

E0834

Description of Engines

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

E0834

Technical Data



Technical features E0834

Mode of operation		COP with natural gas					COP with special gas		
		1 500 (50)			1 800 (60)		1 500 (50)	1 800 (60)	
at engine speed rpm (Hz)									
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
Emissions status NO _x ²⁾	mg/Nm ³	< 500	< 7 000	< 500	< 500	< 7 000	< 500	< 500	< 500
Combustion ³⁾		m	st	m	m	st	m	m	m

1) at 100 % load

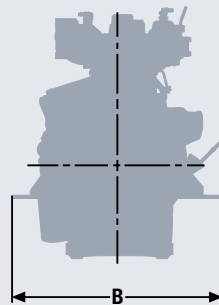
2) with 5 % exhaust-gas oxygen

3) m = lean, st = stoichiometric

4) Data conditional and on request

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

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 E0834

Type designation		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.