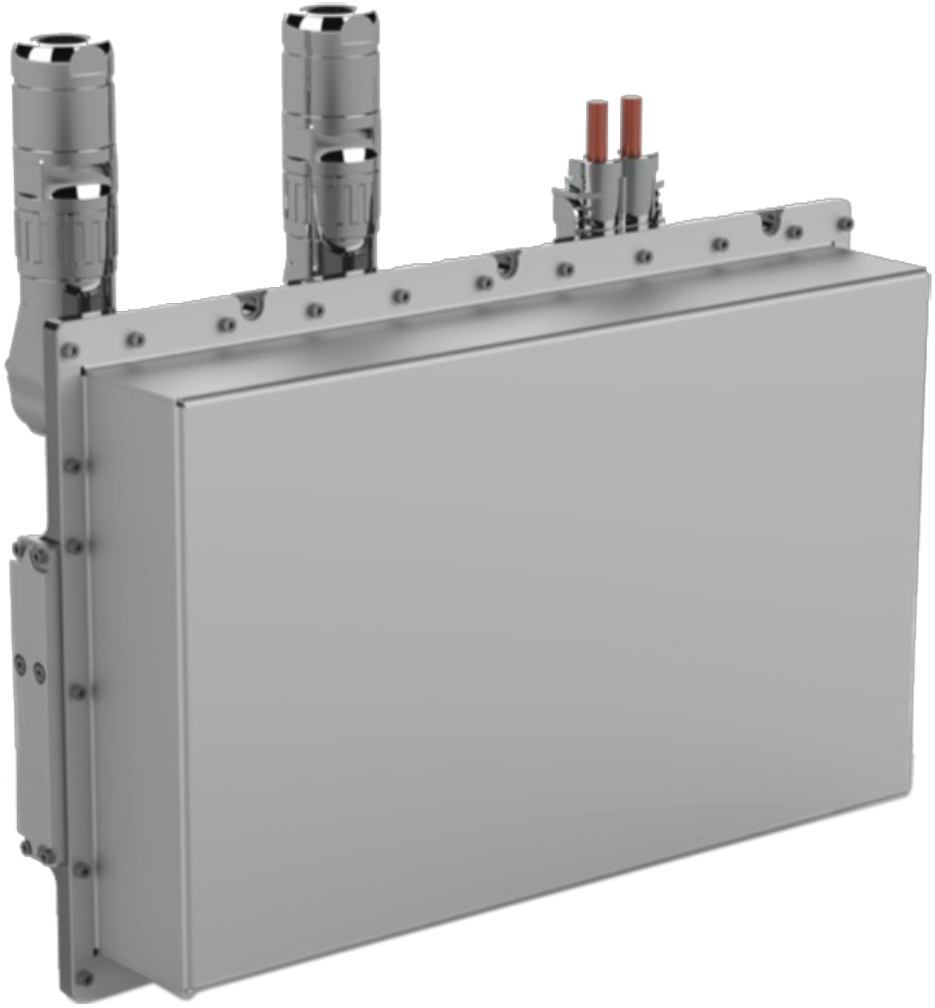
For mobile machines and vehicles

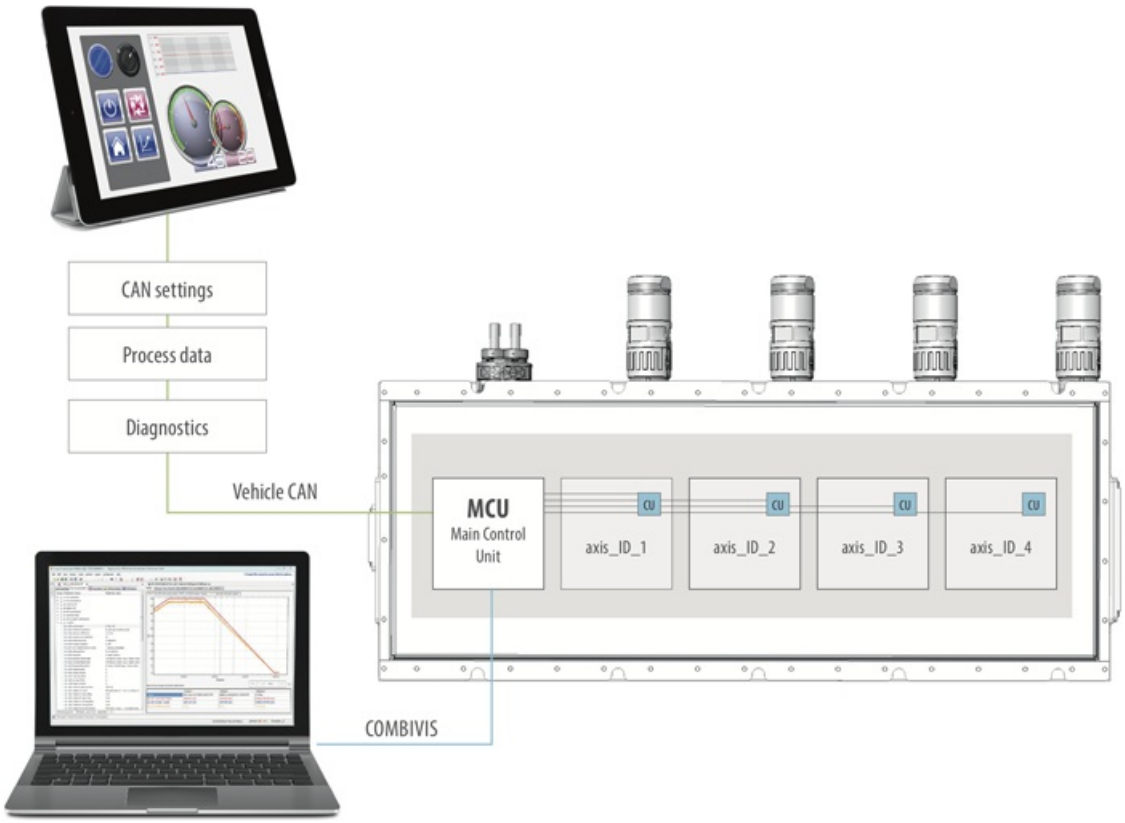
KEB has developed the Combivert T6 APD electric drive. It features a J1939 interface.



The Combivert T6 APD electric drive comes in IP67- or IP6K9K-rated enclosures (Photo: KEB)

The E-drive by KEB comprises the J1939-connectable main control unit (MCU) and the drive controller unit (DCU). The MCU is based on the Codesys IEC 61131-3 programmable controller and a J1939 protocol stack. The DCU supports rated output currents from 16,5 A to 60 A. The drive system is intended for electrification of auxiliary systems. Typical applications include hydraulic pumps, fans, and air-conditioning compressor, steering pumps, etc.

In conventional utility vehicles, auxiliary components such as air and air-conditioning compressors, for example, used to be driven by the combustion engine. Electrification of drives enables needs-orientated control, improves energy efficiency of vehicles and hence makes a major contribution with regard to reduction in pollution and noise emissions. KEB's drive has been specially developed for all hybrid- or all-electric utility vehicles with an on-board high-voltage DC voltage supply and meets the requirements for vehicles. The common-mode DC EMC filters fitted by default, guarantee operational safety in conjunction with other high-voltage devices in the vehicle.



The Combisis tool is used to configure the J1939 communication (Photo: KEB)

The MCU J1939 software enables to communicate process data, parameters, and diagnostic messages (DM1 to DM4) according to SAE J1939 specifications. Operation is performed exclusively via the explicitly provided Combisis parameterization, diagnosis (Inverterscope), and commissioning tool. For direct exchange of set-point and actual values, the E-drive offers two possible channels, Proprietary A and B, which are defined in SAE J1939 protocol. In addition, the solution provides a commissioning assistant for the effective and efficient commissioning and operation of later ones series applications.

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