

we invent solutions

Autonomous Machine control module with bus connection



for propulsion technology, mechanical engineering

Technology fields

Software, power electronics, MCR technology, communication & connectivity, operating & monitoring, CAE

Project requirements

The **project objective** was the development of a motor control for 2 BLDC and one stepper motor. Various interfaces, inputs for sensors and outputs for actuators as well as the operability with keyboard were further requirements. In addition, a pressure sensor with very limited installation space, fanless operation and a CANopen bus connection were realized.

Facts/Highlights

- Two output stages for 3-phase motors up to 350 W as well as a stepper motor output stage for Bipolar stepper motors up to 150 W with encoder inputs
- 2 CAN interfaces (galvanically isolated)
- RS485 and RS232 interface
- Integrated pressure sensor
- Exactly tailored to the application
- Modular, compact, easy configuration

Services of KNESTEL

Potential analysis, target price estimation, project management, specifications, project planning, development of software and hardware, electrical and mechanical design, EMC test, prototyping, series production

Possible Applications

- Mechanical and plant engineering
- General propulsion technology
- Automation technology
- Distributed systems

About KNESTEL: Knestel has been developing and producing customized electronic and mechatronic special solutions in the fields of motor and machine control, frequency converters, image processing, MCR technology, software development, radio, bus systems and gas analysis for 40 years. We support our customers from the idea to the finished implementation. Individual solutions and concepts - technically up to date. Our production - electronics manufacturing, device and switch cabinet construction, Production of subassemblies, assembly and mechanical processing - is equipped with the latest technology.

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