

# 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 <sup>4)</sup> | LE 332 <sup>4)</sup> | LE 202               | LE 322 <sup>4)</sup> |
| 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 <sup>5)</sup>               | kW                 | 250                  | 420    | 280                 | 400                  | 420                  | 420                  |
| Air-fuel ratio                                 | $\lambda$          | 1.0                  | 1.6    | 1.0                 | 1.6                  | 1.45                 | 1.45                 |
| Coolant heat <sup>1)</sup>                     | kW                 | 225                  | 236    | 253                 | 218                  | 257                  | 264                  |
| Exhaust heat based on 120°C <sup>1)</sup>      | kW                 | 153                  | 222    | 172                 | 242                  | 233                  | 262                  |
| Efficiency <sup>1)</sup>                       |                    |                      |        |                     |                      |                      |                      |
| – mechanical <sup>5)</sup>                     | %                  | 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 <sub>x</sub> <sup>2)</sup> | mg/Nm <sup>3</sup> | < 5 000              | < 500  | < 5 000             | < 500                | < 500                | < 500                |
| Combustion <sup>3)</sup>                       |                    | st                   | m      | st                  | m                    | m                    | m                    |

1) at 100 % load

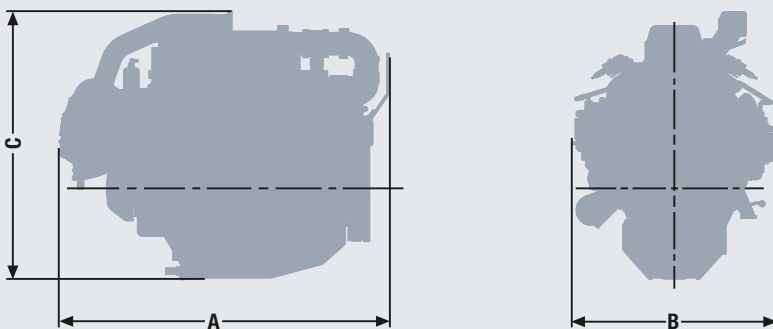
2) with 5 % exhaust-gas oxygen

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/Nm<sup>3</sup> for natural gas and 6 kWh/Nm<sup>3</sup> 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.