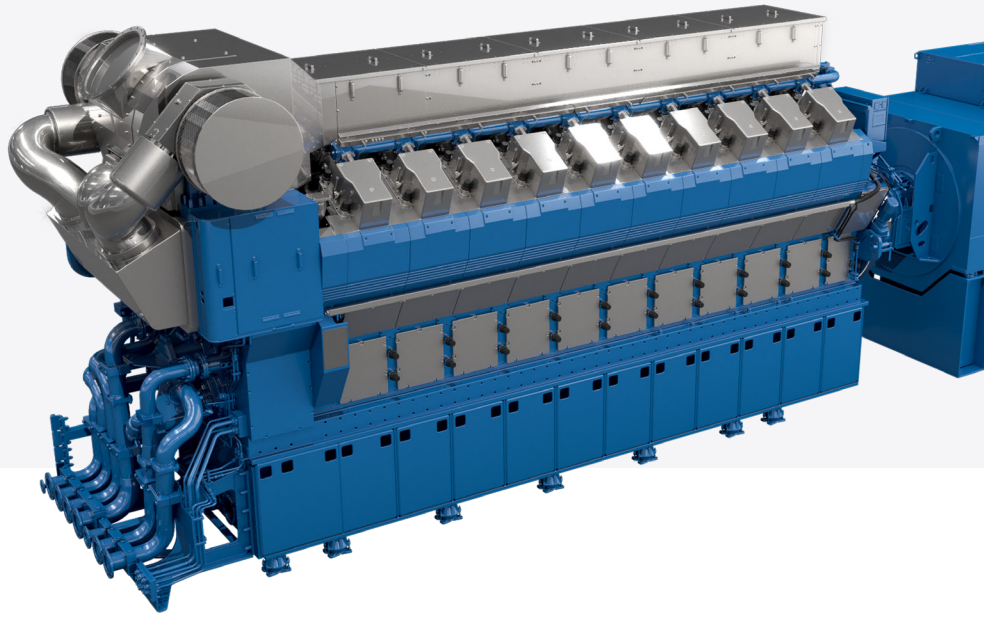


# B33:45L

Inline Engine  
Liquid Fuel  
3,155 - 4,750 kW



## Revolutionizing Power Generation

### Crafted with You in Mind

Through close dialogue and collaboration with our customers and expert service organization, we've gain invaluable insights that shape the development of our cutting-edge solutions.

Boasting over 70 years of expertise, Bergen's latest B33:45V engine features power capabilities reaching 600kW per cylinder. This engine is designed to deliver unrivaled performance, setting new benchmarks in efficiency while lowering life-cycle costs for our customers.

### Unlocking the Potential of Medium-Speed Engines

Bergen's B33:45 gas engine stands as a testament to innovation. Purpose-built for land-based applications, this medium-speed lean-burn unit generates up to 12MW of mechanical power. Equipped with state-of-the-art combustion technology, it ensures optimal efficiency and unparalleled load responsiveness.

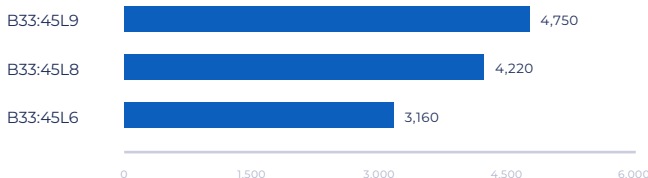
Additionally, it's engineered to meet the most stringent emission standards, while maximizing electrical and heat recovery efficiency, all while guaranteeing extreme reliability.

### Key Benefits

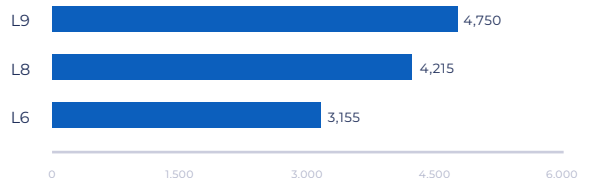
- World-Class Efficiencies
- 600kW Mechanical Output per Cylinder
- World-Class Fuel Consumption
- Exceptionally Low Emissions
- Modular Design for Seamless Scaling
- Low Lifecycle Costs
- Excellent Load Responsiveness
- Convertible to Gas Fuel Operation with Bergen's B3X Platform

### Product Range

**B33:45L (50hz, 750rpm)**  
Electrical Output (kW)



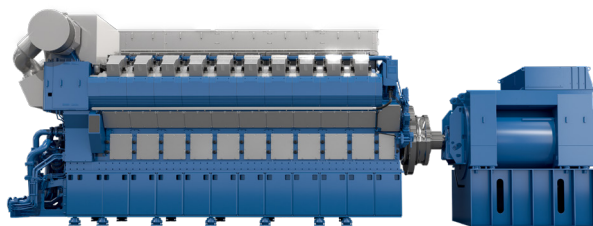
**B33:45L (60hz, 720rpm)**  
Electrical Output (kW)





## Weight & Dimensions

	Weight (kg)	Length (mm)	Width (mm)	Height (mm)
B33:45L6	65,300	9,775	2,710	4,100
B33:45L8	81,562	10,825	2,985	4,370
B33:45L9	82,395	11,240	2,985	4,390



## Technical Data

### 50 Hz

	B33:45L6	B33:45L8	B33:45L9
Number of Cylinders	6	8	9
Engine Speed (r/min)	750	750	750
Electrical Output (kW)	3,160	4,220	4,750
Charge Air Cooler HT (kW)	710	1,115	1,175
Charge Air Cooler LT (kW)	250	290	295
Lube Oil Cooler (kW)	415	510	540
Jacket Water Cooler (kW)	370	525	675
Exhaust Mass (kg/h)	21,800	28,600	32,200
Exhaust Gas Temp. (°C)	320	290	310
Nom. El. Efficiency (%)	46.1	46.7	46.7

### 60 Hz

	B33:45L6	B33:45L8	B33:45L9
Number of Cylinders	6	8	9
Engine Speed (r/min)	720	720	720
Electrical Output (kW)	3,155	4,215	4,750
Charge Air Cooler HT (kW)	710	1,135	1,185
Charge Air Cooler LT (kW)	250	290	295
Lube Oil Cooler (kW)	415	515	540
Jacket Water Cooler (kW)	370	530	675
Exhaust Mass (kg/h)	21,800	29,100	32,200
Exhaust Gas Temp. (°C)	330	330	330
Nom. El. Efficiency (%)	46.1	46.2	46.7

### Stroke Ratio

	B33:45L
Cylinder Diameter (mm)	330
Piston Stroke (mm)	450
Ratio	0.73

### GENERAL CONDITIONS

- All technical data is valid for 100% load, including two engine driven pumps.
- Engine power definition and fuel consumption are according to ISO 3046-1 and ISO 8528.
- Specific fuel consumption is based on using diesel-oil with a lower heating value of 42.7 MJ/kg.
- Generator rating and performance in accordance with IEC 60034-1, power factor 1.
- NOx Emissions are according to the WB 2008.
- Data for heat dissipation and exhaust gas are based on a tolerance of  $\pm 5\%$ , turbocharger air suction temp 25°C.
- Fast start time to be evaluated on a project specific basis. Engine must be specified accordingly and maintained in hot standby mode.
- For low load levels specified the engine can be operate continuous. For lower loads, certain recommendations apply.

### DISCLAIMER

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

### Loading & Unloading

	B33:45L
Regular start time (min:sec)	17
Fast start time (min:sec)	3
Low load (%)	25

## 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 and Ammonia.

