

■ MAN Gas Engines for Power Generation

E0836



Characteristics E0836 E

- Cylinders and arrangement: 6 cylinders in-line
- Mode of operation: four-stroke spark-ignition gas engine
- Engine cooling: water-cooled
- Exhaust system: water-cooled exhaust pipe

Characteristics E0836 LE

- Cylinders and arrangement: 6 cylinders in-line
- Mode of operation: four-stroke spark-ignition gas engine
- Turbocharging: turbo charger with pressure-oil lubricated bearings and water-cooled bearing pedestal
- Engine cooling: water-cooled
- Air-fuel mixture cooling: two-stage cooler

MOTORTECH Equipment – Standard Scope of Supply

- Ignition system with MIC3+ ignition controller and LiteRail wiring rail
- MHP spark plug B4321
- Detonation control system with DetCon2
- Speed control system with ITB throttle body, VariStep3 stepper motor driver and SC100 speed controller
- Sensor harness
- VariFuel2 air/gas mixer including flow body, inlet and outlet flanges, stepper motor harness and VariStep3 stepper motor driver

E0836 – COP with Natural Gas

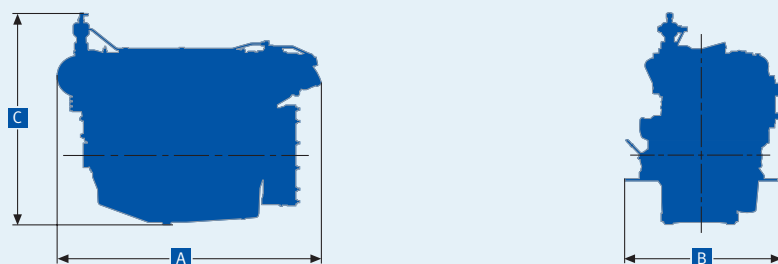
Technical Features

Mode of Operation		COP with Natural Gas	
At engine speed	rpm (Hz)	1500 (50)	1800 (60)

Engine version		E 312	E 302	LE 302	E 312	E 302	LE 302
Bore	mm	108	108	108	108	108	108
Stroke	mm	125	125	125	125	125	125
Displacement	l	6.9	6.9	6.9	6.9	6.9	6.9
ISO standard power ⁴⁾	kW	56	75	110	64	85	110
Air-fuel ratio	λ	1.50	1.00	1.65	1.50	1.00	1.68
Coolant heat ¹⁾	kW	41	63	82	58	70	89
Exhaust heat based on 120 °C ¹⁾	kW	37	46	50	48	55	51
Efficiency ¹⁾							
■ mechanical ⁴⁾	%	35.0	37.3	39.6	33.8	37.0	38.0
■ thermal	%	47.9	53.3	49.6	55.2	53.6	52.1
■ total	%	82.9	90.6	89.2	89.0	90.6	90.1
Emissions status NO _x ²⁾	mg/Nm ³	< 500	< 7000	< 500 < 100 ^{5) 6)}	< 500	< 7000	< 500 < 100 ^{5) 6)}
Combustion ³⁾		m	st	m	m	st	m

1) at 100 % load 2) with 5 % exhaust-gas oxygen 3) m = lean, st = stoichiometric 4) data conditional and on request
5) in accordance with German Industrial Standard DIN ISO 3046, Part 1 6) emission status available on request, including SCR technology

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.



Dimensions

Engine Version		E 312	E 302	LE 302
A	Overall length	mm	1090	1300
B	Overall width	mm	740	740
C	Overall height	mm	930	1030
	Dry weight	kg	520	605

All data are reference values. Please request installation drawings for detailed specifications.

MAN Gas Engines for Power Generation

E0836 – COP with Special Gas

Technical Features

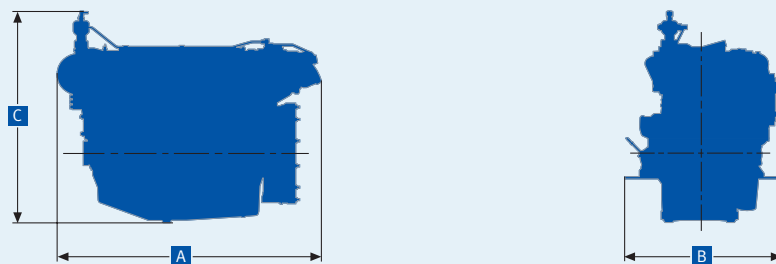
Mode of Operation		COP with Special Gas	
At engine speed	rpm (Hz)	1500 (50)	1800 (60)

Engine version		LE 202	LE 302 ⁵⁾	LE 202	LE 302 ⁵⁾
Bore	mm	108	108	108	108
Stroke	mm	125	125	125	125
Displacement	l	6.9	6.9	6.9	6.9
ISO standard power ⁴⁾	kW	110	110	110	110
Air-fuel ratio	λ	1.40	1.49	1.40	1.45
Coolant heat ¹⁾	kW	85	82	102	98
Exhaust heat based on 120 °C ¹⁾	kW	50	55	51	54
Efficiency ¹⁾					
■ mechanical ⁴⁾	%	40.1	39.4	38.6	37.4
■ thermal	%	49.3	49.3	53.7	52.0
■ total	%	89.4	88.7	92.3	89.4
Emissions status NO _x ²⁾	mg/Nm ³	< 500	< 500	< 500	< 500
Combustion ³⁾		m	m	m	m

1) at 100 % load 2) with 5 % exhaust-gas oxygen 3) m = lean, st = stoichiometric 4) data conditional and on request

5) in accordance with German Industrial Standard DIN ISO 3046, Part 1 6) emission status available on request, including SCR technology

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.



Dimensions

Engine Version		LE 202	LE 302
A Overall length	mm	1300	1300
B Overall width	mm	740	740
C Overall height	mm	1030	1030
Dry weight	kg	605	605

All data are reference values. Please request installation drawings for detailed specifications.