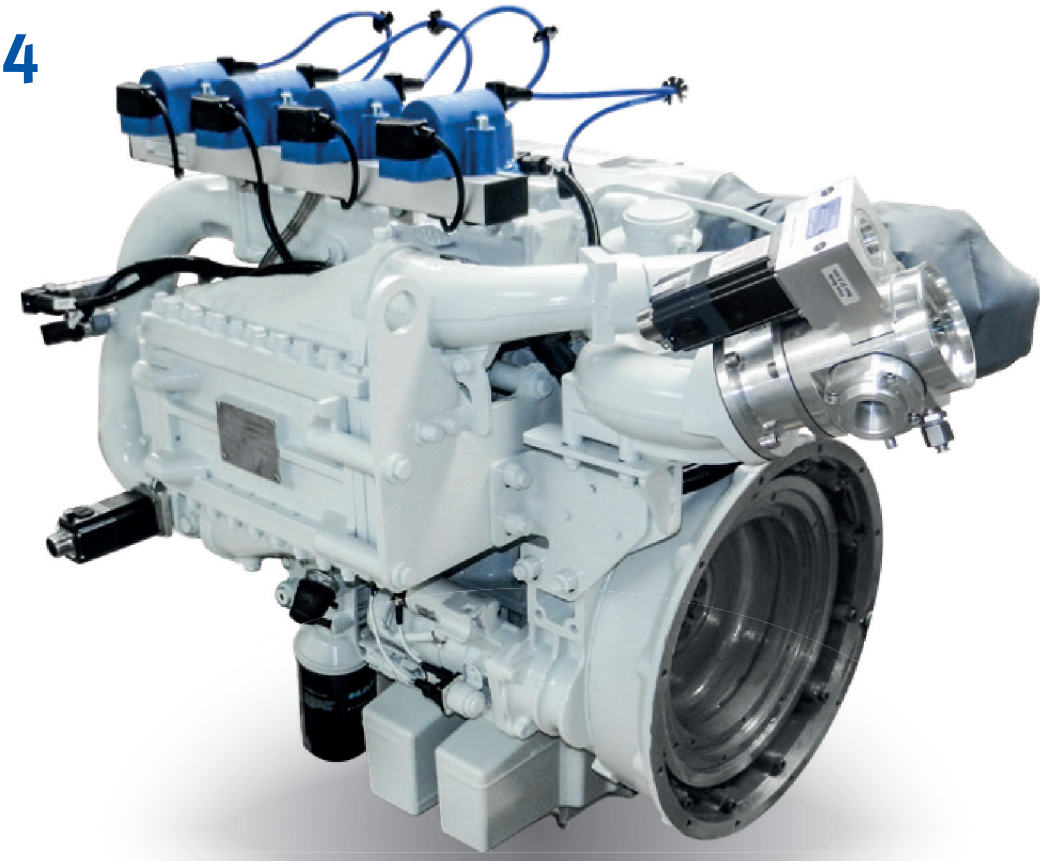
MAN Gas Engines for Power Generation

E0834



Characteristics E0834 E

Cylinders and arrangement:	4 cylinders in-line
Mode of operation:	four-stroke spark-ignition gas engine
Engine cooling:	water-cooled
Exhaust system:	water-cooled exhaust pipe

Characteristics E0834 LE

Cylinders and arrangement:	4 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
Exhaust system:	water-cooled exhaust pipe

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

E0834 – COP with Natural Gas/Special Gas

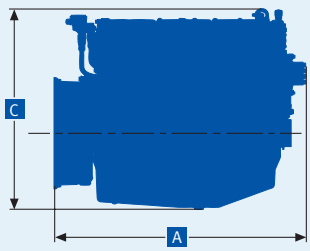
Technical Features

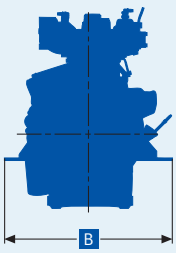
Mode of Operation		COP with Natural Gas		COP with Special Gas	
At engine speed	rpm (Hz)	1500 (50)	1800 (60)	1500 (50)	1800 (60)

Engine version		E 312	E 302	LE 302	E 312	E 302	LE 302 [4]	LE 302	LE 302 [4]
Bore	mm	108	108	108	108	108	108	108	108
Stroke	mm	125	125	125	125	125	125	125	125
Displacement	l	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
ISO standard power [5]	kW	37	54	68	45	62	68	68	68
Air-fuel ratio	λ	1.5	1.0	1.6	1.5	1.0	1.6	1.4	1.5
Coolant heat [1]	kW	29	46	54	31	51	54	52	55
Exhaust heat based on 120 °C [1]	kW	26	33	33	35	40	37	35	38
Efficiency [1]									
■ mechanical [5]	%	33.5	37.1	39.1	32.5	37.1	38.2	39.0	37.8
■ thermal	%	49.1	53.5	53.1	46.8	53.7	51.9	52.0	52.5
■ total	%	82.6	90.6	92.2	79.3	90.8	90.1	91.0	90.3
Emissons status NO_x [2]	mg/Nm3	‹ 500	‹ 7000	‹ 500 ‹ 100 [4] [6]	‹ 500	‹ 7000	‹ 500 ‹ 100 [4] [6]	‹ 500	‹ 500
Combustion [3]		m	st	m	m	st	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		E 312	E 302	LE 302
A Overall length	mm	862	862	1055
B Overall width	mm	742	742	809
C Overall height	mm	870	870	870
Dry weight	kg	430	430	495

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