratio	0.80

GENERAL CONDITIONS

- *All technical data is valid for 100% load.*
- *Engine power definition is according to ISO 3046-1*
- *Specific fuel consumption is measured on testbed according to iso 3046-1, running on Natural Gas with a lower heating value of 36 MJ/m3n and no engine driven pumps.*
- *Methane no Min 70, Aaccording to AVL calculation.*
- *Specific lub. Oil consumption is for guidance only.*

DISCLAIMER

- *Due to continuous development, some data may change. The information does not carry any contractual value.*

Sustainability

Future Fuels

Our customers are making long-term investments when planning their next project, yet uncertainties loom regarding future fuel availability, costs, and regulatory landscapes, including potential CO2 taxes. That's why Bergen Engines' modular design prioritizes fuel flexibility, enabling customers to navigate these uncertainties with confidence.

This flexibility ensures reliability and top efficiency ratings for our engines, regardless of the fuel type you choose to operate with today, providing peace of mind and longevity to your investments.

Learn more about our ongoing research with Hydrogen, Methanol, Biofuels and Ammonia.