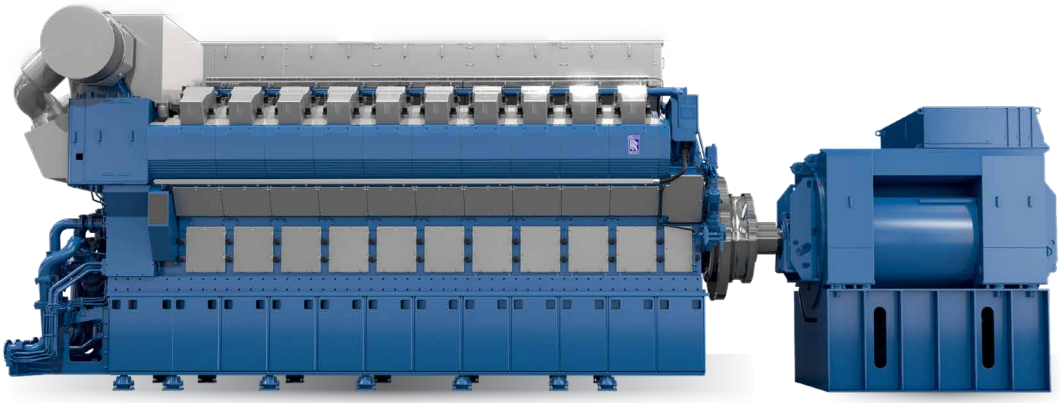


Medium-speed power generation

B33:45V LIQUID FUEL

600 kW per cylinder in a compact design, with world class efficiency and low life-cycle costs.

Defined by our customers

Close dialogue with our customers and the service organisation has given valuable input to the development of more efficient solutions – both for assembly and maintenance. The result is a robust and powerful engine, delivering up to 600kW per cylinder, with world class efficiency and reduced life-cycle costs.

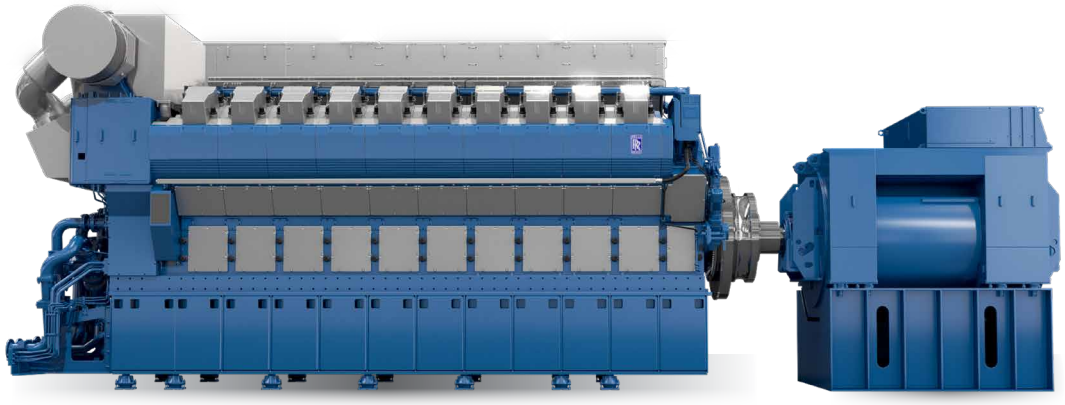
Our latest engine series is built on more than 70 years of experience. Our legacy, with all its valuable knowledge and experience, has been an important foundation for the development and testing of new technologies. The B33:45 liquid fuel engine is designed to produce up to 12 MW of mechanical power with optimised combustion technology and excellent load responsiveness. The design has been driven by stringent requirements for lower exhaust emissions, highest possible electrical and heat recovery efficiency, coupled with extreme reliability.

Your benefits

- World class efficiencies
- 600 kW mechanical output per cylinder
- World class fuel consumption
- Exceptionally low emissions
- Simple, modular and robust design
- Low lifecycle costs
- Excellent load responsiveness
- Convertible to gas fuel operation

B33:45V AG

50 Hz



Main dimensions - cylinder diameter 330 mm, piston stroke 450 mm

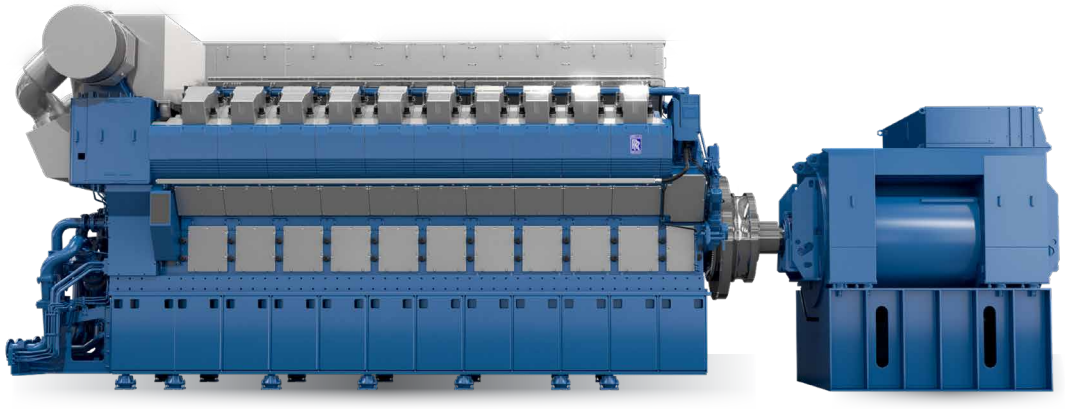
Weight and dimentions	Weight kg	Length	Width	Height
B33:45V12 A	100000	11716	3280	4980
B33:45V16 A	150000	12996	3783	4980
B33:45V20 A	170000	14276	3783	4980
Technical data	**Unit**	**B33:45V12A**	**B33:45V16A**	**B33:45V20A**
Number of cylinders		12	16	20
Engine speed	r/min	750	750	750
Electrical output	kW	6380	8520	10650
Charge air cooler HT	kW	1810	2410	3090
Charge air cooler LT	kW	400	530	590
Lube oil cooler	kW	780	1030	1290
Jacket water cooler	kW	920	1220	1520
Exhaust mass	kg/h	43400	57900	72400
Exhaust gas temperature	°C	300	300	300
Nom. el. efficiency	%	48	48.3	48.3

General conditions

- Depending on type of generator the weight, performance and dimensions may change
- All technical data is valid at 100% load, with no engine driven pumps
- Engine power definition is according to ISO 3046-1 (ICFN)
- Generator standard IEC 60034-1, power factor 1
- Specific fuel oil consumption is measured at test bed according to ISO 3046-1, using diesel oil with a net heating value of 42.7 MJ/kg
- The information herein is subject to change without notice and the given data does not carry any contractual value. Rolls-Royce assumes no responsibility for any errors that may appear

B33:45V AG

60 Hz



Main dimensions - cylinder diameter 330 mm, piston stroke 450 mm

Weight and dimentions	Weight kg	Length	Width	Height
B33:45V12 A	100000	11716	3280	4980
B33:45V16 A	150000	12996	3783	4980
B33:45V20 A	170000	14276	3783	4980
Technical data	**Unit**	**B33:45V12A**	**B33:45V16A**	**B33:45V20A**
Number of cylinders		12	16	20
Engine speed	r/min	720	720	720
Electrical output	kW	6380	8520	10650
Charge air cooler HT	kW	1810	2410	3090
Charge air cooler LT	kW	400	530	590
Lube oil cooler	kW	780	1030	1290
Jacket water cooler	kW	920	1220	1520
Exhaust mass	kg/h	43400	57900	72400
Exhaust gas temperature	°C	300	300	300
Nom. el. efficiency	%	47.9	48.1	48.2

General conditions

- Depending on type of generator the weight, performance and dimensions may change
- All technical data is valid at 100% load, with no engine driven pumps
- Engine power definition is according to ISO 3046-1 (ICFN)
- Generator standard IEC 60034-1, power factor 1
- Specific fuel oil consumption is measured at test bed according to ISO 3046-1, using diesel oil with a net heating value of 42.7 MJ/kg
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