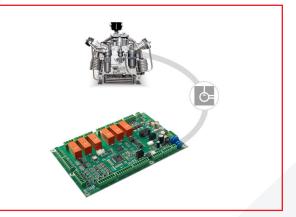


## we invent solutions

# Control of a compressor for filling breathing gas cylinders



for propulsion technology, mechanical engineering

### Technology field

MCR technology, propulsion technology

### **Project requirements**

The **project objective** was the development of a control with integrated monitoring for a compressor. The compressor is controlled via external contactors with star-delta switching or alternatively via an external frequency converter. The control board has a CAN bus connection and a 230 V relay for controlling various other consumers.

### Facts/Highlights

- Motor control via star-delta or alternatively frequency inverter possible
- Current measurement via external current transformers
- Various operating modes for the compressor adjustable (e.g., semi or fully automatic)
- Isolated CAN bus for data exchange with keypad, level control and air monitoring

#### **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**

- Filling of breathing gas bottles for divers, fire brigades and medical applications
- Starter air compressors for the launch of marine propulsion
- Supply of pressure chambers and fire extinguishing equipment on offshore installations
- Filling of air cartridges

**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.