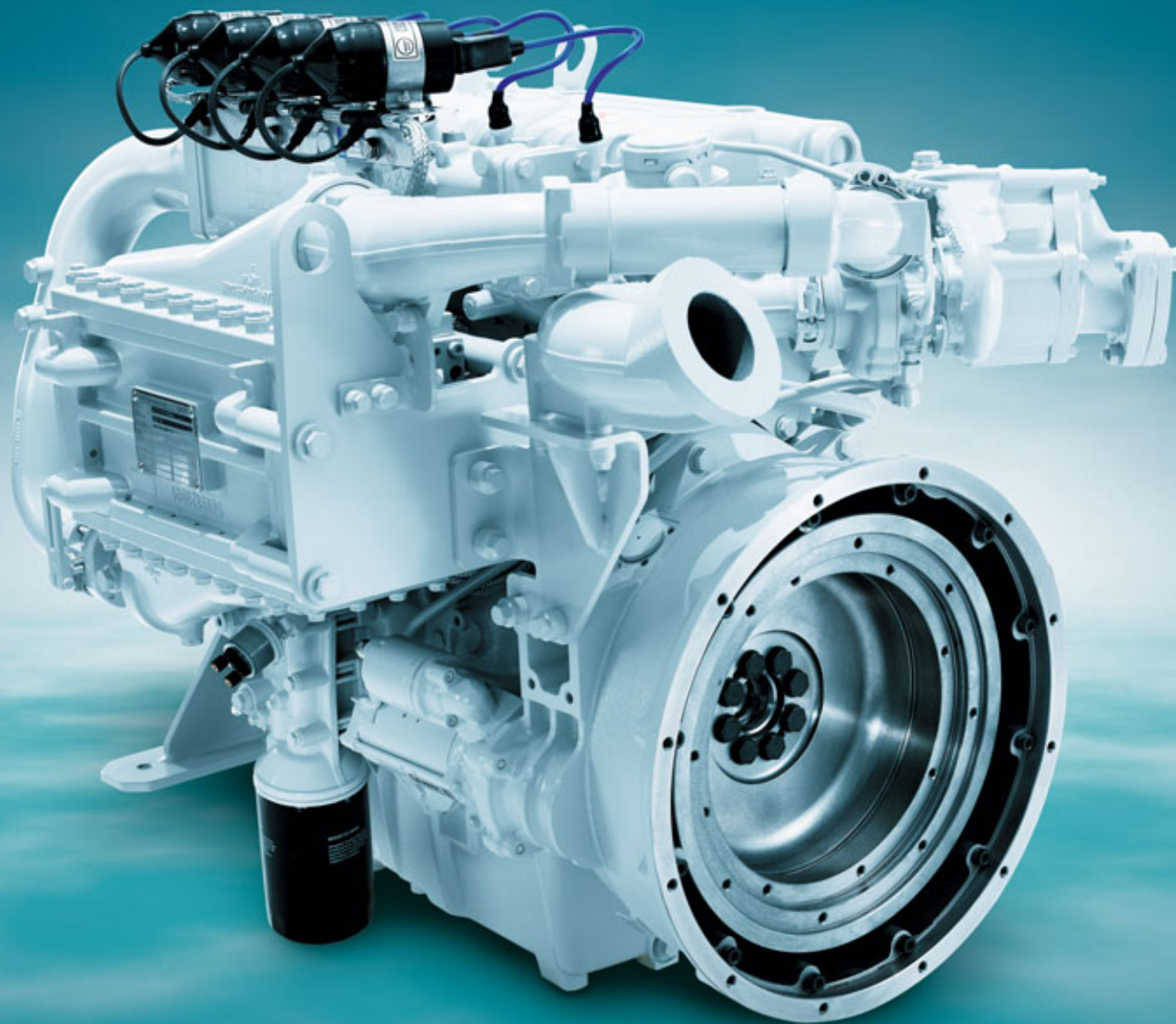


E0834



4-cylinder 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 E0834.

Characteristics E0834 E

Cylinder	4-cylinder
Arrangement	In line
Operation mode	4-stroke otto gas engine
Type of cooling	Watercooled

Characteristics E0834 LE

Cylinder	4-cylinder
Arrangement	In line
Operation mode	4-stroke otto gas engine
Type of cooling	Watercooled
Charging	Exhaust turbocharger with heat insulated turbine housing, compressive oil lubricated bearing and watercooled bearing seat
Mixture cooling	Two-stage mixture cooling with high and low temperature circle

Dimensions E0834		E302	E312	LE302
A-Overall length	mm	825	825	1,055
B-Overall width	mm	740	740	809
C-Overall height	mm	940	940	866
Weight (dry)	kg	430	430	495

Customer Benefits

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

Technical Data E0834

Operation mode		COP with natural gas					COP with biogas
at speed	rpm	1,500 (50 Hz)			1,800 (60 Hz)		1,500 (50 Hz)
Type of engine		E302	E312	LE 302	E302	E312	LE302
Bore	mm	108	108	108	108	108	108
Stroke	mm	125	125	125	125	125	125
Displacement	l	4.6	4.6	4.6	4.6	4.6	4.6
ISO standard rating	kW	54	47	68	62	53	68
Air ratio	λ	1.0	1.0	1.6	1.0	1.0	1.4
Coolant heat ¹	kW	46	39	54	51	44	52
Exhaust heat up to 120°C ¹	kW	33	24	33	40	28	35
Efficiency ¹							
mechanical	%	36.5	36.4	38.5	36.5	34.9	38.3
thermal	%	53.5	48.8	53.1	53.7	47.4	52.0
total	%	90.0	85.3	91.6	90.2	82.3	90.2
Emissions ² NO _x	mg/Nm ³	< 6,500	< 5,000	< 500	< 7,000	< 5,000	< 500
Combustion ³		st	st	m	st	st	m

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

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