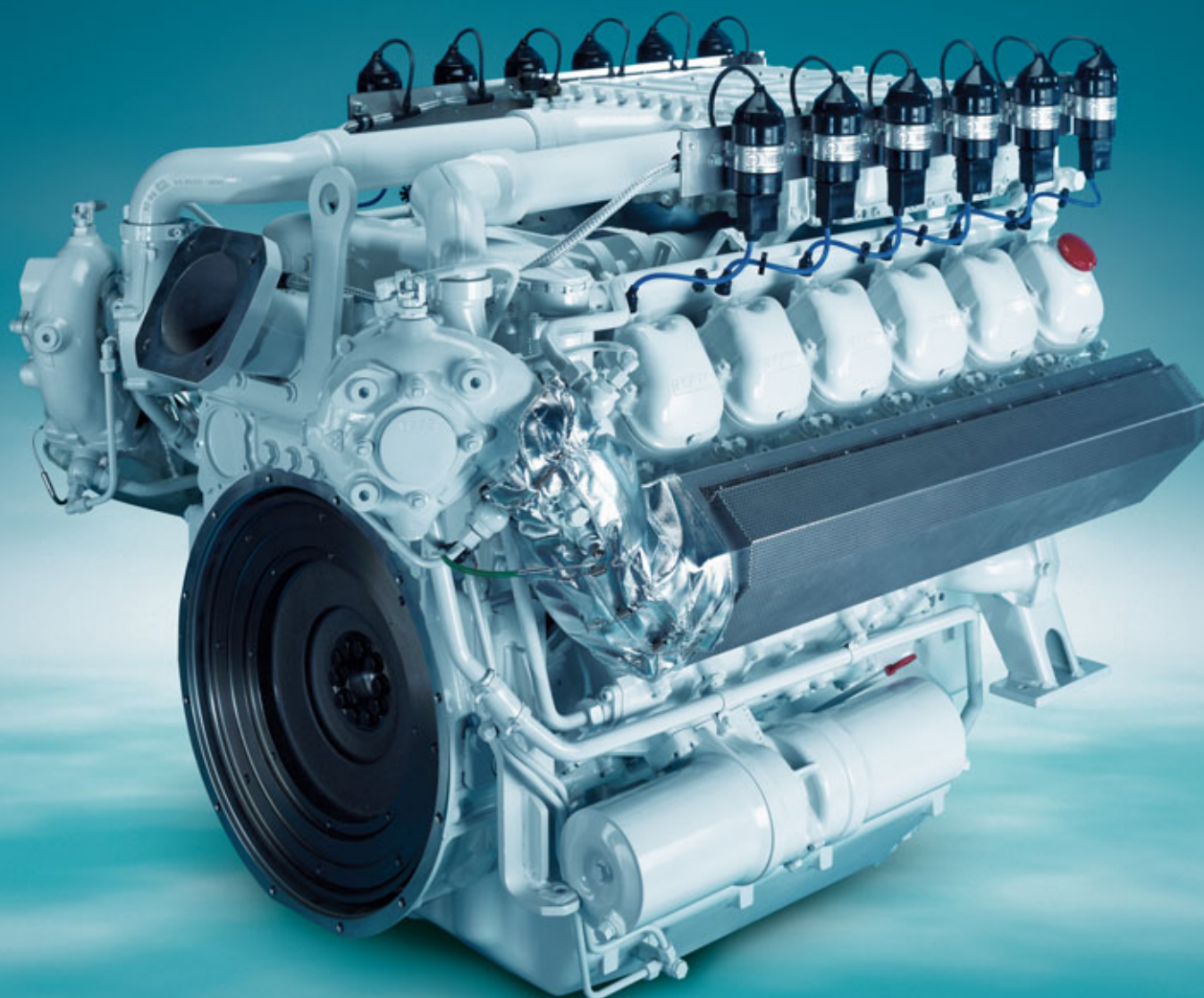


# E2842 LE



## V12 gas engine for CHP.

Engineering the Future – since 1758.

**MAN** Nutzfahrzeuge



# Efficient and Clean.

Producers and operators of cogeneration plants have stringent demands. Robust and compact engines have to work reliably round-the-clock. Economic operation is important for the lifetime of the complete plant. Economic means highly efficient use of resources and low running costs of the plant. Due to continuous development MAN engines always work highly efficiently, reliably and environmentally-friendly.

## Engine Description E2842 LE.

### Characteristics

Cylinder and arrangemant	12-cylinder in V-design
Operation mode	4-stroke otto gas engine
Charging	Exhaust turbocharger with watercooled turbine housing
Cooling system	Watercooled
Mixture cooling	Single-stage for the LE 312, two-stage for the LE 322

Dimensions E2842			
Type of engine		LE 312	LE 322
A-Overall length	mm	1,695	1,570
B-Overall width	mm	1,175	1,142
C-Overall height	mm	1,350	1,155
Weight (dry)	kg	1,415	1,420

Customer Benefits

- High efficiency due to optimal combustion
- Compact design
- Reduced operating costs due to low fuel and oil consumption as well as long service life
- Sophisticated and well-tested technology ensures reliable operation and long lifetime
- Low emissions to save the environment

Technical Data E2842

Operation mode		COP with natural gas				COP with biogas		
at speed	rpm	1,500		1,800		1,500		1,800
	Hz	50		60		50		60
Type of engine		LE 312	LE 322	LE 312	LE 322	LE 312	LE 322	LE 322
Bore	mm	128	128	128	128	128	128	128
Stroke	mm	142	142	142	142	142	142	142
Displacement	l	21.9	21.9	21.9	21.9	21.9	21.9	21.9
ISO standard rating	kW	400	420	420	420	360	380	380
Air ratio	λ	1.6	1.6	1.6	1.6	1.5	1.45	1.45
Coolant heat¹	kW	230	236	270	258	215	205	232
Exhaust heat up to 120°C¹	kW	237	222	280	244	217	228	243
Efficiency¹								
mechanical	%	39.0	40.2	36.6	38.7	39.0	40.2	38.6
thermal	%	45.5	49.1	47.9	51.2	46.8	50.0	52.1
total	%	84.5	89.3	84.5	89.9	85.9	90.2	90.7
Emissions² NO <sub>x</sub>	mg/Nm³	< 500	< 500	< 500	< 500	< 500	< 500	< 500
Combustion³		m	m	m	m	m	m	m

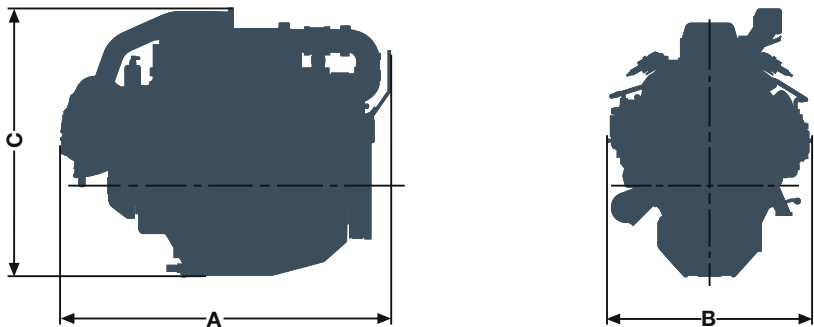
¹ At 100% load. ² Correlation 5% oxygen. ³ m=lean burn

Technical data are based on natural gas with calorific value 10 kWh/Nm³ and bio gas with calorific value 6 kWh/Nm³

The values given in this data sheet are for information purposes only and not binding.

Definition of Application

Engines for COP (continuous power) are designed for 8,000 annual operation hours at a load factor of 100%. Usually, these engines are used in cogeneration plants.



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Text and illustrations are not binding.

We reserve the right to make modifications in the course of technical progress.

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