

POWER.

Gas Engines for Power Generation.



MAN Engines



EFFICIENT ELECTRICITY AND HEAT GENERATION.

Manufacturers and operators of CHPs have stringent requirements. Robust, compact engines have to work reliably 24 hours a day, 7 days per week. Economic operation over the life cycle of the entire plant is therefore essential. This requires a high level of efficiency by maximum utilisation of primary energy and low plant operating costs. With their continuous development programme, MAN engines make a contribution to greater efficiency. Reliable and low in emissions.





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BENEFITS

- High power and maximum efficiency
- Low operating costs as a result of low levels of lubricant and fuel consumption as well as extended service intervals (component stability)
- Low emissions due to state-of-the-art combustion technologies
- Low space requirement due to compact design
- Reliable in use thanks to field-tested technology
- Long service life resulting from application-specific design





HYDROGEN BLENDING

Most stationary MAN gas engines are designed for a hydrogen blending of up to 20% by volume (H_2) when operated with natural gas. We thus support operators in setting up their CHP units as “hydrogen readiness” plants, something the German government is currently assessing with a view to promoting it within the framework of the Combined Heat and Power Act (KWK-Gesetz).

No design modifications are required for MAN natural gas engines for operation with hydrogen-containing fuels with up to 20% hydrogen blending by volume. Existing installations can be converted to “hydrogen readiness” up to 20% by volume with knock detection.



HOW DO NATURALLY ASPIRATED ENGINES DIFFER FROM TURBOCHARGED ENGINES?

Naturally aspirated engine

- Stoichiometric gas combustion ($\lambda=1$)
- Water-cooled exhaust pipes, without exhaust-gas turbocharging
- Ideally suited for exhaust gas aftertreatment with a three-way catalytic converter

Advantages: The low power density enables long maintenance intervals. Naturally aspirated engines have fewer components and are subject to less mechanical stress. They also offer higher operating reliability with the highest possible overall efficiency.

Turbocharged engine

- Lean gas combustion ($\lambda>1$)
- Exhaust-gas turbocharging complies with the inner-engine exhaust gas values from the TA Luft 2002 regulation for special gas
- For stricter emission regulations: exhaust gas aftertreatment with an oxidation catalytic converter and, if required, with SCR is available

Advantages: When fitted with a turbo charger the engine achieves a higher power density and operates economically and very efficiently.

PEACE OF MIND FROM TAILORED SERVICE

Low-pollutant and fitted with state-of-the-art combustion technology, MAN natural-gas and special-gas engines pave the way to the future of cogeneration. Energy supply is an essential component for economic success. This is why of course you can always count on our corporation after the purchase should you need help.

MAN offers its partners and customers a tailored service concept. The packagers can perform the service entirely independently for their end customers. We customize our training courses to match your requirements by employing the in-depth and proven MAN expertise: Reliable and efficient – just like a MAN gas engine.



PRODUCT RANGE

MAN gas engines for energy generation

Mode of operation		COP with natural gas		COP with special gas	
at engine speed	rpm (Hz)	1 500 (50)	1 800 (60)	1 500 (50)	1 800 (60)

Type	Cylinders	Power (kW) ¹⁾			
E0834	4	37–68	45–68	80	80
E0836	6	56–110	64–110	110	110
E2876	6	150–220	170–210	130–220	130–200
E3268	8	320–370	340–390	320–370	390
E3262	12	275–550	300–580	450–550	450–580
E3872	12	735	–	735	–

1) in accordance with German Industrial Standard DIN ISO 3046, Part 1



Continuous power of unit (COP following DIN ISO 8528-1)

A unit's continuous power is the amount of power an electricity generator is able to produce over an unlimited number of operating hours per annum between the required maintenance intervals under the stated ambient conditions.



E0834 AND E0836

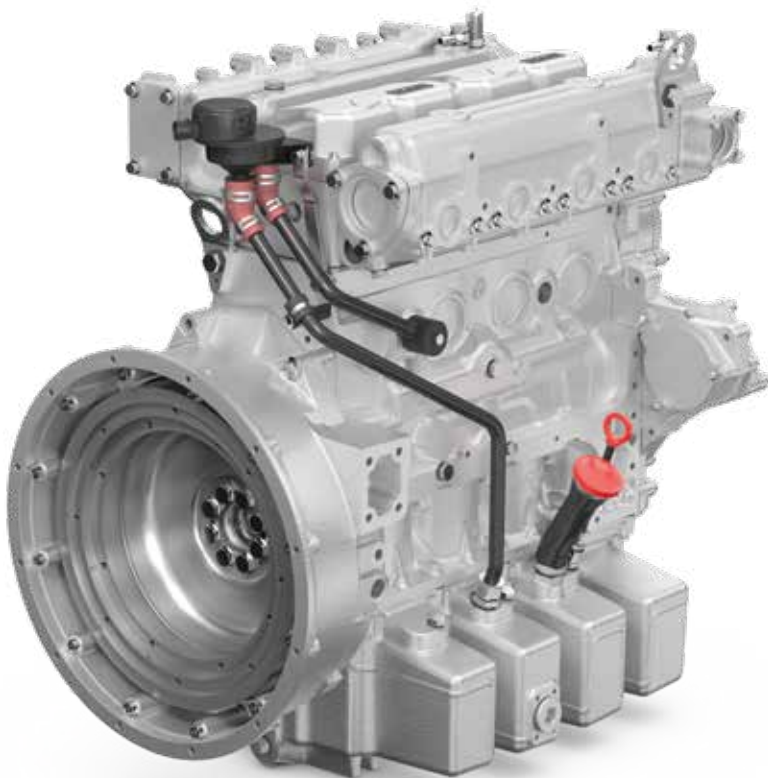
General data

Gas engine			E0834		E0836	
Engine version			E	LE	E	LE
TYPE	Cylinders		4		6	
	ISO standard power ¹⁾	kW	37–80		56–110	
	Bore	mm	108		108	
	Stroke	mm	125		125	
	Displacement	l	4.6		6.9	
	Overall length	mm	862	1 055	1 090	1 300
	Overall width	mm	742	809	740	740
	Overall height	mm	870	866	930	1 030
	Dry weight	kg	430	495	520	605

1) in accordance with German Industrial Standard DIN ISO 3046, Part 1



**POWER AND HEAT FROM NATURAL GAS.
LOW IN POLLUTANTS. LOW LOSSES.**



Technical data is based on a calorific fuel value of 10kWh/Nm³ for natural gas and 6kWh/Nm³ for special gas. The values are provided for information purposes only and are non-binding.

E0834

Technical features

Mode of operation

at engine speed	rpm (Hz)
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Engine version

Effective rated power ISO standard power ⁴⁾	kW
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Air-fuel ratio	λ
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Coolant heat ¹⁾	kW
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Exhaust heat based on 120 °C ¹⁾	kW
--	----

Efficiency ¹⁾	
– mechanical	
– thermal	%
– total	

Emissions status NO _x	ppmvd mg/Nm ^{3 2)}
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Combustion³⁾

1) at 100 % load

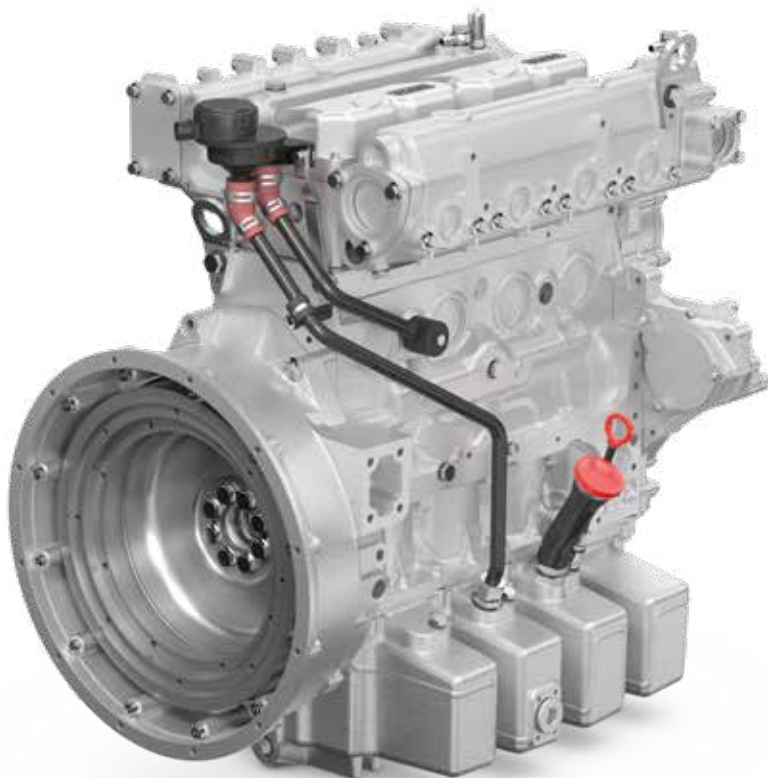
2) with 5 % exhaust-gas oxygen

3) m = lean, st = stoichiometric

COP with natural gas								COP with special gas	
1 500 (50)				1 800 (60)				1 500 (50)	1 800 (60)
E 312	E 302	LE 302	LE 302	E 312	E 302	LE 302	LE 302	LE 322	LE 322
–	54	68	68	–	62	68	68	–	–
37	–	–	–	45	–	–	–	80	80
1.50	1.00	1.58	1.59	1.50	1.00	1.59	1.59	1.54	1.52
29	46	53	51	31	52	57	56	61	63
26.0	35.0	35.4	31.9	35.0	41.0	38.2	34.7	35.0	41.0
33.0 ⁴⁾	36.9 ⁵⁾	37.4 ⁵⁾	39.1 ⁵⁾	31.9 ⁴⁾	36.7 ⁵⁾	35.8 ⁵⁾	37.1 ⁵⁾	38.1 ⁴⁾	37.7 ⁴⁾
49.1	55.1	49.8	48.2	46.8	54.8	51.5	50.4	49.1	50.4
82.1	92.0	87.2	87.3	78.7	91.4	87.3	87.6	87.2	88.1
–	3 730	–	–	< 500	3 249	–	–	–	–
< 500	–	< 250	< 500	–	–	< 250	< 500	< 500	< 500
m	st	m	m	m	st	m	m	m	m

4) in accordance with German Industrial Standard DIN ISO 3046, Part 1

5) in accordance with German Industrial Standard DIN ISO 3046-1, chapter 13



Technical data is based on a calorific fuel value of 10kWh/Nm³ for natural gas and 6kWh/Nm³ for special gas. The values are provided for information purposes only and are non-binding.

E0834

Technical features

Mode of operation

at engine speed	rpm (Hz)
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Engine version

Effective rated power ISO standard power ⁴⁾	kW
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Air-fuel ratio	λ
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Coolant heat ¹⁾	kW
----------------------------	----

Exhaust heat based on 120 °C ¹⁾	kW
--	----

Efficiency ¹⁾	
– mechanical	
– thermal	%
– total	

Emissions status NO _x	ppmvd mg/Nm ^{3 2)}
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Combustion³⁾

1) at 100 % load

2) with 5 % exhaust-gas oxygen

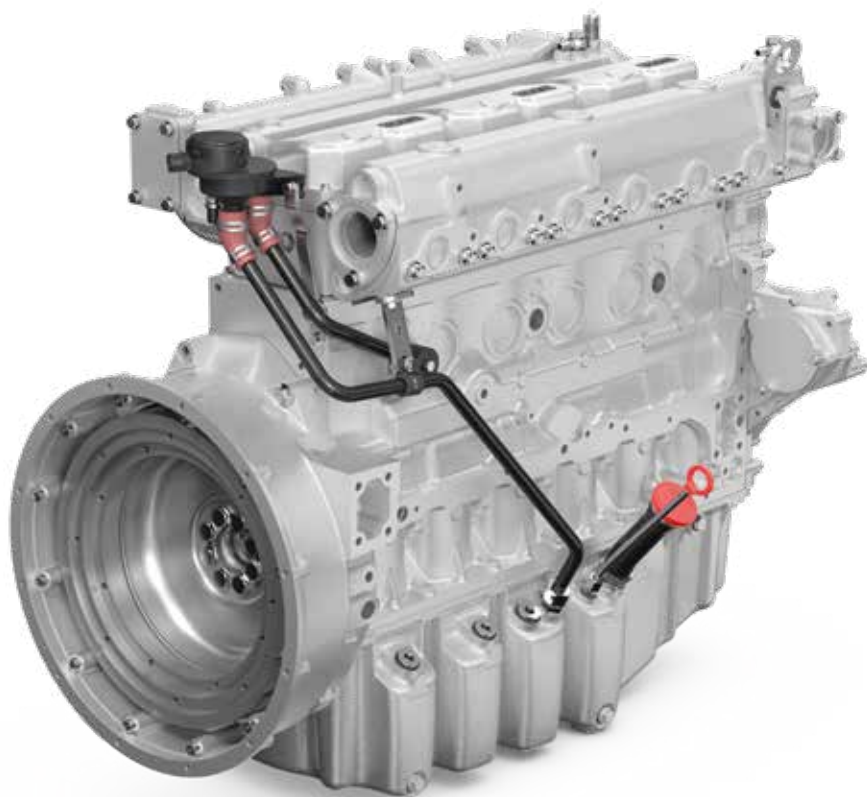
3) m = lean, st = stoichiometric

COP with natural gas + H ₂ (20 % by volume)						
1 500 (50)			1 800 (60)			
E 302	LE 302	LE 302	E 302	LE 302	LE 302	
54	68	68	62	68	68	
–	–	–	–	–	–	
1.00	1.64	1.66	1.00	1.72	1.71	
45	52	51	52	52	51	
35.0	33.4	31.4	42.0	32.6	30.9	
36.7 ⁵⁾	38.6 ⁵⁾	39.7 ⁵⁾	36.5 ⁵⁾	38.1 ⁵⁾	39.1 ⁵⁾	
54.7	49.2	48.5	55.3	48.8	47.8	
91.4	87.8	88.1	91.9	86.9	87.0	
3 812	–	–	3 748	–	–	
–	< 250	< 500	–	< 250	< 500	
st	m	m	st	m	m	

4) in accordance with German Industrial Standard DIN ISO 3046, Part 1

5) in accordance with German Industrial Standard DIN ISO 3046-1, chapter 13





Technical data is based on a calorific fuel value of 10kWh/Nm³ for natural gas and 6kWh/Nm³ for special gas. The values are provided for information purposes only and are non-binding.

E0836

Technical features

Mode of operation

at engine speed	rpm (Hz)
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Engine version

Effective rated power ISO standard power ⁴⁾	kW
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Air-fuel ratio	λ
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Coolant heat ¹⁾	kW
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Exhaust heat based on 120 °C ¹⁾	kW
--	----

Efficiency ¹⁾	
– mechanical	
– thermal	%
– total	

Emissions status NO _x	ppmvd
	mg/Nm ^{3 2)}

Combustion³⁾

1) at 100 % load

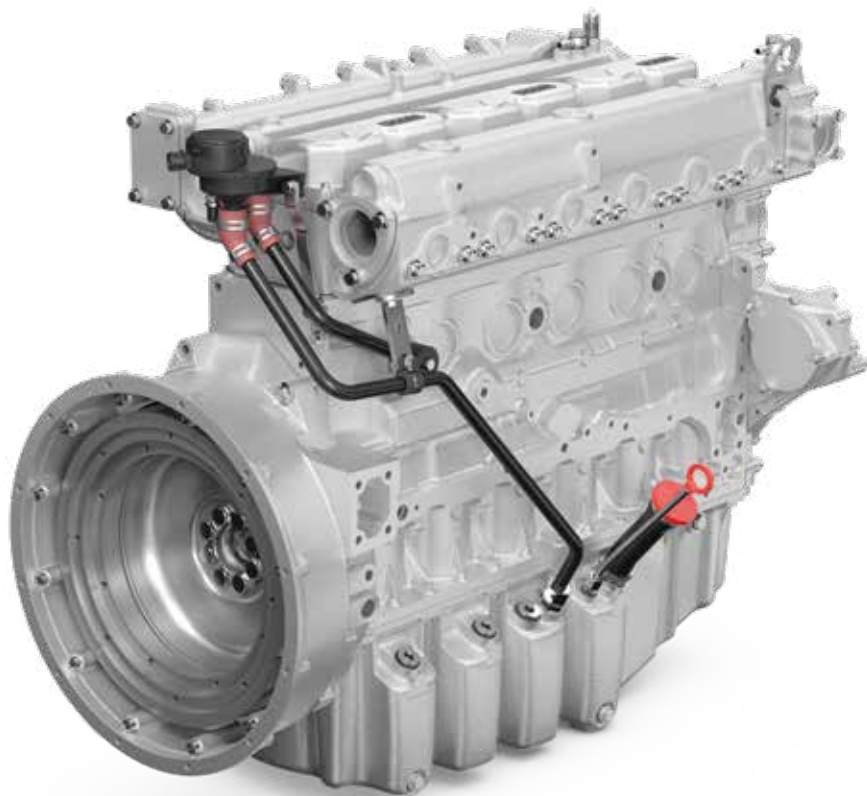
2) with 5 % exhaust-gas oxygen

3) m = lean, st = stoichiometric

COP with natural gas								COP with special gas	
1 500 (50)				1 800 (60)				1 500 (50)	1 800 (60)
E 312	E 302	LE 302	LE 302	E 312	E 302	LE 302	LE 302	LE 302	LE 302
–	75	110	110	–	85	110	110	–	–
56	–	–	–	64	–	–	–	110	110
1.50	1.00	1.60	1.57	1.50	1.00	1.59	1.59	1.49	1.45
41	66	89	87	58	75	96	92	77	93
37.0	45.0	55.8	53.2	48.0	56.0	60.2	54.5	55.0	54.0
34.4 ⁴⁾	37.2 ⁵⁾	37.5 ⁵⁾	38.8 ⁵⁾	33.3 ⁴⁾	36.2 ⁵⁾	35.8 ⁵⁾	37.4 ⁵⁾	39.4 ⁴⁾	37.4 ⁴⁾
47.9	55.1	50.8	50.3	55.2	56.0	52.5	51.0	49.3	52.0
82.2	92.4	88.2	89.1	88.5	92.2	88.3	88.4	88.7	89.4
–	3 378	–	–	–	3 247	–	–	–	–
< 500	–	< 250	< 500	< 500	–	< 250	< 500	< 500	< 500
m	st	m	m	m	st	m	m	m	m

4) in accordance with German Industrial Standard DIN ISO 3046, Part 1

5) in accordance with German Industrial Standard DIN ISO 3046-1, chapter 13



Technical data is based on a calorific fuel value of 10kWh/Nm³ for natural gas and 6kWh/Nm³ for special gas. The values are provided for information purposes only and are non-binding.

E0836

Technical features

Mode of operation

at engine speed	rpm (Hz)
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Engine version

Effective rated power ISO standard power ⁴⁾	kW
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Air-fuel ratio	λ
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Coolant heat ¹⁾	kW
----------------------------	----

Exhaust heat based on 120 °C ¹⁾	kW
--	----

Efficiency ¹⁾	
– mechanical	
– thermal	%
– total	

Emissions status NO _x	ppmvd mg/Nm ^{3 2)}
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Combustion³⁾

1) at 100 % load

2) with 5 % exhaust-gas oxygen

3) m = lean, st = stoichiometric

COP with natural gas + H ₂ (20 % by volume)						
1 500 (50)			1 800 (60)			
E 302	LE 302	LE 302	E 302	LE 302	LE 302	
75	110	110	85	110	110	
–	–	–	–	–	–	
1.00	1.59	1.57	1.00	1.76	1.73	
67	91	87	76	87	86	
44.0	59.3	55.1	57.0	49.9	48.2	
37.4 ⁵⁾	36.9 ⁵⁾	38.5 ⁵⁾	36.4 ⁵⁾	38.6 ⁵⁾	39.1 ⁵⁾	
55.7	52.0	50.7	56.7	49.4	49.0	
93.0	88.9	89.2	93.0	87.9	88.1	
3 382	–	–	3 246	–	–	
–	< 250	< 500	–	< 250	< 500	
st	m	m	st	m	m	



4) in accordance with German Industrial Standard DIN ISO 3046, Part 1

5) in accordance with German Industrial Standard DIN ISO 3046-1, chapter 13



E2876

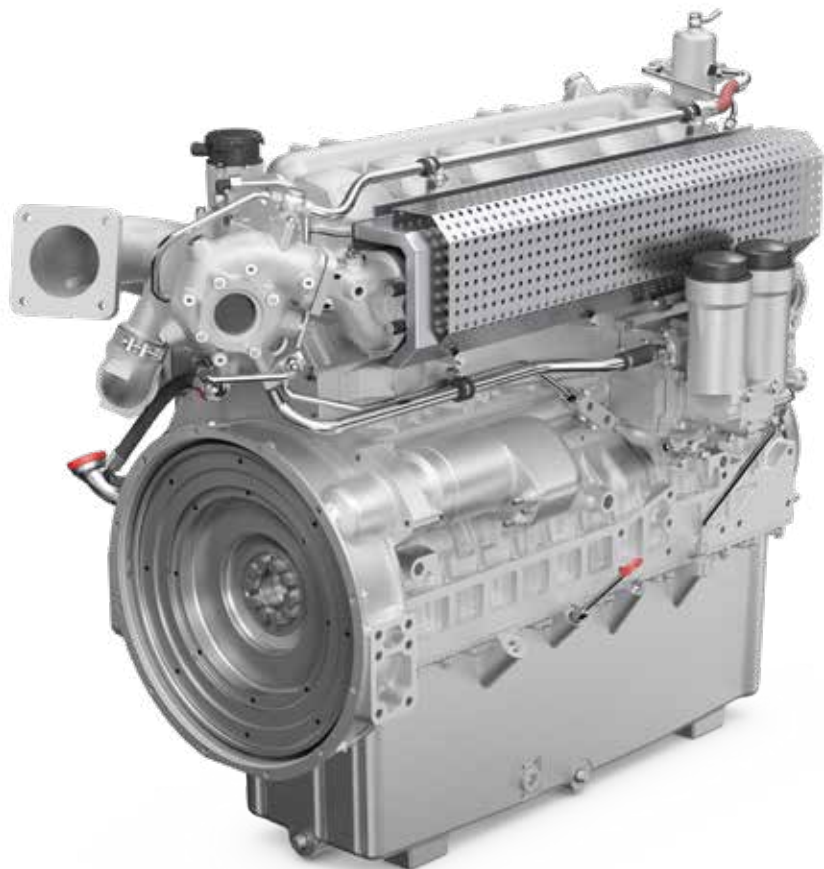
General data

Gas engine			E2876		
Engine version			E	LE	TE
TYPE	Cylinders		6		
	ISO standard power ¹⁾	kW	130–220		
	Bore	mm	128		
	Stroke	mm	166		
	Displacement	l	12.8		
	Overall length	mm	1 330	1 520	1 545
	Overall width	mm	830	830	835
	Overall height	mm	1 166	1 226	1 226
	Dry weight	kg	830	985–990	920

1) in accordance with German Industrial Standard DIN ISO 3046, Part 1

**OR FROM SPECIAL GAS.
CARBON-NEUTRAL. SUSTAINABLE.**





E2876

Technical features

Mode of operation

at engine speed	rpm (Hz)
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Engine version

Effective rated power ISO standard power ⁴⁾	kW
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Air-fuel ratio	λ
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Coolant heat ¹⁾	kW
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Exhaust heat based on 120 °C ¹⁾	kW
--	----

Efficiency ¹⁾	
– mechanical	
– thermal	%
– total	

Emissions status NO _x ²⁾	ppmvd
	mg/Nm ^{3 2)}

Combustion³⁾

1) at 100 % load

2) with 5 % exhaust-gas oxygen

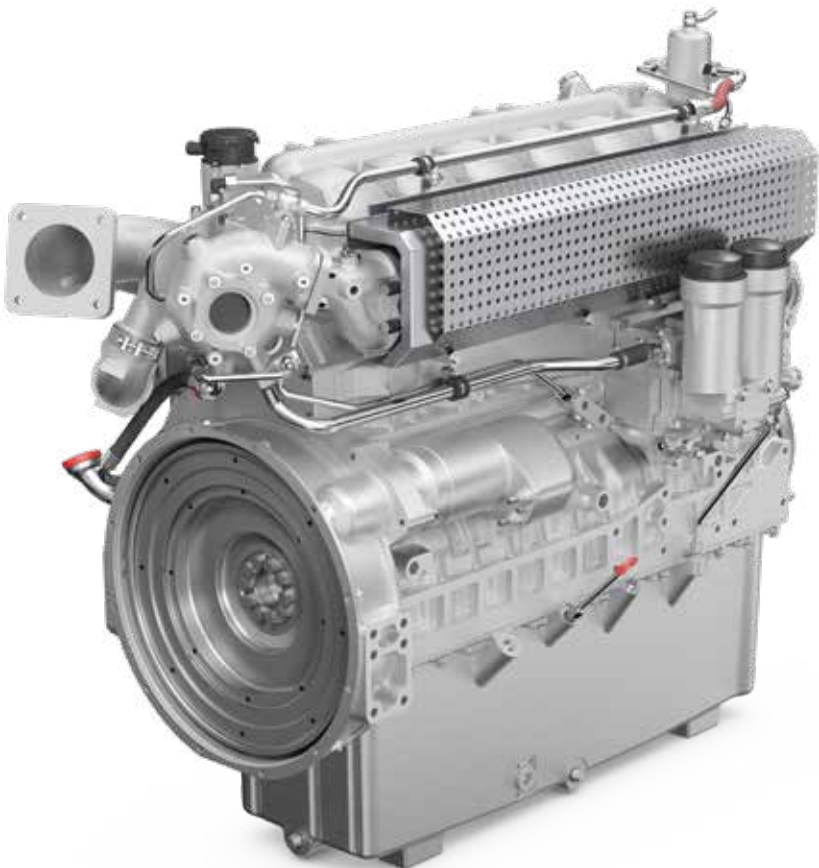
3) m = lean, st = stoichiometric

Technical data is based on a calorific fuel value of 10kWh/Nm³ for natural gas and 6kWh/Nm³ for special gas. The values are provided for information purposes only and are non-binding.

COP with natural gas					COP with special gas			
1 500 (50)		1 800 (60)			1 500 (50)		1 800 (60)	
E 312	LE 302 (M18)	E 312	LE 302 (M18)		TE 302	LE 202	TE 302	LE 302
150	210	170	210		–	–	–	–
–	–	–	–		130	220	130	200
1.00	1.61	1.00	1.57		1.40	1.40	1.40	1.40
133	110	151	125		124	103	132	106
94	130	115	142		56	139	60	137
37.2 ⁵⁾	39.1	36.4 ⁵⁾	36.9		38.2	40.4	36.6	38.5
56.2	47.6	57.0	50.0		52.9	49.6	54.0	50.8
93.3	86.7	93.4	86.9		91.1	90.0	90.6	89.2
3 894	–	3 977	–		–	–	–	–
–	< 500	–	< 500		< 500	< 500	< 500	< 500
st	m	st	m		m	m	m	m

4) in accordance with German Industrial Standard DIN ISO 3046, Part 1

5) in accordance with German Industrial Standard DIN ISO 3046-1, chapter 13



E2876

Technical features

Mode of operation

at engine speed	rpm (Hz)
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Engine version

Effective rated power ISO standard power ⁴⁾	kW
Air-fuel ratio	λ
Coolant heat ¹⁾	kW
Exhaust heat based on 120 °C ¹⁾	kW
Efficiency ¹⁾	
– mechanical ⁴⁾	
– thermal	%
– total	
Emissions status NO _x ²⁾	ppmvd
	mg/Nm ^{3 2)}

Combustion ³⁾

- 1) at 100 % load
2) with 5 % exhaust-gas oxygen

Technical data is based on a calorific fuel value of 10kWh/Nm³ for natural gas and 6kWh/Nm³ for special gas. The values are provided for information purposes only and are non-binding.

COP with natural gas + H ₂ (20 % by volume)		
	1 500 (50)	1 800 (60)
	E 312	E 312
	150	170
	–	–
	1.00	1.00
	132	150
	95	120
	37.1	36.4
	56.8	57.9
	93.9	94.3
	3 855	3 957
	–	–
	st	st



3) m = lean, st = stoichiometric

4) in accordance with German Industrial
Standard DIN ISO 3046, Part 1



E3268 AND E3262

General data

Gas engine			E3268	E3262	
Engine version			LE	E	LE
TYPE	Cylinders		8	12	
	ISO standard power ¹⁾	kW	320–390	275–580	
	Bore	mm	132	132	
	Stroke	mm	157	157	
	Displacement	l	17.2	25.8	
	Overall length	mm	1 620	1 743	1 748
	Overall width	mm	1 210	1 245	1 243
	Overall height	mm	1 422	1 494	1 500
	Dry weight	kg	1 497	1 763	1 849

1) in accordance with German Industrial Standard DIN ISO 3046, Part 1

**OR WITH HYDROGEN BLENDING.
FOR LOWER CONSUMPTION OF NATURAL GAS.**





E3268

Technical features

Mode of operation

at engine speed	rpm (Hz)
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Engine version

Effective rated power ISO standard power ⁴⁾	kW
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Air-fuel ratio	λ
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Coolant heat ¹⁾	kW
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Exhaust heat based on 120 °C ¹⁾	kW
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Efficiency ¹⁾	
– mechanical	
– thermal	%
– total	

Emissions status NO _x	ppmvd mg/Nm ^{3 2)}
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Combustion³⁾

1) at 100 % load

2) with 5 % exhaust-gas oxygen

Technical data is based on a calorific fuel value of 10kWh/Nm³ for natural gas and 6kWh/Nm³ for special gas. The values are provided for information purposes only and are non-binding.

COP with natural gas							
1 500 (50)				1 800 (60)			
LE 212	LE 212	LE 242	LE 242	LE 212	LE 212	LE 242	
-	-	-	-	-	-	-	
370	370	320	320	390	390	340	
1.64	1.63	1.70	1.70	1.65	1.66	1.70	
182	175	174	160	210	203	175	
234	215	204	181	257	222	206	
39.5	41.6	39.2	41.7	38.2	40.8	40.3	
48.7	47.9	50.0	47.5	49.9	47.9	48.2	
88.2	89.5	89.2	89.2	88.1	88.7	88.5	
-	-	-	-	-	-	-	
< 250	< 500	< 250	< 500	< 250	< 500	< 500	
m	m	m	m	m	m	m	

3) m = lean, st = stoichiometric

4) in accordance with German Industrial Standard DIN ISO 3046, Part 1



E3268

Technical features

Mode of operation

at engine speed	rpm (Hz)
-----------------	----------

Engine version

Effective rated power ISO standard power ⁴⁾	kW
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Air-fuel ratio	λ
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Coolant heat ¹⁾	kW
----------------------------	----

Exhaust heat based on 120 °C ¹⁾	kW
--	----

Efficiency ¹⁾	– mechanical	
	– thermal	%
	– total	

Emissions status NO _x	ppmvd
	mg/Nm ^{3 2)}

Combustion³⁾

1) at 100 % load

2) with 5 % exhaust-gas oxygen

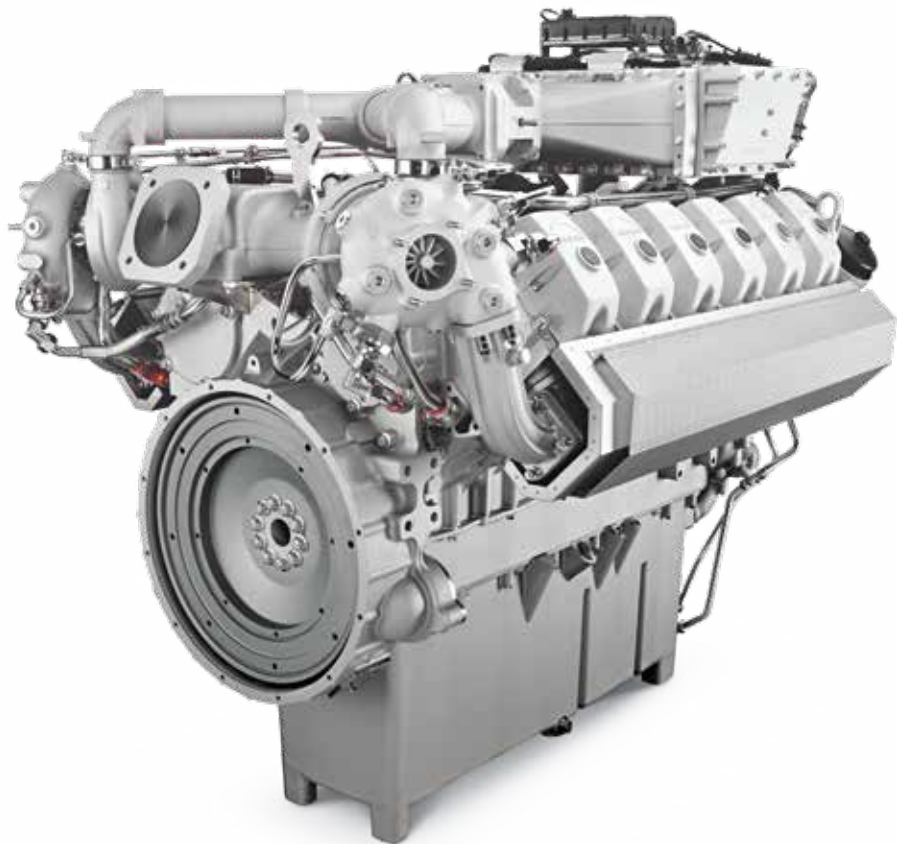
Technical data is based on a calorific fuel value of 10kWh/Nm³ for natural gas and 6kWh/Nm³ for special gas. The values are provided for information purposes only and are non-binding.

COP with special gas

1 500 (50)					1 800 (60)		
LE 222	LE 222	LE 232	LE 252	LE 262	LE 252	LE 262	LE 222
–	–	–	–	–	–	–	–
370	370	370	320	320	340	340	390
1.62	1.63	1.47	1.54	1.52	1.49	1.53	1.59
192	176	193	173	163	186	179	201
225	202	222	194	177	222	201	236
39.4	41.7	40.3	40.5	41.9	38.7	40.1	40.1
49.7	46.9	49.2	49.5	47.6	49.3	47.5	49.0
89.1	88.6	89.5	90.0	89.5	88.0	87.6	89.1
–	–	–	–	–	–	–	–
< 250	< 500	< 500	< 500	< 500	< 500	< 500	< 500
m	m	m	m	m	m	m	m

3) m = lean, st = stoichiometric

4) in accordance with German Industrial Standard DIN ISO 3046, Part 1



Technical data is based on a calorific fuel value of 10kWh/Nm³ for natural gas and 6kWh/Nm³ for special gas. The values are provided for information purposes only and are non-binding.

E3262

Technical features

Mode of operation

at engine speed	rpm (Hz)
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Engine version

Effective rated power ISO standard power ⁴⁾	kW
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Air-fuel ratio	λ
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Coolant heat ¹⁾	kW
----------------------------	----

Exhaust heat based on 120 °C ¹⁾	kW
--	----

Efficiency ¹⁾	– mechanical ⁴⁾	
	– thermal	%
	– total	

Emissions status NO _x	ppmvd
	mg/Nm ^{3 2)}

Combustion³⁾

1) at 100 % load

2) with 5 % exhaust-gas oxygen

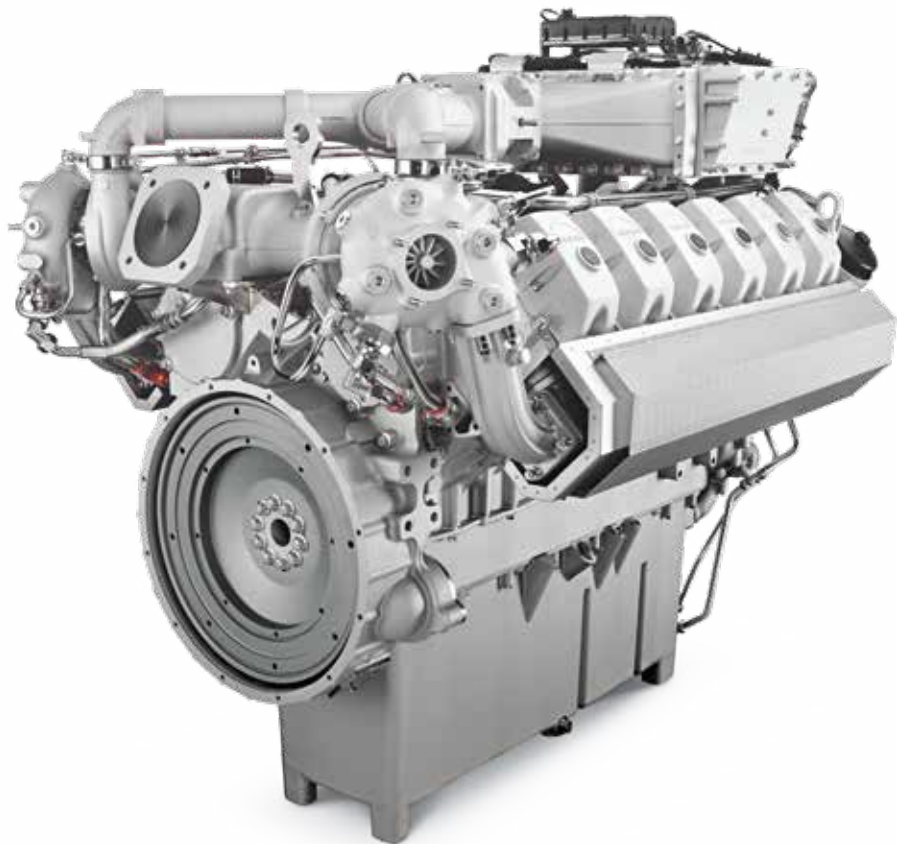
3) m = lean, st = stoichiometric

COP with natural gas

1 500 (50)					1 800 (60)			
E 302	LE 202	LE 202	LE 232	LE 232	E 302	LE 202	LE 232	LE 232
275	550	550	-	-	300	580	-	-
-	-	-	450	450	-	-	450	450
1.00	1.71	1.73	1.68	1.71	1.00	1.72	1.64	1.67
232	302	281	234	220	255	335	256	245
173	351	314	293	253	204	352	320	271
38.0 ⁵⁾	38.3 ⁵⁾	40.4 ⁵⁾	38.5 ⁴⁾	41.3 ⁴⁾	36.8 ⁵⁾	38.3 ⁵⁾	36.3 ⁴⁾	39.3 ⁴⁾
55.8	51.7	49.0	49.7	47.3	56.2	51.8	51.7	49.4
93.8	90.0	89.5	88.2	88.6	93.0	90.1	88.0	88.7
3 942	-	-	-	-	3 980	-	-	-
-	< 250	< 500	< 250	< 500	-	< 500	< 250	< 500
st	m	m	m	m	st	m	m	m

4) in accordance with German Industrial Standard DIN ISO 3046-1, chapter 14

5) in accordance with German Industrial Standard DIN ISO 3046-1, chapter 13



Technical data is based on a calorific fuel value of 10kWh/Nm³ for natural gas and 6kWh/Nm³ for special gas. The values are provided for information purposes only and are non-binding.

E3262

Technical features

Mode of operation

at engine speed	rpm (Hz)
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Engine version

Effective rated power ISO standard power ⁴⁾	kW
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Air-fuel ratio	λ
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Coolant heat ¹⁾	kW
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Exhaust heat based on 120 °C ¹⁾	kW
--	----

Efficiency ¹⁾	– mechanical ⁴⁾	
	– thermal	%
	– total	

Emissions status NO _x	ppmvd
	mg/Nm ^{3 2)}

Combustion³⁾

1) at 100 % load

2) with 5 % exhaust-gas oxygen

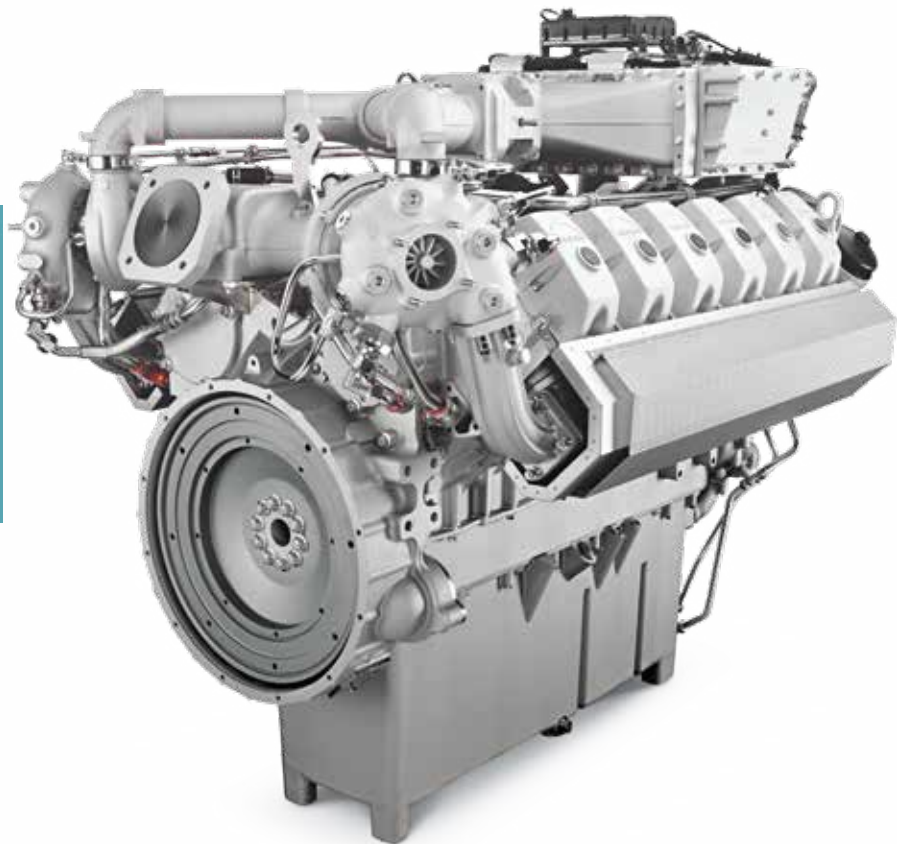
3) m = lean, st = stoichiometric

COP with special gas

1 500 (50)					1 800 (60)				
LE 202	LE 212	LE 212	LE 242	LE 242	LE 202	LE 212	LE 212	LE 242	LE 242
550	–	–	–	–	580	–	–	–	–
–	550	550	450	450	–	580	580	450	450
1.48	1.58	1.57	1.51	1.54	1.47	1.56	1.55	1.48	1.50
292	271	263	245	233	331	313	299	259	262
321	303	281	290	249	368	353	315	314	279
39.6 ⁵⁾	40.3 ⁴⁾	41.7 ⁴⁾	38.6 ⁴⁾	41.1 ⁴⁾	37.2 ⁵⁾	37.7 ⁴⁾	40.0 ⁴⁾	36.7 ⁴⁾	38.6 ⁴⁾
49.3	47.3	46.0	50.3	47.8	51.3	49.4	47.8	51.5	50.4
88.9	87.6	87.7	88.9	88.9	88.5	87.1	87.8	88.2	89.0
–	–	–	–	–	–	–	–	–	–
< 500	< 250	< 500	< 250	< 500	< 500	< 250	< 500	< 250	< 500
m	m	m	m	m	m	m	m	m	m

4) in accordance with German Industrial Standard DIN ISO 3046, Part 1

5) in accordance with German Industrial Standard DIN ISO 3046-1, chapter 13



Technical data is based on a calorific fuel value of 10kWh/Nm³ for natural gas and 6kWh/Nm³ for special gas. The values are provided for information purposes only and are non-binding.

E3262

Technical features

Mode of operation

at engine speed	rpm (Hz)
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Engine version

Effective rated power ISO standard power ⁴⁾	kW
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Air-fuel ratio	λ
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Coolant heat ¹⁾	kW
----------------------------	----

Exhaust heat based on 120 °C ¹⁾	kW
--	----

Efficiency ¹⁾	– mechanical ⁴⁾	
	– thermal	%
	– total	

Emissions status NO _x	ppmvd
	mg/Nm ^{3 2)}

Combustion ³⁾

1) at 100 % load

2) with 5 % exhaust-gas oxygen

COP with natural gas + H ₂ (20 % by volume)						
1 500 (50)			1 800 (60)			
LE 202	LE 202	E 302	LE 202	LE 202	E 302	
–	–	–	–	–	–	–
550	550	275	580	580	300	
1.82	1.80	1.01	1.82	1.84	1.01	
272	296	234	325	329	264	
291	332	170	321	348	199	
41.6	39.2	38.0	39.8	38.0	36.8	
47.8	50.8	55.6	50.4	51.4	56.8	
89.4	90.0	93.6	90.2	89.4	93.6	
–	–	4 044	–	–	4 249	
< 500	< 250	–	< 500	< 250	–	
m	m	st	m	m	st	



3) m = lean, st = stoichiometric

4) in accordance with German Industrial Standard DIN ISO 3046-1, chapter 13



E3872

General data

Gas engine			E3872
Engine version			LE
TYPE	Cylinders		12
	ISO standard power ¹⁾	kW	735
	Bore	mm	138
	Stroke	mm	165
	Displacement	l	29.6
	Overall length	mm	1 789
	Overall width	mm	1 243
	Overall height	mm	1 407
	Dry weight	kg	1 497

1) in accordance with German Industrial Standard DIN ISO 3046, Part 1

A green industrial container, likely a generator housing, is situated in a wooded area. The container has a white door on the right side, which is slightly ajar. On top of the container, there is a complex structure with metal frames and pipes, possibly a gas engine or generator. A tall, thin metal chimney or vent pipe extends from the top of the container. The container is surrounded by trees and foliage, suggesting a rural or forested setting. The ground in front of the container is covered with gravel.

**MAN IS STEPPING ON THE GAS IN
DECENTRALISED ENERGY GENERATION.**



Technical data is based on a calorific fuel value of 10kWh/Nm³ for natural gas and 6kWh/Nm³ for special gas. The values are provided for information purposes only and are non-binding.

E3872

Technical features⁵⁾

Mode of operation

at engine speed	rpm (Hz)
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Engine version

Effective rated power ISO standard power ⁴⁾	kW
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Air-fuel ratio	λ
----------------	-----------

Coolant heat ¹⁾	kW
----------------------------	----

Exhaust heat based on 120 °C ¹⁾	kW
--	----

Efficiency ¹⁾	– mechanical ⁴⁾	
	– thermal	%
	– total	

Emissions status NO _x	ppmvd
	mg/Nm ^{3 2)}

Combustion³⁾

1) at 100 % load

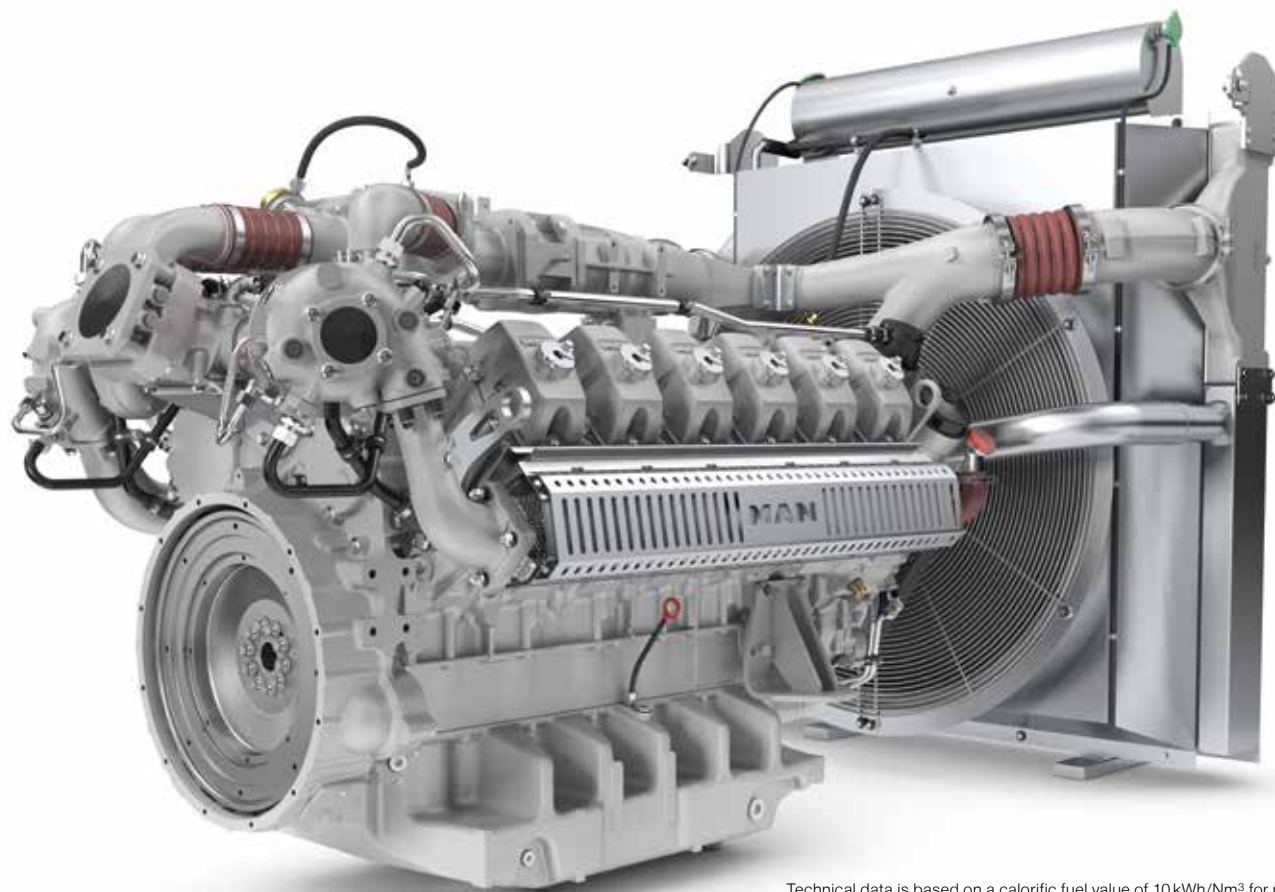
2) with 5 % exhaust-gas oxygen

3) m = lean, st = stoichiometric

COP with natural gas		COP with special gas
1 500 (50)		1 500 (50)
LE 201	LE 201	LE 201
735	735	735
-	-	-
1.78	1.77	1.61
273	273	284
300	314	325
44.0	44.0	44.0
42.4	43.6	44.2
86.3	87.7	88.2
-	-	-
< 500	< 250	< 500
m	m	m

4) in accordance with German Industrial Standard DIN ISO 3046-1, chapter 13

5) provisional



Technical data is based on a calorific fuel value of 10 kWh/Nm³ for natural gas and 6 kWh/Nm³ for special gas. The values are provided for information purposes only and are non-binding.

E3262 GENSET

Technical features

Mode of operation		COP with natural gas				COP with special gas	
at engine speed rpm (Hz)		1 500 (50)		1 800 (60)		1 500 (50)	1 800 (60)
Engine version		LE 252	LE 252	LE 252	LE 252	LE 252	LE 252
Effective rated power	kW	475	530	480	530	530	530
ISO standard power ⁴⁾		–	–	–	–	–	–
Air-fuel ratio	λ	1.58	1.61	1.60	1.63	1.44	1.44
Coolant heat ¹⁾	kW	–	–	–	–	–	–
Exhaust heat based on 120 °C ¹⁾	kW	306.2	304.4	335.9	323.0	312.1	304.4
Efficiency ¹⁾							
– mechanical ⁴⁾		35.8	39.0	33.4	36.4	38.5	35.3
– thermal	%	23.0	22.4	23.3	22.1	22.7	23.4
– total		58.8	61.4	56.7	58.5	61.2	58.7
Emissions status NO _x	ppmvd						
	mg/Nm ³ ²⁾	< 250	< 500	< 250	< 500	< 500	< 500
Combustion ³⁾		m	m	m	m	m	m

1) at 100 % load

2) with 5 % exhaust-gas oxygen

3) m = lean, st = stoichiometric

4) in accordance with German Industrial Standard DIN ISO 3046, Part 1

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