

Bergen B35:40V AG

Lean-burn gas engine

Features

- It gives the widest power range in the 720-750rpm class, from 4.5 to 8.5MW.
- The B-gas gives exceptionally low emissions of NO_x, CO and UHC combined which is a tribute to its efficient combustion system.
- The combination of a good combustion system that requires less air dilution and the variable geometry of the turbocharger results in more recoverable exhaust heat.
- **Particularly robust, simple and straightforward design with a proven reliability record. Simple to maintain.**



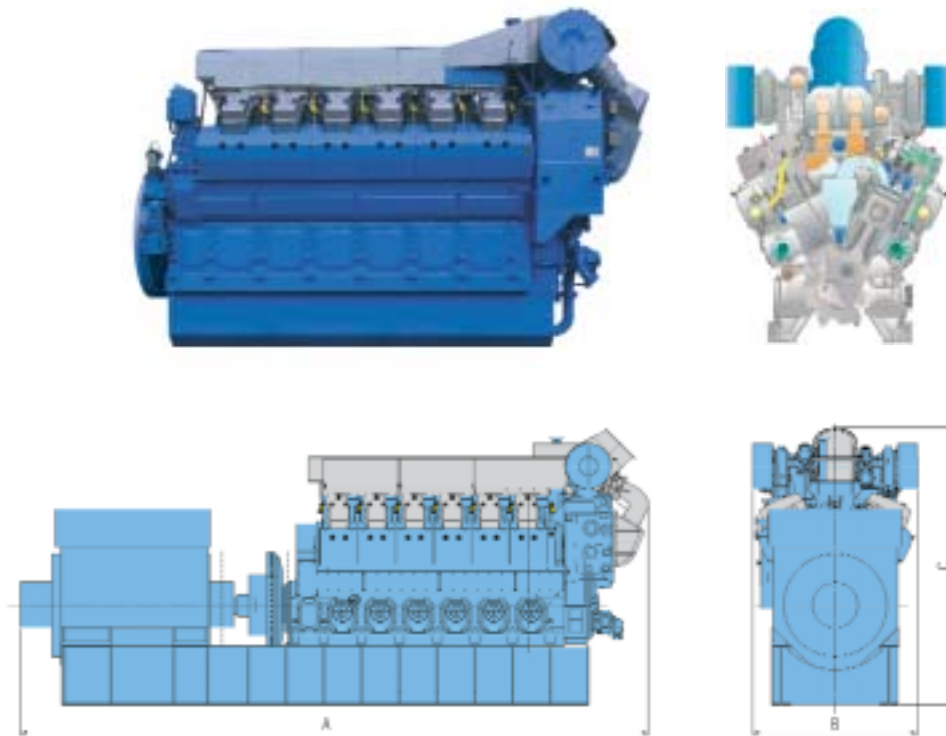
Description

The new B-gas engine is a medium-speed, spark-ignited lean-burn unit designed to produce up to 8.5MW of electrical power giving customers more energy and greater cost-effectiveness than anything else of its type on the market. It will be available in 12, 16 and 20 cylinder versions.

The design has been driven by stringent requirements for lower exhaust emissions, highest possible electrical and heat recovery efficiency coupled with extreme reliability. It is a natural extension to the already successful K-gas engine range and together the two engines cover outputs from 2.0 to 8.5MW.

The B-gas sets new standards both in power and efficiency in the 720-750rpm class. Decisive features are the enlarged cylinder volume and optimised combustion technology, which ensures class leading performance without over stressing the engine.

Fact sheet



Principal dimensions

Cylinder diameter 350mm. Piston stroke 400mm.

Engine type:	A	B	C	Weight Gen Set
B35:40-V12AG/B	10600	2750	4650	91800 kg
B35:40-V16AG/B	11700	2750	4650	104500 kg
B35:40-V20AG/B	13100	2750	4650	125500 kg

The performance data is based on:

- All technical data is valid at 100% load, including two engine driven pumps (lub oil and jacket water)
- Exhaust gas raw emissions are set at 500mg/NOx and 5% O₂
- Engine power definition and fuel gas consumption are according to ISO 3046-1(ICFN)
- Fuel gas consumption is applicable for turbocharger air suction temperature 25 °C
- Reference fuel is natural gas with a lower heating value of 36 MJ/Nm³
- Minimum fuel gas pressure to the gas regulating module: 3,9 barg
- Due to continuous development, some data may change

Technical data

Engine type		B35:40-V12B AG	B35:40-V12 AG	B35:40-V16B AG	B35:40-V16 AG	B35:40-V20B AG	B35:40-V20 AG
Number of cylinders		12	12	16	16	20	20
Bore/stroke	mm	350/400	350/400	350/400	350/400	350/400	350/400
Engine speed	r/min	720	750	720	750	720	750
Electrical output,cosφ 1,0	kW	4895	5100	6530	6800	8160	8500
Mean effective pressure (BMEP)	bar	18.2	18.2	18.2	18.2	18.2	18.2
Fuel gas consumption	kW	10570	11010	14095	14680	17615	18350
Specific lubricating oil consumption	g/kWh	0.4	0.4	0.4	0.4	0.4	0.4
Cooling water temp – engine outlet	°C	90	90	90	90	90	90



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