

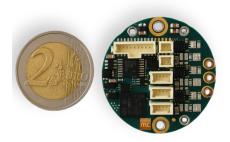
## miControl® informs:

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# The New Controller Generation for Motor Integration! mcDS-i3: Maximum Performance, Minimal Installation Space

With the mcDS-i3, miControl is ushering in a new era of motor integration. Designed for direct installation into motors, this compact controller packs cutting-edge drive technology into just 35 mm in diameter.

It delivers peak currents from 15 A to 40 A- ideal for use in confined spaces and high ambient temperatures.



Thanks to advanced field-oriented control (FOC), the mcDS-i3 provides maximum performance in the smallest form factor. This makes it the perfect choice for applications in automation technology, robotics, medical devices, mobile systems, and many other fields.

#### **Fully Equipped for Demanding Applications**

Despite its compact design, the mcDS-i3 offers the full range of functions required by today's decentralized drive solutions:

- 4-quadrant operation
- Current, speed, and position control
- Integrated motion process unit with PLC functionalities
- Freely programmable stand-alone operation for motionintensive applications

With a built-in magnetic encoder and optional feedback options such as Hall or incremental encoders, maximum flexibility is guaranteed. At the same time, compatibility with the proven miControl software (mcTools, mPLC) ensures easy commissioning and programming.

#### A Unified Concept with a Future

The mcDS-i3 is based on a consistent, modular mounting concept. CANopen enables seamless integration into existing system architectures. The devices are also prepared for STO and UL certifications, making them suitable for safety-critical applications as well.

But the success story of the new controller generation is just beginning: In Q4/2025, the next model in the series - the mcDS-i5 - will follow, offering an extended performance range of up to 90 A peak current while retaining the same proven architecture. This provides users with scalability, compatibility, and a unified software and operating concept across the entire product line.

In addition, more variants will soon be available: The mcDS-h3 (h = housing) will be offered as an external device for installation in control cabinets or enclosures. At the same time, the mcDS-m3 (m = module) will be launched, specifically designed for use on carrier boards. The mcDS-i3 and mcDS-i5 controllers will be available both as module versions and external versions. This means that miControl offers its customers a comprehensive product portfolio. Detailed information on all new variants will be published in the coming weeks.

### **Individual Consultation and Quotation**

Would you like to use the mcDS-i3 in your application? Feel free to contact us at <a href="mailto:vertrieb@miControl.de">vertrieb@miControl.de</a> - our sales team will provide you with personalized advice and a tailored quotation.

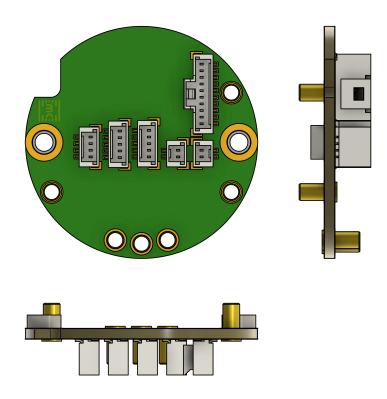


Figure 1: i35 Connector

All Connections at a Glance:

The i35 connector layout enables easy integration and secure connections in compact motor designs.

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