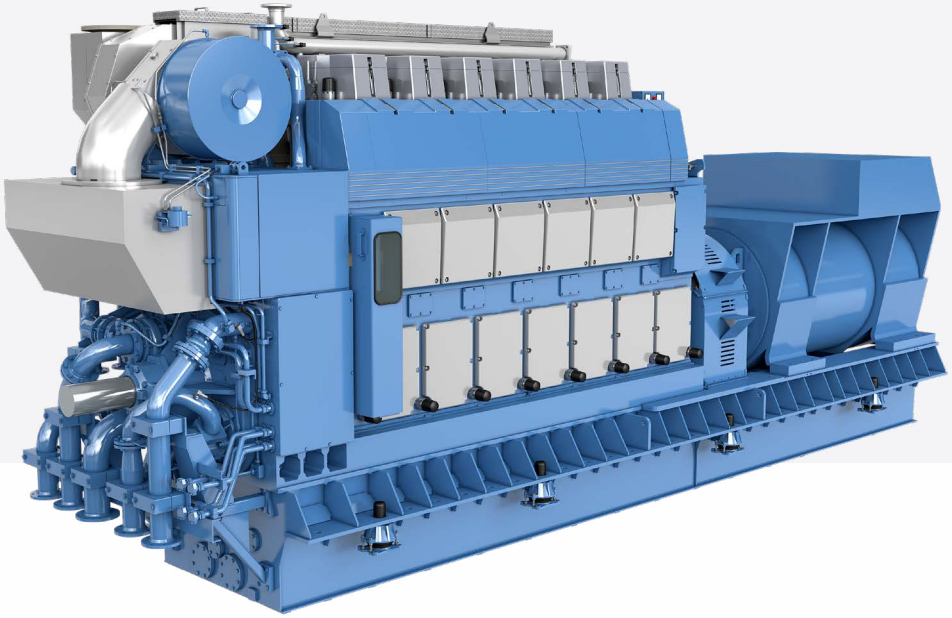
BERGEN ENGINES
ON LAND. AT SEA.

B33:45L

Generator Set
Liquid Fuel
3,600 - 5,400 kW



CH_3OH READY

Cost Effective Operation & Design

Developed through consultations with operators, designers, and shipbuilders, Bergen's B33:45L offers cost-effective operation through modular design, delivering the efficiency and dependability we're known for with the service-friendly design our customers appreciate.

The engine provides proven reliability with extended service intervals of up to 25,000 hours, **minimizing downtime and maintenance costs.** It meets IMO Tier II compliance without the need for Selective Catalytic Reduction (SCR) and achieves Tier III compliance with SCR, ensuring adherence to stringent environmental regulations. Additionally, its fast load response, low vibration, and structural noise levels ensure smooth and efficient operation in any application.

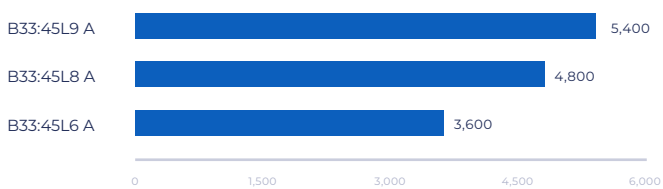
The B33:45 engine features full equipment health monitoring with 24/7 global service support, including emergency assistance and a comprehensive network of trained service engineers and workshops. The **modular, low-weight construction** allows for ease of installation and maintenance, with adaptable exhaust routing and aligned piping for straightforward connections. Our flexible design includes the capability to **convert between liquid and gas operation** via Bergen's B3X Engine Platform, providing versatility in a futureproof solution for any future fuel type. Furthermore, its compact size and high power per cylinder make it ideal for small engine rooms, requiring fewer units to maintain.

Key Benefits for Shipyards

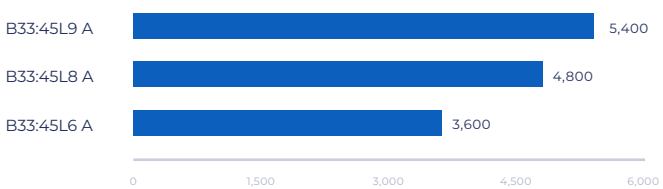
- Easy Installation
- Option to Split Engine and Alternator for Variable Speed Operation to Reduce Fuel Consumption
- In-House TVC Expertise for Complex Applications (e.g. Research vessels, seismic, fishing, etc.)
- Pre-Commissioning Support to Minimize Idle Time
- Dedicated Bergen Engines Service Engineers for Commissioning and Troubleshooting

Product Range

B33:45L (720 r/min)
Max Cont Rating (kW)

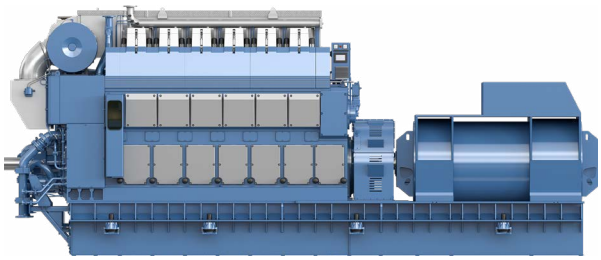


B33:45L (750 r/min)
Max Cont Rating (kW)



Weight & Dimensions

	Dry Engine Weight (kg)	Engine Length (mm)	Engine Width (mm)	Engine Height (mm)
B33:45L6 A	48,300	5,890	2,710	4,100
B33:45L8 A	60,860	6,985	2,985	4,370
B33:45L9 A	61,695	7,510	2,985	4,385



Technical Data

720 r/min

	B33:45L6 A	B33:45L8 A	B33:45L9 A
Number of Cylinders	6	8	9
Mean Piston Speed (m/s)	10.8	10.8	10.8
Max. Cont Rating (MCR, kW)	3,600	4,800	5,400
Max. Cont Rating altern, h=0.97 (kWel)	3,490	4,655	5,240
Max. Cont Rating altern, Cos f=0.8 (kVa)	4,365	5,820	6,550
Mean Effective Pressure (BMEP, bar)	25.98	25.98	25.98
Specific Lub. Oil Consumption (g/kWh)	0.5	0.5	0.5
Specific Fuel Consumption (g/kWh)	173	175	173
Cooling Water Temp. Engine Outlet (*C)	90	90	90

750 r/min

B33:45L6 A	B33:45L8 A	B33:45L9 A
6	8	9
11.2	11.2	11.2
3,600	4,800	5,400
3,490	4,655	5,240
4,365	5,820	6,550
24.94	24.94	24.94
0.5	0.5	0.5
175	174	173
90	90	90

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.*
- *Engine power definition is according to ISO 3046-1*
- *Specific fuel consumption is measured on testbed according to iso 3046-1, using diesel-oil with a net heating value of 42.7 MJ/kg and no engine driven pumps.*
- *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.