

E2842

Description of Engines

Characteristics E2842 E

- Cylinders and arrangement: 12 cylinders in 90° V arrangement
- Mode of operation: four-stroke spark-ignition gas engine
- Engine cooling: water-cooled
- Exhaust system: water-cooled exhaust pipes

Characteristics E2842 LE

- Cylinders and arrangement: 12 cylinders in 90° V arrangement
- Mode of operation: four-stroke spark-ignition gas engine
- Turbocharging: turbo charger with water-cooled turbine housing and pressure-oil lubricated bearings
- Engine cooling: water-cooled
- Air-fuel mixture cooling: two-stage cooler

E2842

Technical Data



Technical features E2842

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	LE 322	E 312 ⁴⁾	LE 332 ⁴⁾	LE 202	LE 322 ⁴⁾
Bore	mm	128	128	128	128	128	128
Stroke	mm	142	142	142	142	142	142
Displacement	l	21.9	21.9	21.9	21.9	21.9	21.9
ISO standard power ⁵⁾	kW	250	420	280	400	420	420
Air-fuel ratio	λ	1.00	1.60	1.00	1.60	1.45	1.45
Coolant heat ¹⁾	kW	225	236	253	218	257	264
Exhaust heat based on 120°C ¹⁾	kW	153	222	172	242	233	262
Efficiency ¹⁾							
– mechanical ⁵⁾	%	37.5	40.2	37.5	39.2	40.0	38.4
– thermal	%	56.0	49.1	56.3	50.3	50.2	52.3
– total	%	93.5	89.3	93.8	89.5	90.2	90.7
Emissions status NO _x ²⁾	mg/Nm ³	< 5 000	< 500	< 5 000	< 500	< 500	< 500
Combustion ³⁾		st	m	st	m	m	m

1) at 100 % load

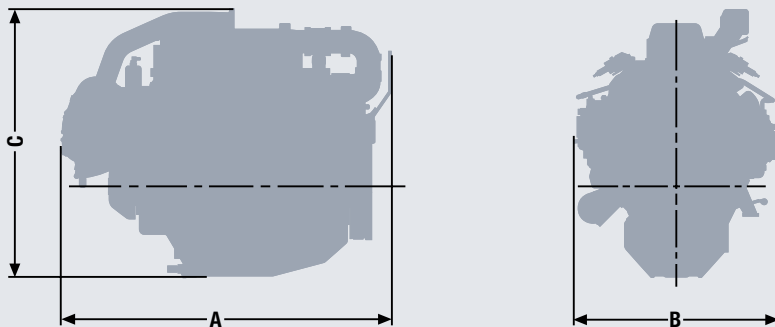
2) with 5 % exhaust-gas oxygen

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 E2842

Type designation		E 312	LE 322/LE 332/LE 202
A-Overall length	mm	1 490	1 570
B-Overall width	mm	1 265	1 142
C-Overall height	mm	1 240	1 155
Dry weight	kg	1 300	1 420

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