

Emerson Commercial & Residential Solutions



Power Electronics Engineer (m/f/d)

Job responsibilities:

The Power Electronics Engineer will be part of the growing European Power Electronics Team located in Aachen. We are developing Drives (Frequency Converters) as part of our compression technology for the heating, ventilation, air conditioning and refrigeration (HVACR) industry. Together with us, you will shape the drive technology of tomorrow and help us with your motivation and curiosity to increase the efficiency of the drive circuits, reduce the cost and improve the reliability of our platform by generating deep knowledge in the key components of the drive technology.

Essential functions:

- Implementation of external and internal requirements according to specifications in electronic circuits
- You will perform concept definition, specification, simulation, design and development of our next generation commercial drives in collaboration with our interdisciplinary team
- Supporting the PCB Designer in terms of implementation in an EMC and Safety related PCB layout
- Ensuring complete functionality of power electronics in various project development phases through necessary adjustments and optimizations in circuits diagrams, components and layout
- Responsibility for the timely execution of work packages, considering specified framework conditions such as schedule and quality
- Creation and support of test concepts for electronics, prototypes and series production
- Support in the selection and qualification of the second source components for a flowing production process
- You actively monitor the international electronics component market and incorporate new trends into new electronics solution concepts

Required qualifications and experience:

- BSc/MSc degree in Electronics/Electrical Engineering
- Experienced in the design of frequency converters (Power Stages, Active PFC, Buck- and Boost Converters)
- EMC and Safety related design knowledge for household appliances (IEC 60335-1, EN 50014-1/2)
- Knowledge of LTSpice, Matlab/Simulink, PLECS and Cadence Design Systems (OrCAD / Allegro)
- Basic skills in soldering and measurements on PCBs are mandatory
- Familiar with the control mechanism of Permanent Magnet Synchronous Motors (PMSM)
- Project management skills is a plus
- Fluent in English (German knowledge is a plus)

If you are interested in joining the Emerson family, please send your application to jenny.janssen@Emerson.com.