

ELECTRIFICATION OF AUXILIARY UNITS

48 V

Mobile Machinery

TCD 2.9 Torque Boost

- Belt Starter Generator
- 48 V Auxiliaries / Start-Stopp
- 48 V Battery

Agriculture Applications

TCD 5.2 EC48

- Electric Compressor (EAV)
- 48 V Auxiliaries / Start-Stopp
- 48 V Battery

Belt-free Diesel Engine

TCD 2.2 HEV

- Hybrid gearbox
- 48 V E-Machine
- 48 V Auxiliaries / Start-Stopp
- 48 V Battery

Hydrogen Engine

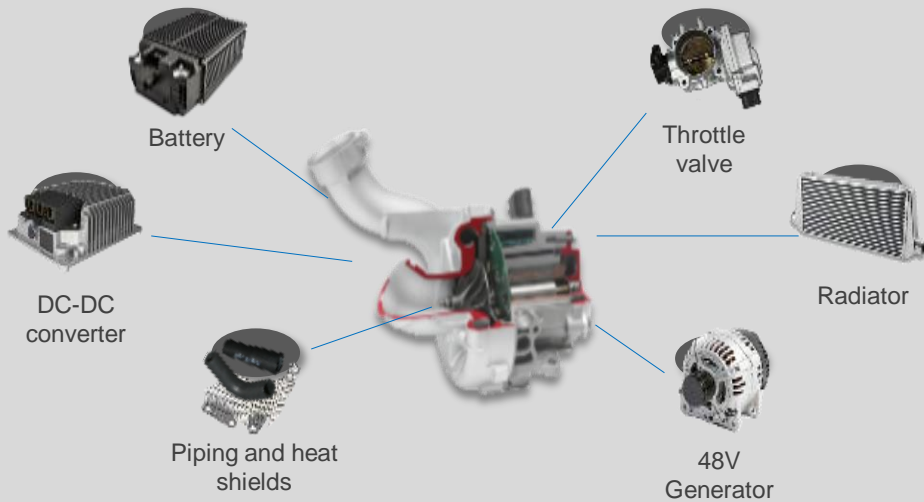
TCG 7.8 H2 EC48

- Electric Compressor (EAV)
- 48 V Auxiliaries / Start-Stopp
- 48 V Battery

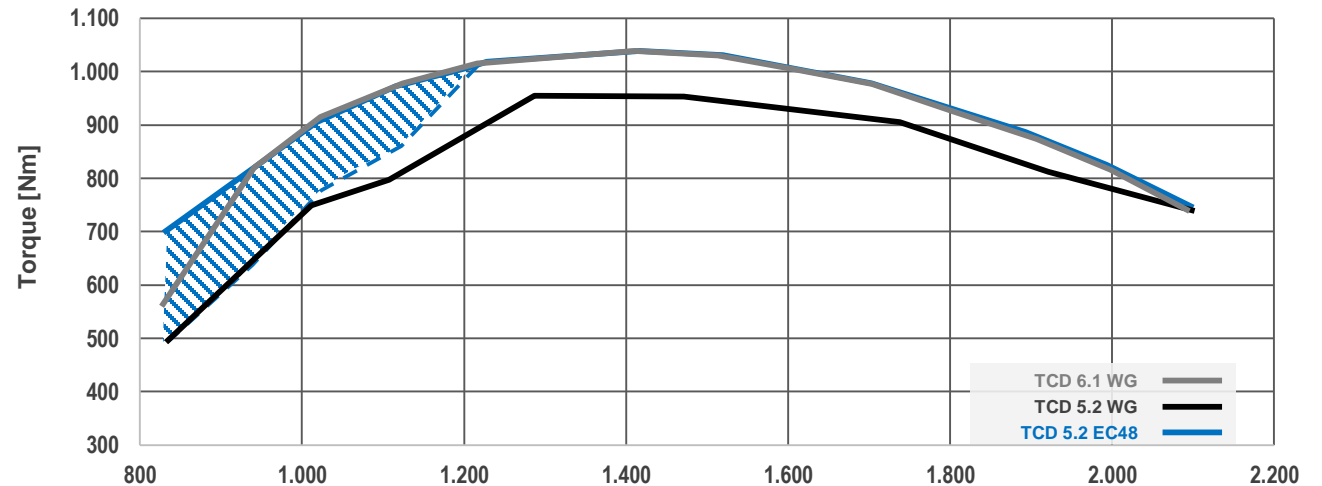
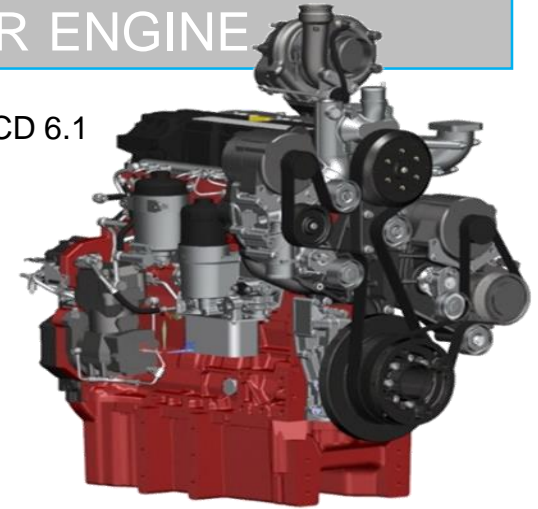
- 48 V auxiliaries and Boost-components as modular system for all engine families
- Target: min. 20 % CO2 savings (start-stopp, recuperation, downsizing)
- Customer application: 48 V on board power system: more available power for auxiliaries

4 CYLINDER ENGINE WITH ELECTRIC COMPRESSOR 48V VS. 6 CYLINDER ENGINE

48V SYSTEMS FOR ALL DEUTZ ENGINES



- 4 cylinder TCD 5.2 EC48 and 6 cylinder TCD 6.1
- Strong initial torque
- Strong engine dynamic
- No turbo delay
- Fuel efficient
- 48V onboard system



ELECTRIFICATION OF AUXILIARY UNITS



Start Stop Function

- CO2 reduction
- Optimized fuel and ad-blue consumption



Performance increase on demand

- 48V el. compressor – no turbo delay
- Downsized engine – same performance
- Powerful engine dynamic



External 48V Power Supply

- 48V electric auxiliaries
- Standard 230V power sockets

New Premium Features

- Pre-cooling (A/C)
- Pre-heating (using 48V battery)



48V Engine Accessories

- Electric Compressor (Turbo)
- Climate Compressor
- Fan
- Pumps



360V Systems

- DEUTZ offers 360V systems
- Applicable for lower load applications

