

## CO<sub>2</sub>-free, hydrogencombustion engine

TCG 7.8 H2

Max. power: 220 kW (2200 rpm)

**Max. torque:** 1000 Nm (1400 - 1600 rpm)

Hydrogen quality: min. 98% or higher ISO 14687

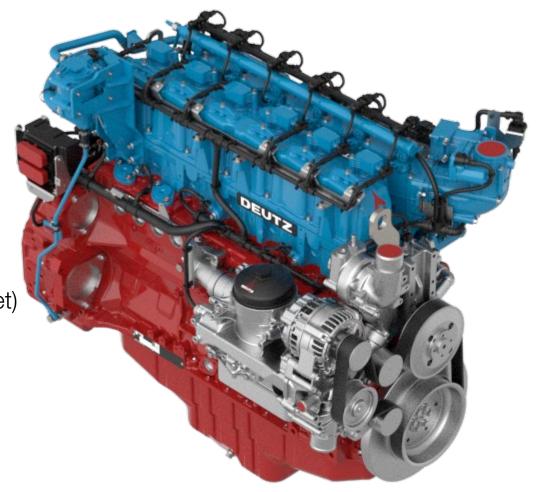
■ **H2 consumption:** ~19 kg/h @max. power (~12kg/h GenSet)

1CG 7.8 F

- nz consumption:



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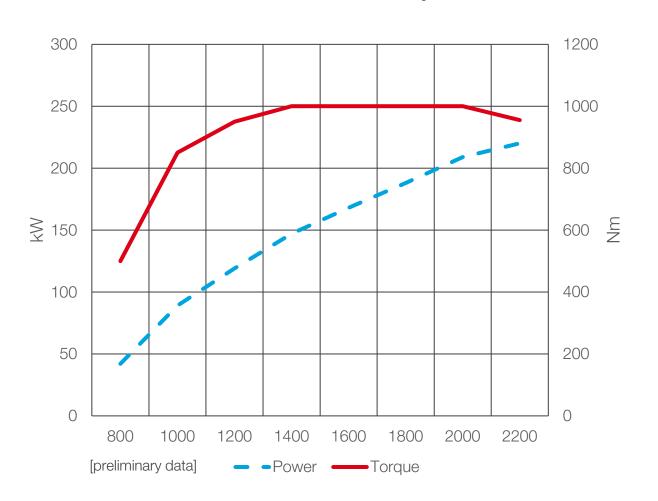


### Engine Specification

Engine Specification		TCG 7.8 H2	
No. of Cylinders		6	
Displacement	I	7,755	
Hydrogen quality	ISO 14687	min. 98 % or higher	
Pressure interface	bar	30	DEL
Max. Power Output	kW	220	
At Speed	min <sup>-1</sup>	2200	
Max. Torque	Nm	1000	
At Speed	min <sup>-1</sup>	1400 - 1600	
H2 Consumption (12 kg/h GenSet)	kg/h	up to ~19 @max. power	
Power generating @50 Hz / 1500 rpm (GenSet)	kW	~150kW	



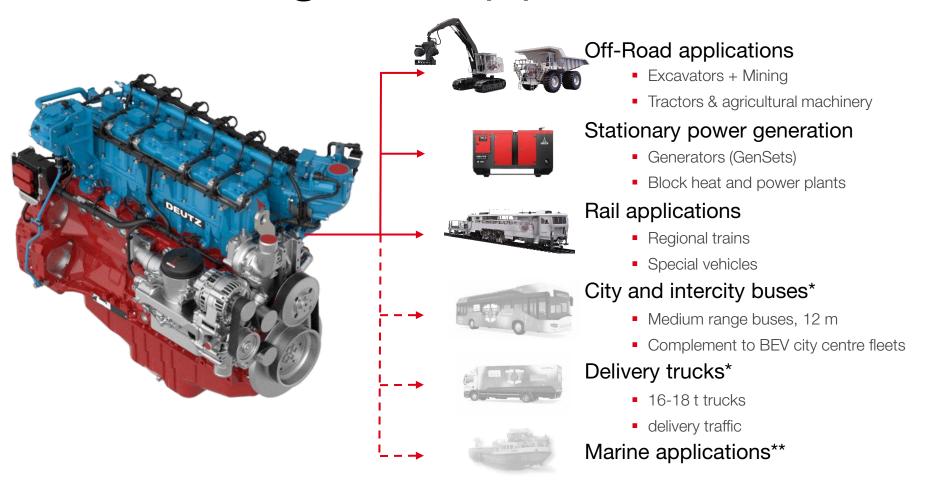
Performance (Power + Torque)







#### Wide Range of Applications

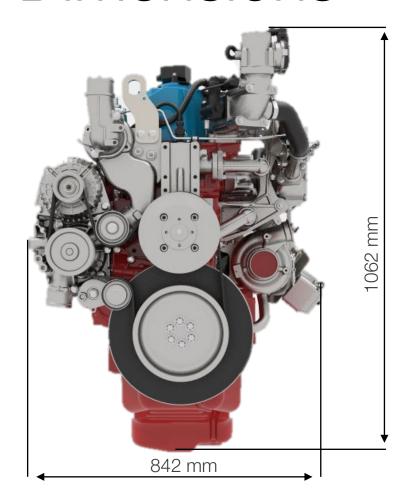


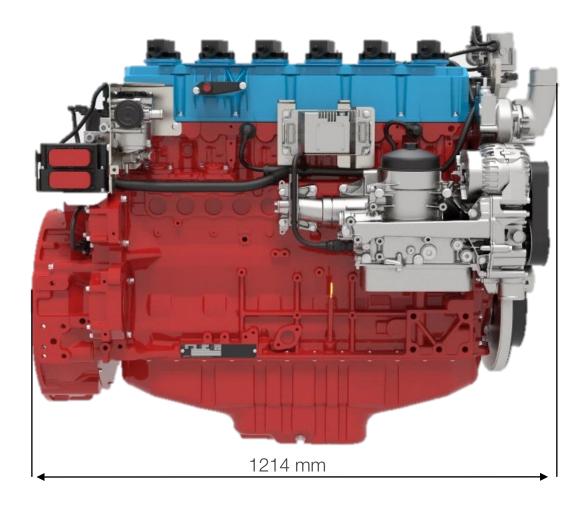
<sup>\*</sup> Development on request

<sup>\*\*</sup> not foreseen yet



#### Dimensions







220 kW 2200 rpm



1000 Nm



~740 kg ~90 kg EAT



# Cost-Efficient Low Emission Alternative to Fuel-Cells & Batteries

- CO<sub>2</sub>-free\* technology
- NO<sub>x</sub>-emissions fulfil EU standards
- Economic alternative to other zero-emission technologies
  - Overall cost comparable to Diesel
  - Initial invest substantially lower than Fuel-Cell & Batteries
  - Retro-Fit to existing fleets possible

- Available as of 2024 for selected applications
- High reliability due to proven base engine technology
- Growing H<sub>2</sub>-infrastructure
- Existing service network for combustion engine

\*according to *forthcoming* UN Regulation No. 49-07 series referenced by Euro VI Regulation (EC) 595/2009 and its amending regulations