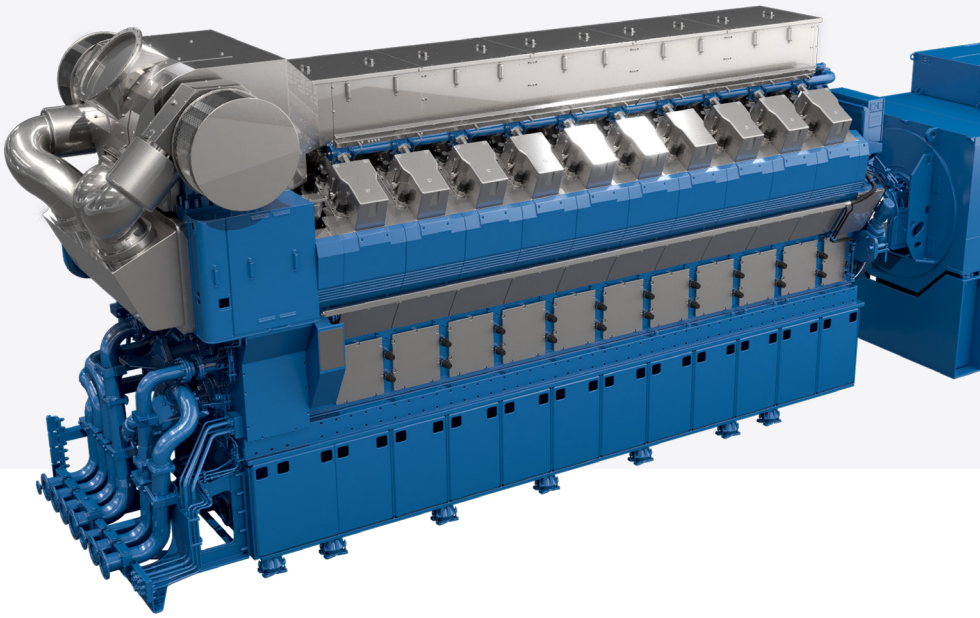
BERGEN ENGINES
ON LAND. AT SEA.

B33:45V

V-Engine
Liquid Fuel
6,335 - 10,605 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 engine stands as a testament to innovation. Purpose-built for land-based applications, this medium-speed lean-burn unit generates up to 11MW of mechanical power. Equipped with state-of-the-art combustion technology, it ensures optimal efficiency and unparalleled load responsiveness.

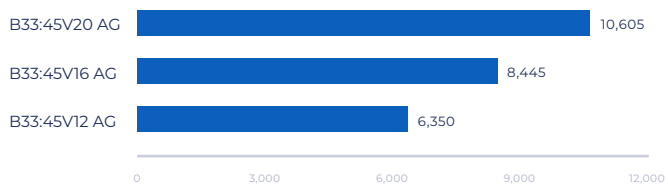
Additionally, it's engineered to meet the most stringent emission standards, while maximizing electrical and heat recovery efficiency, all while guaranteeing extreme reliability.

Key Benefits

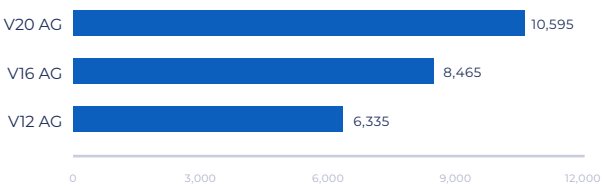
- World-Class Efficiencies
- 600kW Mechanical Output per Cylinder
- World-Class Fuel Consumption
- Exceptionally Low Emissions
- Modular Design for Seamless Scaling
- Low Lifecycle Costs
- Excellent Load Responsiveness
- Convertible to Gas Fuel Operation with Bergen's B3X Platform

Product Range

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

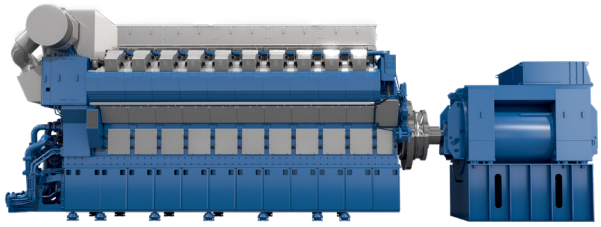


B33:45V (60hz, 720rpm)
Electrical Output (kW)



Weight & Dimensions

	Weight (kg, dry)	Length (mm)	Width (mm)	Height (mm)
B33:45V12 A	107,000	11,600	3,280	4,570
B33:45V16 A	144,500	13,165	3,750	4,750
B33:45V20 A	160,600	14,410	3,660	4,950



Technical Data

50 Hz

	B33:45V12 A	B33:45V16 A	B33:45V20 A
Number of Cylinders	12	16	20
Engine Speed (r/min)	750	750	750
Electrical Output (kW)	6,350	8,445	10,605
Charge Air Cooler HT (kW)	1,310	2,215	2,765
Charge Air Cooler LT (kW)	590	570	630
Lube Oil Cooler (kW)	735	1,015	1,140
Jacket Water Cooler (kW)	985	1,040	1,395
Exhaust Mass (kg/h)	42,200	57,200	71,600
Exhaust Gas Temp. (°C)	325	345	330
Nom. El. Efficiency (%)	47.1	47.2	46.9

60 Hz

B33:45V12 A	B33:45V16 A	B33:45V20 A
12	16	20
720	720	720
6,335	8,465	10,595
1,310	2,240	2,775
590	575	630
735	1,020	1,140
985	1,050	1,400
42,200	58,200	71,600
325	330	330
47.1	46.9	46.9

Stroke Ratio

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

Loading & Unloading

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

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 ± 5%,turbocharger air suction temp 25°C.*
- *Fast start time to be evaluated on a project specific basic. 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. 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 and Ammonia.