# -R-P<mark>0=</mark>DID-

### R-PODID - RELIABLE POWERDOWN FOR INDUSTRIAL DRIVES

R-PODID aims to develop an automated, cloudless, short-term fault-prediction for electric drives, power modules, and power devices, that can be integrated into power converters.



#### **R-PODID OBJECTIVES:**

- •Methodology for fault-prediction model generation from sparse training sets or system simulation
- ·Power electronics with integrated support for embedded AI
- •24 h fault-prediction for Gallium Nitride (GaN) and Silicon Carbide (SiC) based power converters
- •24 h fault-prediction and fault mitigation for electric drives
- ·Sensors for reliability prediction in power modules

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## Innovations within R-PODID are implemented into the power modules and applied in the four use cases:





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