Medium-speed power generation

B36:45 IN-LINE NATURAL GAS

600 kW per cylinder in a compact design, with class leading efficiency levels 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 B36:45 in-line gas engine is a medium-speed, spark-ignited lean-burn unit 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
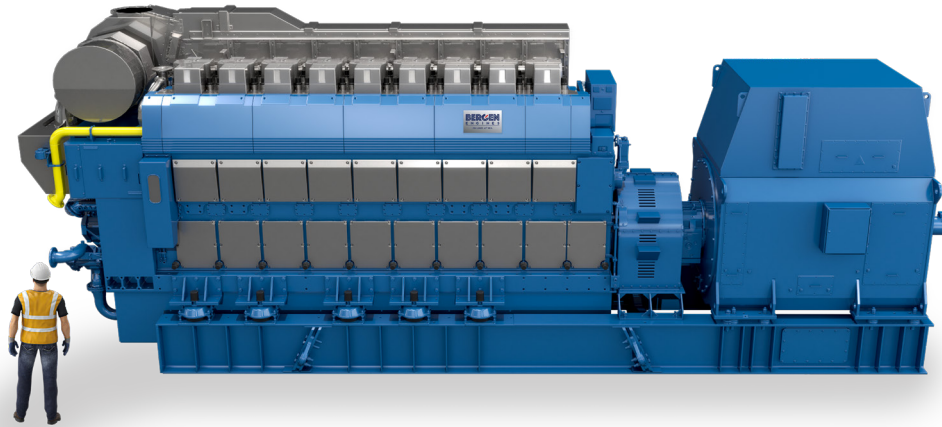— Convertible to liquid fuel operation
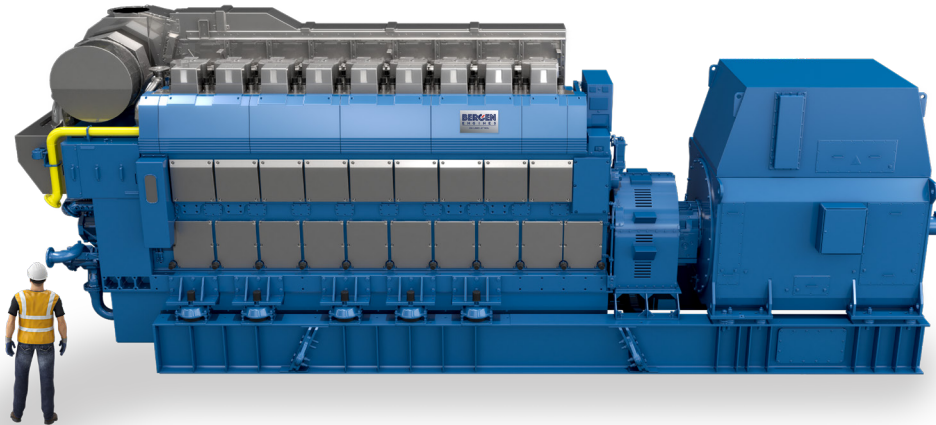
B36:45L AG

Main dimensions - cylinder diameter 360 mm, piston stroke 450 mm

Weight and dimentions	Weight kg	Length	Width	Height
B36:45L6 AG	67000	9800	2800	3890
B36:45L8 AG	87500	10240	3000	4170
B36:45L9 AG	88000	11250	3400	4170
Technical data	**Unit**	**B36:45L6AG**	**B36:45L8AG**	**B36:45L9AG**
Number of cylinders		6	8	9
Engine speed	r/min	750	750	750
Electrical output	kW	3520	4700	5290
Charge air cooler HT	kW	810	1080	1085
Charge air cooler LT	kW	225	300	400
Lube oil cooler	kW	360	475	625
Jacket water cooler	kW	455	605	790
Exhaust mass	kg/h	18800	25100	28200
Exhaust gas temperature	°C	375	375	375
Nom. el. efficiency	%	48.5	48.7	48.9

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 and fuel gas consumption are according to ISO 3046-1 (ICFN)
— Generator standard IEC 60034-1, power factor 1
— Reference fuel is natural gas with a lower heating value of 36MJ/nm3, methane number >80
— Minimum fuel gas pressure to the gas regulating module: 5.3 barg
— 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

B36:45L AG

Main dimensions - cylinder diameter 360 mm, piston stroke 450 mm

Weight and dimentions	Weight kg	Length	Width	Height
B36:45L6 AG	67000	9800	2800	3890
B36:45L8 AG	87500	10240	3000	4170
B36:45L9 AG	88000	11250	3400	4170
Technical data	**Unit**	**B36:45V12AG**	**B36:45V16AG**	**B36:45V20AG**
Number of cylinders		6	8	9
Engine speed	r/min	720	720	720
Electrical output	kW	3370	4500	5070
Charge air cooler HT	kW	720	970	1080
Charge air cooler LT	kW	220	270	320
Lube oil cooler	kW	400	540	610
Jacket water cooler	kW	480	640	720
Exhaust mass	kg/h	18500	24600	27700
Exhaust gas temperature	°C	375	375	375
Nom. el. efficiency	%	48.4	48.6	48.9

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 and fuel gas consumption are according to ISO 3046-1 (ICFN)
— Generator standard IEC 60034-1, power factor 1
— Reference fuel is natural gas with a lower heating value of 36MJ/nm3, methane number >80
— Minimum fuel gas pressure to the gas regulating module: 5.3 barg
— 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